Part 1

Tools and Theory

2

Terminology and Methods

Sampling is the (digital) use of external sound material to produce new music.

This chapter focuses on the theoretical and methodological framework of my study. I will introduce definitions for the terms and cultural concepts that are most significant to the book. This includes a definition of the term sampling, a discussion of the concept of "the political," and some explanation regarding the concepts "meaning" and "material." (Terms and concepts that are relevant to only one or two sections are introduced in the respective chapters.) I then embed this study in the field of experimental electronica, and explain its underlying understanding of "popular music." The chapter closes with a thorough discussion of my methodological approach.

Defining Sampling

Without a doubt, the most central term in this book is "sampling." Here, I approach the term from three angles: from the field, from the literature, and from my own, concluding perspective. In the first approach, I aim to combine data from my interviews to reach a definition of sampling from the perspective of the musicians involved. The second approach gives a brief overview of definitional attempts in the existing academic literature. Addressing both approaches will illustrate the slipperiness of the term. As a third and final step, I will combine both previous approaches into my own definition of sampling as a multilevel process. I always indicate the names of the interviewed artists in brackets.

When I asked my interviewees about their individual understanding of sampling, I was met with a large variety of answers. The explanation of what sampling is for them was blended with the explanation of how and why it is used. In general, sampling was explained as *a (digital) transfer of sound material from a source to a musical product*. I put "digital" in brackets because this aspect was mentioned only once explicitly (Future Daughter), but I assume that all my informants naturally view the transfer as predominantly digital. Beyond this commonly shared, rather basic definition, there were some nuances in the understanding of the term. Among them I have identified four rough approaches to defining the term. These approaches highlight the challenges of finding a generally accepted definition within the field, and nevertheless suggest some first steps towards one.

(a) Pre-Existing vs. Live-Recording

The first approach defines sampling by the nature of the processed material. Many artists emphasized that samples are of "pre-existing recorded" (Peder Mannerfelt) or "pre-recorded" (Young Palace) sound material. This means that, at the point when the producer accesses their source material, the material already exists as a "pre-recorded" sound file. Recording is here understood as the process of the conversion of sound "into a permanent form for subsequent reproduction" (Oxford 2019b). Accordingly, the processing of material recorded or synthesized at the instant when the producer is working is not considered sampling. In the case of field recordings, this definition becomes especially diffuse and raises questions: do we only consider the processing of field recordings as sampling when the material has been recorded beforehand? Does it make sense to terminologically distinguish between the processing of field recordings that are pre-recorded and others that are recorded at the instant when the producer is working? Is environmental sound unique or does it already exist prior to being recorded? And could we therefore label environmental sounds as pre-existing? Accordingly, some artists explicitly excluded field recordings from their definitions (Mauro Guz Bejar, Young Palace), while others included them (James Whipple).

(b) External vs. Internal

A second approach approximates the term by defining it by the origin of the processed material. In this approach, sampling is the use of *external* sound material. Olivia Louvel, for example, mentioned that sampled material is "not generated from scratch" by the producer themselves. It is made or recorded by "someone else" (Mauro

Guz Bejar, Sufyvn, Young Palace) and samples can thus be considered "found sounds" (KALAB).

One major objection could be raised at this point: the practice of "self-sampling." Dasychira described this as using "tracks of mine and sounds I've composed in the past," and James Whipple similarly considered sampling as "a production kind of studio thing of constantly recording what I'm doing and then resampling it."[1] Apparently, self-sampling is regarded as a form of sampling, although these sounds are internal. Still, such a definition would throw the doors wide open to ubiquitous usage of the term, with the effect of terminological insignificance. Some artists referred to such a broad understanding when they equated sampling with recording (Ian McDonnell or Zavoloka: "For me, it's recording. For me, everything is sampling"). Bod [ɒ ˈP] mentioned that "the only thing I wouldn't call a sample is like if I did a stereo recording and just mastered it as that." In consequence, this means as soon as electronic music production contains a single step of editing—as it usually does—one could, theoretically, speak of sampling. Even if we exclude from the concept sounds instantly generated for a specific track, these sounds could turn into samples later, as Peder Mannerfelt explained:

> *It's pretty often the case of me using a sound I have recorded myself for something else or a bunch of sounds I've collected in a folder to use as drums or one-shot samples. As opposed to say a melody that I will record specifically for the track I'm working on (but that melody might be used as a sample in another track, so maybe everything can be considered samples?!?).*

kritzkom pointed to another special case. For one of her projects, she asked a musician to record a few clips on a particular instrument. She mentioned that she does not consider the use of excerpts from these recordings as sampling, although these sources are clearly external. This, once again, indicates the various understandings of what is considered sampling and what is not.

However, most of the artists would probably agree when I define sampling as *the process of using material that was not recorded or generated by the producer for the current track or project.* This would include own (internal) material from previous projects (self-sampling) as well. Still, the use of field recordings and the practice of live-sampling would have to be regarded as exceptions. A reasonable solution would be to rely on a definition of sampling that combines different, equivalent forms such as that suggested by James Whipple:

> *I guess you could divide it [sampling] into three things.*

1 Musicians often use the term "resampling" to describe the process when a sample is edited and manipulated first, and then recorded within the DAW for a second time (see for example Wegerle 2019a). I do not use this term as I conceive of sampling in general as a multilevel process that could encompass multiple cycles of recording.

There would be the classic form of sampling which is sampling other recorded music. (…) And then there's maybe sampling from more environmental recordings (…) whether it's a field recording that you've recorded, or you sample simply kind of incidental, or ambient, or environmental sound from something. Either from a film or from news footage or whatever. And then the third one would be self-sampling which I do a lot and that's more a production kind of studio thing of constantly recording what I'm doing and then resampling.

(c) Describing Sampling

A third approach to the definition of sampling describes its effects or consequences. Here, similar terms such as "transfer from one context to another" (Drew Daniel/Matmos), "re-location" (Dr. Das), or "re-contextualization" (Dasychira) are applied. Dr. Das pointed to the attachment of new meaning to the sampling material, while DJ Kala emphasized the fusion of one's material with one's own aesthetic. YATTA underlined a temporal dimension, describing sampling as "a way of working at time by pulling up clips from the past." Similarly, Matthew Herbert considered sampling as "historical reenactment" or "historical reimagining." Others generally understood sampling as a "process of appropriation" (Olivia Louvel, Young Palace). The reuse of a sound recording as an instrument (Naked, Dubokaj) or the imitation of an instrument (Dubokaj) was also mentioned in descriptions of the process. Finally, ZULI indicated that sampling could mean "different processes." According to him, the creation of a new sound on the basis of a pre-recorded sample is called sampling as much as the creation of a reference (DJ Kala). The former thus blends the lines between sampling and sound synthesis.

it becomes evident that the limitation of a definition of sampling to a few keywords such as "re-contextualization" would fail to encompass other individual sampling strategies.

It becomes apparent that all these attempts to explain sampling are highly shaped by personal strategies in production processes that vary for each artist. This approach thus hardly serves as a general definition. Moreover, it becomes evident that the limitation of a definition of sampling to a few keywords such as "re-contextualization" would fail to encompass other individual sampling strategies.

(d) Sampling as a Multilevel Process

The fourth approach expands the definition of sampling towards a multilevel process that contains more than the mere transfer of sound from a source to the new composition. Dubokaj and Future Daughter, for example, emphasized that sampling means to edit, manipulate, and tweak the imported sounds. They understood the process of editing as a part of the concept of sampling. Drew Daniel

from Matmos specified the moment of access as entailing further steps as well:

> *I would say that the word sample implies that it's a piece of something that is a broader organic whole and you're taking a part of something. So, it's about excerpting, choosing, selecting, narrowing your access to something.*

In my own definition of sampling below I will rely on this idea of sampling as a multilevel process.

Perspectives from Academic Literature

On the basis of my literature review on sampling, I have identified three main approaches to an audio-related definition of the term, whether relating to signal processing or musical processes: a technical, a procedural, and a multilayered. Table 2.1 presents a rough categorization of these approaches.[2] Technical definitions (approaches [a] to [c]) define sampling following its primary meaning as the conversion of an analog sound signal to digital data. The continuous, analog signal is thereby represented by a digital code containing periodical "samples" of the input signal. The digital code allows the approximate—though never complete—reconstruction of the analog signal. A few authors emphasize that the meaning of the term has shifted towards the inclusion of the storage of sound that is already digital (b) while others point to one of the earliest areas in which sampling was applied: the reproduction and imitation of instruments (c).

I have identified three main approaches to an audio-related definition of the term: a technical, a procedural, and a multilayered.

A second group recognizes that the meaning of sampling extends beyond the mere technical procedure of sound conversion or storage. I call these definitions procedural as they understand sampling as a longer, or even multilevel, process. These scholars define sampling by generalizing the term as the transfer of *pre-existing* sound material into new compositions or contexts (d). As we can see from Table 2.1, this seems to be the most popular approach. This finding resonates with some feedback from the field, and it further corresponds to Butler (2014, 47) who noted that "most of the literature assumes that samples are derived from sources external to the work." An emphasis on the aspect of recontextualization can, however, obscure other functions of sampling. Butler pointed, for example, to the use of sampling as "a more general constructive technique" (ibid.), which would not be covered by such a conception. Accordingly, approaches (e) and (f) show the inadequacy of (d) on a broader level. The attempt by David J. Gunkel (2016, 7–8)

2 See Appendix for an extended overview of all examined definitions. The list is not exhaustive, and it also includes some general definitions of the term that are not related to the subject of music or signal processing. In this chapter, I focus on audio-related definitions only. It should also be noted that an author's definition of sampling depends on the study in question. An author might define sampling in a certain way in one study before expanding this definition in the context of another study.

to merge different meanings of sampling leads to an emphasis on aspects of fragmentation as the connective element between various modes of definition (approach [e]): "The term 'sampling' in whatever mode it is operationalized, focuses attention on an act of cutting, extracting, citing, and/or recording."

Approach	Focus	Literature
(a) Technical Definitions I	the conversion of an analog sound signal	Cutler 1994; Supper 1997; Binas 2004; Katz 2005; Diederichsen 2006; Djordevic 2014; Brockhaus 2017
(b) Technical Definitions II	additional emphasis on the digital storage of digital sound	Kühn 2009; Binas 2010
(c) Technical Definitions III	additional emphasis on the sampling of instruments	Tully 1968 (cited in Schloss 2004); Davies 1996; Harkins 2016
(d) Procedural Definitions I	emphasizing the transfer of *pre-existing* sound material into new compositions	Brackett 1995: Hesmondhalgh 2000; Fulford-Jones 2001; Demers 2003; Fuchs 2004; Lena 2004; Katz 2005; Moorefield 2005; Marshall 2006; Dyer 2007; Pelleter and Lepa 2007; Klammt 2010; Großmann 2011; McLeod and DiCola 2011; Reynolds 2011; Tonelli 2011; Navas 2012; Collins, Schedel and Wilson 2013; Fischer 2013; Sewell 2013; McLeod 2015; Harkins 2016; Behr, Negus, and Street 2017; Suechting 2017; Gallagher 2018b; Fischer 2020
(e) Procedural Definitions II	emphasizing aspects of extraction and fragmentation	Gunkel 2016; Borschke 2017
(f) Procedural Definitions III	emphasizing aspects of manipulation and editing	Binas 2010; Großmann 2005; Fischer 2013; Schloss 2004
(g) Procedural Definitions V	emphasizing various stages or aspects	Metzer 2003; Rodgers 2003; Leydon 2010; von Gehlen 2011; Behr, Negus, and Street 2017; Harkins 2020
(h) Combining Definitions	emphasizing technical *and* procedural aspects	Reck 1995; Ruschkowski 1998; Großmann 2002; Feuerstein 2004; Kvifte 2007; Demers 2010; Harkins 2010a; Hosken 2014; von Appen 2014; Gallagher 2018a; Oxford 2018b, 2019c

Table 2.1: Audio-related definitions of "sampling"

This definition, as simple as it is, highlights the cultural function of sampling and merges all different forms of meanings of the term. However, it does not work as a useful definition as it is too unspecific. Others emphasize that sampling not only encompasses the transfer of a sound from one context to another, but also the

editing and manipulation of this material (f).

Finally, a few scholars try to understand these various stages and aspects of sampling as a multilevel process (g). Behr, Negus, and Street (2017, 2) highlight that the practice of sampling "constitutes a continuum of activity, sometimes distinct from other musical practices but very often merged into them." They view sampling as part of a musical field which is shaped by "listening practices, creative habits and habitus" (15). At the same time, sampling itself is, they argue, part of a greater "spectrum of activities" (1). One of the first scholars to suggest defining sampling as a multilevel process was Tara Rodgers. In my own definition below, I will rely to a large extent on her attempt: "In the production of electronic music, the sampling process encompasses selecting, recording, editing and processing sound pieces to be incorporated into a larger musical work" (Rodgers 2003, 313).

Sampling is not equal to the terms remix, quotation, collage, and montage, to name only the most important of the terms sometimes used interchangeably with it.

As a final category, several scholars have tried to combine previous definitional attempts. Among them are the often-quoted Tellef Kvifte (2007) and Dan Hosken (2014). Both emphasize definitions (a) and (c), as well as a third attempt referring to "the process whereby a musician/composer includes part of an earlier recording in his/her own music, as a more or less recognizable citation" (Kvifte 2007, 107). Furthermore, Kvifte adds a fourth understanding, where sampling is used in a completely hidden way as a "repair-technique" in studio production to merge different recordings to reach the best result (108). As Harkins (2010a, 8) points out, Kvifte's extended definition is still incomplete. It does not adequately represent sampling strategies where samples are neither used in a recognizable way nor as a mere studio repair-technique. In this book, it is most of all the case study of "Methy Imbiβ," with its concealed sampling of highly referential sound material, which evades Kvifte's categories.

→ Chapter 10

There is another attempt to define sampling that is not included in the overview above: the delimitation from other terms and the suggestion of alternative vocabulary. Sampling is not equal to the terms remix, quotation, collage, and montage, to name only the most important of the terms sometimes used interchangeably with it. As Eduardo Navas (2012, 12) points out, "sampling is the key element that makes the act of remixing possible." Remix is thus understood as a result of one or more processes of sampling. Accordingly, remix refers to the final musical product that contains at least one sample.[3]

3 I do not define the term "remix" beyond this very short and vague definition. This is an endeavor even more complex than the definition of "sampling," and it goes beyond the scope of this book. By not using the term, I also try to avoid confusion with remix as a particular musical product that is labeled as such. Furthermore, in my interviews, the term "remix" was rarely used.

Jeanette Bicknell (2001, 190) theorizes the musical quotation as "an intentional re-use: One intended to be heard as a reference to other music." Following this understanding, a sample could turn into a quote (if there is a referential intention), but it is not one *per se*. Aram Sinnreich (2010, 124) emphasizes that, compared with quotation, sampling is "the mediated expression itself, not merely the ideas behind it." In other words: "Traditional musical quotations typically cite works [and] samples cite performances" (Katz 2005, 141).

The delimitation towards the terms collage and montage is diffuse. Generally they are used in different historical contexts, or at least in relation to analog phenomena. Collage is mostly associated with haptic processes (Tollmann 2004, 292) and with the combination of external material from various contexts (Großmann 2005, 329–30). However, the term collage has regularly been used in relation to sound, in particular to describe techniques similar to sampling such as musique concrète (Burkholder 2001b). Montage is sometimes used interchangeably with collage, and, more often, in connection with film and photography. It refers to the combination and recombination of media material of a similar nature (Großmann 2005, 329–30). Neither term can be clearly differentiated from the term sampling. I would nevertheless suggest doing so to avoid terminological fuzziness, reserving collage and montage for haptic processes in the visual arts.

A final challenge is the delimitation from the term "recording." Both Eduardo Navas (2012, 12) and Justin Morey highlight that "any piece of music that is recorded in a DAW, unless done so in one take with no overdubbing, is constructed from a collection of samples of varying length" (Morey 2017, 292). This observation corresponds with some of the aforementioned broad definitions of sampling from the field. Owen Gallagher criticizes such an open understanding of the term. He differentiates between the "original recording" that is additive ("producing a new recording that did not exist before"), and "sampling" that is subtractive ("taking a sample from something previously recorded") (Gallagher 2018b, 29). As previously mentioned, equating sampling with recording would lead to such a broad understanding of the term that it would become useless, especially when discussing electronically produced music. Provided that we still want to use the term, we thus need to find a more restricted definition.

Before making my own attempt in this endeavor, I would like to comment on the efforts of some scholars to introduce alternative terms. Ragnhild Brøvig-Hanssen (2010), Robert Strachan (2017), and Eduardo Navas (2012, 15) use "cut & paste" to describe practices of sampling. Brøvig-Hanssen (2010, 164) only refers to sampling when talking about the technical process ("The voice is sampled from […]"). Rolf Großmann (2015, 2016) suggests the term "phonographic work," deriving the term from the historical practice of motivic work in the tradition of classical composer Joseph Haydn.

Although these suggestions would at least bypass some of the aforementioned definitional challenges, I still prefer the term "sampling," mainly because of its spread and general popularity. I believe that it does not make sense to describe human action without considering, albeit critically, the vocabulary established in the field.

A Short Definition of Sampling

This overview of definitions from both the field and the literature has shown one thing: "sampling" has become a slippery concept that cannot be defined universally, but must be defined relative to the scope of its application. In this book, I thus rely on the following definition. Only the highlighted part is relevant, as I will not analyze processes of self-sampling.

Sampling is the (digital) use of external sound material to produce new music. The processing of internal material can be conceived of as sampling if it has not been newly produced (self-sampling).

This definition conceives of sampling as a human action, carried out by the producers of music as active agents. Four crucial aspects shall be highlighted:

(**1**) I have avoided the terms "pre-existing" or "pre-recorded," to include field recordings as sampling material. Instead, I rely on the distinction between *external* and *internal*. From the producer's perspective, every sound that they have not created themselves—through sound synthesis or the playing of an instrument—is external. However, as the definition above shows, sampling is not exclusive to the processing of external sound material if one takes the moment of action into account. The use of own (internal) material can be considered sampling too, as long as the processed material has not been created in direct relation to the project at hand. Similarly, Gallagher (2018b, 41) emphasizes "the difference between sampled material and newly produced material" as crucial in defining both sampling and remix.

(**2**) The term *material* is essential for any definition of sampling. Sampling means to work with materially available sound. Material here means that the sound is present as a file that is included in the new production. Accordingly, Navas (2017) describes sampling as "materially grounded" and samples as "quantifiable." Hence, if a process of musical borrowing is not based on quantifiable material, we would have to speak of other practices such as quotation or imitation.

(**3**) It is important to note that sampling does not necessarily need

to be *digital*. The Mellotron (an electro-mechanical instrument) and the use of dubplates are just two musical examples that involve parallel but analog processes. Kvifte (2007, 111), Harkins (2010b, 179), and Morey (2017, 107) highlight that, when understanding sampling beyond its original, technical meaning (approach [a]), there is no reason to regard sampling as necessarily digital. This is why I put the term "digital" in brackets. However, most processes that are described with the term "sampling" are indeed digital. This is the case for this book as well.

(4) Sampling means *to work* with (to use) something (sound material) *to produce* a larger piece of new music. The definition thus describes a creative act that encompasses a whole process with multiple stages. With this understanding of sampling, I correspond to various definitions from the field (approach [d]) as well as from the literature (approach [g]). I will now draft the different stages of the creative process in question.

The Stages of Sampling

The main stages involved in the process of sampling are: research and/or listening; selection; access (download, conversion, or recording); storing; and editing (processing/manipulation). Figure 2.1 displays some further steps in brackets: leveling, revision, and mastering. I do not consider these steps part of the actual sampling process. However, they do indicate that the sampling process as such is part of a greater process: that of musical production in general. This corresponds to Behr, Negus, and Street (2017), who describe sampling as part of a continuous "spectrum of activities."

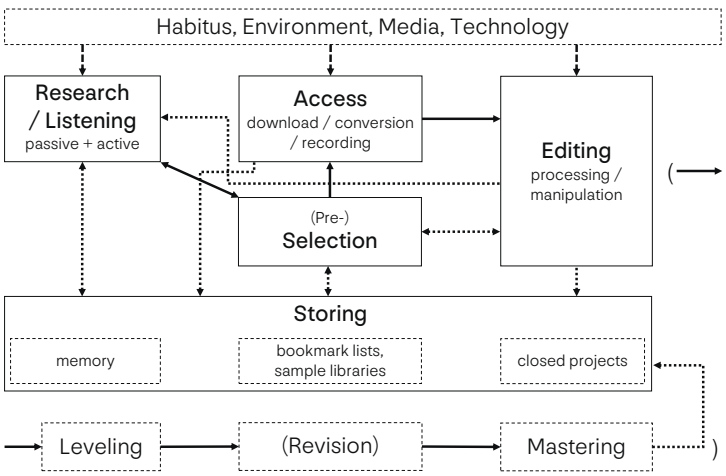

Figure 2.1: Sampling as a multilevel process

Samples are saved in various kinds of stores: memory, bookmark lists, sample libraries, and closed projects. The latter indicates that the process of sampling could be cyclical: a sample processed in one project can become a sampling source in the next.

The order in which these steps are executed depends on the

respective sampling strategy. Moreover, not all steps have to be addressed in every sampling process, and each step could be undertaken more than once. The solid arrows indicate an ideal, direct succession of the stages, while the dotted arrows point to possible variations. Finally, the dashed box at the top of the diagram refers to potential external influences on the various stages of the process.

The main aspect missed by most of the aforementioned procedural definitions of sampling is the inclusion of a research and/or listening stage. However, there are some exceptions to this, with authors such as Warner (2003, 97), Chapman (2011), Borschke (2017, 96), and Behr, Negus, and Street (2017) having already emphasized the role of listening in sampling. This understanding is further expanded by Morey, who theorizes "listening as authorship." In his study on sampling practices in British dance music he describes listening as an important, creative part of the act of sampling. Among his interviewees, "the ability to listen and select was considered as compositionally significant as any production or technique-based skills" (Morey 2014, 48; 2017, 279).

The main aspect missed by most of the procedural definitions of sampling is the inclusion of a research and/or listening stage.

If we consider sampling as a multilevel process, the listening stage must be the point of departure. Interestingly, in a pedagogical manual for Live by Ableton, the most important production software for electronic popular music of the early 21st century, this step of music production is also emphasized. In *Making Music. Creative Strategies for Electronic Music Producers*, Ableton's head of documentation, Dennis DeSantis (2015, 30–33), recommends the development of listening skills to those producers who want to enhance their electronic compositions. DeSantis distinguishes between two listening modes:

> *Active listening simply means listening as the primary activity, and it's an important skill to develop. Rather than using music as the background for another activity [(passive listening)], try listening without doing anything else. This requires time, quiet, and focus, which are skills you need for your own production work anyway. (DeSantis 2015, 31)*[4]

Regarding sampling, both active and passive listening can mark the point of departure. In the figure above, I have labeled this stage with the term "research," as in some cases targeted research on sampling sources is a separate and important step.

See interlude in Chapter 11.

4 The concept of "active listening" is borrowed from communication studies and seems to receive some attention among electronic music producers (Clayton 2016, 256–72; Wegerle 2019b).

To close this extended definition of the term "sampling" I highlight five key characteristics of the sampling process. These aspects were observed in the present research and will be illustrated in the following chapters.

The examination of underlying motivations and intentions can substantially contribute to a better understanding of the characteristics, functions, and effects of popular music.

(1) The process of sampling is considerably shaped by moments of selection. Sampling material is selected from different kinds of stores while actively or passively listening to music, when conducting targeted research, or during the process of editing. Thus, over the whole process, a single sample can be selected more than once. The emphasis on the stage of selection in sampling in particular, and cultural production in general, is also made by Westrup (2014) and Navas (2017).

(2) The process can happen over a longer time period. The storing stage allows the producer to interrupt the sampling process. A sample can be revisited after being stored for a while in the producer's own memory, bookmark lists, sample libraries, or closed projects. It might be years between the first encounter with a sample (research/listening stage) and its final processing in a track. This poses various difficulties to the researcher of sampling processes.

See case studies of "Perversas" (Chapter 9) and "Methy Imbiβ" (10).

(3) The process is cyclical. Each step links back to the research and listening stage. At every moment of the process, new samples can potentially enter the emerging composition, and closed projects with their own processes of sampling behind them could become sources for new sampling projects. By taking this thought a step further, sampling could potentially be considered a basic principle of musical practice. Focused on musical performance, Mark Butler describes the sampling practice of one of his interviewees as an "accumulative cycle of musical creation": "Composition forms the basis of improvisation, which in turns feeds back into composition, and so on. Along the way, multiple forms of musical existence are generated" (Butler 2014, 48).

(4) In most cases, the whole process takes place on an explicitly personal level and so remains hidden from a broader audience. The examination of underlying motivations and intentions can thus substantially contribute to a better understanding of the characteristics, functions, and effects of popular music.

(5) The process of sampling illustrates what has been widely recognized as a basic characteristic of digital culture: the merging of the roles of the consumer and the producer. Morey highlights that listening could be conceived of as both production and consumption. At times, as he argues, it has become impossible to separate these two roles (Morey 2014, 51). In his book on technology and popular music, Paul Théberge (1997, 213) claimed as one of his main theses that "making music with new

technology has indeed become a process of simultaneous production and consumption." This definition has shown that the producer of sample-based music has become a consumer of (potential) sampling material.

I will return to the presented model in Chapter 11, where I will analyze a sampling process on the basis of anthropological fieldwork (direct observation). This interlude will allow us to follow the sampling process in the moment of action, verifying the steps introduced above. If not at the moment of production itself, these stages rapidly overlap with one another in the memory of the producers. The more time that has elapsed since the moment of production, the more challenging it becomes to separate the individual steps of the sampling process.

→ Figure 11.2

I do not therefore rely on this model in the case studies, as they are all approached in retrospect, with a distance from the moment of production of between one and three years. However, I draw on this chapter's general conception of sampling as a multilevel process as a theoretical groundwork. In the case studies, I retrace particular sampling processes and their key influences as far as possible, according to the knowledge that is still accessible.

Defining Cultural Concepts

When sampling is the object of the present study, a few cultural concepts are consistently used to explain this object. The notion of "the political" defines what kinds of tracks and sampling strategies are analyzed. The concept of "the material" is used to describe the sound-clips the sampling producers work with, and the concept of "meaning" is applied when talking about the extra-musical connotations that particular samples evoke. In the following pages I will introduce and define these cultural concepts.

A Signifier of the Social: the Political

This book is not about political music: it is not my main concern to discuss the relationship between music and politics or to depict the analyzed tracks as political. As Ute Canaris (2005, 30) has pointed out, the evaluation of music as political relies on specific contexts of reception. This question thus exceeds the scope of this study. However, this book is about *political* sampling material, sampling strategies that *politicize* seemingly "neutral" material, and *political* sampling motivations and intentions. The notion of "the political" is thus highly significant to my focus. Below, I aim to clarify my understanding of "the political" as well as the distinction between "political" and "politicized" sampling material.

This book is not about political music.

According to the Oxford Dictionary (2018a), "the political" relates "to the government or public affairs of a country." This definition

contains two dimensions. The first is a narrow understanding of "the political." It conceives of "the political" as something closely linked with the actions of nation states, parties, or other institutions and agents involved in the process of governing a country. In short, in this definition "the political" is equated with "government." In contrast, the second dimension indicates a much wider understanding of the term. "The political" is defined as something related to "public affairs." At this point, we inevitably have to ask what kinds of affairs this explanation refers to. Here, the definition becomes diffuse and much harder to grasp, at least if we want to avoid a completely open and thus meaningless definition that views everything as political.

In the literature on music, "the political" is often not defined at all. As an adjective, the term is used in combination with nouns such as value, consciousness, censorship, economy, and culture. It is presupposed that the reader knows exactly what "political" means. Moreover, "the political" is often tautologically defined as something that refers to politics. Helmut Rösing (2004, 162) notes that "the political" in music could become obvious "as a response to the socio-political reality."[5] David K. Dunaway (1987, 37) states that "music may be said to be political when its lyrics or melody evoke or reflect a political judgment by the listener."[6]

Dunaway thereby focuses on the effect of music, rather than the intent behind it, following a prevalent definitional approach. Other definitions are more helpful for my purposes. In his extended article in the German encyclopedia *Musik in Geschichte und Gegenwart* (MGG), Hanns-Werner Heister (2016) defines "the political" in only one sentence: "The 'political' in music," he states, "is a condensed form of the social in music."[7] Heister's definition is vague again: what exactly is meant by "the social"? Canaris points in a similar direction while, again, not clearly defining the "political." In her helpful overview on the relation between music and politics, she distinguishes between, on the one hand, concrete political contexts related to the political system and its agents (narrow definition), and on the other, political dimensions occurring in different societal spheres of activity (wider definition). According to Canaris (2005, 28–29), these political contexts encompass the economy, the social, education, culture, and issues relating to gender and ethnicity.

Heister and Canaris both approximate my own understanding of the "political" as a signifier of the social.

Heister and Canaris both approximate my own understanding of the "political" as a signifier of the social. I will further clarify this definition through the conception of "politics" and "the political" developed by Colin Hay. He outlines four key features for forming a "differentiated yet inclusive conception of politics," among them an understanding of "politics"—and "the political"—

5 Own translation. Original quote: "Reaktion auf Soziopolitische [sic!] Realität."
6 Dunaway also wrote the entry on "political music" in the *Grove Music Online* (Dunaway 2016).
7 Own translation. Original quote: "Das 'Politische' in der Musik ist eine konzentrierte Form des Gesellschaftlichen in der Musik."

as "a social activity" (Hay 2007, 65). He defines activities, choices, and decisions as social "if they have, or are likely to have, direct or indirect consequences for others" (70). Following Hay, John Street (2012, 7) summarizes that "decisions that are taken alone and affect only the individual who takes them are not social and hence not political." The further three key features of "the political" according to Hay (2007, 65) are: that "politics" offers people a choice; that it involves them (they have agency); and that it consists of a process of deliberation. As Street (2012, 7) argues, it is therefore important not to equate public life with "the political" (not everything that is public is automatically "political"), but also not to banish "the political" from the private sphere (a private action can affect other people and thus be "political").

Following these thoughts, I argue that music or musical elements such as samples can be perceived as "political" if they discuss, or at least point to, socially relevant issues. According to Hay, these issues are debated (and deliberated) by particular actors within society with a measurable effect for a specific group of people. It is therefore not crucial whether the musical producers themselves are political actors in Hay's sense.[8] In my case studies, these "socially relevant issues" are, for example, gender roles (Lara Sarkissian), forms of sexuality (Ian McDonnell), migration (Mauro Guz Bejar), and colonial history (Vika Kirchenbauer). There is only one example—James Whipple, with his strategy of sampling the sounds of war—which adheres to the narrow (and conventional) definition of "the political" as introduced earlier.

I argue that music or musical elements such as samples can be perceived as "political" if they discuss, or at least point to, socially relevant issues.

When speaking of "political" sampling material, it is further important to differentiate between material that can be conceived of as "political" in its source context—either by the producer or by myself as a researcher—and other seemingly "neutral" material that is "politicized" in the process of sampling. I draw this vocabulary from Helmut Rösing's draft model systematizing the relations of music (2004). He has rightly pointed out that the labelling of music as "political" is a project that is highly dependent on context and involves all steps within the process of musical circulation ("musikalischer Zirkulationsprozess"). He thereby highlights that the political character of music can change during this process and formerly non-political music can be "politicized." Accordingly, particular sampling material is "politicized" by its producer when the producer charges the sample with any kind of "political meaning" that was not necessarily connected with the sample before. This politicizing use of samples can be (at least partially) observed in the case studies of Lara Sarkissian, Vika Kirchenbauer, and Mauro Guz Bejar, while the case study of Ian McDonnell illustrates

8 Only some of the producers featured in this book could be regarded as political actors. Musical products generated by them could be further characterized as "intentionally political" (Dollase 1997, 122).

the opposite phenomenon: a political sound used in a depoliticizing manner; or, in other words, aestheticized.

The Realm of the Extra-Musical: Meaning

Having clarified my understanding of "the political," I want to introduce a term that constantly appears in discussions of sampling strategies: "meaning." Samples contain and transform meaning; producers select samples because of a particular meaning; they manipulate them and create new meaning. Especially when discussing the sampling of political material, the concept of "meaning" is omnipresent.

With reference to Stuart Hall, Michael Rappe (2008, 175) characterizes a popular music track as a "map of meanings." Ole Petras (2011, 281) coined the expression "patchwork of signs" in relation to popular music. John Fiske (1989, 124) considers "the study of popular culture [to be] the study of the circulation of meanings." The analysis of popular music, and the analysis of sampling processes in particular, thus inevitably has to deal with various layers of meaning. However, what is meaning? Jean-Jacques Nattiez, from whom I have already borrowed the categorization of poietic, neutral, and esthesic analysis, has offered a short and simple definition:

> *An object of any kind takes on meaning for an individual apprehending that object, as soon as the individual places the object in relation to areas of his lived experience – that is, in relation to a collection of other objects that belong to his or her experience of the world. (…) "Meaning" may be defined by a formula more lapidary still; meaning exists when an object is situated in relation to a horizon. (Nattiez 1990, 9)*

This definition emphasizes that meaning depends on context. In other words, the same object placed in a different context produces new meaning. When we conceive of "meaning" as contextual, it should be clear that there is no such thing as a singular and fixed "original meaning." Instead, Ralf von Appen (2014, 220) argues that meaning is created in specific situations of musical activity. Hence sampling, as a production technique which transfers material from one context to another, can be characterized as a meaning-generating process par excellence. Steve Collins (2008) highlights that "sampling is not implemented in creative endeavors to avoid the effort and cost of producing original music, but rather to add layers of meaning to music."

Sampling, as a production technique which transfers material from one context to another, can be characterized as a meaning-generating process par excellence.

Although I would not completely deny the existence of utilitarian sampling motives such as avoiding effort and costs, I basically agree with Collins' observation. I consider meaning to be crucial at two points. Firstly, meaning is attached—by either myself or the producer—to the sample in the source context. Secondly, I analyze how, and to what extent, this meaning is

transferred, adapted, manipulated, changed, or complemented by the producer during the process of sampling. A third point is consciously excluded: the various meanings attached by recipients. Vanessa Chang (2009, 145) is right when she notes that the sample is an "infinitely flexible signifier" and that it "resists the absolutism of linear signification." This means that no particular meaning must necessarily be transferred, even if the sampling material contains controversial content such as the sounds of war, as I will show in the case study of James Whipple.

→ Chapter 10

At some points in the book I speak of samples that contain "extra-musical" meaning, demarcating them from samples that only refer to themselves. Following the definition from Nattiez (1990, 9), this expression is tautological: when meaning is produced, the object—the sample in our case—is placed "in relation to areas of [the producer's] lived experience." Hence, meaning is always extra-musical. However, when using the expression "extra-musical meaning," it is my aim to underline exactly this particular quality of "meaning." As we will see later, one of the most common distinctions producers make when describing their sampling approach is between choosing a sample because of its (extra-musical) meaning (the sample is played by a particular musician, it derives from a particular socio-cultural context, it refers to a particular feeling, it reminds me of a particular situation, etc.) and because of its material qualities (the sample consists of a fast melody, a high and long lasting note, a dense texture, a short and sharp rhythmic pattern, etc.).

→ Chapter 5

Physically Treated Digital Code: Sampling Material

This "material nature" of a sample links to another concept that needs to be discussed: "the material." I use this term in two different senses. In the first sense, material means the matter with which the sampling artist works. Although samples consist of digital code, the editing steps in a DAW resemble the treatment of physical material: producers cut, paste, move, alter, and manipulate audio clips on the screen, even "touching" the clips with the mouse cursor. Samples form the bricks of a new musical work, and, in turn, the work consists of these materials. Thus, material is "what artists work with," as Theodor Adorno puts it in his *Aesthetic Theory* (Adorno 2006 [1970], 148). However, Adorno's understanding is broader than the one I use here in the sense of "sampling material." For Adorno, material represents more than just building blocks:

> *It [the material] is the sum of all that is available to them [the artists], including words, colors, sounds, associations of every sort and every technique ever developed. To this extent, forms too can become material; it is everything that artists encounter about which they must make a decision. (Ibid.)*

Admittedly, there is a certain strangeness to using the term

"material" in relation to sonic phenomena. Joanna Demers (2010, 64) rightly objects that "the definition of musical material is slippery at best." She refers to the fact that

> material *as a physical, tangible or repeatable object simply does not exist in music. Every musical sound is distinct and one of a kind, even those supposedly captured on recordings, because what are captured are not sounds themselves but the traces they leave in other media as sympathetic vibrations. (Ibid.; italics original)*

Nevertheless, Demers points to the use of the notion of "sound material" by musicians for centuries. This became obvious during my own interviews, in which many producers used the term to describe their compositional practice. Young Palace, for example, relied on it: "In my pieces, I generally put 'sound as such' or 'sound as material' into focus."[9] Owing to the spread of the term within the field and the aforementioned physical-seeming nature of sampling, I decided to rely on the concept of the "material" in this study as well.

In the second sense of the term "material," it describes the particular sampling approach outlined at the end of the previous section: instead of selecting samples because of (extra-musical) layers of meaning, producers choose samples because of their "material" nature. Thus, the focus lies on the "material" characteristics of the processed samples, such as pitch, timbre, and rhythm. Again, this understanding of the material relies on a narrower understanding of the concept than that provided by Adorno above.

A more thorough explanation of the material sampling approach is given in Chapter 5.

Having defined the cultural concepts and terms most important to this study, I will now proceed with a discussion of its field of research.

The Field: Experimental Electronica

In the discipline of cultural anthropology, the field has traditionally been understood as geographically confined. In recent decades, this notion has expanded towards a formation constituted by the research itself and describing "the manifestation of the research object in people, groups, places, discourses, and objects," as Miriam Cohn (2014, 75) puts it.[10] Akhil Gupta and James Ferguson had already called for a decentering of "the field" in 1997:

> *We might emerge from such a move with less of a sense of "the field" (in the "among the so-and-so" sense) and more of a sense of a mode of study that cares about, and pays*

9 Own translation. Original quote: "In meinen Stücken [stelle] ich in der Regel primär Sound an sich oder Sound als Material (…) ins Zentrum."

10 Own translation. Original quote: "Das Forschungsfeld oder Feld bezeichnet die Manifestation des Untersuchungsgegenstandes in Personen, Gruppen, Orten, Diskursen und Gegenständen."

attention to, the interlocking of multiple socio-political sites and locations. (Gupta and Ferguson 1997, 37)

In the meantime, the field has expanded from real places to encompass digital and virtual spaces. Andreas Wittel (2000) pointed to this development at an early stage. In summary, Esther Gajek (2014, 53) emphasizes that, in recent anthropology, "it is no longer the homogeneity of a real place that is primary, but the heterogeneity that emerges from networks of references and relations."[11]

Experimental electronica refers neither to a geographically defined research area nor to a contained musical community or scene.

This research focuses on multiple sites within the field of experimental electronica. The notion of "multi-sited ethnography" was introduced by George Marcus (1995, 95) to describe an approach that focuses on "multiple sites of observation and participation that cross-cut dichotomies such as the 'local' and the 'global,' the 'lifeworld' and the 'system.'" As a result, each case study represents a particular site. (I will further discuss Marcus' ideas, and pinpoint how my own methods rely on them, below.)

Accordingly, this book relies on a modern definition of the field. Experimental electronica refers neither to a geographically defined research area nor to a contained musical community or scene. In the words of Cohn and Gajek, this field is a heterogeneous formation of particular electronic music producers and their tracks. In the broadest sense, it could be regarded as a genre; I would rather conceive of it as a loose collective term for a significant manifestation of popular culture that emerged in the late 2010s, and that is rooted in various genres of EDM. Moreover, experimental electronica emerged predominantly from online discourses. Since the late 2010s, music journalists and fans increasingly describe this particular sound as "deconstructed club music," or invent other terms such as "post-club," "experimental club," "club-not-club," or "avant-club" (RYM 2019).[12]

This field is a heterogeneous formation of particular electronic music producers and their tracks.

In this section, I aim to describe the principal features of this field. Furthermore, I will critically examine the chosen label and discuss why I prefer "experimental electronica" to "deconstructed club music." Finally, I will explain why this field offers substantial insights regarding the focus of this book—with the music's heavily sample-based nature being just one reason among several.

11 Own translation. Original quote: "Damit steht nicht (mehr) die Homogenität eines konkreten Ortes im Mittelpunkt, sondern die Heterogenität, die sich aus dem Netzwerk von Bezügen und Beziehungen ergibt."

12 Although already present in preceding years, the expression "experimental electronica" became more apparent during 2018. See Baines 2018; Blumberg, Cornils and Herrmann 2018; Kretowicz 2018; Marcus 2018.

Music and Actors: Abrasive Sounds from the Bedroom

There are at least two main ways to approach experimental electronica. One describes the music and the technology involved, while the other portrays the actors of the field: its producers and composers.

(a) Music and Technology

The music consists of various forms of electronically produced popular music. This means that it is composed and produced mainly with the help of electronic technology: using synthesizers, drum machines, sequencers, and/or samplers. In most cases, the personal computer (mostly a laptop) serves as the main working tool. DAWs operate as the main working surface. This form of software was especially designed for the recording, editing, and production of music. One of the most influential and widely used DAWs is Live by Ableton (Brett 2019). Since its launch in 2001, Live has "slowly but surely attained market dominance" (Butler 2014, 19), with electronic music producer Stefan Goldmann (2015, 23) calling it the "standard tool for electronic music production and performance." The software's leading position is reflected in the case studies in this book: four of the five studied tracks were produced with Live. In line with this technological context, experimental electronica is sample-based to a high degree.

Ableton's leading position is reflected in the case studies in this book: four of the five studied tracks were produced with Live.

A further feature of the music is the broad absence of vocals and lyrics. Mark Butler (2006, 34) identifies this "instrumental focus" as a key quality distinguishing EDM in general from "almost all other commercial popular music produced in America and Europe since the birth of rock 'n' roll." Butler identifies two further characteristics shared by most EDM genres: a "steady relatively fast tempo—mostly in the range of 120–50 beats per minute (BPM)" and "a repeating bass drum pattern" (ibid.).

The label "electronic dance music" (EDM) has been used in recent years by Butler and other scholars (such as Feser and Pasdzierny 2016 and Demers 2010) as a neutral catchall term encompassing a broad range of musical genres and styles ("a complex network of related styles" [Butler 2012, xii]) such as techno, house, garage, drum and bass, dubstep, trance, and their respective subgenres. As Robert Ratcliffe (2011, 235) notes, more experimental genres such as breakcore and IDM (intelligent dance music)—which are not primarily dance-oriented—can also be subsumed within EDM. This makes the term diffuse and not accurate enough for my purposes. Furthermore, the term should not be confused with the label applied to highly commercial electronic music, mostly by journalists and fans. Morey (2017, 268) wrote that this genre "became very

popular in U.S. nightclubs in the 21st century, including vocal-based house and trance and dubstep influenced techno."[13]

Nevertheless, experimental electronica tracks have roots in one or various EDM genres, and occasionally also beyond this, in hip hop for example. They consistently and intentionally cross boundaries of genre and style—this is perhaps one of their key features. The highly hybrid character of these sounds thus makes me hesitant to define the field as a genre. If we consider genre following Demers (2010, 10), "as a sort of social contract between musicians and listeners, a set of conventions that can more or less guide the listening experience," we might conclude that this phenomenon is too recent for consideration of its status as a genre. After all, this will be the task of future scholarly attempts, which will be able to take further musical developments and emerging discourses into account.

However, how does "experimental electronica" sound? The terms "deconstructed" and "experimental" indicate that there is a liberated approach to production behind these particular forms of electronic music. Beyond the absence of lyrics, the aforementioned common features of EDM (steady rhythm and repeating bass drum)—and other conventional forms and structures—are challenged, ignored, or constantly experimented with. Therefore, "deconstructed" signifies that producers have complete freedom in what they do and are not following the conventions of formerly existing club music (Baines 2018). This leads to a sound aesthetic that is often abrasive, shaped by cuts, disruptions, noises, and dissonances. On the user-based music database *Rate Your Music* (RYM) the sound is accurately described:

A sound aesthetic that is often abrasive, shaped by cuts, disruptions, noises, and dissonances.

> *Identified by aggressive, frantic, post-industrial sound design featuring metallic or staccato sounds such as samples of glass smashing, gunshots, etc. deconstructed club aims for an excessive, apocalyptic-sounding soundscape, with constant rhythmic switch-ups and atonality. (RYM 2019)*

The music mostly appears in the form of tracks released independently on LPs or EPs. It is also presented in DJ mixes and on mixtapes. Tracks and mixes are primarily published and distributed online through platforms such as SoundCloud, Bandcamp, and Boiler Room. As this description of the music of experimental electronica illustrates, this music is far away from the mainstream: the tracks examined in the case studies reached between 1,000 and 7,000 plays on SoundCloud or YouTube within two to six years. The field of experimental electronica is a niche branch of EDM.

13 In the years during which this study was being conducted, the term became closely related to this particular genre in public discourse. This public understanding of EDM, though, can be conceived of as a subgenre in terms of the academic understanding of EDM. To avoid further confusion, I use the term only rarely in this book, and when doing so, always refer to its broader, academic meaning.

The actors behind experimental electronica are the producers and composers of its music. Morey (2017, 107) has defined the producer as an individual "who oversee[s] the creation and completion of a record but who [is] not actively involved in its composition." While these roles have been historically separate in popular music, they started to merge "with the huge rise of dance culture during the '90s" (Hepworth-Sawyer and Golding 2011). Artists in experimental electronica—as in many fields of EDM—compose *and* produce their music. In short, they have full sovereignty over the production process of their music. In some cases they even handle the distribution of their music and the management of booking requests. In this book, I thus use the role descriptors "producer" and "composer" interchangeably.

Artists in experimental electronica compose* and *produce their music. In short, they have full sovereignty over the production process of their music.

The production itself takes place in private (mostly urban) surroundings instead of professional studios. Often, the latter are only used for the final mastering of the tracks, if at all. This might be the only moment where people other than the composing artist enter and affect the production process. However, in many cases, mastering is done by the artists themselves. All producers from the case studies predominantly work on their music in their own apartments, mostly in their bedrooms. These producing habits gave rise to the label "bedroom producer," which is widespread and popular among both artists and producers (e.g. Goldmann 2015) and scholars (e.g. Butler 2006, 48; Hein 2016, 2017; Strachan 2017). However, Aram Sinnreich criticizes the concept of the "bedroom producer." Even if many artists identify with this term, he argues that it is used by music industry executives in a derogatory sense (see Hepworth-Sawyer and Golding 2011) to deprive producers of their artistry. Sinnreich finally unmasks the concept as a racial cliché:

> *In its ability to communicate both deprecation and pride, both otherness and selfness, to suggest both the bonds of community and the exile of the outlaw, the term "bedroom producer" resembles nothing more than a well-known racial epithet that has been used against (and by) African Americans for centuries. (Sinnreich 2010, 122)*

Another critique of the term as "a contested site in a struggle for musical legitimacy and credibility" has been offered by sociologist Andrew Whelan (2008, 20). In his study on breakcore he identifies another racial use of the term, but in the opposite direction from Sinnreich's example. Whelan argues that the label is primarily applied to "white (male)" musical genres (such as breakcore), while "Black (male)" genres (such as grime) are described as street music, although tracks from both genres are produced with similar technology and in similar places (31).

Following these critiques, I consciously avoid the label "bed-

room producer" in this book. Rather, I rely on the alternative "laptop producer." Butler (2014), for example, has used the similar "laptop performer" or "laptop musicians."[14] As with the bedroom, the focus on the laptop points to an intimate producing environment. It even adds a further dimension to the reality of electronic music producers: as the laptop can be brought everywhere, some of this music—or at least parts of it—is produced and developed on the road, while the artists are traveling for DJ sets and performances.[15]

I consciously avoid the label "bedroom producer" in this book. Rather, I rely on the alternative "laptop producer."

This leads on to further characteristics common to producers of experimental electronica. Many of them are closely related to DJ culture. They regularly present themselves in front of audiences, both as DJs and performers of their own productions, with the club as the main site where these events take place. The producers are thus active in various local and trans-local scenes and networks. However, there is nothing like a contained scene for experimental electronica, neither virtually nor in real life. The musicians themselves are based all over the (Western) world, with considerable concentration on a few centers.

At the time of the present study, the most important among them was the capital of Germany, Berlin. Butler has already recognized that

> *since the turn of the millennium, however—and particularly since the middle of the '00 decade—[Berlin] has gradually become* the *most active location in the world for both club culture and EDM record production. (Butler 2014, 17, italics original)*

The outstanding significance of Berlin for electronic music is illustrated by the fact that all producers in the five case studies live in Berlin either permanently (Vika Kirchenbauer, James Whipple) or partially (Ian McDonnell, Mauro Guz Bejar), or they have traveled to Berlin for musical projects (Lara Sarkissian). They each moved or traveled to the German capital from different regions of the world: Germany (Kirchenbauer), Ireland (McDonnell), the U.S. (Sarkissian, Whipple), and Argentina (Guz Bejar). This circumstance has substantially facilitated my own research, as I was able to interview all producers in the same place within a short period of time. However, this was rather a coincidence, and there was no primary criterion to focus on Berlin as a center for electronic music production in the research design of this study.

The following non-exhaustive list of (net)labels and globally operating collectives further highlights the field.

14 The label "laptop musician" has received some attention in recent scholarship, see Prior 2008.

15 A further alternative is offered by Whelan in the term "online musicians" (Whelan 2008, 20).

(Net)Label / Collective	Artists (Selection)	Associated Places
Blueberry Records	Dasychira, Elysia Crampton	New York
Break World Records	Elysia Crampton, Via App	Hillsborough (CA)
Club Chai	8ulentina, Lara Sarkissian, Thoom	Oakland/San Francisco
Creamcake	COOL FOR YOU	Berlin
Eotrax	Eomac, Lakker	Dublin, Berlin
Halcyon Veil	Angel Ho, Rabit, MHYSA, NAKED, Why Be	Houston (TX)
Janus	M.E.S.H., KABLAM, Lotic, Moro, Why Be	Berlin
NAAFI	Lao, Lechuga Zafiro, Paul Marmota	Mexico City
NON Worldwide	Angel Ho, Bonaventure, Chino Amobi, Moro, Nkisi	various (African diaspora)
PAN Records	Amnesia Scanner, M.E.S.H., Pan Daijing, Rashad Becker, Yves Tumor	Berlin, London, Athens
Pastel Voids	bod [ת ִפ], Dapper Dan	New York
Planet Mu	Bonaventure, Ital, Jlin, WWWINGS, Yearning Kru, Ziúr	Hove (U.K.)
PTP (Purple Tape Pedigree)	Bonaventure, YATTA	New York
Quantum Natives	bod [ת ִפ], Brood Ma, Yearning Kru	Taiwan, London
Salviatek	Lechuga Zafiro, Superfície	Montevideo

Table 2.2 : A selection of (net)labels and collectives in experimental electronica

All these actors are engaged in the distribution and promotion of experimental electronica. They are by no means the only players in the field, and most of them do not solely focus on experimental variations of EDM in their productions. Instead, the list represents networks with which the producers examined in the case studies are involved, as well as the most important actors in the field that I encountered during my research. Beyond being a primarily online phenomenon, the range of associated places further shows that experimental electronica is a distinctively global phenomenon, at least with a broad European and American spread. This corresponds with the reception of the music, which is, as far as I can judge from fan interaction on online platforms, mostly centered around Europe and North America.

As for the scope of themes addressed, there is a striking preference for political topics such as diversity, gender, queer identity, racism, social justice, and colonialism.

As for the scope of themes addressed, there is a striking preference for political topics such as diversity, gender, queer identity, racism, social justice, and colonialism. The choice of themes might be substantially influenced by the origin of many of the field's actors in marginalized communities. However, the online database RYM (2019) mentions that "these topics are not always

present, since some deconstructed club artists prefer to engage with futurism and technology for example."

Challenges of Labeling: From Deconstructed to Experimental

An attempt to label such a heterogeneous conglomerate of electronic music presents considerable challenges. Its status as a recent phenomenon, in which the musical and discursive processes of genre-building are not yet consolidated, further complicates this endeavor. With the label "experimental electronica" I have tried to find an accurate expression that is, nonetheless, as neutral as possible, and that as a result leaves space for further unpredictable developments.

I decided not to use the term "deconstructed club music" or one of the other aforementioned alternatives suggested by journalists and fans. All these expressions emphasize the club as point of origin. This might be true for many examples as this music is often rooted in the context of club culture. Moreover, it indeed "deconstructs" conventional club music into its components. These tracks can thus be heard as an "attack" on club music itself. The case study of Mauro Guz Bejar's "Libres," with its attempt to rupture "Western" four-on-the-floor beat patterns, can be viewed as an example here.

However, the reference to the club is, in my view, too dominant when using the expression as a broader collective term. To label this music as some sort of club music (or even anti-club music) is to assume that these producers are either composing for the club or intentionally opposing club culture. Considering the case studies in this book, we might recognize that, in particular, Lara Sarkissian's "kenats" and Vika Kirchenbauer's "STABILIZED, YES!" are not composed with a primary focus on the club. Rather, these tracks are experimental approaches to the composition and production of electronic music. At this point, there are some similarities to the genre of IDM (intelligent dance music), a label used by journalists and record labels in the 1990s to describe forms of electronic music suitable for living room listening (Demers 2010, 170).

I use the term "experimental" to capture the innovative character of the music in question.

I finally use the term "experimental" to capture the innovative character of the music in question. The term also seems to be accepted in the field: when I asked my interviewees how they would label their music—doubtless a task that few musicians enjoy—most of them came up with the label on their own, or agreed when I suggested it. By using "experimental," I consciously do not refer to experimental art music. In this area, the "experimental" is conceived as being outside a tradition (the European art music tradition) while the "avant-garde" is characterized as an "extreme position within the tradition" (Nicholls 2008 [1998], 518). By this definition we would need to use the latter term,

as I do not regard this music as being completely outside of the tradition of electronic popular music or club culture. With a view to the object of this study, electronic popular music, I finally decided to rely on a popular understanding of "experimental" that does not necessarily connect to the aforementioned theoretical discourses of other fields and traditions.[16]

Having explained my thoughts behind the first word, I now want to proceed with explaining the second: "electronica." As some scholars have argued, the collective terms "electronic music," "electronica," and "electronic dance music" have acquired multiple definitions not only during the twentieth century but also in different regions (namely Europe and the U.S.) and professional fields (academia and journalism).[17] Without recapitulating all these attempts in detail, I want to rely on a useful distinction made by Joanna Demers. In a holistic approach, she distinguished three "metagenres" of electronic music: institutional electroacoustic music, electronica, and sound art. The first and the third are oriented towards art music and institutional and academic contexts, while the second is related to popular music. "Electronica" thereby encompasses to a large extent what I have above discussed as EDM. However, it explicitly does not restrict itself to dance-oriented music. In the glossary of her book, Demers explains the term as follows:

> *Electronic music that flourishes primarily outside of academia but also claims some independence from the mainstream music industry. Electronica is split between dance genres such as house or techno and non-dance-oriented music such as drone, ambient, or glitch. No specific formal or stylistic parameters govern what counts as electronica; the one common factor seems to be a sense among artists and listeners that electronica is ideologically distinct from both mainstream culture and institutional electronic music. The term began to appear in the 1990s as a music-industry tool to brand what had become an explosion of niche EDM subgenres such as acid house and jungle. (Demers 2010, 167–68)*

What remains unclear with Demers' categorization is where to place mainstream music, as "electronic music" as an umbrella term should encompass "any type of music that makes primary, if not exclusive use of electronic instruments or equipment" (5) and mainstream music is apparently not included in Demers' concept

16 I do not recognize a theoretical distinction between "avant-garde" and "experimental" as relevant in my case studies. That does not mean that it is not relevant for the field as a whole. However, answering this question accurately would exceed the scope of this study.

17 Demers (2010) and Landy (2007, 14–15) assembled and discussed a range of occurring definitions of these terms. Collins, Schedel, and Wilson (2013, 136) pointed to the use of the term "electronica" in the U.S. as a marketing umbrella, in Europe as referring to electronic music in general, and in Latin-derived languages as simply meaning electronic music.

of "electronica." For my purposes, the term "electronica" is useful as it demarcates itself both from art music contexts and from mainstream music. By avoiding the term "electronic dance music," I finally point to the fact that "experimental electronica" is not necessarily dance-oriented.

The musicologists Collins, Schedel, and Wilson (2013) use the term "experimental electronica" as well. In a chapter of the same title in their *Cambridge Introduction to Electronic Music* they applied it to experimental variations of electronic popular music that are not mainstream-oriented, such as Brian Eno's ambient music, Throbbing Gristle's industrial-noise, and glitch music. Ultimately, their understanding of the term takes a similar direction to my own, with my study adding more recent examples to their historical overview.

There is a final remark to be made on the question of the mainstream. As I have outlined above, "the experimental" is often thought of as opposing mainstream culture. Although these tracks arise from niches, and although they can hardly be categorized as mainstream, this is, in its absoluteness, still not an accurate description of the present field. These tracks do not oppose mainstream culture *per se*. On the contrary, they often play with it or embrace it (Zevolli 2016, 2020).

Relevance: Heavily Sample-Based and Accessible

This chapter has so far defined "experimental electronica" as the field for this study and has at the same time revealed the shortcomings of this label. The conception of this field is an attempt at grasping a particular phenomenon of popular music that has become visible in the 2010s, but should be viewed neither as a constrained scene nor as a consolidated genre. The previous pages are not least based on personal observations of the field by the author in the years prior to this study; observations which were in turn broadly confirmed by the study itself. However, we still lack a detailed ethnography of this field. This book contributes somewhat to such an endeavor, namely through a detailed analysis of a range of sampling strategies. Consequently, the fields of electronic popular music in general and experimental electronica in particular serve as ideal research areas. I have identified five main aspects that illustrate the relevance of the chosen field:

(**1**) Experimental electronica music is heavily sample-based. Sampling is not just one of many producing techniques; it is a core tool in terms of the creation of meaning.

(**2**) Experimental electronica tracks are mainly instrumental. There is no possible communication through lyrics, which makes the use of samples even more obvious and necessary.

(**3**) The focus on political themes in recent experimental electronica significantly raises the possibility of accessing sampling

strategies with a particular political focus, and/or involving political sampling material.

(4) As "laptop producers," the actors of experimental electronica embody most of the conventional roles in the music-making process. This allows for the observation of popular music in a nutshell, without needing to explore the complex networks of hundreds of people involved in a single mainstream production—which would far exceed the scope of such a project.

(5) Since these tracks are niche music, it is potentially possible to get in touch with the producers. This is one of the most important requirements for the chosen research question and method.

(6) Finally, research on experimental electronica brings a particular phenomenon of early 21st century music into academic focus. Due to its newness, it is no surprise that this field has been largely absent from scholarly work so far.[18]

So far I have repeatedly referred to the object of this study as "popular music." It is now time to clarify my understanding of this label, which presents considerable definitional challenges—and even impossibilities.

The Object: Popular Music Without Being Popular

Popular music scholars continuously emphasize that there are no distinct musical features that could define popular music (Middleton and Manuel 2001), or that popular music has to be conceived of as a discourse rather than a fixed representation of a particular music (Wicke 2004, 119). It is thus reasonable to follow a flexible understanding of the term, using it strategically to place this study in an area that is, however, not defined exhaustively. Concerning my own understanding of the term, there is a simple and short explanation, and a longer one. The first is negative—which is a widespread approach to the definition of popular music—while the second is positive.

Experimental electronica is niche music. The tracks covered by this study can thus hardly be called popular music if we refer to the corresponding numbers of clicks, views, and likes alone— as an economic definition following on from Middleton (1990, 4) would require. However, there is no broader term suitable for categorizing this music other than "popular music." Following the description of the field on the previous pages, it should be clear that this music is neither folk, nor jazz, nor art or classical music—if we accept these categories

There is no broader term suitable for categorizing this music other than "popular music."

18 To my knowledge, the only—albeit not systematic—exception is the writing of Zevolli (2016, 2020).

as valid alternatives to "popular music."

As a second, positive definitional approach, I have compiled a range of features which locate the tracks and actors in question within popular music. Individually, these features might not be exclusive to popular music. But in combination they make a case for the application of this label. A first feature is the context of the producers portrayed in this study. They are all more or less connected to club culture. The club can be understood as a crucial site of popular culture. Accordingly, the analyzed tracks are rooted in various popular music genres such as EDM and hip hop. The music is thereby distributed and spread through (online) channels and networks characteristic of the circulation of popular music: labels, music platforms, music blogs, social media, mixes and remixes. The producers themselves are not linked to art music institutions and most of them have not received substantial formal musical training. Instead, they learned their music production skills mostly through the internet, or through peers within the scenes they operate in.

Exceptions are Mauro Guz Bejar (Chapter 8), who attended a conservatory in Buenos Aires, and Ian McDonnell (9), who studied sound engineering at Trinity College Dublin.

Following Giorgina Born's ethnography of French electronic music institution IRCAM (Born 1995), Butler has argued that there are still existing "borders between 'high' and 'low' forms of electronic music." He considers type of musical education and training as a dividing factor as much as sources of income ("clubs, record labels, and the music-technology industry" for the popular sphere) and the technology used ("technologies that come from this industry, such as variable-speed turntables, samplers, drum machines, and the software Live") (Butler 2014, 21–22). Butler's observations in both respects—sources of income and technology used—correspond to the producers of the present study.

■

In conclusion, these tracks are popular music because they circulate through networks that exist for popular music, and because their producers live and act in social contexts and structures that are shaped and defined by popular music (e.g. club culture). The actual popularity of this music in terms of clicks, views, and likes is thus not decisive in terms of understanding this music as popular.

This chapter has so far delivered the definitional and terminological framework for this study. I have defined sampling as a multilevel process, discussed a broad understanding of the political, and commented on the concepts of meaning and the material. Finally, I have introduced experimental electronica as an understudied and highly fruitful field for the present study. As a last step, I will now comment on my methodological approach.

Methodological Steps

This study uses methods of qualitative research. It applies a triangulation of methods ranging from musical analysis to anthropological fieldwork (semi-structured interviews and direct observation) and the use of case studies. The study thus focuses on the qualitative analysis of qualitative data (Bernard 2011, 337). This study is at least partially explorative, as its insights on the production process of electronic popular music could be fruitful starting points for further investigation. The analytical tools developed in this book should be applied to and tested with a greater corpus of data for further improvement and verification (or indeed falsification). Here, I present the methodical steps that guided the research process, which concluded with the analysis of five exemplary sampling strategies found in the case studies which follow.

The research for this book was conducted between April 2016 and June 2019. The process encompassed eight methodical stages that led from a broad overview towards the in-depth analysis of five case studies. The stages were part of an iterative research design. I alternated constantly between phases of preparation, data collection, and analysis.[19] In the following, I briefly discuss each methodological stage.

The process encompassed eight methodical stages that led from a broad overview towards the in-depth analysis of five case studies.

(1) Search for Tracks (Preparation)

The first stage focused on the search for tracks suitable for the purposes of this study. I followed a broad range of online platforms relevant to the field of experimental electronica, such as Resident Advisor, Tiny Mix Tapes, XLR8R, and FACT Magazine. Other sources included music magazines such as Groove, Spex, The Wire, and Zweikommasieben, the catalogues of labels such as NON Worldwide, PAN, PTP, and Quantum Natives, and the sound platforms Bandcamp and SoundCloud. Furthermore, I constantly asked the artists I was interviewing about other artists that might be suitable for study (snowballing method).

In the first instance, I was looking for tracks that sample external sound or media material with obvious links to extra-musical contexts. (I only narrowed my focus to political sampling material in stage 3.) This was in service of my aim to analyze reasons for sampling in this study. The more concrete a sample's reference to the extra-musical, the higher my chances of accessing conscious strategies that were still remembered by the music's creator. I either directly recognized such samples, read that they belonged to this category, or simply assumed that they did. The inclusion of tracks

19 This research design resembles the linear but iterative process that Robert Yin (2014, 1) has recapitulated with regards to case study methodology.

based on assumption was important, as it was my particular aim to uncover hidden sampling strategies. To further improve my chances of accessing useful information on the production process, I focused on tracks that were not older than two or three years.

One of the first tracks I accessed at this research stage was Lara Sarkissian's "kenats," which later became one of the case studies. I was interested in this track because it was presented online as being inspired by "Armenia in terms of music and poetry" (DJ Umb 2016). I assumed that samples were included in the track and wondered what stories might be behind them. In summary, this first methodical stage prepared the ensuing study, and provided a general overview of the field.

(2) First Interviews (Data Collection)

The next stage was to get in touch with the producers of the selected tracks. In total, I reached out to 105 producers via digital channels such as email, social media, and music platforms (Facebook, SoundCloud, and Bandcamp). Once contact was established, I first asked them questions about their sampling strategies, such as "what is your understanding and approach to sampling?" or "what have you sampled in this particular track or in other tracks?" From there, I decided which tracks could fit into my focus and tried to further intensify the email conversation. Out of the 105 requests I received 46 responses with usable data, making for a response rate of almost 44%. Responses varied widely in level of detail, from the producer Chino Amobi, who wrote one short sentence about a particular EP ("I used sounds in each song which I felt reflected the mood I experienced while visiting each city"), to Dr. Das, who sent four emails with extended answers totaling more than 3,500 words.

(3) Narrowing the Focus (Analysis)

Having collected a considerable number of tracks and a first corpus of interview data, I started to compare the assembled tracks. Two main criteria guided this process: (1) potential access to the producers for further interviews, and (2) the significance of the sampled material. Until this point, I had consciously left it open as to which kind of sampling material I would focus on, a methodological choice inspired, in particular, by grounded theory (Glaser and Strauss 1980 [1967]). Now it was necessary to narrow the focus to allow for a comprehensive study. In starting to analyze and code the data generated from the first round of interviews, I noticed a particular number of sampling strategies dealing with political sound material or using sampling to transmit a political message. It became clear that this focus would make it possible to cover a broad spectrum of different strategies.

(4) Further Interviews (Data Collection)

At the next stage, I went back to data collection and conducted a total of sixteen semi-structured interviews via Skype, phone, or, wherever possible, in person. These interviews were conducted between June 2016 and August 2018, and they lasted between 30 minutes and one hour each. With some artists, such as Bonaventure, or Drew Daniel and Martin C. Schmidt of the sampling-heavy duo Matmos, I skipped the first round of interviews (stage 2) and started directly with these longer conversations, because an email interview providing sufficient data was not possible. With the others, including the five producers featured in the case studies, I now had the opportunity to deepen insights gained in the previous interviews through longer conversations.

(5) Selection of the Case Studies and First Analysis (Analysis)

The second round of interviews finally provided me with enough data to decide which tracks I would choose for the case studies. I selected the tracks according to my aim to analyze a variety of sampling strategies. An initial application of the two analytical tools that will be introduced below, the FOV (fader of visibility), and SSR (spider of sampling reasons), helped me to compare the respective strategies for the first time and to make sure that the chosen strategies were not too similar to each other. With Lara Sarkissian's "kenats," I had a sampling strategy that was clearly concerned with questions of identity; Vika Kirchenbauer's "STABILIZED, YES!" was representative of an obvious and politically motivated strategy; Mauro Guz Bejar's "Libres" used non-contextual sound material instead of music or media material; James Whipple's "Methy Imbiß" sampled highly political material in a completely concealed way; and Ian McDonnell's "Perversas" was an example of the sampling of political sound material in a broader sense, without a political intention behind it.

→ Chapter 4
→ Chapter 5

At this point, a few more candidate tracks for case studies appeared, but I did not further pursue them, whether because I was not able to conduct further interviews (Bonaventure), because the strategies behind these sampling processes were too similar to those already chosen (Olivia Louvel), or because they did not provide enough analytical depth (kritzkom).

After selecting the case studies, I analyzed the use of samples in these tracks in a systematic manner for the first time. Here I relied on the catalogue of reference analysis (Referenzanalysekatalog RAK), developed by Thomas Burkhalter (2015b), as a guideline. This helped me to analyze the tracks from a broad range of perspectives, focusing on the source context, the processing of the sample in the new composition, and the presentation of the media product, alongside the habitus, context, and viewpoint of the producer.

Subsequently, I compiled a log file for each track containing short notes on the various perspectives. It was now possible to identify remaining gaps in my information as preparation for the next round of interviews.

(6) Third Round of Interviews and Direct Observation (Data Collection)

On this basis, I contacted the producers of the potential case studies to request further interviews. At this stage I conducted a total of sixteen interviews of between 45 minutes and two hours. These interviews were again semi-structured, and, with one exception, all face to face. They took place either in Berlin (July 2017, January 2018, and April 2018) or Karlsruhe, Germany (March 2018).

I asked the producers to share their DAW project files with me before the interview. All producers but one used the same DAW, Live. Mauro Guz Bejar used Apple's Logic Pro, but was in any case unable to find the original project file. Analyzing these files was worthwhile both to prepare interview questions beforehand and to analyze the case studies later. However, these files were ultimately of limited use. Transferring Live files from one computer to another mostly entails a certain loss of data (this is also the case when producers themselves move files or update software versions). Missing plugins such as VST Instruments and effects, and varying software versions, limit access—and sometimes alter parts of the file—when analyzing a project on my own computer. This might be one reason why Live has not been embraced by research as an instrument for musical analysis. On the other hand, this might simply be because researchers rarely have access to these files.

The third round of interviews offered deeper insights into the production process behind the chosen tracks. I asked the producers to meet in front of their computer or laptop so that we could go through the project file together on screen. Within this methodological stage, I also conducted a direct observation of one of the producers featured in the case studies. While researching this book, I was able, via the platform for music research Norient, to invite Lara Sarkissian to a four-week artist residency in March 2018 at the Center for Art and Media (ZKM) in Karlsruhe, Germany. I took this opportunity to accompany the producer for two weeks in order to witness the production of a track. In doing so, it was my aim to deepen the insights gained from musical analysis and interviews through further anthropological fieldwork.

I used my own role as a scholar and journalist working for Norient for the benefit of this study. See the end of Chapter 2 for a more detailed discussion of my own position as a researcher.

H. Russell Bernard (2011, 306) defines two forms of direct observation: "You can be blatant about it and reactive, or you can be unobtrusive and nonreactive." Following Bernard, I conducted a reactive observation. Sarkissian agreed to my presence in two production sessions. There, I observed her working on her track and sampling various material. I further used my presence to constantly

discuss the sampling strategies she was applying and to conduct further in-depth interviews. The benefit of this method for this book in particular, and its potential for the study of electronic popular music in general, will be examined in the interlude chapter. Further below I will discuss why direct or participant observation of laptop producers is a particularly challenging endeavor.

→ Chapter 11

(7) Analysis

The next stage in my methodical process involved a comprehensive analysis of the sampling processes pursued in the chosen tracks. The analysis was facilitated by the tools developed and introduced in Chapters 4 (FOV) and 5 (SSR), and by Burkhalter's RAK (2015b). Following Bernard (2011, 337), the analysis was qualitative (discussing particular case studies) and based on qualitative data (musical analysis and anthropological fieldwork).

(8) Writing

Finally, I had to write this book and thereby finalize the analyses. During this last stage, carried out between May 2018 and June 2019, some further gaps became apparent in the data collected. This demanded some further interviews, or conversations via email, with the producers featured in the case studies. Moreover, the chapters on the case studies were written using a dialogic method. I sent both a rough draft and a well-developed version of each chapter to the producer concerned, asking them to comment on what I had written, and later incorporating these comments into my writing.

A last remark at this point concerns quotations from the artists interviewed. I have directly edited typographical errors from email interviews or online texts without further reference. As we all know, most people do not care about orthography and grammar in email communication. Moreover, many producers are not native English speakers, and it was my aim to slightly edit these quotations for clarity without changing their intended meaning. Such quotations were sent to the producers for verification. Citations from literature are printed exactly as they appear in the source. Finally, when quoting from my own fieldwork data, I do not refer to the date of the email or interview for the sake of readability.

Methodological Challenges and Limitations

I will now discuss the methodological challenges and limitations I faced during this study on sampling culture in experimental electronica. I have identified six main areas here: problems of recognizability, of access, of memory, of articulation, of validity, and of density.

(a) The Problem of Recognizability

A great number of sampling processes are not recognizable to the listener, and thus not to the researcher either. This is a basic problem for studies of borrowing practices in music. Justin Morey wrote that in

> *the analysis of any sample-based track, the particular direction taken by the analyst will depend on the(…) level of knowledge both of the sources of the samples and their cultural significance, relevance and resonance. (Morey 2017, 161)*

A great number of sampling processes are not recognizable to the listener, and thus not to the researcher either.

Accordingly, Amanda Sewell (2013, 9) noted that "recognition is paramount." A lot of studies on sampling thus remain contingent on secondary sources such as the website and app database Whosampled.com, which collects user-generated information about sample-based music. As a result, unknown sampling strategies cannot be covered by these studies (for example Sewell 2013, see 9–11 in particular). To uncover hidden sampling practices within my own study, it was thus indispensable to establish close contact with the producers.

(b) The Problem of Access

The problem of recognizability is linked with the next problem: how do I gain access to these producers? And if I succeed, to whom do I get access? And to what kind of information? As expected, not everyone agreed to an interview: around half of my inquiries were not successful, or contact was lost before useful data could be gained. Even once contact was established, the discussion of sampling strategies proved delicate. I encountered a broad range of reasons—insofar as such reasons were detectable—for producers refusing to take part in my inquiry or for not allowing me access to certain information:

Even once contact was established, the discussion of sampling strategies proved delicate.

(1) Producers did not want to talk about sampling strategies because they had not cleared the samples, and/or were afraid of a negative reaction from the sampled artists. For example, I asked electronic industrial artist Ptyl to provide me with a detailed list of all samples used in a particular track, and he refused:

"because you never know what will happen with such a list and you never know how the sampled artists would react" (Liechti 2016b). Similarly, the dub collective SKRSINTL refused to "mention [from] which movies or sources [the samples] were taken from in order to avoid any copyright matters." Similar reactions from other interviewees and from other studies (e.g. Morey 2017, 295) illustrate that this is an issue any study on sampling strategies has to deal with.

(**2**) Producers hesitate to discuss sampling strategies because they do not want to reveal their artistic strategies. This could also be related to copyright issues, but touches on a further dimension. Many artists understand the creative process as extremely intimate and not intended to be shared with outsiders. One producer wrote, "I prefer to keep my strategies close to my chest," and Tomutonttu stated: "If I feel like the listener needs to know about the process behind a piece of music, I will include that info in the artwork. And in most cases I don't." YATTA referred to "inside jokes" when refusing to talk about a certain sample (Liechti 2017h). I will further discuss this issue as the problem of intimacy, in the interlude on Lara Sarkissian's "Thresholds" project.

→ Chapter 11

(**3**) Further reasons applied in individual cases, such as language skills (the necessary level of communication in either English or German was not possible), no press contact desired (since I also act as a music journalist, artists sometimes made no distinction between my roles as journalist and scholar), information only if paid or booked ("You only get the extra goodies if you book me live." Or: "When you have a budget we can talk"), and the lack of time due to intensive traveling/touring at the moment of the inquiry.

See methodological discussion in Chapter 11.

(**4**) Finally, some producers may be afraid of reactions from listeners, the public, or a particular scene or community. Matthew Herbert, for example, refused to discuss the sampling of sounds from the Arab-Israeli conflict within transitional music that he composed for a Eurovision Song Contest hosted by Russia. Although he had already discussed this sampling strategy in public (Harkins 2016, 229, 245) he did not want to return to it in our interview. I suspect that this refusal related to the circumstances of that moment: at the time of the interview (November 2017) he was facing pressure from British media regarding another one of his projects, on Brexit. Accordingly, Herbert was trying to avoid getting into further controversial discussions: "I'm particularly cautious at the moment," he stated. This example illustrates that the very moment when the interview takes place can be crucial. Beyond this example, I can only assume that similar reasons play a certain role for other producers, although it is understandable that none of the interview participants articulated this.

In summary, it is important to be aware of the various reasons why access to producers or to particular information might be denied. This problem illustrates that such an approach can only generate qualitative data, but not quantitative insights. However, while there are producers who *refuse* to take part in such a study because of particular reasons, there are also producers who *do* take part for a host of other reasons. It is therefore also important to analyze the motivations of participating producers within such a study. This could be done by addressing questions such as "why do producers agree to reveal their sampling practices?" Or, "what kind of interests may be uncovered by revealing such practices?"

Finally, as imposing as the list above may appear, these problems of access can be dealt with simply by increasing the number of inquiries and keeping the focus of research as broad as possible—at least in the first stages of the study, until the researcher has collected a significant amount of data.

(c) The Problem of Memory

Successfully establishing contact with a producer does not guarantee successful research. Producers sometimes forget their sampling sources and lose their project files—reasons given for this include deletion, deficient file management, loss of an external hard drive, or a change of computer. Often, producers work in a rather chaotic manner. They sample intuitively and rely on improvisational practices. Once a track is finished, they do not remember their exact workflow. The following examples describe such unreproducible approaches to music production:

Producers sometimes forget their sampling sources and lose their project files.

> – *bod [n ˈP]: "I am super unorganized with my files, and I often delete project files."*
> – *BZGRL: "Going through the project files now I can't hear anything from the bells in any of the material I actually used in the end. (…) My production process is kind of messy and irresponsible."*
> – *kaisernappy: "I download and use so many samples, it is not easy for me to tell you which sample I use for a track."*
> – *J(ay).A.D.: "I don't really remember what I did."*
> – *Dasychira: "Most sounds I used are honestly referenced from all over my hard drive and it would take a long time to locate all of them."*

These examples emphasize the need for conducting anthropological fieldwork, meaning interviews and participant or direct observation. In two of my interviews it was in front of the computer screen that we realized that a particular sample was not part of the final mix (Dubokaj, see Liechti 2017a), or that a particular sample had entered the project at a later stage than previously assumed (kritzkom). Both producers remembered their sampling process

incorrectly. These interviews thus helped me to verify statements made in email communication or from the producer's memory, by trying to trace back the sampling process by means of the project file. In many cases it is true that even the producers themselves do not remember all parts of their sampling process. This problem encompasses both the general limitations of human memory and—if the production process dates back a long time—methodological problems concerning oral history.

A way of dealing with these problems is to select tracks for investigation that were recently produced. Moreover, the focus on characteristic (in my case political) sampling material increases the possibility that a producer (a) had a distinctive and articulable reason for the selection of the particular material and (b) still remembers this reason.

(d) The Problem of Articulation

It is testament to this focus on characteristic material that a further problem was less relevant for my research: the problem of articulation. When researching the reasons behind actions, it is often challenging or impossible for the interviewees to precisely articulate what they have done. Practices of improvisation or intuitive actions can hardly be reflected in words. Behr, Negus, and Street reflected on this problem:

> *[Our] interviews covered musical copying more broadly with the aim of unearthing instinctive practices that are often conducted without much deliberation and which respondents often found hard to articulate. (Behr, Negus, and Street 2017, 1)*

Practices of improvisation or intuitive actions can hardly be reflected in words.

In my own interviews, BZGRL summarized a similar issue:

> ***With any improvisatory or intuitive practice there are of course always reasons and usually quite emphatic ones to use one sample or sound or gesture over another, but outside the moment it can be difficult to analyze the thought process or put it into words.***

Hence, a study that wants to access these kinds of reasons must rely on other methods and further analytical tools. My own direct observation of a production process points in this direction as well. This method allowed me to witness the moment of production and to access information on the production process that would have remained concealed when trying to access it at a later stage.

→ Chapter 11

(e) The Problem of Validity

However, if producers *do* articulate themselves, a further question arises. How do I know whether these producers are telling the truth or not? Hypothetically, producers could invent any story to explain

sampling processes, especially when talking about reasons for sampling or processes that are concealed for the listener. Drew Daniel from the duo Matmos summarized the problem:

> *Artists are very good at telling a fancy story about why they do what they do but you shouldn't believe artists. Necessarily. We're liars. We're salesmen. We have a dog in the race which is sculpting a persona that we come to believe in because we've told the same story for ten years, twenty years about who we are—but that story isn't necessarily reliable, especially when it comes to questions of politics.*

How do I know whether these producers are telling the truth or not?

Dealing with young producers who have not been in the public eye—or not for as long a time as Matmos, for example—might lower the risk of getting caught in this trap. It is also important to verify the information given by interviewees whenever possible. I did this with the second round of interviews, by approaching a better understanding of the producer's context, artistic aims, and interests. Getting access to project files also helped verify their statements.

However, this does not solve the problem in relation to statements on reasons for sampling. I attempted to address this by discussing the reasons behind sampling in as open a manner as possible. I refused to define one single motivation or intention per case. Accordingly, one of the models proposed later allows space for a range of (subjective) motivations and intentions. Some of these reasons for sampling might not have been raised by the producer but are instead the interpretation of the researcher. It might even be the case that the interviewee disagrees with these suggested reasons—though this did not happen in my research.

→ Chapter 5

(f) The Problem of Density

Finally, Andreas Wittel has illustrated a problem that I call the problem of density. In his review of the approach of cultural anthropology in the digital age, he writes:

> *A shift from classical fieldwork to a multi-sited network ethnography will change the relationship between the ethnographer and the observed in such a way that the boundaries between home and the remote "field" become less clear. It will reduce the time that can be spent with one single site, which will negatively affect the search for hidden and deep layers of meanings. (Wittel 2000)*

Hence, a multi-sited research such as this study runs the risk of losing accuracy. Having many "construction sites" necessarily diminishes the resources available for each in the "search for hidden and deep layers of meanings" (Wittel 2000). I cannot provide a definitive solution to this considerable problem. Moreover, as George Marcus (1995, 99) has written, the goal of multi-sited ethnography "is not holistic representation, an ethnographic portrayal of the

world system as a totality." However, to respond to this problem, I want to add some epistemological remarks on two methodological steps in my study: Direct observation (Chapter 11) and case studies (Chapters 6–10).

It is obvious that for practical reasons (money, access, and time) a participant or direct observation for all five case studies would have been beyond the scope of this study. Although such an approach would doubtless have yielded valuable additional insights and perspectives. Moreover, the conducted direct observation was relatively constrained in time—two production sessions over three weeks. This only allowed for a limited understanding of the research context. Nonetheless, by having conducted this limited direct observation I aim to demonstrate the potential of my methodological approach for further research. Accordingly, the insights from this stage of research are presented as an exploratory interlude.

→ Chapter 11

For the most part, this book uses a case study methodology. Following Robert Yin (2014, 50) and his handbook on the method, my research can be described as a holistic multiple-case design, with the five case studies representing five different contexts (the multiple sites of the field after Marcus 1995). Yin further describes three different purposes for which a research method, and thus also the case study method, can be used. According to him, a case study could be explanatory, descriptive, and/or exploratory (Yin 2014, 8). As I will argue, my case studies touch on all of these categories. They are descriptive as they illustrate distinctive strategies of sampling. They are exploratory as they develop and test methodological tools for analyzing sample-based music. Finally, they are explanatory as they help to develop a better understanding of the culture of musical sampling in particular and popular music in general.

My case studies are exploratory as they develop and test methodological tools for analyzing sample-based music.

In summary, by investigating a total of five case studies from different contexts, it is my aim to provide a precise description of a set of possible, but not exhaustive, artistic strategies. As a result, the focus on small-scale case studies allows access to individual positions and strategies of music production. Susanne Binas-Preisendörfer emphasizes the importance of such studies:

> *A scientific exploration of the musical phenomena in a modern globalized and mediated world demands both reflexive theoretical concepts as well as very specific, small-scale studies. (Binas-Preisendörfer in Burkhalter 2016, 176)*

■

I have now discussed the six methodological problems of recognizability, access, memory, articulation, validity, and density, and have offered my own strategies in dealing with them. At this point, a final question arises: are there sampling strategies that producers

do not want to share and that still remain hidden, even after having conducted this study? The answer to this question is, simply, yes, of course. However, I am convinced that it is only anthropological fieldwork and its respective array of methods that gives us the possibility of accessing these strategies. What is required is close contact with the producers, persistent research, and a bit of luck.

The main object of this study is the popular music track. I have not, however, said much so far about the concept of the track, which I will thus turn to in the next section. This connects to the methodological discussions in the previous pages and suggests a new field of study focusing on this particular format of popular culture.

Trackology: Reading the World through Tracks

> *There can be little doubt (…) that music is an indicator of the age, revealing for those who know how to read its symptomatic messages, a means of fixing social and even political events. (Schafer 1977, 7)*

The influential composer and soundscape researcher Raymond Murray Schafer observed that music is more than just organized sound. Music contains the extramusical, it contains the world. By listening to music in everyday life or by analyzing it as a scholar, we can reveal knowledge about the world. (I will return to this argument on several occasions in this book.) One way to access this knowledge is through the in-depth and thus multi-perspective analysis of tracks of popular music. I want to suggest the term "trackology" for this (hopefully) emerging field of study. In the track, this field focuses on one of the most central objects of popular music.

I have until now avoided a definition of the concept of the "track." The term comes along with five layers of meaning. (1) A track is, simply, an individual section on a compact disc that can be triggered by a distinct number. (2) When defining the "recording," Albin Zak (2001, 24) defines the track as "the recording itself" as opposed to the song ("what can be represented on a lead sheet") and the musical arrangement ("a particular musical setting"). (3) A third definition understands the track as "a single textural layer within a composition, as defined by a distinct instrumental sound; in particular, a single instrumental sound within a sequencing program" (Butler 2006, 328). There are also vocal tracks in this sense, of course. To avoid confusion, I will highlight whenever the term is used in this way with the addition of "audio" (in most DAWs, including Live, one can work with audio tracks or MIDI tracks).

From all these definitions it becomes clear that the term refers to a musical artifact that has been generated with the help of

computers or sequencers (Binas 2010, 62). Accordingly, conceiving of the track as "machine music" (Eshun 2000, 78) places it in opposition to the "humanistic" song. (4) This links to a fourth definition in which the track is understood in opposition to the concept of the song. (Zak's second definition above used the term "song" in another sense.) The academic literature mentions various characteristics of the track, such as an emphasis on rhythm and sound instead of voice and pitch (as in the song); a potentially open, loop-based structure; and a lack of hierarchies between melody, sound, and rhythm (Bonz 2008, 127; Butler 2006, 328; Ismaiel-Wendt 2011a, 54–55; Kraut 2011, 86). Accordingly, the concept of the track is mostly used within electronic popular music; however, as the first definition in particular illustrates, it is not restricted to these genres.[20] (5) A fifth understanding, finally, uses the word in its literal sense, referring to a path, route, trace, or journey (Ismaiel-Wendt 2011a, 208; Poschardt 1997, 250).

In this book, I understand the concept of the track in two ways. (1) in its narrower sense as an artifact of electronically produced music that can be distinguished as much as possible from the song. (2) in its broader sense, in line with the aforementioned fifth definition. Hence, "trackology" doesn't focus solely on the study of tracks in the narrow sense. Trackology also addresses the study of, for example, pop songs, which are today almost without exception produced by electronic means. In short, trackology calls for the seeking out of traces in popular music, taking its central artifact—be it a track or a song—as the point of departure.

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Having introduced the main object of trackology, the track, I now want to shed light on the goals and aims of this field. Tracks are probably the artifacts of popular music culture most present in everyday life today. We hear them in restaurants through radio speakers and in public spaces via mobile phones, we listen to them while doing sports, and we encotunter them when watching TV and movies, consuming adverts, or browsing the internet. On the other hand, tracks are anything but mundane; through their global production, distribution, and reception, they reflect a highly hybrid world that is shaped by processes of globalization and digitization.

Trackology serves as a tool to make sense of this world. It establishes an applicable method of multi-sited ethnography (Marcus 1995; Wittel 2000) in which tracks are the initial point of research. They generate research questions as well as leading the direction of the research. Marcus describes a bundle of techniques through which multi-sited ethnographies define their objects:

20 Johannes Ismaiel-Wendt emphasizes that there is no sharp distinction between the concepts "song" and "track" and that the transition from the track to the song is fluid (Ismaiel-Wendt 2011a, 54–55).

> *These techniques might be understood as practices of construction through (preplanned or opportunistic) movement and of tracing within different settings of a complex cultural phenomenon given an initial, baseline conceptual identity that turns out to be contingent and malleable as one traces it. (Marcus 1995, 106)*

In line with the second of his six approaches—called "follow the thing"—trackology simply "follows the track." Finally, trackology bridges the gap between approaches that focus on the musical material (textual analysis) and others that merely focus on its context (cultural and anthropological analysis).[21] In summary, trackology relies on a methodological loop between music (track) and context (in the case of this study, the producer), playing back and forth between musical and textual analysis and anthropological study.

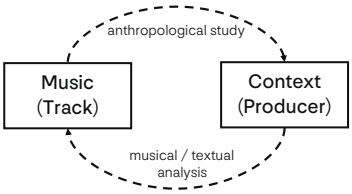

Figure 2.2: The methodological loop of trackology

I know of at least two similar approaches within the existing academic literature, the first coming from cultural theorist Johannes Ismaiel-Wendt (2011a). In his book *tracks'n'treks* he coins the term "TRX studies." By analyzing eight tracks from various genres of popular music, his aim is to uncover colonial and postcolonial knowledge of the world ("Weltenwissen"). He defines "TRX studies" as an alternative approach to research developed on the basis of postcolonial theories:

> *TRX studies are postcolonial analyses of music, oriented toward aesthetic strategies for the representation of spaces and times against the backdrop of colonial history. They understand songs as a semiosis that stages cultural geographies. They form the mode of discussion that reflects the battle around geographies or the attempt to dissolve them. (Ibid., 53)*[22]

Like Ismaiel-Wendt, my aim with trackology is to establish a close focus on tracks as a tool for uncovering knowledge of the world. However, I would not restrict this approach to aspects of

21 Richard Middleton (1993) had already recognized a gap between popular music analysis and musicology in 1993. The foundation of the Network for the Inclusion of Music in Music Studies (NIMiMS) by Philip Tagg et al. in 2015 illustrates that this debate remains relevant in popular music studies almost thirty years after Middleton's claim (NIMiMS 2018).

22 Own translation. Original quote: "TRX Studies sind postkoloniale Musikanalysen, die auf die ästhetischen Strategien zur Repräsentation von Räumen und Zeiten von kolonialgeschichtlichem Hintergrund gerichtet sind. Sie begreifen Songs als Semiose, die kulturelle Geographien inszeniert. Sie sind der Diskussionsmodus, in dem der Kampf um Geographien oder der Versuch ihrer Auflösung an Musik reflektiert wird."

colonial/postcolonial history. A similar approach was suggested by Michael Rappe, who describes his method of "music archeology" as a

> *search for traces whereby—based on the concrete aesthetic product—as many musical and visual signs as possible, as well as subjective impressions, affects, and fantasies, are assembled and transformed into processes of interpretation. (Rappe 2008, 174–75)*[23]

It is this search for traces within popular music that is the core interest of trackology.

One danger comes with the approach I have outlined. By placing individual tracks or songs at the core of a study, there might be a temptation to give too much weight to these tracks and to, at least partially, return through the back door the concept of the musical work associated with art music. Popular music in general, and electronic forms in particular, have difficulties with this concept.[24] In order to avoid this trap, the single track or song should always be considered as an initial point of study and/or as a case study. One should avoid sticking to the track beyond this initial point, or overestimating its individual importance or meaning.

Speaking from Where? The Researcher's Position

The final concern of this chapter is to reflect on my own position as a researcher. I am aware that this subjective position plays a significant role in shaping a study. Every scholar inevitably brings their own habitus into research. In the following, I will outline six relevant biographical moments and core beliefs. These "indicators of position" allow me to discuss specific aspects of my own perspective on the object of study in particular and on the world in general. These indicators may—at least partly—explain how I came to ask the questions I am asking. They also helped to build the framework through which I have accessed the field of this study. It is not necessary to read the following pages in order to follow my argument, but the perspectives they contain may make it easier to retrace my steps, and thus offer a more transparent approach to this study.

23 Own translation. Original quote: "Es handelt sich um eine Form der Musik-Archäologie, um eine Spurensuche, bei der, vom konkreten ästhetischen Produkt ausgehend, möglichst alle musikalischen und visuellen Zeichen, aber auch die subjektiven Eindrücke, Affekte und Fantasien zusammengetragen und in Deutungsprozesse überführt werden."

24 To mention just a few of these difficulties: the forms in which tracks or songs appear as musical products range from very elusive and spontaneous utterances to conceptual "work-like" compositions; tracks are published, distributed, and performed in different versions; canons are (largely) absent or secondary; and "musical meaning is generated within a *field*, not a discrete work" (Middleton 1990, 95; italics original).

(a) Popular Music as a Seismograph of the World

Popular music was not a familiar part of my childhood surroundings. There were rarely strict prohibitions, but popular music in particular provoked harsh reactions. I was not allowed to buy Aqua's *Aquarium* (1997) as my first record, and the song "Zehn kleine Jägermeister" ("Ten little hunters")—a parody of "Zehn kleine Negerlein" ("Ten little negros") by the German punk band Die Toten Hosen (1996)—caused controversy thanks to its lyrics. Although my wish to own Eminem's *Marshall Mathers* album (2000) was fulfilled, the gift was considered highly suspicious. I did not understand the reasons for these reactions, and I always felt unsatisfied by any explanations given. If anything, these early encounters with popular music showed me that it is not just an aesthetic adventure but a thing that is *of* and *about* this world. This might have informed one of my main interests in the study of the subject today: the potential of popular music to tell us about the world and its people. In other words, these experiences have led me to conceive of music as a seismograph (Jacke 2006; Beyer, Burkhalter, and Liechti 2015).

Popular music is not just an aesthetic adventure but a thing that is of and about this world.

(b) Popular Music as an Ambivalent Project

It might not be surprising that I consumed popular music uncritically as a teenager. For example, I listened to and loved Moby's "Why Does My Heart Feel So Bad?" (1999), a chart hit of the time. It was only years later that I read the critique of Moby's sampling strategies in that song and the album it comes from (Hesmondhalgh 2006; Clayton 2016, 126–27; Diduck 2019). Despite this justified criticism, the song remains for me connected with positive memories. Such experiences shaped my perception of popular music as an out-and-out ambivalent project: while some might perceive a particular strategy as problematic, a track might still be highly valuable and meaningful for others. Such experiences aroused my interest in a differentiated view on popular music. I am not only interested in a broad range of subjective readings (or rather listenings). I am, in particular, interested in the positions behind the music: the motivations and intentions of its makers. This is what this book is about.

(c) Politics, Spectrums, and Diversity

My private surroundings have always been attuned to political issues. This has significantly shaped my own actions and, in turn, my academic endeavors. Despite the above observations on the ambivalence of popular music, I am convinced that this music remains a powerful tool to speak out about global injustice and to share individual, potentially marginalized narratives. It is my aim to make such positions visible and to critically discuss instances in popular

music that counteract this project. I therefore try to resist the temptation of simple explanations. I am convinced that the world is far too complex to be described with dualistic concepts. Hence, in the following, I will regularly relate to spectrums as modes of categorization and explication.

A final aspect connected with the political is the (also anthropological) aim of being close to people. It is not my goal to write a history of the great white men of popular music, but to contribute to a more diverse history. Therefore, big names in sampling in experimental electronic music only play a secondary role in my study, if any.

I am convinced that this music remains a powerful tool to speak out about global injustice and to share individual, potentially marginalized narratives.

(d) Beyond Scenes

I have never been part of a subcultural scene. The only exception was the third wave of ska music in Europe during the early 2000s, which strongly influenced my socialization within popular music culture. In my hometown of Bern, Switzerland, I used to lead a ska band as a guitarist and singer, and I wrote my final thesis paper at *gymnasium* (Swiss upper high school) on the history of the genre. However, my musical taste has always been quite broad, and I was never interested in sticking to a particular scene. This is also the case with regards to club culture. By the time of the birth of my first child, right before starting this research, I had largely stopped going out clubbing. Furthermore, beyond some basic knowledge of the DAW Live, I have never produced electronic music myself. Rather, I consider my perspective to be external to the field I am examining.

(e) Between Academia and Journalism

This external position might be a disadvantage in the field, especially when it comes to technical aspects of music production. On the other hand, it could also be an advantage, as it allows the researcher to ask simple questions and to take novel positions. There is, however, another factor that greatly facilitated my access to the field. Since 2013 I have been part of Norient, a Swiss-based non-profit association and worldwide network with a focus on global developments in niche music. Among other projects, we run the online platform Norient.com. Norient was known among some of my interviewees, who were highly motivated to contribute to it.

With my series of blog posts titled "Sampling Stories" (Liechti 2016) I had a tool to give something back to my interview partners shortly after our interviews. In doing this, I crossed the borders between academia and journalism. (In some rare cases this was also a disadvantage, as some artists refused to talk with journalists, see discussion above.) Moreover, as part of the Norient editorial board, I had observed the field of study for some years even before starting work on this project. Being part of Norient also made my direct

observation possible. Norient had the opportunity to invite two artists into Hexadome, a cultural project offered by the Institute of Sound and Music (ISM) in Berlin. By choosing Lara Sarkissian as one of the two artists, I was able to follow her for three weeks during her residency at Center for Art and Media (ZKM) in Karlsruhe, Germany. → Chapter 11

(f) Between Historical Musicology and Cultural Anthropology

The choice of my subject of study, musicology, was shaped by both a misapprehension and a necessity. I wanted to study musicology because I was deeply interested in almost all kinds of music and their accompanying actions, backgrounds, and contexts. However, as I had to learn, the discipline of historical musicology is still significantly shaped by (although not restricted to) a canon of works drawn from Western art music. At that time, it was not possible to study cultural anthropology or popular music at a Swiss university. By chance, during my basic studies, the University of Bern established a professorship for cultural anthropology of music. As a result, I finally had the chance to broaden my focus in the study of musical phenomena. Today, as a consequence of my academic career, I still define myself as both a historical musicologist and a cultural anthropologist. From the first I draw an interest in the musical material, and from the second my motivation to learn more about the musical practice of people: how, why, and through what kinds of actions, with what aims and with what consequences for a broader society people encounter music. And, in particular, what music means to people. Both perspectives are reflected in the methodological approach of this study.

■

These six indicators of position—many more remain unmentioned—influenced and shaped my research. They represent my own position as a researcher before and during this project. However, these indicators are constantly subject to change, refinement, and possibly even disavowal.

This chapter has broadly discussed the theoretical and methodical framework of this study. As well as outlining my own position, I have clarified my understanding of the study's key terms (e.g. sampling, the political, and popular music), described the field of experimental electronica, and elaborated on my methodological approach. The next chapter will now present an overview of how scholars have approached sample-based music in the past. This will serve as a basis on which to develop the analytical groundwork of this study in subsequent chapters.