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D9.1 DEVELOPING A CONCEPTUAL AND ETHICAL FRAMEWORK OF DIVERSITY

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Abstract	This deliverable provides a conceptual analysis of "diversity" from an ethical
	perspective. It addresses the following issues: what is ethics, what is



	diversity, why diversity matters, what is the WeNet understanding of diversity, and what are points to consider when working with the social practices approach. In the deliverable, ethicists argue why diversity can be considered desirable or undesirable, depending on the context. The deliverable also reflects on the diversity understanding as laid out in the proposal text of the WeNet project. It makes explicit some of the underlying assumptions about diversity and raises ethical questions that should be considered in working with the term "diversity." Finally, the deliverable addresses preliminary ideas of operationalizing diversity, and thereby investigates the benefits and constraints of the social practices approach. It raises ethical concerns that we as a consortium should discuss and consider in the modelling of diversity.
Keywords	Diversity, ethics, social practices, operationalization, discrimination

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WENET | D9.1: Ethical Framework for Modelling Diversity



DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc.



EXECUTIVE SUMMARY

This deliverable provides an in-depth ethical analysis of the term "diversity," the understanding of diversity employed in the WeNet project, and the social practices approach used to model diversity. Ethics is a discipline that help us reflect upon moral judgments and normative ideas. Diversity is such a normative idea, because diversity is not merely a fact of our world but also carries a sense of "what society we want to live in." An ethical framework can therefore reflect the WeNet understanding of diversity and investigate its normative contents. Moreover, an ethical framework can help evaluate the social practices approach used to model diversity and point to potential consequences of using the approach in the operationalization of diversity.

In the second chapter, the deliverable reviews the concept "diversity" from an ethical perspective. Such a perspective on diversity is different from understandings of diversity in the social sciences, which usually sees diversity as a descriptive concept. However, there are also prescriptive/normative understandings of diversity. For instance, diversity can mean the quality or fact of actively including a range of many people and things. This is the sense in which for instance anti-discrimination law and affirmative action policies use the term diversity. The term diversity is closely linked to the concepts pluralism and multiculturalism. Here, again, diversity is not merely a fact of pluralist or multicultural societies, but also affirms the need and desirability of including multiple ethnicities, religious practices, political opinions, and ways of life in one society. Diversity has not only intrinsic but also instrumental value. On the one hand, diversity can lead to better outcomes; in representative democracies, for instance, it can lead to better policies. On the other hand, diversity underlines the dignity and human rights of human beings, affirms the idea that we owe respect to each other and that we believe in freedom of choice and tolerance. However, diversity can also be problematic in some instances, e.g. when we are interested in creating "safe spaces" or want to counter hate speech and violence-inciting political opinion. In the third chapter, the deliverable investigates the WeNet understanding of diversity against the backdrop of diversity understandings in different theories. Different fields of study have produced different understandings of diversity, which will be laid out and evaluated from an ethical perspective. Most of these theories and understandings of diversity are skeptical and see diversity as an instrument or a challenge, and propose that diversity be reduced or controlled. Despite the positive parlance in the WeNet consortium, an in-depth analysis shows that WeNet similarly employs a skeptical view of diversity. Diversity is seen as positive in instrumental terms, but observations in society point to diversity as a potential source of anxiety, and diversity is thus considered in need to alignment, adjustment, and mediation. On the one hand, diversity can be used to improve social interaction; thus, it is considered an asset, something positive that should be leveraged. On the other hand, exposure to diversity can cause fear among human beings. As implied in the proposal text, it then follows that diversity must be regulated or adjusted by the WeNet technology.

The WeNet understanding of diversity raises some ethical questions that should be addressed in the course of the project: If we believe that diversity causes anxiety in humans, what exactly is this anxiety or fear about? It seems vital to know this in order to address the fear and adequately mediate exposure to diversity. Another crucial question is: What are appropriate methods to mediate individuals' exposure to diversity? In an online social platform, reducing users' exposure to diversity may lead to filter bubbles which raise different but equally important ethical concerns. Furthermore, if we believe that "full" or non-aligned diversity is not beneficial, how can we best align diversity? How can we ensure that we are not accidentally or unnecessarily reducing diversity? What is the "lowest common denominator" that ensures maximum diversity of people but prevents irritation or conflict? Is diversity an end in itself or is diversity an indicator of a lack of social recognition that cannot be compensated by more diversity? These are crucial questions that we should address to ensure that we achieve our goal of empowering users by leveraging diversity. Finally, the WeNet understanding of diversity



relates to a very specific setting: the university setting, where students show similarities with regard to age, socio-economic background or level of education. Diversity may mean something quite different in a different context such as the wider population. Therefore, transferring the WeNet technology to other contexts may create ethical problems.

In the fourth chapter, the deliverable provides an ethical perspective on the social practices approach used to operationalize diversity in WeNet. The social practices approach has some benefits and constraints. It allows researchers to a) look beyond dichotomous conceptualizations of human behaviour as either emotional or rational, b) account for the flexibility and dynamic character of human behavior, and c) understand the interrelation of individuals and society. However, the social practices approach looks primarily at standard social practices, or "normal" behaviour. While the focus is on typical performance, it remains problematic who decides what typical performance constitutes. Certain members of society seem to contribute to the enactment of a certain practice, and if the number of people joining in this enactment is large enough, then the practice can be considered typical. This poses the question: What about minority groups and those people whose behaviour differs from typical performances? In the context of WeNet, it may be that those users, whose practices deviate from the norm and who enact alternative practices, fall through the cracks and are not sufficiently represented in the dataset or technology. Related to that is the concern that the operationalization of diversity as (mainstream) social practices may lead to algorithmic discrimination, as the machine-learning algorithm might infer standard practices from the dataset and render divergent/deviant behaviour invisible. A possible consequence and ethical concern is then that the WeNet technology may not send out requests to users who enact practices "differently."

The social practices approach furthermore rarely addresses the problem that structural inequality and injustice is sustained through the continuous re-enactment of (certain) social practices. Additionally, and linked to that, the approach rarely evaluates the moral quality of certain social practices. Individuals interact with society and have a certain socialized understanding of their world, how to interpret a given situation and behave accordingly. According to Sally Haslanger, schemas (internalized ideas of what is "normal" or appropriate behaviour) interact with structures (such as institutions) and effectively privilege some but marginalize others. This occurs to the extent that power relations are often sustained and produce structural inequality and injustice. In the context of WeNet, this means that we should be particularly careful when working with social practices; we should reflect on whether we are (knowingly or unknowingly) reinforcing social practices that lead to discrimination and injustice. Ideally, the dataset/technology explicitly accounts for practices that deviate from the norm and are thus truly diverse.

The fifth chapter provides some points to consider that are derived from the afore-mentioned analyses. They are recommendations, offering the opportunity for a joint ethical reflection in the consortium. They invite all partners for an open discussion about the use and understanding of the term "diversity" and the best application of the social practices approach.



	T		
Chapter 1: an ethical framework of diversity	In this chapter, we will:		
	Describe the field of ethics and its methodology		
	State the relevance of ethics in technology development projects		
	→ Present some of the core issues and questions that ethicists deal with		
	Argue for the importance of an ethical framework of diversity		
	Outline the goals of the ethical framework of diversity		
Chapter 2: diversity from an ethical	In this chapter, we will:		
perspective	→ Conduct a conceptual analysis of "diversity"		
	Provide some background on descriptive and prescriptive understandings of diversity		
	→ Formulate some considerations on the moral value of diversity		
	Discuss contexts in which diversity may not be desirable		
Chapter 3: WeNet understanding of	nis chapter, we will:		
diversity	Analyze how different theories understand and utilize the concept of diversity		
	→ Problematize the understanding of diversity advanced by some theories		
	 Discuss how different understandings of diversity might influence the WeNet understanding of diversity 		
	Provide ethical considerations for the utilization/application of the WeNet understanding of diversity		
	Provide ethical considerations about the context of WeNet's diversity understanding: the university setting		
Chapter 4: The social practices approach	In this chapter, we will:		
praedices appreasi:	Investigate the benefits and constraints of the social practices approach		
	Discuss how social practices largely reflect "normal" or standard behaviour, thereby marginalizing alternative practices		
	Demonstrate how social practices are "coded" to ideas of gender, class, and race, and have a tendency to sustain structural inequality and injustice		
	Argue that the application of the social practices approach in WeNet may reduce diversity in the WeNet platform and, in the worst case, lead to algorithmic discrimination		

TABLE 1: ETHICAL ANALYSES IN CHAPTER 1-4





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1 AN ETHICAL FRAMEWORK OF DIVERSITY

Ethics is the reflection on moral judgments and normative ideas. It deals mostly with questions of "what is the right thing to do" or "what society do we want to live in." Ethics is a field of study that applies the following methods: conceptual analysis, reflection and analysis of arguments, deconstruction and reconstruction of values and norms in society, and comparison and evaluation of appropriate behaviour and policies in a given context. Ethics usually deals with principles and concepts such as equality and justice, autonomy or freedom of choice, responsibility and accountability, and trust or trustworthiness. In the context of technology development projects, ethics can help reflect the values inscribed in the research goals and process. For instance, an ethical framework reflects the WeNet understanding of diversity and investigates its normative contents.

In this chapter, we will:

- Describe the field of ethics and its methodology
- State the relevance of ethics in technology development projects
- Present some of the core issues and questions that ethicists deal with
- Argue for the importance of an ethical framework of diversity
- Outline the goals of the ethical framework of diversity

1.1 WHAT IS ETHICS?

Ethics is defined as the reflection on moral judgements by rational argumentation without referring to religious texts or other belief systems (Pieper 2007, p. 60; Rawls 1999). Individuals, groups, states, and other actors make statements and judgments about their environment, their attitudes and behaviour that refer to questions of "What is good action? What is right behaviour? What do we owe to each other?" and even more broadly, "What is a good life?" Such statements have normative implications and promote moral values and even hierarchies of values (Ammicht-Quinn 2014, pp. 28–32; Pieper 2007, pp. 30–42). For instance, in WeNet, one normative claim or judgment is that "the social interaction of online users can be improved by creating diversity-aware algorithms and leveraging the diversity of users."

Moral statements like these express the beliefs of entities. They therefore necessarily claim a specific degree of universality or notion of general validity, which is often expressed by the grammatical phrase of "you shall (not)" (Ammicht-Quinn 2014, p. 38). Although a moral claim can be an individual statement in a certain context, it implicitly demands that everyone behaves accordingly. Generally speaking, moral beliefs refer to value-related evaluations of living conditions, behaviour or social expectations of normality (Pieper 2007, p. 42).

Ethics in academia, as a scientific discipline, encompasses several research fields and methodological approaches (Pieper 2007, p. 60). Meta ethics deals with core principles and general ideas of ethics such as what defines a moral value, the possibility of defining a common good, or the question whether it is possible to disqualify specific moral judgements or whether moral judgments are all equal. Descriptive Ethics is mainly concerned with describing different moral judgements and beliefs regarding a specific topic within a group or society. Normative Ethics analyzes how moral judgements can be justified and how different moral judgements can



be weighed in case of moral disagreement. Finally, there is the field of Applied Ethics, which combines all three research areas regarding one specific topic. Technology ethics for instance is dedicated to ethical questions that arise in the context of designing, developing, and implementing new and emerging technologies.

Due to the nature of Applied Ethics, this happens in a three-fold approach: First, existing moral judgements and aligned values/value-hierarchies in the context of technology – respectively a more specific area such as computer-mediated social interaction – need to be analyzed, described and thus implicit (underlying) moral judgments must be made explicit (descriptive ethics). Second, these different moral judgements need to be analyzed in regard to the given justifications and their conformity (descriptive and normative ethics). Although moral values are rooted in philosophical thinking, they are usually (re-)produced in the actions of members of society (there are thus social dynamics at play). Therefore, studies in the field of applied ethics should not draw only on philosophical theories, but also include theories from sociology and political science (Ammicht-Quinn 2014, pp. 32–38). These theories might offer important insights for an appropriate ethical analysis. Third, the different moral judgements need to be compared and evaluated in order to formulate a recommendation for an ethically appropriate decision (normative ethics).

Some of the issues dealt with in Applied Ethics include the following core principles and values: justice, participation, autonomy, responsibility and accountability, transparency, trust, privacy, and non-maleficence. Ethicists analyze the roles that these principles play in the respective research project. For instance, in the context of technology ethics, ethicists might investigate the following questions: does the process of designing and developing a technology involve the participation of end users? Is the technology designed to be fair and non-discriminatory, thus serving some idea of justice? Does the technology protect the privacy of its users and does not do harm to the users? Are there mechanisms to hold operators but also users of the technology accountable if they misuse the technology? Answering such questions helps identify potential unethical practices and aims at preventing unwanted and unethical outcomes.

1.2 WHY DO WE NEED AN ETHICAL FRAMEWORK OF DIVERSITY?

Research and innovation usually aims at improving the situation of humanity or least of major parts of societies. Technology projects then have some kind of vision for society, some idea of how we can make human life easier or increase for instance productivity, wealth, peace and harmony or happiness. Thus, research and innovation produces and reproduces ideas of how a "good" society should look like. Most of the big, future-oriented technology development projects provide a more or less formulated answer to the question "What society or world do we want to live in?"). In this vein, if technology development projects are constructed around supporting the good life or good society, we must pay attention to the ideas and moral judgements that a research project advances. More precisely, we should scrutinize the implicit and explicit ideas of a good society that are promoted by the research project. The involvement of ethics in research activities aims at addressing these questions head on. Ethicists foster critical reflection and discussion about the values that are inscribed in technology. By doing this, potential ethical concerns or unwanted consequences of the research/technological product can be identified early on and not just after the implementation.

An ethical framework of diversity can help reflect on the meaning of diversity and its associated values and norms. Diversity can have a strong normative connotation. It can thus happen that norms are consciously or unconsciously inscribed in the technology that will be developed in WeNet. The ethical framework provided in this deliverable will analyze the meaning of diversity, its underlying assumptions and implicit values, and scrutinize under which circumstances the concept is useful for the purpose of WeNet. WeNet uses a social science approach to diversity, and measures diversity by looking at the social practices of users. While the social sciences



aim at describing the way society or social structures are organized (Pieper 2007, p. 125), ethics deals with the question of what a society should look like (Ammicht-Quinn 2014, p. 28). It is then vital to include ethics and provide an ethical framework to reflect on the potential pitfalls of using diversity as a descriptive concept. The ethical framework then addresses particularly the prescriptive or normative dimension of the WeNet project's understanding and measuring of diversity.

To provide a brief overview, an ethical framework of diversity can serve the following goals:

- Provide background information on "diversity" as a descriptive but also prescriptive (=normative) concept
- Reflect the concept of diversity used in the WeNet project and make underlying assumptions explicit
- Reflect the benefits and constraints of the social practices approach used in WeNet
- Provide principles or points to consider for our use of the term/concept diversity in WeNet
- → Provide principles or points to consider for the modelling of diversity in WeNet



2 DIVERSITY FROM AN ETHICAL PERSPECTIVE

The term "diversity" refers to a variety of something. There are descriptive understandings of the term but also prescriptive/normative understandings. The term "diversity" is closely linked to at least two other important concepts in philosophical ethics (especially in social and political philosophy): pluralism and multiculturalism. Both terms in turn have descriptive and normative meanings. Ethics helps to develop a comprehensive understanding of concepts and terms. It differentiates for instance between a descriptive and a normative concept of diversity and reveals hidden normative implications of allegedly descriptive uses of given terms. Diversity initiates, instantiates and is a constitutive feature of a long list of moral and ethical values as well as practices. That is why diversity matters from an ethical perspective. However, diversity can also be problematic in some instances, e.g. when we are interested in creating "safe spaces" or want to counter hate speech and violence-inciting political opinion.

In this chapter, we will:

- Conduct a conceptual analysis of "diversity"
- > Provide some background on descriptive and prescriptive understandings of diversity
- Formulate some considerations on the moral value of diversity
- Discuss contexts in which diversity may not be desirable

2.1 WHAT IS DIVERSITY?

The term diversity describes a range of things or people that are very different from each other, usually in at least one identifying feature. This is the sense of diversity that we know for instance from the term biological diversity. Biological diversity is the number of genetic or visible variants of each occurring species of all animal and plant species in a given ecosystem, a particular habitat or otherwise geographically limited area (Faith 2016; Gaston 2001).

Diversity also means the quality or fact of actively including a range of many people and things. This is the sense in which anti-discrimination law and affirmative action policies use the term diversity. The term "affirmative action" describes policies that support members of marginalized groups e.g. through education, employment, or housing (Young 1990).

Dimensions of diversity among people include but are not limited to racial and ethnic classifications, age, gender and gender identity, sexual orientation, religion and philosophical beliefs, socioeconomic background, physical and mental health (Bendl et al. 2012). There are interactions between different dimensions of diversity. These interactions can add up and intensify the effect of a dimension, for instance on a person's socio-economic standing, or reduce and weaken the effect in different social contexts. It is also possible that they permanently contradict each other. When different dimensions (e.g. age and gender) interact in these aforesaid way, this is called intersectionality.

A concept that is closely related to diversity is pluralism. The word pluralism like diversity generally refers to a variety of things in question (Mason 2018). These things in question, however, differ profoundly. Usually, we use the word pluralism to describe a variety of immaterial things like concepts, values, or world views (cf. Hildt 2014). This is not necessarily the case with diversity - in that sense diversity is the broader concept.



There are three main understandings of the term pluralism in philosophical ethics. It can, firstly, mean the philosophical view, according to which the reality consists of many independent principles, which are not based on a common basic principle (cf. Wolff 1720). Or it can, secondly, mean the existing diversity of coexisting groups, organizations, institutions of equal standing but also opinions, values and beliefs within a society or a state that are competing for influence and power. Thirdly, it can mean the affirmation of diversity in a society and/or political body of different convictions, world views and opinions (Höffe 2008). The first is a metaphysical one, the second a descriptive, and the third a prescriptive understanding of pluralism. Diversity, however, is most often used in a descriptive ("There is a great variety of things") or a prescriptive ("There ought to be more diversity") sense, but rarely in a metaphysical sense.

To sum up, diversity is important for pluralism but the outlook of a pluralistic society is not necessarily diverse. A pluralistic society can in fact be very homogenous in character when it comes to demographic and socio-economic features.

Diversity and pluralism are often linked to yet another closely related concept: multiculturalism. The word multicultural "is often used as a descriptive term to characterize the fact of diversity in a society" (Song 2017). In contemporary political philosophy it refers, however, to a set of prescriptive approaches and theories that develop ideas on how to respond to the challenges of cultural and religiously diverse societies. Some authors argue for "group-differentiated rights" (Kymlicka 1995), others for a non-interference policy (Kukathas 1992, 2003). It is, however, important to note that the term multiculturalism "has been used as an umbrella term to characterize the moral and political claims of a wide range of marginalized groups, including African Americans, women, LGBT people, and people with disabilities" (Song 2017; cf. Glazer 1997; Hollinger 1995; Taylor 1994). The subject of multiculturalism can be in fact quite diverse (Song 2009).

Like the term "diversity," the term "multiculturalism" describes a variety of something - and there seem to be overlaps between the varieties of things that diversity and multiculturalism are concerned with.

2.2 WHY DOES DIVERSITY MATTER - MORALLY SPEAKING?

Ethics differentiates between a descriptive and a normative concept of diversity. Diversity can be just a fact, but it can also be valuable morally speaking and in a non-instrumental way. A descriptive concept of diversity simply names the range of features in a given group of persons (for instance the group of WeNet users) that make that group diverse. An instrumental concept attributes value to diversity but only as a means to a further end: It is valuable because it contributes positively in achieving this or that goal. The so called "business-case for diversity," for instance, holds that diversity in the workplace is valuable because it contributes to the overall performance of an organization or enterprise through better decision-making and improved problem-solving. In this case diversity has merely instrumental value.

Instrumental value is often said to contrast with intrinsic value (Zimmerman and Bradley 2019). For our purposes we will leave aside the highly metaphysical question of whether all non-instrumental values necessarily have to be intrinsic values — and if yes, whether they are intrinsic because they are good or because they are intrinsically valuable (Schroeder 2016). What is important for the purposes of this deliverable is that diversity matters non-instrumentally and (therefore) also morally and that we should be concerned with the question of how it can be endorsed, secured and protected.

From the aforesaid, at least two arguments follow for diversity: As we have seen, pluralism as well as multiculturalism presuppose a diversity of opinions, values, beliefs, convictions and world views or plurality of cultural, ethnic and religious backgrounds or a variety of life styles.



According to theories of pluralism and multiculturalism, this diversity is to be protected. In other words: There is no multiculturalism and no political pluralism without a certain amount of diversity. One could argue that modern liberal democracies are only viable if there are competing interests, opinions, and world views. In that sense, diversity matters because it keeps the wheels of modern democracy turning.

A further aspect of the moral discourse on diversity is that we owe a certain amount of acceptance, respect and tolerance to other people (Weale 1985). In pluralistic societies, the concept of tolerance plays a central role (Forst 2013; Cohen 2014). Tolerance permits conflicts over beliefs and practices while at the same time defusing them. Societal diversity and pluralism are inputs and outcomes of tolerance. Highly controversial issues in the ethical discourse on tolerance (which are also highly important to WeNet and the development of ethical guidelines) are "hate speech," and how to properly deal with it (Butler 1997; Waldron 2012; Gerstenfeld 2013); as well as the question of how new forms of digital communication alter the very nature of social interaction (Barnett 2007).

Another argument for diversity stems from the discourse on non-discrimination: "Discrimination is prohibited by six of the core international human rights documents. The vast majority of the world's states have constitutional or statutory provisions outlawing discrimination" (Altman 2016; Osin and Porat 2005). Again, diversity is on the input and the output side: Societal diversity makes non-discrimination necessary, but diversity is also the outcome of non-discriminatory policies.

Diversity also matters morally because the concept of freedom of choice, the right of individuals to determine their actions (which lies, as some would argue, at the heart of autonomy) presupposes that there is in fact a range of options to choose from. Building on that, one could say that societal diversity or a variety of lifestyles also expands our options to choose from: "The value of diversity within a culture is that it creates more options for each individual, and expands her range of choices" (Kymlicka 1995, p. 121).

Building on ideas of the debate on life forms, one could formulate yet another point: If forms of life have a consistent purpose, namely to solve basic social problems and advance social goods (Jaeggi 2018), then we could further argue, based on the empirical claim that diverse communities solve problems more efficiently, that diverse societies are more likely to adapt to societal crises, overcome internal contradictions, and continue to fulfill its purpose. This would provide us with yet another argument on why diversity matters from an ethical perspective. Similar to that line of argument, some authors argue that diversity is valuable and desirable because recognizing and promoting diverse cultures may foster exchange between people with different backgrounds and finally lead to a greater understanding of one another and, in consequence, to peaceful coexistence. This hope is expressed for instance in the UNESCO "Convention on the Protection and Promotion of the Diversity of Cultural Expressions" (2005) where the following beliefs are stated: "That cultural diversity creates a rich and varied world." which increases the range of choices and nurtures human capacities and values, and therefore is a mainspring for sustainable development for communities, peoples and nations" and "that cultural diversity, flourishing within a framework of democracy, tolerance, social justice and mutual respect between peoples and cultures, is indispensable for peace and security at the local, national and international levels" (1f).

A further argument for the value of diversity is a quasi-aesthetic one: "Societal diversity enhances the quality of life, by enriching our experience, expanding cultural resources" (Falk 1988, p. 23). According to this argument, life is just a little nicer in a societally diverse environment. If the well-being of people is important, then everybody profits from diversity in an ethically important way by its enhancement of the quality of life, according to this argument.



2.3 ARE THERE CONTEXTS IN WHICH DIVERSITY IS NOT DESIRABLE?

So far, we have discussed the advantages of diversity and its moral value. Are there also contexts, in which diversity is not desirable or even dangerous? A very practical application of the idea of limiting diversity for the sake of diversity can be found in the concept of "safe spaces." The term safe space refers to places created for individuals as an explicitly non-discriminatory environment. Often, individuals who seek safe spaces feel marginalized in society and want to come together as a group with people who have suffered from similar experiences. In these safe spaces, a certain level of homogeneity provides comfort, because individuals are less afraid of being targeted by other members of the group.

Various authors also raise the question of whether norms of justice, including the representation and inclusion of marginalized groups, really extends the agency of individuals who belong to marginalized groups and communities or whether these norms in fact consolidate existing power relations (Spivak 2004).

With regard to political philosophy and political theory, many authors have argued that however valuable some extent of societal diversity may be, social cohesion is also needed. Therefore, societal diversity needs boundaries. Even advocates of a societal and political pluralism argue for certain constraints. John Rawls (1995), for instance, famously argued that diverse liberal democracies need a certain set of political principles that govern the public sphere. These principles, however, were to be restricted to a core set of political principles to allow for as much pluralism of "comprehensive doctrines" as possible.

An abovementioned controversy regarding the limits of diversity is how much diversity of opinions, beliefs, and mode of expression thereof do we believe necessary to see the right to free speech is not illegitimately curtailed. Hate speech is often said to be a boundary of the right to free speech. Jeremy Waldron (2012), for instance, argues that hate speech compromises not only "the public good of inclusiveness" (4), it also compromises the dignity of those under attack (5). Hate speech sends the message to the targeted group that "[t]he time for your degradation and your exclusion by the society that presently shelters you is fast approaching" (96). This makes life exceedingly difficult for those targeted by hate speech. According to Waldron, prohibiting such acts of communication assures all people that they are welcome members of the respective community. For Waldron, sacrificing a certain amount of diversity is sacrificing diversity of opinion for an acceptance of the given diversity within liberal societies: "Each group must accept that the society is not just for them; but it is for them too, along with all the others" (Waldron 2012, p. 4). The issue of hate speech and the boundaries of freedom of speech are very important to WeNet and should be considered closely and carefully (as well as other forms of potential misuse scenarios like for instance trolling and cyberbullying).



3 WENET UNDERSTANDING OF DIVERSITY - AN ETHICAL ANALYSIS

Different fields of study have produced different understandings of diversity and fed the public discourse, thus influencing our common understanding of diversity. These theories and understandings of diversity are mostly skeptical and see diversity as an instrument or a challenge, and propose that diversity be reduced or controlled. WeNet researchers might be influenced by some of these common understandings of diversity. From an ethical perspective, it is necessary for us as researchers to reflect our implicit assumptions when talking about diversity. Especially in the development of a definition of diversity and in the modelling of diversity, we should make explicit our assumptions about diversity. An analysis of the proposal text tries to find indicators for different approaches to diversity in WeNet. The ethical implications of the different views are addressed in this chapter. Finally, the chapter will address the fact that the WeNet understanding of diversity is framed by the university context and the social practices of students.

In this chapter, we will:

- → Analyze how different theories understand and utilize the concept of diversity
- > Problematize the understanding of diversity advanced by some theories
- Discuss how different understandings of diversity might influence the WeNet understanding of diversity
- Provide ethical considerations for the application of the WeNet understanding of diversity
- Provide ethical considerations about the context of WeNet's diversity understanding: the university setting

3.1 ASSUMPTIONS ABOUT DIVERSITY AND HOW THEY POTENTIALLY INFLUENCE WENET

Our common understanding and attitude towards diversity is influenced by theories and assumptions stemming from various fields of study. These theories have shaped our societal discourses around the value of (not) being diverse. To make explicit some of the theories that underlie certain arguments and show where they originate, the following section investigates the understanding of diversity in the natural sciences, in political science and international relations, in politics and justice theory, and in business and management. This is merely a selective synopsis of the various understandings of diversity. Nevertheless, this synopsis will shed some light on why diversity is often regarded as undesirable, threatening, in need of reduction or control, and only valuable in instrumental terms. In the context of the WeNet project, it is important to reflect these common ideas and assumptions about diversity and ask:

- → How is WeNet's understanding of diversity influenced by these theories?
- Do we, as a project team, subscribe to these theories? Or do we want to advance a different understanding of diversity?



Are there implicit assumptions that we as researchers hold and that inform WeNet's understanding of diversity?

In the natural or life sciences, diversity has long been seen as problematic because any deviation from the norm allegedly has a defective and inferior character to it. In molecular biology and medicine, diversity has been framed as dangerous and undesirable as diversity was equaled mutation and defection. Similarly, in the social sciences, deviations from a "normal" mind/body or script of behaviour were seen as irrational, ill, and in need of treatment. The afore-mentioned views are especially strong in the area of gender and sexuality. Critics of Charles Darwin and his sexual selection theory demand that we reject the afore-mentioned views and acknowledge how the value of diversity in nature and society has been wrongly denied (Roughgarden 2004, 3ff). A change of perspective helps challenge the views shaped by evolutionary theory.

First, changing perspective, one could argue that there is no defection in nature or society but there are simply "bad" environments. Context matters; whether a species or an individual/group is able to strive depends on the natural and social environment they find themselves in. Second, there is no need to reduce diversity in nature and society through sex or procreation because natural selection already takes care of eliminating bad genes. Some scientists have argued that sexual selection (i.e. looking for the best gene pool in a partner) ensures their survival and the reduction of mutations or defections. This argument can easily be used to justify the maintenance of "clean" bloodlines and the prevention of mixing diverse gene pools, as often done by white supremacists or nationalists. Of course, there are other theories explaining the pairing of sex partners; these theories focus on social selection and argue that individuals look for social qualities in a partner. However, the idea of a non-diverse gene pool and the idea that diversity is dangerous still informs our understanding of how relationships, families, and societies should look like (Roughgarden 2004, 20ff).

In political science and international relations, diversity is usually seen in terms of pluralism of states and the pluralism of their ethical commitments, norms, and values. The nation-state is the central actor in world politics, at least in the Realist and the English school of international relations. International law depends on nation-states agreeing to a minimum set of values and norms. This is important because the diversity of ethical positions among nation-states allegedly threatens the stability of the international order. Diversity or pluralism is then seen as a challenge that constantly needs to be figured out in order for world politics to continue a relatively calm path. Critics who seek to reform the English school have called for an active affirmation of the value of diversity and suggested that scholars focus on the diversity of human communities. Stressing the value of diversity and accommodating other actors than the nation-state allows for a path towards solidarism and a bottom-up ethical diversity in negotiations and agreements about the international order (Williams 2015, 2016).

In politics and theories of justice, as well as in campaigning and social action, diversity is often understood in terms of identity groups and the diverse needs and claims of members of different groups. These groups may be framed as women, migrants, people of colour, LGBTIQ, disabled people, children, and more. They are constructed as homogenous groups whose members share a certain worldview, special needs or experiences, and a common goal or claim to justice. Critics have argued that this representation of identity groups is problematic as it reduces the diversity of the members of a group. Furthermore, such a representation diverts attention from the intersectionality of experienced injustice and the fact that members of the example groups above often belong to various of these groups. In politics and theories or struggles for justice, it is often seen as necessary to reduce the diversity of these groups to a core and develop the narrative of "the" stereotypical group member in order to stress coherence of the group (Young 1990).



In business and management, diversity is usually seen as beneficial for organizations in terms of problem-solving and profit. The argument "diversity as a business case" goes as this: the more perspectives looking at a challenge, the more ideas for solutions will come up. Diverse teams lead to better outcomes, which then translates into better product development and ultimately more profit. This framing of the advantage of diversity in workplaces and organizations was partly a response to increasing protest over affirmative action policies of the 1980s and 1990s. In the business case for diversity, diversity is understood in terms of individual diversity (e.g. that there is this one thing that a person brings to the team that has been missing and will enrich the organization), instead of focusing on structural inequalities and the injustice of systematically excluding entire groups from organizations (Jack 2017). Contributions in critical diversity studies have pointed to the problem of the "business case" understanding of diversity: it renders invisible the persisting racism that underlies diversity management. From a postcolonial perspective, diversity management is a tool to control diverse identities and sustain the racial binary and hierarchy known from colonial times. According to the diversity managers, marginalized individuals should be "empowered" and "uplifted" to the level of the white privileged group in power. Such an approach does not dismantle racial orders but sustains them (Jack 2017, p. 163).

The abovementioned theories and understandings of diversity originating in diverse fields of study inform our common understanding of diversity. It should be emphasized that all these theories advance a skeptical view of diversity. In any of the included theories and fields, diversity is considered a challenge and diversity can only be beneficial if controlled or reduced in some way: in biology, diversity is often seen as a form of mutation and diversion from the norm and thus threatening; in international relations, diversity is reduced to the diversity of values/normative positions among nation states and constantly threatens the stability of the international order; in politics and activism, diversity is reduced to identity groups that are constructed as homogenous entity with a core claim for justice; in business and management, diversity is seen as beneficial as long as profit can be increased through the addition of diverse individuals, as such diversity is seen as of instrumental value. After sufficiently describing the core assumptions underlying the afore-mentioned understandings of diversity, we can investigate how these theories potentially influence WeNet. How do the above-mentioned skeptical views of diversity relate to WeNet's understanding of diversity?

From our analysis, we find that WeNet also employs an ambivalent view of diversity. While diversity is valued because it is considered beneficial to social interactions between humans and beneficial to societal development, it is also regarded as potentially irritating, conflictprovoking, and creating anxiety among humans. The analysis of the WeNet understanding of diversity (see 3.2) shows that diversity is constructed as a) positive in instrumental terms, b) a potential source of anxiety and often experienced as threatening, and thus c) in need of alignment, adjustment, and mediation for humans to benefit from its positive qualities. On the one hand, diversity can be used to improve social interaction. Diversity is thus framed as an asset, as something positive that should be leveraged. On the other hand, exposure to diversity can cause fear among human beings, especially given our new knowledge (gained by accessing digital information and communication technologies) of the extreme diversity of our world. According to WeNet, it then follows that diversity must be regulated or adjusted in some way. The technology developed has to help shape and coordinate the diversity of humans (or individual's exposure to diversity) so that diversity is not a source of irritation and conflict. This understanding of diversity points to a skeptical view of diversity in the sense that "full diversity" or non-aligned diversity will not be beneficial for human social interaction.

There are elements in our understanding of diversity in WeNet that show similarities to the theories and assumptions presented above. One could argue that our understanding of diversity is close to the business and management discourse around diversity. Here, too, diversity is seen as beneficial because it promotes certain outcomes (instrumental value). In the business case scenario, diversity is good as long as diverse teams solve problems more



efficiently and effectively. Diversity is used in teams to arrive at better business solutions and ultimately generate more profit. WeNet seems to adopt a similar view when citing literature on the advantages of diversity for social interaction. From an ethical perspective, the question is whether profit and efficiency is the major driver for leveraging diversity, or whether there are in fact other reasons or justifications for leveraging diversity. For instance, one might look at the intrinsic value of diversity. One might argue that diversity of individuals' behaviour, attitudes, norms, qualities, and experiences constitutes a value in itself. Such an argument might be used to affirm human dignity and reject structural discrimination and oppression. Finally, there is concern over the potential danger of sustaining certain structures of online social interaction by controlling how diversity impacts online social interaction. Algorithms are built in order to accommodate the alleged difficulty of individuals to process and adequately react to the diversity they encounter. In this way, structures might be sustained instead of dismantling discriminatory ways of computer-mediated communication.

Our understanding of diversity in WeNet also shows similarities to the pessimistic view advanced in international relations, i.e. that diversity is always a source of instability and potential conflict. With the variety of norms and values held by nation states (and in WeNet's case individuals), the argument goes that conflict will arise sooner or later. While it is vital to address the difficulty of cross-cultural communication (from language to communication style), the assumption that encountering diversity is experienced as a threat prevents affirming the potential of cross-cultural solidarity. A further concern is that the alleged need for reducing and controlling diversity will de facto prevent individuals from connecting with each other. The danger here is that diversity will be reduced too much, effectively discriminating against certain normative positions or individuals that engage in "unwanted" social practices. This balancing (of reducing diversity so that individual can interact and protecting diversity so that no one is excluded) is difficult and involves a lot of responsibility.

Moving forward in the WeNet project, it is important that we as researchers reflect our understanding of diversity and question assumptions underlying theories of diversity. Why do we value diversity? Is diversity of instrumental or intrinsic value? What message do we send with our understanding of diversity? To what end to we want to leverage diversity? What implication does our aligning of diversity have on the users of the WeNet technology? Are we knowingly or unknowingly sustaining structures of online social interaction by regulating diversity? What should be the role of technology in mediating individuals' exposure to diversity? From an ethical perspective, there is not one correct answer to these questions. There can be many helpful understandings of diversity. However, it is important to make transparent our (sometimes unconscious) assumptions, goals, and motivation underlying our understanding and utilization of the term diversity.

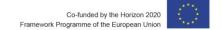
3.2 ANALYSIS "DIVERSITY UNDERSTANDING IN WENET"

We take the proposal as a tentative statement regarding diversity. As such, a reflection on its contents is part of the ongoing development of an ethical framework of diversity.

According to the proposal there are three elements of our understanding of diversityin WeNet:

- Diversity as positive and of instrumental value
- Diversity as a source of anxiety and potentially threatening
- Diversity as in need of control and alignment

Concerning the **first element "diversity as positive and of instrumental value,"** we (as WeNet) argue that diversity is positive because it can help improve social interaction and make





individuals' lives easier or more fulfilling. In the proposal, pages 2 and 5 address our view of diversity directly. There are two claims that we make with regard to the positive elements of diversity, a descriptive and a prescriptive/normative claim. The descriptive claim is that diversity is simply a reality of our world and our social interactions. The proposal text reads: "In WeNet, we take diversity to mean the variability that exists across humans and social relations. [...] This diversity is something we exploit in our everyday life, often without even realizing it. [...] Embracing and exploiting diversity can make us do better." Hence, we necessarily encounter a vast amount of diversity and often make use of it in our daily lives. As this is the reality, it will be helpful or logical to leverage diversity.

The normative claim is already hidden in the above quote. We believe that diversity can be used to improve our lives. Diversity is important and valuable because it allows us to strive and develop in positive ways. For instance, diversity is seen as integral part of a successful European future: "Diversity is a key societal value for the future of Europe and [...], if put at the centre of a platform design, can lead to sociotechnical systems that allow to connect people to achieve everyday life goals while respecting their differences and embodying fundamental features of transparency, fairness, and accountability" (proposal text). The value of diversity is then of instrumental nature, i.e. diversity is valuable for a certain end.

From an ethical perspective, the above-mentioned understanding of diversity raises two concerns: 1) the fallacy of determinism and 2) the neglect to affirm diversity as an intrinsic value. Concerning the first issue, only because diversity is a fact in our world, and only because individuals make use of diversity in their everyday lives, diversity is not automatically a good thing. How does diversity help individuals in their lives? Why do we believe that diversity is helpful for human social interactions? Roughgarden (2004) warns that we should avoid determinism and not automatically declare everything that exists in nature "good". For instance, among non-human animals, there is the common practice of infanticide, but humans would not consider this practice to be a morally acceptable standard for societies (Roughgarden 2004, p. 4). Diversity, luckily, is a fact of nature and is good in many contexts. Yet, we need to reflect on why we believe that diversity (regardless of its status in nature) is good. Note that on page 7 of the proposal text, it says that "diversity holds also the key to successful interactions (for instance, diverse teams are more successful than homogenous ones (Marcolino 2013, Mathieu 2008, Wilde 2009))". However, the cited literature refers only to contexts, in which teams faced with one particular task perform better than uniform teams. WeNet looks at a different context, that is WeNet mainly looks at volunteer activities and private, non-business social interactions.

Concerning the second issue, our understanding of diversity as valuable in instrumental terms (because diversity can improve social interaction) renders invisible the possibility that diversity can also be of intrinsic value. This means that, by stressing the importance of diversity for the development of society, the importance of diversity in itself (as a quality of human beings and cultures) becomes irrelevant. Seeing diversity as an intrinsic value, however, can have some advantages that also affect human social interaction. Seeing diversity as a value in itself affirms the plurality of lifestyles, norms, behaviour, and features of human beings. It is a strong argument in favor of tolerance and rejecting any form of repression or discrimination - a goal that is potentially embedded in the culture and goals of WeNet. Furthermore, our understanding of diversity as of instrumental value raises the question: "For what outcome or for whom" should we leverage diversity? Yes, we want to improve online social interaction, but there seems to be more to it. What is the goal of leveraging diversity and improving online social interaction? What assumptions about development, progress, and human well-being come with the rationale that diversity should be used to improve online social interaction? If we for instance leverage diversity for better online social interaction because we believe it will increase cooperation among students and thereby lead to innovation, new ideas, and marketable inventions, we probably have adopted a neoliberal, smart economics approach to



development. While different rationales can be justified, it is important to make transparent what underlying (sometimes unconscious) motivation we have in the WeNet project.

Concerning the second element "diversity as a source of anxiety and potentially threatening," the proposal sees diversity as a challenge, as potentially overwhelming human capacity to understand and cope with new information that we receive via digital information technologies. On page 2 of the proposal text, we write: "The amount of diversity we have access to has increased exponentially [...] Yet, evolution operates on a slower timescale than that of technology. We have basically the same instruments and skills to deal with diversity that our grandparents had 50 years ago. But the level of diversity they were exposed to was way more limited. Technology has provided with an increasing access to diversity, but failed short at providing the instruments for individuals and communities to cope with the social challenges that arise with diversity." Here, we assume that human beings cannot sufficiently process their exposure to diversity. Human beings might not be able to handle the mere knowledge of the existence of diversity, on the one hand, and the social challenges that arise from increased exposure to diversity, on the other hand. It is not specified what these social challenges might be. We assume that human beings need assistance through technology in coping with diversity.

From an ethical perspective, the understanding of diversity as potentially creating anxiety and in need of reduction/alignment through technology raises the following questions:

- → Why do we think that people are overwhelmed by their exposure to diversity? What capabilities would help people to cope better with diversity? What role should technology play in the context of reducing anxiety?
- → What exactly constitutes the fear created by diversity? Is this fear "natural" in human beings or is it spurred by societal discourses and narratives in politics and media?
- → What is an ethical way to mediate individual's exposure to diversity? For instance, scholars have pointed to the danger of social media bubbles (Pariser 2012). Reducing diversity in online social platforms then raises other ethical problems. What are appropriate methods to mediate individuals' exposure to diversity?

Concerning the **third element** "diversity as in need of control or alignment," we (as WeNet) argue that leveraging diversity will not be beneficial for users if diversity is not regulated. We see diversity as something that can be grasped and made understandable by building profiles and categories. Diversity has to be broken down into pieces, e.g. a particular social practice in one aspect of a person's life. Moreover, the diversity of users has to be aligned, i.e. there has to be some kind of adjustment or regulation for diversity to be beneficial. Diversity is not considered "good" if it is complicated, contradictory or fluid, but if diversity is amended and mediated by technology. In this understanding of diversity, in order to work with and benefit from diversity, regulation is required. That is why WeNet plans to install "a diversity alignment mechanism that lifts communication barriers by ensuring that messages between humans are interpreted correctly" (proposal text).

From an ethical perspective, the understanding of diversity as in need of control and alignment raises the following questions:

→ Why does "full" diversity, i.e. diversity that is not controlled in some way, not benefit social interaction as much as aligned diversity? What evidence/literature supports these claims? In which contexts is alignment needed, or is alignment always needed?



- To what extend should the diversity of users be aligned? How can we ensure that we are not accidentally or unnecessarily reducing diversity and inclusion of users in the platform? What is the "lowest common denominator" that ensures maximum diversity of users but prevents irritation or conflict?
- What are the criteria for aligning diversity? What are implications for users' social interaction? By aligning diversity, are we effectively excluding the possibility for certain matches? For instance, if we use age group as a criterion for aligning diversity (e.g. because we believe that generational divides might constitute a barrier to meaningful social interaction), how can we bring together the student who is looking for a mentor and the professor who wishes to pass on her knowledge and support struggling students?

3.3 THE CONTEXT OF DIVERSITY IN WENET: THE UNIVERSITY SETTING

In the WeNet project, the pilot trials will be conducted in a university setting. Students are considered the primary prospective users of the WeNet technology, and thus the app should be developed for them. Given this focus on students and the university, we need to carefully consider how the university setting affects the diversity of the group of people in question. Arguably, a student population is less diverse with regard to socio-economic factors (e.g. level of education, financial resources) as well as age and other features than the general population. This is also true with regard to the social practices of the group. Certain practices that students enact will never be enacted by other parts of the population and vice versa. While universities are considered a diverse setting (when we think about disciplines, interests of students, academic performance, national origin and language skills of students), we should keep in mind that diversity is also quite limited when compared to the diversity of the general public.

The university setting also affects the trust and assumed trustworthiness of the counterparts in an envisioned interaction within WeNet. The university setting removes some important epistemic obstacles in an interaction with a previously unknown person. To put it differently: "When we trust people, we are optimistic not only that they are competent to do what we trust them to do, but also that they are committed to doing it" (McLeod 2015). We tend to be more optimistic – and rationally so – when we have more information about the person that we encounter. Knowing that a person who sends a request to me via WeNet belongs to the university I attend gives me quite a lot of information about that person and will affect my perception of the trustworthiness of my interlocutor. This will also affect my use of the application and the kind of interactions that I will pursue within WeNet.

From an ethical perspective, the abovementioned considerations have implications for the potential application of WeNet to a wider group: What works within the university setting might not work with regard to a more diverse group that is furthermore not assured by the collective identity of the student body of a given university. Our operationalization of diversity in WeNet is adapted to a university/student context, i.e. we are talking about limited diversity and social practices. Moreover, the data collected by the WeNet project, i.e. data on the social practices and forms of interaction of students, are specific to the university setting. While methodological restrictions are inherent to research projects, and the breath of the project must be limited to a particular focus, we should be aware that potential ethical concerns may arise from the transfer of the WeNet approach developed for the university context to other contexts.



4 THE SOCIAL PRACTICES APPROACH FROM AN ETHICAL PERSPECTIVE

In the WeNet project, we employ the social practices approach to operationalize diversity. While culture is too broad to break down the variety of languages, norms, values, cuisine, processes, and structures that make up different cultures, social practices are manifestations of the afore-said markers of diversity. The social practices approach allows researchers to a) look beyond dichotomous conceptualizations of human behaviour as either emotional or rational, b) account for flexibility and dynamic character of human behaviour, and c) understand the interrelation of individuals and society. However, the social practices approach looks primarily at standard social practices, or "normal" behaviour, thus marginalizing alternative behaviour. The approach furthermore rarely addresses the problem that structural inequality and injustice is sustained through social practices, and – related to that – the approach rarely evaluates the moral quality of certain social practices. In the context of WeNet, these constraints of the social practices approach can have ethical implications: the approach may lead us to operationalize diversity according to standard behaviour, ignoring "other" behaviour and in effect not account for people who enact practices differently from our understanding (i.e. those people's needs and competences might not be reflected by the dataset). Moreover, the operationalization of diversity as (mainstream) social practices may lead to algorithmic discrimination, as the machine-learning algorithm might infer standard practices from the dataset and render invisible "other" behavior, effectively not sending out requests to users who enact practices "differently."

In the following chapter, we will:

- → Investigate the benefits and constraints of the social practices approach
- Discuss how social practices largely reflect "normal" or standard behaviour, thereby marginalizing alternative practices
- → Demonstrate how social practices are "coded" to ideas of gender, class, and race, and have a tendency to sustain structural inequality and injustice
- Argue that the application of the social practices approach in WeNet may reduce diversity in the WeNet platform and, in the worst case, lead to algorithmic discrimination

4.1 BENEFITS AND CONSTRAINTS OF THE SOCIAL PRACTICES APPROACH

In the WeNet project, we draw on a social sciences taxonomy of diversity that considers diversity as the materialization of culture in the form of social practices. In the social sciences, diversity is usually understood in terms of the culture, i.e. language, norms, values, cuisine, history, and media. Culture, however, is too broad, complex, and intangible to be measured. Therefore, social scientists look at the materialization and manifestation of cultural behaviour in tangible action such as social practices. The everyday routines and practices of individuals (and the various components that make up these practices, e.g. the body, material, knowledge, discourses) will thus be the measurement of diversity. Like any approach, however, the social practices approach has some constraints. Working with the approach in WeNet without acknowledging the constraining aspects of the approach can have ethical implications. In the following, we will recount the approach used in WeNet and then depict an ethical perspective.



In this way, we may gain a better understanding of the possibilities and constraints of the approach and increase awareness of the sometimes ambivalent evaluation of social practices.

Practices are routines, or a routinized type of behaviour, which consists of several elements interconnected to one another. Practices are "a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood" (Reckwitz 2002, p. 250); they thus include mental activities as well as bodily performances. A practice is formed by a block of elements, which cannot stand on their own. Relevant to the understanding and reconstruction of social practices are the body, the mind, things, knowledge, discourse and language, structures and processes, as well as the agent or individual. Social practices are hence complexes of body, knowledge, and things (Reckwitz 2002, 249ff).

According to Holtz (2013), the elements of a practice can be categorized under the components a) meaning, b) material, and c) competences. "Material" makes up the physical performances within the practice and points to the physical sequences of bodily movements that are underlying. "Meaning" refers to everything that is considered relevant to the interpretation of the material (such as understandings, beliefs, and emotions that are socially shared). Skills and knowledge, which are required to perform the practice, are encompassed in the component "competence." Together, material, meaning, and competence form a block of interconnected elements, which make up the practice (Holtz 2013, 2f). According to Holtz (2013), practices have to be coherent, i.e. they are successfully enacted only if they do not involve major cognitive dissonance or discomfort. Coherent practices usually do not require much cognitive efforts, which makes it easy to perform them. Some practices are even performed subconsciously. Finally, routines are passed on to individuals, or individuals are "recruited" into practices (Holtz 2013, 2f).

The social practices approach has many advantages when it comes to understanding human behaviour and mapping human needs/preferences and competences. First, it does not employ a dichotomous view of human action – as either emotional or rational. Nor does the approach suggest that humans are acting always consciously or always unconsciously. The social practices approach is then more flexible than other cultural theories and social methodologies and accounts for daily semi-conscious behaviour, routines and automatic reactions, assumptions, and shared understandings of things, bodies, and knowledge.

Second, the social practices approach focuses on social relations and not social categories, which is especially important when we are talking about diversity. Using such an approach in WeNet means that we do not prioritize characteristics of people that are ascribed from the outside or self-attributed in the form of "static" or "rigid" categories like age, gender, ethnicity, religious affiliation, etc. Instead, we focus on people's diverse and dynamic interests and competences. The practices approach captures particularly the interrelation between the aforesaid rigid categories and how they are lived and experienced in society through the enactment of social practices.

The concept of intersectionality is relevant here. Intersectionality describes multiple forms of discrimination experienced by members of more than one marginalized group (Cooper 2016). For instance, in many European countries, a woman who is also a migrant experiences other (and arguably more severe) forms of discrimination than women in general. While the social practices approach captures the relational character of social practices and the intersection of diversity attributes, it also highlights the dangers of discrimination through social practices (this will be spelled out in chapter 4.3).

Third, the social practices approach acknowledges the interrelation of society and individuals in the sense that society/culture/hegemonic norms and knowledge shape individual behaviour and individual behaviour in turn sustains and reinforces social structures or social order. The



theory is well suited to explain how social practices are ways of creating, sustaining, and breaking power relations. The theory stresses how material and bodies are part of practices evolving in and through social processes, i.e. in interaction between people but also by socialization or recruiting knowledge, discourses and such. Social practices are then not independent, stand-alone activities but are connected to a society or "form of life" (Jaeggi 2018). Even if a person does not engage in a certain practice, they have some kind of understanding of the practice that is shared with other people in their cultural sphere.

While there are the afore-mentioned benefits of a social practices approach, there are also constraints. Unfortunately, the approach does not acknowledge that social practices and their components reflect mainstream or standard ideas about how to behave in a certain situation and how things and bodies have to look/perform in certain situations. Social practices and their components (material, meaning, and competence) are "coded" to certain attributes through the social construction of practices. They are derived from hegemonic ideas about "normal" behaviour, as individuals are socialized into practices and as a result internalize these ideas about "normal" behaviour through meaning and competences. Some critical social practices theorists discuss this aspect of socialization or the origin of social practices (Butler 1990; Walzer 1987; Taylor 1989; Honneth and Archard 1994). Using existing hegemonic/standard conceptualizations of social practices in WeNet may reinforce societal biases and marginalize those practices and components that are in fact deviating from the norm and thus truly diverse.

Another concern about the social practices approach is that it is largely descriptive and seeks to explain human behaviour instead of ethically reflecting the normativity of social practices. Using a social practices approach may thus lead to the reinforcement of discrimination, if social practices and their components are not evaluated (according to their fairness, appropriateness, effects, etc.). We should therefore ask: "What social practices align with our ideas of a good life?", and reflect whether we want to promote certain social practices or not. These constraints directly relate to the matter of measuring diversity; they have to be considered carefully when we operationalize diversity in WeNet.

Benefits

of the social practices approach

- more flexible than other cultural theories; no dichotomy of rational vs. emotional behaviour; accounts for semi-conscious behaviour
- focus on social relations; captures diverse and dynamic interests and competences; highlights interrelation of "static" categories like gender, race, class, etc.
- focus on interrelation of society and individuals; social practices formed in social processes

Constraints

of the social practices approach

- focus on mainstream, hegemonic social practices; marginalization of practices that deviate from "normal" behaviour;
- little awareness of discriminatory character of social practices; lack of attention to strutural inequality perpetuated by interaction of social practices and structures/institutions
- largely descriptive; the morality of social practice is not the focus of analysis; neglect of theories for social change

TABLE 2: THE SOCIAL PRACTICES APPROACH: BENEFITS AND CONSTRAINTS



4.2 SOCIAL PRACTICES AS "NORMAL" BEHAVIOUR AND MARGINALIZATION OF ALTERNATIVE PRACTICES

In WeNet, we understand social practices as a manifestation of cultural diversity. Therefore, social practices carry norms and values, tradition, attitudes and beliefs that are culturally specific. Social practices are normative in their very essence. The enactment of social practices by an individual or group sends a message to other actors about what is considered "normal" or appropriate behaviour in a certain situation. The challenge of the approach is that it seeks to explain human behaviour without acknowledging the structural dynamics behind the formation and distribution of social practices. It may therefore face the challenge to ethically evaluate the normative content of these practices and their reproduction of gender roles and other stereotypes.

Social practices reflect the mainstream, "normal" behaviour of a group or society. According to Holtz (2013), they "refer to regularities— patterns how certain mundane practices are typically and habitually performed in (a considerable part of) a society" (2). While the focus here is on typical performance, it remains problematic who decides what typical performance constitutes. Certain members of society seem to contribute to the enactment of a certain practice, and if the number of people joining in this enactment is large enough, then the practice can be considered typical. But what about minority groups and those people whose behaviour differs from typical performances? Some individuals or groups may behave in a way that deviates from "normal" behaviour. If their behaviour is not considered a social practice, their behaviour will not be analyzed or considered in the theory of social practices.

The focus on mainstream, "normal" behaviour raises ethical concerns because it may lead to the exclusion of minority groups. The social practices approach has a hard time accounting for resistant, alternative behaviour that does not conform with heteronormative ideas about organizing one's life in society. Why is it problematic that minority groups and their performance falls through the cracks and they are not captured? The concern is that diversity can then not be adequately represented. One could argue that social practices are always carried out slightly differently, for instance according to cultural context and thus *do* capture deviating forms of behaviour. However, the truly diverse practices are those that in fact contest social practices and de-assemble their components. For instance, let's consider the example of running.

Running is a social practice that can, like other social practices, be analyzed through its components: material, meaning, and competence. If we did an analysis of the practice of running in Western cultures between 2010 and 2019, we would probably arrive at the following conclusion. The material aspect of running involves owning running shoes and other equipment, having a decent amount of muscles, displaying certain bodily movements (slightly bending forward, making long steps, using arms to support the movement), and a street, pavement, field, road, or treadmill. The meaning aspect of running involves ideas about health, fitness, stress reduction, competition and recognition, and body image. The competence aspect of running involves knowledge of potential injuries, being able to motivate oneself, showing endurance, and finding one's way to the gym or track. Such an understanding of the social practice of running, however, captures only mainstream ways of running. For instance, there is a community that believes in the benefit of running barefoot, e.g. for health or traditional reasons. The social practices approach does not highlight this diverse practice but focuses on the mainstream analysis of running. What implications does this have for WeNet?

In the context of WeNet, we want to operationalize diversity as differences across but also within social practices. That means that we must built categories of data that reflect (components of) social practices. For instance, in order to find out whether a person is a runner, if we ask in a questionnaire about the component material "Do you own running shoes?", then the person who has recently run a marathon barefoot will nonetheless *not* be identified as a

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runner. In the WeNet technology, it might then happen that this person who has recently run a marathon barefoot, will not receive a request like "I want to run my first marathon and heard that running a marathon requires significant mental strength. How can I best prepare for that?" The problem with the operationalization of diversity as social practices is thus that individuals whose practices deviate considerably from typical behaviour that will be captured by the questionnaire have a chance of being discriminated against in the platform interaction. They may not receive as many requests as individuals who conform with the predominant version of a practice. In addition, by designing the questionnaire in a certain way, we might reinforce our own underlying preconceptions of what the practice of running consists of, thereby running the risk of preselecting certain instantiations of this practice and disregarding others. It may thus happen that we in fact reduce diversity in the interaction on the platform. It may be worth exploring the possibility whether this threat of in-built social exclusion ("threat of invisibility"Bucher 2012) can be mitigated by keeping the elicitation of social practices to a fairly general level, that is to use a level of low granularity. One could argue that the wider the purview of the social practice, the more people would be signed up. Furthermore, if diversity has intrinsic value, then exposure to a range of requests and queries within a general social practice would not only show people new opportunities, but also limit the reinforcement of biases. Low granularity might avoid that cliques have no exposure to interests, lifestyles etc. outside their own group.



Data collection (questionnaire and app)

Operationalization of diversity as social practices and their components

Operationalization of "Running" (according to contemporary Western European understanding)					
Material Meaning Competence					
Running shoes, other equipment, muscles, street, field road, treadmill	health, fitness, stress reduction, competition and recognition, and body image	knowledge of potential injuries, motivate oneself, endurance, and finding one's way to the gym or track			

Possible questions derived from operationalization:

- Do you own running shoes and other equipment? Please tick the things you own below.
 - Do you consider yourself rather muscular? Please evaluate your body on a scale.
- Do you agree with the following statements? Running keeps me healthy and fit. Running reduces stress. Running is fun. Running keeps my body in shape. Etc.
 - ...

WeNet Technology (matching users according to their social practices)

REQUEST: "I want to **run** my first marathon and heard that **running** a marathon requires significant mental strength. How can I best prepare for that?"

→ the technology might infer from this request that it must look for "runners" to match the person

WeNet community

Request

Thomas (profile)

has two pairs of running shoes and a professional runner's watch, considers himself very muscular, runs on the treadmill twice a week to keep his body in shape, and has participated in two 10k runs organized by his university in the past 12 months

Selina (profile)

goes on a 5k morning run every weekday, runs barefoot along the river near her university, considers herself fairly muscular, runs primarily for fun and because she loves to be outdoors, participated in the barefoot marathon in New York last year

Result

The WeNet technology will probably send out the request to Thomas, because he fulfills more of the previously defined aspects of running. Although Selina has run a marathon, the system might not identify her as a legitimate "runner" because she does not own running shoes and special equipment nor considers herself very muscular (maybe out of modesty).

FIGURE 1: SOCIAL PRACTICES AND DISCRIMINATION, EXAMPLE OF "RUNNING"



In a way, we might create a problematic feedback loop: we are using social practices that are considered as stereotypical "normal" behaviour to measure and account for the diversity of users. Thereby, we most likely exclude practices that deviate from the norm ("threat of invisibility" Bucher 2012; "statistical stereotyping"Cheney-Lippold 2011, p. 171). This may effectively reduce diversity instead of enhancing it. Drawing on social practices that are considered appropriate and "normal" behaviour means that we run the risk of excluding alternative social practices, which may even contest or resist a normalizing effect.

From an ethical perspective, two major conclusions can be drawn from the analysis above: First, it matters greatly what kind of questions will be asked of our data subjects. The components of a social practice – materiality, competence, and meaning – will be defined in data points. The questions posed to generate the data points might already carry bias about the idea of a certain social practice. Second, it matters whether and how the algorithms will reconstruct and reassemble the components of practices. We should be particularly wary of the power of machine-learning in the process of inferring and reinforcing social practices or patterns of "normal" behaviour. The matching algorithm might infer from the data "typical" behaviour or practices and match people accordingly ("statistical stereotyping"Cheney-Lippold 2011, p. 171). Users who engage in alternative practices will then possibly receive less request, effectively experiencing discrimination due to their diversity. We should thus continuously review the questionnaire and other tools to collect data and the machine-learning models that work with data on social practices. A further idea to mitigate these risks would be to complement or amend the questionnaires on social practices in the pilots by meta-questions like "Do you feel represented by the platform?", or "What is your understanding of diversity?"

4.3 IMPLICIT BIAS AND THE CODED NATURE OF SOCIAL PRACTICES

The example of a barefoot runner who does not receive requests through WeNet might not appear as a serious form of discrimination. It does not constitute discrimination on the basis of "sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status," as prohibited in Article 14 of the European Convention on Human Rights. However, cases of serious discrimination may arise due to a similar problem with the social practices approach: the fact that social practices are socially constructed in a way that they are associated with certain gender roles, racial performance, and socio-economic classes. Social practices are not enacted in a vacuum. They are embedded in social structures and society, and they de facto make up the social order. Individuals and social practices are thus not independent. For instance, even if a person does not enact the practice of caring for a child, they have a certain idea about what this practice entails (who carries out the practice, what material and competences are involved, ideas about "good" childcare). Hence, in their talking about child care, parental leave, and education, even individuals not actively engaging in childcare will draw on established ideas of the social practice of caring for a child. Thereby, individuals reproduce and reinforce socially constructed social practices.

This idea that social practices are embedded in society and relational to the body, mind, discourses, knowledge, structure, processes, agents, and individuals is expressed in the following quotes:

"The single individual – as a bodily and mental agent – then acts as the 'carrier' (Träger) of a practice – and, in fact, of many different practices which need not be coordinated with one another. Thus, she or he is not only a carrier of patterns of bodily behaviour, but also of certain routinized ways of understanding, knowing how and desiring. These conventionalized 'mental' activities of understanding, knowing how and desiring are necessary elements and qualities of a practice in which the single individual participates, not qualities of the individual. Moreover, the practice as a 'nexus of doings and sayings' (Schatzki) is not only understandable to the agent or



the agents who carry it out, it is likewise understandable to potential observers (at least within the same culture)" (Reckwitz 2002: 250).

"Agents, so to speak, 'consist in' the performance of practices (which includes – to stress the point once more – not only bodily, but also mental routines). As carriers of a practice, they are neither autonomous nor the judgmental dopes who conform to norms: They understand the world and themselves, and use know-how and motivational knowledge, according to the particular practice. There is a very precise place for the 'individual' – as distinguished from the agent – in practice theory (though hitherto, practice theorists have hardly treated this question): As there are diverse social practices, and as every agent carries out a multitude of different social practices, the individual is the unique crossing point of practices, of bodily-mental routines" (Reckwitz 2002: 256).

Similarly, Bourdieu's idea of the habitus relates to the "coded" nature of social practices, i.e. that certain behaviour is tied to certain gender roles, social classes, and races/ethnicities (Bourdieu 2008). A habitus derives from the interaction of social structure and practices. History or common interpretations of the past create, sustain, and exacerbate so-called "schemes" (Bourdieu 2008, p. 58) that dominate thought and action of society members. The habitus

"ensures the active presence of past experiences, which, deposited in each organism in the form of schemes of perception, thought and action, tend to guarantee the 'correctness' of practices and their constancy over time, more reliably than all formal rules and explicit norms" (58).

The schemes and social practices produced and continuously reproduced in society through socialization or the "recruitment" of individuals into these schemes and practices raise ethical concerns. The major concern here is that social practices reinforce and sustain structural inequality and injustice such as sexism, racism, anti-Semitism, and bigotry. Bourdieu (2008) recognizes this famously with respect to class:

"The practices of the members of the same group or, in a differentiated society, the same class, are always more and better harmonized than the agents know or wish, because, as Leibniz again says, 'following only (his) own laws', each 'nonetheless agrees with the other'. The habitus is precisely this immanent law, lex insita, inscribed in bodies by identical histories, which is the precondition not only for the co-ordination of practices but also for practices of co-ordination" (59).

We will flesh out the afore-made arguments – that social practices are interacting with structures, that they are "coded" and sustain discrimination due to their constant reproduction in society – by drawing on the ideas of philosopher Sally Haslanger.

According to Haslanger, oppression is caused not by one single actor or entity, but by a system of interacting individuals and structures. For instance, there might be cases where a person is not discriminated against by another person directly. But because of the set-up of the social order and institutions, the person might find herself in a position of oppression and not enjoy the same privileges as other persons. This is the case because power was allocated unjustly and distributed to some individuals but not to others (Haslanger 2004). For instance, if a migrant woman in Germany is not able to find an apartment for herself and her children after relocating from Afghanistan, there is not a single person responsible for this injustice. After all, there is not only one person in a city who owns an apartment and decides to rent it but there are many landlords. Now, one could argue that all these landlords are racists and are therefore not offering a leasing contract to the migrant woman. However, it seems quite unlikely that everyone is a racist. Instead, due to structural reasons (poverty of migrant women/single mothers in combination with tense housing market, stigma and xenophobia, language and cultural barriers), the migrant woman might not be invited to any apartment inspections and has no opportunity to apply for an apartment.



Haslanger (2004) stresses that individuals are tied together with structures and that not one individual can be responsible for structural injustice:

"Admittedly, individuals play a role in creating and maintaining the social world, but most of the practices and institutions that structure our lives, although made up of individuals and influenced by individuals, are not designed and controlled by anyone individually. The government, the economy, the legal system, the educational system, the transportation system, religion, family, etiquette, the media, the arts, our language, are all collective enterprises that are maintained through complex social conventions and cooperative strategies. And they all distribute power among individuals-for example, a public transportation system that is inaccessible to the disabled disempowers them relative to the able-bodied. Rules of etiquette [or what Bourdieu might label habitus] that preclude women from asking a man on a date, or that require a man to pay for all expenses incurred on the date, are not neutral with respect to the distribution of power" (104).

Now let us look in more detail at social practices and how they may lead to oppression or structural discrimination. According to Haslanger (2004), human behaviour can be explained by looking at schemas that dictate how we interpret a situation and act under given circumstances. These schemas are – in our terminology – the meaning of social practices: they make sense of the practice. What are we doing in which role within the practice, what materials do we need for that, which competences do we have to employ? What are our goals, what are the goals of the other participants?

Schemas make us act automatically and help us process the various stimuli we receive; they help us decide what is the appropriate action. Since schemas often determine our behaviour, they have much to do with implicit bias. When we interpret people and their behaviour, usually schemas kick in and can make us act in a prejudicial or discriminatory manner. This is the core of the argument that we would like to advance here. Social practices are not neutral. They are coded according to the schemas we internalize at a young age and which usually determine our actions and interpretations. For instance, in Western Europe and many other parts of the world, the practice of caring for a child is linked to female bodies, motherhood, love and nurture, and commitment to staying at home when the child is young. This is our traditional view of childcare, which has been reinforced over generations by stay-at-home-mums and media/cultural promotions of the idea that motherhood and childcare is beautiful and fulfilling.

But as experiences with different views on child care from e.g. East Germany and other former socialist societies show, these schemas can be altered and relearned – they are not "natural" behaviour. However, that is where institutions and social structures come in and interact with schemas. For instance, if women would like to go back to their careers after three months of paid maternity leave, they depend on child care centers. Often, there is no quality child care that is affordable, e.g. because city officials invest in other areas because they believe (again, they hold certain schemas) that women will stay at home anyway as this is the "normal" way to enact the practice of childcare.

What is even more important, the (non)existence of quality child care precludes our perceptions of motherhood and childcare. Abundance of good quality child care instills the norm that "it's ok" to go on maternal leave, to pursue a career etc. without being a "bad mom". Therefore, not only do the schemas of our practices effect our institutions (lack of child care facilities, because mothers should care for their children at home), but also the institutions effect our schemas (good child care facilities teach us that women should have careers).

The results of these structural discriminations are clear: Due to the lack of quality low-cost childcare, women decide to stay at home longer than just three months or at least return to the job part-time. Probably the woman earns less than her partner due to the gender pay gap so that it is wise financially-speaking that the man continues working. The child then becomes

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more attached to the woman and the woman acquires most of the skills needed for childcare and the parents then decide that it will be more convenient if the woman stays at home and takes care of the child (cf. Haslanger 2015).

In summary, social practices are not independent from individuals and structures but they reinforce each other and can sustain structural injustice and discrimination. Unfortunately, this is often not adequately theorized and addressed in social practice theory. What implications does this have for the use of the approach in the WeNet project?

First, as researchers who collect data on social practices, we should be aware that we rely on our own schemas that inform our understanding of social practices. It may thus be that we cannot fully grasp potential discriminatory consequences. This relates also to the process of data collection and the conceptualization of questions for our data subjects. We might create a questionnaire or program an app to ask questions that are based on narrow ideas of social practices. Other than in the case of the barefoot-running marathon finisher, the potential discrimination of prospective users of our technology may be more serious if it relates to access to student resources, university information, and participation in community activity.

For example, at the university, we might think of social practices like part-time work or student jobs. If we consider the practice of "working" in terms of contract and employment and operationalize the social practice of working accordingly, we will probably not account for unpaid labor and care work that is traditionally done by girls and women. Yet, some students might take care of a family member or have a child to take care of. Balancing work and studies can be very challenging. Connecting students in order to support their better time management and stress reduction could empower students. However, if we connect people only on the basis of contract-related work data, a number of individuals will fall through the cracks. They might effectively experience discrimination on the basis of sex, social class, and race, as these categories work together in producing the phenomenon that care work is carried out mostly by women of color in precarious socio-economic situations.

Second, even if we procure a vast questionnaire such as to include all possible deviations from our standard view of a given practice, it may very well be that the machine-learning algorithm will select only the typical components of a practice (e.g. having a formal contract is a precondition for working). For instance, if we tell the algorithm that it should infer the most prevalent aspects of working from the social practices and their components that we have constructed in the questionnaire, the algorithm might infer the "normal" practice of working (which usually involves some kind of written agreement on the responsibilities and rights of the worker). The algorithm (that will be used to match requests) then does not pick up alternative practices (unpaid labor and care work), effectively discriminating against users who do not engage in "typical" working. We should therefore consider how the algorithm must be adjusted in order to identify and include alternative or varying aspects of social practices that represent true diversity.



Data collection (questionnaire and app)

Operationalization of diversity as social practices and their components

Operationalization of "Working" (according to contemporary Western European understanding)					
Material Meaning Competence					
Contract, paycheck, colleagues, organization, office, supervisor, computer, work-related material	Self-fulfillment, gaining experience, having an impact (policy-wise), making ends meet, being the breadwinner	Soft skills, sociability, convincing someone to invest in you, specific work-related competences			

Possible questions derived from operationalization:

- What type of contract do you have? Please indicate whether it is temporary, long-term, etc.
- How many employees are there in your organization? How many supervisors do you have? Who is above you?
- What is your motivation to work in addition to studying? Do you agree with the following statements: Working helps me meet ends and be financially independent. Working helps me to gain important experience. Working allows me to share my expertise and make a difference at my organization.

WeNet Technology (matching users according to their social practices)

REQUEST: "I noticed that **working** and studying at the same time is a challenge for many students. I want to create a self-help group that focuses on better balancing **work** and studies. Who wants to join?"

→ the technology might infer from this request that it must look for "workers"/employees to match the person

WeNet community

Request

George (profile)

is a student assistant (5hrs a week) at a local NGO that focuses on environmental protection, has a one-year contract, has two supervisors (the leader of his working group on "plastic reduction" and the leader of the NGO), wants to gain experience and extra money to spent on music

Aisha (profile)

takes care of her grandma every weekday between 7 and 9 pm (when her mother has to leave for her night shift), cooks dinner, makes sure grandma takes the medication, prepares grandma for sleeping, is often annoyed because cannot meet friends in the evening, has to take responsibility as her mother cannot afford professional care

Result

The WeNet technology will probably send out the request to George, because he fulfills more of the previously defined aspects of working. Although Aisha works 2 hours a day, the system might not identify her as a legitimate "worker" because she is not an employee. Aisha experiences discrimination on various levels here. She seems to be marginalized already with her family struggling financially. She cannot rely on state assistance for elderly care and quality elderly care is not affordable. Aisha suffers from her responsibilities and is not fulfilled in her work. She could immensely benefit from a self-help group that empowers her to juggle studies and reproductive labor.

FIGURE 2: SOCIAL PRACTICES AND DISCRIMINATION, EXAMPLE OF "WORKING"





In conclusion, the social practices approach may trap us in the sense that our own schemas and ideas of "normal" behaviour influence the data collection which possibly leaves us with biased or incomplete data. When we operationalize diversity in terms of (mainstream) social practices, we run the risk of not considering the situation of people at the margins, i.e. those who experience oppression due to the interaction of structures and schemas. This may be the case because we are situated in a privileged academic context (where minority groups are usually underrepresented) and we might not be aware about the social practices in other contexts we are not familiar with: "Algorithms are implicitly or explicitly designed within the framework of social customs" (Capurro 2019) (e.g. if someone never experienced the burden of unpaid labor or lives and works in a context that renders invisible unpaid labor, then they might frame "work" as merely contract-related). Or it may be because we are trying to reduce the diversity of social practices for practical reasons, e.g. to make our studies more feasible given limited resources. Similarly, we might provoke algorithmic discrimination because the algorithm (that matches requests of users) might infer/reassemble/identify standard social practices from our data and not deviating practices. While bias can never be fully reduced or extinguished from data, statistical methods, and machine-learning, we should be aware of our constraints and acknowledge them openly. That leads us to the recommendation of a continuous reflection by WeNet researchers, designers, and participants on the risk that the App has an inbuilt tendency to generate exclusion of minority voices.

4.4 REFLECTION ON THE MORALITY OF SOCIAL PRACTICES

Another ethical concern about the social practices approach is that the approach is largely descriptive. In the social sciences, "practices" are used to describe social interaction or human behaviour. The practices are not evaluated to the extent that moral judgments are made about their appropriateness. This makes it difficult to further understand inequalities in society and achieve social change. Critical Theory has argued that social practices should not be regarded as neutral but normative and practice theory must recognize that social practices and associated attitudes and norms can be contested and transformed. Practice rules can become "thematic" in the sense that they are publicly discussed (Habermas 1983), they provoke "reactive attitudes" (Strawson 2008), and the norm in question has to be interpreted, justified and "resettled into the life-world" (Habermas 1983). Even more so, practices that do not typically deal with contestations, disruptions, and norm change, become the target for suspicion.

Reckwitz (2002) stresses the potential of practice theory to reflect on the social (order) and the "good life" (in contrast to other cultural theories):

"Practice theory [...] encourages a shifted self-understanding. It invites us to regard agents as carriers of routinized, oversubjective complexes of bodily movements, of forms of interpreting, knowing how and wanting and of the usage of things. We can only speculate on which shifts such a self-understanding could also mean for our ethical outlook on agency and the social. However, it does not seem out of place to assume that practice theory encourages us to regard the ethical problem as the question of creating and taking care of social routines, not as a question of the just, but of the 'good' life as it is expressed in certain body/understanding/things complexes" (259).

Since we want to explicitly empower users' interaction in WeNet, we should not only ask how we can best represent diversity in the form of social practices but also whether we want to reinforce ideas of "normal" behaviour. In our operationalization of diversity and design of the WeNet technology, we might generate and work with patterns that reproduce standard views of social behaviour and interaction. While these patterns are merely a description of reality and reflect social behaviour in the offline world, we need to evaluate whether they are ethically acceptable. The question here is: do we *want* the practices that we find in our societies? If we agree that we do not want to reinforce all social practices because we know that some of them can be discriminatory, we should discuss openly "what is the best way to foster positive social

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interaction". The designers of algorithms thus bear an enormous (moral) responsibility (Grodzinsky et al. 2008; Kraemer et al. 2011).



5 POINTS TO CONSIDER/RECOMMENDATIONS

In this deliverable, we have conducted an ethical analysis of diversity and its understanding and modelling in WeNet. From this analysis, the following points to consider can be inferred:

- We should reflect our own understanding of diversity, being aware of the normative implications of the concept, and make our assumptions about diversity explicit/transparent
- We should discuss and decide (and make explicit/transparent) what kind of diversity we want to leverage and how much we regulate diversity in the online platform
- → We should use the social practices approach with caution, given that the approach largely reflects "normal" behaviour and marginalizes alternative practices
- We should prevent data and algorithmic bias by accounting for practices that deviate from the norm and are thus truly diverse
- → We should constantly reflect and review the design of the data gathering tools (e.g. questionnaire) as well as the algorithmic models working with data on social practices

When we are talking about diversity...

We should reflect on the normative implications of seemingly descriptive terms (it was argued in chapter 2.1 that diversity is often regarded solely a descriptive concept) and review our work with the concept in the research design. Diversity has instrumental but also intrinsic value, which needs to be taken into account. Diversity initiates, instantiates and constitutes a long list of moral and ethical values. Therefore, we should be aware of the implications and effects of our work with regard to diversity. The issue of hate speech and the boundaries of freedom of speech are crucial to WeNet and should be considered closely and carefully.

Moreover, our analysis of the WeNet understanding of diversity has shown that WeNet employs a rather skeptical view of diversity. Despite a very positive and diversity-affirming parlance in the consortium, the idea advanced in the proposal text is that diversity is valuable only in instrumental terms (namely for improving social interaction). At the same time, diversity is seen as potentially threatening and a source of conflict. For instance, users' exposure to the extreme diversity "out there" may make them feel anxious. Our conclusion in WeNet is that diversity must be aligned by technology.

From an ethical perspective, it is necessary to reflect on this understanding of diversity and especially the actions following from this understanding. What message do we send to our users with our understanding of diversity? To what end do we want to leverage diversity? What implication does our aligning of diversity have on the users of the WeNet technology? Are we knowingly or unknowingly sustaining discriminatory structures of online social interaction by regulating diversity? What should be the role of technology in mediating individuals' exposure to diversity? There is not one correct answer to these questions. There can be many helpful understandings of diversity. However, it is important to make transparent our assumptions, goals, and motivation underlying our understanding and utilization of the term diversity.

When we are operationalizing and modelling diversity...

The ethical analysis of the social practices approach has shown that the approach has benefits and constraints. We should be aware that some of the constraints may lead to discrimination of prospective users of the WeNet technology. It is therefore important to acknowledge the

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constraints of the approach and address the following concerns: Since the social practices approach focuses on standard behaviour (that reflects the hegemonic, dominant norms in society), using the approach may render invisible those practices that deviate from the norm but in fact are truly diverse. There are also implications from the fact that the social practices approach insufficiently addresses the concern of structural discrimination that is upheld by the continuous re-enactment of certain social practices. The approach misses the fact that schemas (internalized ideas about how to interpret the world and behave in a given situation) interact with structures (institutions, etc.) to the extent that power relations are often sustained and produce structural inequality and injustice. In the context of WeNet, we might experience particular difficulties to think of those practices that fall through the cracks due to our own socialization.

In a nutshell, the concern is that individuals whose practices deviate considerably from typical behaviour (which will be captured by the questionnaire) may be discriminated against in the platform interaction. This potential discrimination works on two levels: on the one hand, considering only those practices that are deemed "normal" behaviour means that individuals who engage in alternative practices may not be accounted for in the dataset. On the other hand, the machine-learning algorithm (that is responsible for matching people on the platform) may infer standard social practices from the dataset, reconstructing "normal" behaviour and not send out requests to individuals whose practices deviate substantially from the norm. We should therefore use the social practices approach cautiously and frequently review and reflect on the data gathering tools and algorithms.



6 CONCLUSION

Ideas about diversity are not neutral. They have implications for our societies. Therefore, dealing with diversity involves much responsibility.

This deliverable has provided an in-depth ethical analysis of the term "diversity," the understanding of diversity employed in the WeNet project, and the social practices approach used to model diversity. The major findings include the following:

- Diversity as a concept can have normative implications; working with the term should include constant reflection on the norms and values as well as assumptions underlying our understanding of diversity
- Diversity has not only instrumental value (e.g. diversity can be leveraged to improve social interaction) but also intrinsic value; the concept diversity allows us to affirm human rights and our commitment to a pluralist society, where freedom of choice and diverse opinions are protected
- Our understanding of diversity in WeNet implies that diversity needs to be aligned for users of our technology to benefit from diversity; it further implies that anxiety and fear (following users' exposure to extreme diversity online) should be reduced
- → Aligning diversity in an online social platform can be a difficult endeavor; it raises ethical concerns such as the potential side-effect of curtailing diversity too much and effectively excluding users
- The social practices approach is useful to highlight the flexibility and dynamic character of human behaviour; it stresses how individuals and society interact in constituting a social order and has much potential in accounting for social interaction; however, the social practices approach rarely recognizes its focus on standard, "normal" behaviour; it further lacks acknowledgement of the way that the continuous re-enactment of social practices tends to sustain discriminatory structures in society
- Applying the social practices approach to model diversity has ethical implications: in the worst case scenario, it may lead to the exclusion of certain practices from the dataset, particularly "alternative" practices that deviate from our understanding of "normal" behaviour; similarly, it may lead to algorithmic discrimination if the machine-learning algorithm infers or reconstruct standard behaviour and dismisses other data

The WeNet goal to leverage diversity for the benefit of users is an ambitious goal that requires constant reflection on the norms promoted in the course of the project work. Moreover, societal diversity can also refer to sensible and person-related data (e.g. gender, age, socioeconomic status). All actions that aim at collecting data within the WeNet project should take this into account. The issues addressed in this deliverable should be handled with care and close consideration especially with regard to privacy standards and the usage of the data collected.

Moving forward, EKUT will continue to reflect on and evaluate our norms and values advanced in WeNet and focus particularly on the value of privacy in the next deliverable.



REFERENCES

Publication bibliography

Altman, Andrew (2016): Discrimination. In *Stanford Encyclopedia of Philosophy*. Available online at https://plato.stanford.edu/archives/win2016/entries/discrimination/.

Ammicht-Quinn, Regina (Ed.) (2014): Sicherheitsethik. Wiesbaden: Springer VS (Studien zur inneren Sicherheit, Band 16).

Barnett, B. A. (2007): Hate Group Community-building Online: A Case Study In The Visual Content of Internet Hate. Proceedings of the New York State Communication Association. New York. Available online at

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.577.8533&rep=rep1&type=pdf.

Bendl, Regine; Hanappi-Egger, Edeltraud; Hofmann, Roswitha (2012): Diversität und Diversitätsmanagement. 1. Aufl. Stuttgart, Wien: UTB GmbH; Facultas (UTB Wirtschaftswissenschaften, Sozialwissenschaften, 3519). Available online at http://www.utb-studi-e-book.de/9783838535197.

Bourdieu, Pierre (2008): The Logic of Practice. Reprinted. Stanford, Calif.: Stanford Univ. Press.

Bucher, Taina (2012): Want to Be on the Top? Algorithmic Power and the Threat of Invisibility on Facebook. In *New Media & Society* 14 (7), pp. 1164–1180. DOI: 10.1177/1461444812440159.

Butler, Judith (1990): Gender Trouble. Feminism and the Subversion of Identity. New York, London: Routledge (Routledge classics).

Butler, Judith (1997): Excitable Speech. A Politics of the Performative. New York, NY: Routledge. Available online at http://www.loc.gov/catdir/enhancements/fy0651/96033054-d.html.

Cheney-Lippold, John (2011): A New Algorithmic Identity. In *Theory, Culture & Society* 28 (6), pp. 164–181. DOI: 10.1177/0263276411424420.

Cohen, Andrew Jason (2014): Toleration. Cambridge: Polity Press (Key concepts).

Cooper, Brittney C. (2016): Intersectionality. In Lisa Jane Disch, M. E. Hawkesworth (Eds.): The Oxford Handbook of Feminist Theory. Oxford, New York: Oxford University Press (Oxford books), pp. 385–406.

Faith, Daniel P. (2016): Biodiversity Standford Encyclopedia of Philosophy. Available online at https://plato.stanford.edu/archives/sum2016/entries/biodiversity/.

Falk, Richard (1988): The Rights of Peoples (in Particular Indigenous Peoples). In James Crawford (Ed.): The Rights of Peoples. reprintet 2001. Oxford: Clarendon Press et al, pp. 17–37.

Forst, Rainer (2013): Toleration in Conflict. Past and Present. Cambridge: Cambridge University Press (Ideas in context, 103).



Gaston, Kevin J. (Ed.) (2001): Biodiversity. A Biology of Numbers and Difference. Reprinted. Oxford: Blackwell Science.

Gerstenfeld, Phyllis B. (2013): Hate Crimes. Causes, Controls, and Controversies. 3. ed. Thousand Oaks: SAGE Publications.

Glazer, Nathan (1997): We Are All Multiculturalists Now. Cambridge, Mass.: Harvard University Press.

Grodzinsky, Frances S.; Miller, Keith W.; Wolf, Marty J. (2008): The ethics of designing artificial agents. In *Ethics Inf Technol* 10 (2-3), pp. 115–121. DOI: 10.1007/s10676-008-9163-9.

Habermas, Jürgen (1983): Moralbewusstsein und Kommunikatives Handeln. Frankfurt am Main: Suhrkamp (Suhrkamp Taschenbuch. Wissenschaft, 422).

Haslanger, Sally (2004): Oppressions. Racial and Other. In Michael P. Levine, Tamas Pataki (Eds.): Racism in Mind. Ithaca, N.Y., London: Cornell University Press.

Haslanger, Sally (2015): Disrupting Injustice: Implicit Bias and Structural Change. Lecture at Quinnipiac University. Quinnipiac University. Available online at https://www.youtube.com/watch?v=SziiKRWYVs8, checked on 6/6/2019.

Hildt, Moritz (2014): Die Herausforderung des Pluralismus. Dissertation. Verlag Karl Alber; Eberhard Karls Universität Tübingen.

Höffe, Otfried (2008): Pluralismus. In Otfried Höffe (Ed.): Lexikon der Ethik. With assistance of Maximilian Forschner, Christoph Horn, Wilhelm Vossenkuhl. Originalausgabe, siebente, neubearbeitete und erweiterte Auflage. München: Verlag C.H. Beck (Beck'sche Reihe, 152).

Hollinger, David A. (1995): Postethnic America. Beyond Multiculturalism. New York, N.Y.: BasicBooks. Available online at http://www.loc.gov/catdir/enhancements/fy0830/94040366-d.html.

Holtz, Georg (2013): Coherence of Social Practices: The Case of Meat Consumption. Unpublished working paper. Institute of Environmental Systems Research. Available online at http://ww.usf.uos.de.

Honneth, Axel; Archard, David (1994): Pathologien des Sozialen. Die Aufgaben der Sozialphilosophie. Originalausg. Frankfurt am Main: Fischer Taschenbuch Verlag (Philosophie der Gegenwart).

Jack, Gavin (2017): Advancing Postcolonial Approaches in Critical Diversity Studies. In Regine Bendl, Inge Bleijenbergh, Elina Henttonen, Albert J. Mills (Eds.): The Oxford Handbook of Diversity in Organizations. First issued in paperback. Oxford: Oxford University Press, pp. 153–174.

Jaeggi, Rahel (2018): Critique of Forms of Life. Cambridge: Harvard University Press. Available online at https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=5583692.

Kraemer, Felicitas; van Overveld, Kees; Peterson, Martin (2011): Is There an Ethics of Algorithms? In *Ethics Inf Technol* 13 (3), pp. 251–260. DOI: 10.1007/s10676-010-9233-7.

Kukathas, Chandran (1992): Are There Any Cultural Rights? In *Political Theory* 20 (1), pp. 105–139. DOI: 10.1177/0090591792020001006.





Kukathas, Chandran (2003): The Liberal Archipelago. A Theory of Diversity and Freedom: Oxford University Press.

Kymlicka, Will (1995): Multicultural Citizenship. A Liberal Theory of Minority Rights. Oxford: Clarendon (Oxford political theory).

Mason, Elinor (2018): Value Pluralism Stanford Encyclopedia of Philosophy. Available online at https://plato.stanford.edu/archives/spr2018/entries/value-pluralism/.

McLeod, Carolyn (2015): Trust. In *Stanford Encyclopedia of Philosophy*. Available online at https://plato.stanford.edu/archives/fall2015/entries/trust/.

Osin, Nina; Porat, Dina (Eds.) (2005): Legislating against discrimination. An international survey of anti-discrimination norms. Universitat Tel Aviv. Leiden: Nijhoff.

Pariser, Eli (2012): The Filter Bubble. What the Internet is Hiding From You. London: Penguin Books.

Pieper, Annemarie (2007): Einführung in die Ethik. Sechste, überarbeitete und aktualisierte Auflage. Tübingen, Basel: A. Francke Verlag (UTB für Wissenschaft Uni-Taschenbücher Philosophie, 1637).

Rawls, John (1999): A Theory of Justice. Rev. ed. Oxford: Oxford University Press.

Reckwitz, Andreas (2002): Toward a Theory of Social Practices. A Development in Culturalist Theorizing. In *European Journal of Social Theory* 5 (2), pp. 243–263. DOI: 10.1177/13684310222225432.

Roughgarden, Joan (2004): Evolution's Rainbow. Diversity, Gender, and Sexuality in Nature and People. Berkeley: University of California Press. Available online at http://www.loc.gov/catdir/bios/ucal052/2003024512.html.

Schroeder, Mark (2016): Value Theory. In *Stanford Encyclopedia of Philosophy*. Available online at https://plato.stanford.edu/archives/fall2016/entries/value-theory/.

Song, Sarah (2009): The Subject of Multiculturalism: Culture, Religion, Language, Ethnicity, Nationality, and Race? In Boudewijn Paul de Bruin, Christopher F. Zurn (Eds.): New Waves in Political Philosophy. Basingstoke England, New York: Palgrave Macmillan (New waves in philosophy), pp. 177–197.

Song, Sarah (2017): Multiculturalism Stanford Encyclopedia of Philosophy. Available online at https://plato.stanford.edu/archives/spr2017/entries/multiculturalism/.

Spivak, G. C. (2004): Righting Wrongs. In *South Atlantic Quarterly* 103 (2-3), pp. 523–582. DOI: 10.1215/00382876-103-2-3-523.

Strawson, P. F. (2008): Freedom and resentment and other essays. London, New York: Routledge.

Taylor, Charles (1989): Sources of the Self. The Making of the Modern Identity. Cambridge Mass.: Harvard University Press.

Taylor, Charles (1994): The Politics of Recognition. In Charles Taylor, Amy Gutmann (Eds.): Multiculturalism. Examining the Politics of Recognition. Princeton, NJ: Princeton Univ. Press (Princeton paperbacks Philosophy, political science).



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Waldron, Jeremy (2012): The Harm in Hate Speech. Cambridge, Mass: Harvard University Press (The Oliver Wendell Holmes Lectures, 2009). Available online at http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=5 97462.

Walzer, Michael (1987): Interpretation and Social Criticism. Cambridge, Mass., London: Harvard University Press (The Tanner lectures on human values, 1985).

Weale, Albert (1985): Toleration, Individual Differences, and Respect for Persons. In John Horton, Susan Mendus (Eds.): Aspects of Toleration. Philosophical Studies. London: Methuen, pp. 16–35.

Williams, John (2015): Ethics, Diversity, and World Politics. Saving Pluralism from itself? 1. ed. Oxford: Oxford Univ. Press. Available online at http://www.loc.gov/catdir/enhancements/fy1604/2014948842-b.html.

Williams, John (2016): Pluralism, the English School and the Challenge of Normative Theory. E-International Relations. Available online at https://www.e-ir.info/2016/02/11/pluralism-the-english-school-and-the-challenge-of-normative-theory/, checked on 6/23/2019.

Wolff, Christian von (1720): Vernünftige Gedancken von Gott, der Welt und der Seele des Menschen, auch allen Dingen überhaupt : den Liebhabern der Wahrheit mitgetheilet. Bayerische StaatsBibliothek digital. Available online at http://mdz-nbn-resolving.de/urn:nbn:de:bvb:12-bsb11274136-1, checked on 7/15/2019.

Young, Iris Marion (1990): Justice and the Politics of Difference. Princeton, NJ: Princeton Univ. Press (Princeton paperbacks). Available online at http://www.loc.gov/catdir/description/prin021/90036988.html.

Zimmerman, Michael J.; Bradley, Ben (2019): Intrinsic vs. Extrinsic Value. In *Stanford Encyclopedia of Philosophy*. Available online at https://plato.stanford.edu/archives/spr2019/entries/value-intrinsic-extrinsic/.