HETEROGLOSSIA IN KAZAKHSTANI`S METAL SUBCULTURE:

TECHNOLOGICALLY MEDIATED SONIC REPRESENTATION OF AUTHENTIC METAL VOICES

by

Ali Dukayev

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Abstract

The current work attempts to investigate the concept of heteroglossia and its sonic representation in Kazakhstani's metal subculture. Heteroglossia is a combination of voices that we consciously and subconsciously derive from our environment, that impact our daily communication. In order to move beyond conventional divisions of language and music, both are treated as communication within a soundscape, i.e. everything an ear is exposed to, and analyzed in terms of frequency and dynamics content. Overall, the paper attempts at uncovering the local heteroglossia that comes to define the common footing of the subculture, establish the universal and canon characteristics of metal sound, and showcase the technologically mediated processes that drive this heteroglossia's expression within a local metal soundscape. In order to achieve this, I have conducted fieldwork, engaged in spectral and dynamics analysis of the locally produced music, and led a personal project. The results of the fieldwork indicate that the underlying common footing of the community is the concept of authenticity, which implies both non-conformity to the mainstream, and conformity to metal canons. Sonically, non-conformity to the mainstream is expressed through the inclusion of the local instrumentations and vocalizations, and creative and pragmatic decisions behind them. The conformity means the inclusion of distorted guitars and fast paced live-sounding drums. Such sonic mix presents a challenge to the clear expression of the local voices within global ones necessary for the convection of certain communicative purposes, since distorted guitars create spectral masking, obstructing audibility and clarity of other instruments and vocals. Resolving this issue falls on the sound engineer. Overall, the balanced expression of the local heteroglossia, i.e. a unique/authentic local metal soundscape, is a technologically mediated process, where the pivotal role is taken by a sound engineer, who

shapes/alters/molds the soundscape to covey certain communicative functions and introduces his/her own voices, i.e. creative and pragmatic decisions.

Key words: heteroglossia, spectral masking, soundscape, voices, Kazakhstani metal subculture, music, language, sound engineer, spectral analysis.

Introduction

The current research explores the concept of heteroglossia by Bakhtin (1981) in its relation to music within the Kazakhstani's metal subculture and music. It attempts to fill in the gap of research that goes beyond conventional division of language and/in/about music through spectral analysis of technologically mediated sonic representations of heteroglossia, and its respective communicative purposes. Heteroglossia implies the existence of multiple voices within a particular cultural or linguistic context, reflecting the diversity of human experiences, perspectives, and social interactions (ibid.). It involves different languages, dialects, registers, styles, genres, and ideologies coexisting and interacting with each other. Basically, people tend to overlap, consciously or subconsciously, all the different social aspects, including the listed, in our daily communication, creating and molding our social interactions, and ultimately identities. Within the framework of local metal music, these voices represent the various creative and pragmatic decisions made by various agents in the process (musicians, engineers, producers, audience) of arranging instrumental, vocal, technological ingredients of a metal track. This in turn might imply the inclusion of certain musical instruments to express an idea or perform a communicative function. Altogether heteroglossia finds representation in a sonic environment, namely a soundscape, which serves as a shared domain where language and music coexist (ibid.). The soundscapes constitute everything that an ear is exposed to in a given environment. It presents an opportunity to analyze the sonic features of the voices without resorting to discussions of language and music as separate entities. By utilizing spectral and dynamics analyses this paper aims to understand the way the local heteroglossia is sonically represented and what communicative purposes drive the technologically mediated processes that shape a local metal soundscape.

In order to understand the link between the local metal heteroglossia and metal music, the current research has conducted a fieldwork, where the participants of the community were interviewed about the peculiarities of the local subculture and music; spectral and dynamics analysis of the locally produced music; and a personal project aimed at showcasing the different stages involved in the process.

The overall aim of the fieldwork was to collect information on the multiple voices that comprise what Goffman (1981) calls the "common footing." The common footing is the shared background assumptions and expectations that underlie social interactions between individuals. It involves establishing a common frame of reference that allows participants to understand and interpret each other's actions and statements within the subculture, that ultimately differentiate the insider from the outsider.

Upon finishing the fieldwork, I made several observations. The underlying feature of the common footing in the Kazakhstani's metal subculture is the concept of authenticity, which implies non-conformity to societal norms through styles of dress, talk, and listening practices. Yet, participation in the subculture also implies a certain level of conformity to the canons of metal music, especially in listening and compositional practices. Thus, a metal soundscape is an interplay of conformity and non-conformity that impacts the sonic representation of the heteroglossia. One way that local authenticity is expressed is through the clear inclusion of both the local voices and global ones. The former are the creative and pragmatic choices, instrumentations and vocalizations that define the local culture, namely Kazakh instrumentation and vocalizations as their more tangible expressions. The latter are the inclusion of distorted guitars and fast paced live-sounding drums. Hence, the sonic expression of the local metal heteroglossia is the interplay of local and

global voices, i.e. Kazakh instrumentations and vocalizations, and distorted guitars and fast paced drums. This in turn will constitute an authentic and unique soundscape.

Nevertheless, such process contains significant challenges. As the fieldwork has demonstrated, for the voices to perform their communicative purpose well within a metal soundscape, they must be clearly audible. Their audibility is obstructed by a thick wall of sound that distorted guitars inevitably present. This is a process called spectral masking, which means that a sonically dense distorted guitar signal becomes a wall of sound, leaving little room for other instruments and vocals (Mynett 2017). Thus, the global voices obstruct the local ones, resulting in an unbalanced representation of the local heteroglossia. The responsibility to resolve this issue falls on the sound engineer, who ultimately alter the soundscape through technologically mediated processes and introduces his/her own voices. The resulting metal soundscape becomes a negotiation of the plethora of voices and their communicative purposes mediated by a sound engineer.

The overall hypothesis of this paper is that in order to create an authentic/unique metal soundscape, i.e. balanced representation of the local heteroglossia, sound engineer has to resolve technological issues of combining global voices with local ones. The engineer then negotiates this interplay of local and global voices and introduces his/her own creative and pragmatic decisions, which alter the overall representation of heteroglossia in a metal soundscape and its communicative purposes. Analyzing these technologically mediated processes might shed light on how language and music are manipulated sonically together to convey certain communicative functions. The underlying reason for attempting to create a unique metal soundscape lies in the fact that there is a pragmatic value in doing so, since it increases your authentic experience of the community by allowing you to be both conforming and non-conforming to the globalizing metal

culture. Moreover, as the concept of heteroglossia implies, the local voices will find representation sonically, since we overlap them both consciously and unconsciously. The overall questions that this paper attempts to unravel are:

- 1. What does it mean for metal music to be "real" or "authentic" or "appealing" from an insider's perspective?
- 2. What is the common footing in the community? What are the voices that constitute it? How do they find representation in the local metal soundscape?
- 3. What are the specific technical productions of sound that make metal into a genre? Who are the "agents" of this genre? What are the global features of metal?
- 4. How does the Kazakhstan metal scene fit into the bigger global scene? What voices might make this scene unique?
- 5. How does one negotiate the sonic representation of local and global voices in a metal soundscape? What are the semiotic processes behind these technologically mediated processes?

Literature on metal, music, and language

The literature on the link between music and language has introduced several ideas. One of the most influential for this study is the concept of voice, or multivoicedness. This concept is one of the ways one can move past the cognitive divisions between spoken, or in general sonically produced, and written material. In metal music, as in music in general, the lyrical content is often quite important, thus we cannot move away from the semiotic processes involved in the construction and perception of the written text. This text, however, might have different implications for the people based on the sonic qualities of the utterance of this written material. Thus, understanding sound as a field beyond metapragmatic aspects of written analysis might serve as a nuanced way of understanding semiotics of music and language. Here the concept of voice comes into play, which serves as a mediator between sound and text, as well as extends well beyond spoken language. Metal communities include many people across different platforms of communication, with different backgrounds and motives, contributing to its multivoicedness. In this variety it is important to understand the context of the sub-culture, and the common ground, or the footing, that its participants are expected to agree on (Goffman 1981). This is partly a trope of understanding music as language, which I will discuss later. Nevertheless, understanding the common voices of the subculture is crucial to seeing their representation in music, in a sonic environment. The preliminary assumption of this paper is that this common ground is highly tied to the concept of authenticity. Authenticity is perceived either as an opposition to the mainstream, or as a dedication to certain listening practice, which fall out of the popular culture domain, according to the respondents of the current research. Distortion here plays an important role not just as a sonic process, but it finds ways to seep into the social domain through so called "distorted practices" such as moshing, dressing up certain ways, and rethinking the concept of brutality.

While tangible elements of style are important for establishing the authenticity of a group member, other non-tangible attributes such as listening practice or skills are expected to have more influence. Listening practices might shed light on the sonic attributes of the local subculture and the semiotics of sound in general. The way that the respondents describe local metal sound is versatile, but it is still coated in language discourse. Moving beyond analyzing music as language in subcultures is difficult, if not impossible due to globalizing practices. Yet, one potential way that this paper will attempt to work around this issue is through spectral analysis and manipulation. Spectral analysis and manipulation of music is a practice utilized by sound engineers in order to negotiate the sonic representation of the voices, i.e. the bridge between language and music. Since the engineers work primarily with sounds, the semantics that go into their work might prove a useful site for thinking about music and language as a mix, and amalgamation, that constitutes a soundscape. In this work, I will look at local metal soundscapes in order to better understand the concept of authenticity, distortion, that constitute the local metal sound. This will fill in the gap of looking at subcultural experience sonically first, linguistically second. Before that, however, it is important to review the existing literature on metal subcultures and sound.

In terms of the literature on the connection between language and music, especially from the perspective of sociological studies, the amount of available research is rather scarce. Historically the studies can be categorized into four major groups: music as language, music in language, language in music, and language about music (Feld, and Fox, 1994, 27). Music as language includes studies that treat musical structures as grammatical categories using linguistic approaches to syntax, morphology, and phonology (ibid., 27). The research in music as language is done in four areas: musical speech surrogates, the musical structuring of linguistic suprasegmentals, verbal discourse about musical meaning, and song texts (ibid., 29). This approach to

studying music is sometimes problematic for its prescriptive aspects, which I will discuss later. Music in language focuses on the phenomenological intertwining of the two, specifically on the musical dimensions of prosody and voice quality, dynamics, and tempo (ibid., 27). The research includes studies into issues of voice quality and the acoustics of the singing voice such as Mongolian overtones (ibid., 31). Harkness's study on fricative voice gestures might be a good example of that, yet its focus is a bit more complex. This area involves the study of "rhythm, meter, pausing, and other durational and stress phenomena in speech and verbal art as well as issues of voice quality and timbre" (ibid., 32). Important here is the social indexing of gender, authority, age, and class through speech and song genres. In language in music the same phenomenological intertwining is investigated in lyrics, musical performance, and verbal art (ibid., 27) Language about music emphasizes the aesthetics and interpretive, theoretical, and evaluative discourse about music (ibid., 32). These categories are driven by three major theoretical framework: absolutist, referentialist, and expressionist. The absolutists focus on individual cognitive interpretation of the sounds, while the referentialist emphasize the semantics of music (ibid., 28). Both can agree or disagree with the expressionist model, which relates music with emotions. In the discussion on semiotics and sociomusicology, ethnographers analyzed ways in which concrete acoustic signs (musical pieces, forms, techniques, styles, tones of voice, phonetic and instrumental icons of natural or mythic sounds, and sonic poetic tropes), inchoate social sentiments and identities (ibid., 34). Here important are the rituals that include musical elements, that have affecting power, becoming the key metaphors of symbolism of voice, self, and action (ibid., 39). As the expressionist theory implies, specific sonic qualities of the types of vocals are tied to specific emotions. This is not, however, far from the semantics of voice qualities. These sonic qualities, including also the compositional and production techniques utilized in the processes of musicmaking, might represent not only social indexing of gender, authority, age, and class of the listeners and performers, but can carry semiotic meaning to the practices of the metal community, its ideologies. The research on the semiotics plays a paramount role in the relationship of music in language.

While the above categories indicate an important part of the research, they still rely on the distinction between music and language. This is especially problematic for communities outside of the Western world, and for the study of semiotics in general (Faudree, 2012, 519). Textuality in music is not negligible, yet the focus should be rethought. In many communities throughout the world there is no clear-cut distinction between language and music, among the examples the author mentions Mazatec, where its speakers use speech surrogates (ibid., 520). In Kazakhstani society I presume that people do understand language and music in a Western type of fashion. Whenever we hear something, we already imagine distinctions and categories, trying to align them with our own ideologies about language and music. Interestingly enough, it also translates into music. Moreover, we lack the language to describe this sonic spectrum wholly without reintroducing distinctions (ibid., 520). The core concepts that can address this is soundscapes, which "contain everything to which the ear [is] exposed in a given sonic setting... [including] the contradictory forces of the natural and the cultural, the fortuitous and the composed, the improvised and the deliberately produced" (Samuels, et al., 330). According to Peircean ideas, the soundscape is full of sign-vehicles that necessarily have an object and interpretant, whose roles are always changing. Understanding sounds without categorizing them is difficult, if not impossible. It might be useful to utilize the concept of voice, which is the mediator between language and music (Faudree, 2012, 525). Applying this concept, we can deem listening as a cultural practice, and soundscapes as a representation of multivoicedness, a bridge between language and music. Applying these concepts and their representation in a soundscape is one way that this paper is moving beyond the conventional distinction between language and music. As I have discussed, one can analyze music as a sonic spectrum if they are to look at the spectral analysis and manipulation involved in the process of music making. Moreover, listening can be a subject-creating practice, while intersubjectivity serves as "an integrative analytical focal point across various domains of human experience" (ibid., 527). Cultural practices, as well as language practices (the two are not separated), are often chronotopic, tied to a place and time (ibid., 523). This raises questions about the relationship between local and global practices in music and language, and in general in multivoicedness. These are also dynamic in nature, and, as we will see later in this review, can change its status in the chronotopic system. This research expands on the semiotic analysis of music and language. Through it we can attempt to understand metal music as a combination of sounds or voices that signify not only gender, authority, age, or class, but the complex interplay of local and global ideologies and practices, i.e. a chunk of multivoicednes constituting the common footing. The use of particular sonic features in voice might indicate how the local attempts to engage with the global, or transform itself to either fit in the global, or become translocal. An interesting example of such research is Alim's work on hip hop, where the communities, while using the "black language" to relate themselves to the global, still reintroduce their own local practices. In the metal scene we can call on a couple of case studies which will be discussed later.

The concept of voice as a mediator between language and music is essential, yet even more important is the notion of multivoicedness, or, as Bakhtin calls it, heteroglossia. Beside emphasizing the necessity to move away from traditional stylistic analyses of novels, almost as pure rhetoric, Bakhtin (267) claims that novel is dialogic. The implication of this phenomenon is that by some stretch even monologues in narrations, even in one's mind, are dialogic in the sense

that we imagine multiple voices, predict questions or answers. These voices are the heteroglossia, meaning the plurality of points of view on the world (Bakhtin, 269). The voices represent the conceptual horizon, i.e. they represent many voices, social, economic, political, public, individual, etc. However, some authors, like Agha (2008, 38), call this conceptual horizon registers, where the voicing phenomena play a significant role in how registers of language expand, change, or remain constant in the socialized competence of language users. It includes how these effects are recognized by the social domain, or the language users, and attempts to define the role of discursive voices and figures in practices, or semiotic activities, involving registers. The participants in the social community of practice and semiotic activities tend to perceive other participants through the concept of footing. Footing is a type of alignment where the participant roles are aligned with specific spoken utterances, or voices. Much of the work deals with the concepts of Bakhtin, such as social and individual voices, widely recognized and event specific. As every register has a social domain, there are also different ways people understand different voices, or discursive figures. The concept of heteroglossia is a flexible and quite general framework that can serve as a bridge between the social aspects of the subculture, to its listening practices, and by extension to the local music as a cultural experience. Here comes the complexity of semiotic meanings even at the level of subcultures. This is done though reflexive cues and involves metasemiotic processes and metapragmatic stereotypes that members of certain social domains recognize, or sometimes even imagine. Sometimes the members of the social domain of certain registers attempt at selfdescription within a specific register, reinforcing the footing or alignment with the perceived core indexes of the group (ibid., 38). For the people voices are not just combinations of sound, but they carry some semiotic significance. One interesting case study of this phenomenon is the work by Harkness (2013) titled "Songs of Seoul."

The book studies the European-style classical singing in Korea that is usually deemed as a Christian form of vocal practice (ibid., 2). One of the main arguments of the book, specifically the 4th chapter, is that the voice of Christian Korean singers represents a shift away from the hard past, a way to clean oneself and others of the "stench" of old hardships, since the people have received the God's grace (ibid., 3, 137). The cleanness is a "specific cultural form of aesthetics and ethics, expression and embodiment," generally representing Christian progress (ibid., 6). Churches here serve as aesthetic sites, where the aesthetics involve the way experiences of qualities are structured by semiotically mediated frameworks of value (ibid., 9). In this framework, the traditional Korean values are deemed harsh and unenlightened, and thus need to be avoided to be clean. While the author refers to the voice in singular form, the complexity of the Christian community, and the individual and group identities and complex backgrounds of the participants, may lead us to believe that the plural form "voices" is more appropriate for the context. It is that these multiple voices have a common footing recognizable by its participants. Interestingly enough, Korean singers are expected to study and work abroad in order to truly clean their voice (ibid., 10). This might reinforce the significance of time and place for the construction of voices. The author studies the voice semiotically, incorporating linguistic, musical, material, and anatomical analyses. The voice is an intersection between mechanical production of sound and its uptake and categorization in the world, either as social acts such as singing, or speaking. In other words, it is a mediator. The author calls it a phonosonic nexus (ibid., 12). The author also defines voicing as relations and interpretations of different perspectives indexed by semiotic form, which leads to one being not just a speaker or an addressee in a conversation, but one's role is manifold and correlated with social positions within a cultural framing of generalizable forms of personhood (ibid., 19). The chapter 4 of the book specifically addresses the question of cleanness. Korean

singers in the study align their faith, sociality, and the cultivation of personhood via the clean voice (ibid., 134). This cleanness is opposed to harsh traditional values of Korean people, thus, all the prayers are given in soft and hushed voice. The church service further aligns one's voice with one's mind "maum" (ibid., 135). Cleaning the voice then translates to cleaning the mind, its perceptual channels used to experience the world. The author emphasizes that the adjective "rotten" is used both by Somang head pastor in relation to maum, and by singers to some of the voices of the past (ibid., 136). The link between being clean and hushed and softer sounds is surely imaginary, it is part of the footing of that community of practice. Considering that voices are these same links, the study of the metal voices, might as well include the study of the screaming and growling vocal techniques and their translation into the spectral soundscape. Voices, as we can see from the example of Harkness, are also about aesthetics and style that are chronotopic, presupposing a time and place structure in the minds of the participants of such communities. Moreover, the people practicing this specific type of singing express a complex social background, the particular voices associated with cleanness through sound.

Conventionally, an essential part of the semiotic spectrum in songs is lyrical content. Going back to the studies of Bakhtin, we can see the importance of the written elements of voices. As Bakhtin (268) discussed it, novels are several heterogeneous stylistic unities, often located on different linguistic levels and subject to different stylistic controls. This implies that whenever somebody writes something there is almost always a dialogue of the author with the imagined reader. This translates also to music, as the compositional elements are included to create a soundscape that communicates with imagined listeners. The authors of the lyrics, and other musical components, might have a specific type of listener in mind, addressing certain social, economic, or political issues relevant specifically to this particular group. Most of the time,

however, the listeners have differing backgrounds and motivations. This enmeshed community of listeners is what Blommaert and Rampton (2011) call superdiversity. There have been many studies analyzing lyrical content and music through language.

The literature addressing linguistic questions have developed a new set of concepts through the prism of social constructivism: speech communities to communities of practice, where specific attention is devoted to multivoicedness of a speaker, and the relations of the various voices a speaker uses (ibid., 4, 5). The switch from one mode of speaking to another is emphasized, where metalanguage, or unstated meanings provide ample room for scientific inquiry (ibid., 6). This shift might especially be felt in metal songs that attempt to incorporate different modes of speaking or singing. Since much of this metalanguage is perceived through visual and sonic ques, the ways these meaning are transferred in texts or audio messaging provides even further complication to the questions of how people induce indexical meaning, to what established ideas they revert, and perceive as common ground in such communication (ibid., 6). The insistence on the written here comes from the fact that in many metal sub-genres, especially with growling, the lyrics are often unintelligible without a written text. Here creativity and linguistic profusion play an important role, where speakers might use different voices based on their style and preference, voices that are not necessarily regarded normally as belonging to the speakers (ibid., 7) In this superdiversity the perceived semantic meaning of the sung text combines different modes of perception, sonic and visual, often not at the same time. In other words, when a listener first hears a song and cannot make out much of the lyrics, they construct what they hear and attach meaning to it. Upon reading the text they reconstruct what they hear, but the remnants of the previous perception remain, introducing further varieties in semiotic meaning. However, when these elements are problematized, people rely on perceived normality in communication through metapragmatic

reflexivity (ibid., 8). This happens all the time, but in the above case even more saliently. In these situations people may transfer certain manner of communication across different texts through entextualization, transposition and recontextualization (ibid., 9). Entextualization addresses "people and processes involved in the design or selection of textual projectiles," transposition alters texts and transfers them, recontextualization of the lyrics puts the text into a new context. Important here is that methodologically all these questions should begin with the investigation into the context, and the internal organization of semiotic data (ibid., 10). How do metal listeners perceive the written and heard lyrical content? What is the common ground, to which people refer to, when the context of their communication in the community of practice changes from, for example, digital to real-life, sonic and visual, or performed live and recorded? What are the voices of the local, perceived and experienced? More importantly, in the metal soundscape the intelligibility of vocals is a challenge addressed by the sound engineer. Thus, the sound engineer is the one who ultimately decides on the semiotic processes involved in the representation of the multivoicedness, imagined or not. The sonic spectrum is shaped and manipulated to achieve a certain semantic response. This is where authenticity within the common footing, which is also a chunk of practiced multivoicedness, is negotiated. As will be evident later, authenticity finds representation through distortion, which becomes a spectral issue in a soundscape.

As songs can be not only carriers of collective memory, but constructors of collective identity, its sonic qualities are paramount in the study of semiotic processes of metal voice and style (Dairianathan, 2012, 246). For example, Dairianathan (2012) has investigated the lyrical and sonic content of songs by the Vedic Death Metal band called Rudra in Singapore. The band is called Vedic because its members attempt to incorporate Sanskrit into their mainly English-based songs, which the author investigates in relation to Spivak's concept of burden (ibid., 243). The

author describes that Rudra did not initially have any Sanskrit in their songs, as they thought to portray their frustration and rebellion (ibid., 255). The vocals performed in most songs are growls that do not contain pitch and mostly inaudible despite its lyrical content, since they were meant to be sonically consonant with bass and drums (ibid., 252). Here sound moves away from poetic scansion and metrical delivery of text. Based on this article we can see that sound might matter more than text or lyrics. This sound can also be something short, guttural, like what Harkness (2011) calls a fricative voice gesture.

The article by Harkness (2011) analyzes the cultural significance of an audible gesture called Fricative Voice Gesture (FVG). The author proposes two versions of FVG: reactive and prosodic. The former is an isolable sound usually made after drinking soju by Korean men. It is defined by the author as "a self-standing utterance that signals personally felt intensity" (ibid., 99). The latter is a form of intensifying other utterances, serving rather as a layer of additional semiotic meaning. Both of these versions are interlinked, and historically have been softened in the Korean culture as a result of the more-female encompassing marketing of soju. The reactive FVG was a recognizable index of male authority, which offered a way to express personally experienced intensity (ibid., 101). However, the author also claims that younger respondents avoided making FVGs, and linked them to older and lower-class people. The FVGs, moreover, represent not only the voice quality of a speech register of a particular speaker, but also the style of particular institutions, whether it be churches or other (ibid., 109). Interesting enough is that different generations react to FVGs differently, where the younger Koreans differentiate and isolate them from regular speech, and the older do no such thing. This points back to the necessity of knowing the context of sound use. It also represents how even short sounds can be indicative of a style of a certain community of practice. The use of such elements can indicate the level of authenticity of a

group member to the group's values. Moreover, this illustrates the flexibility of semiotic meaning behind sounds, the sonic representation of multivoicedness.

Authenticity is a big topic for the metal studies (Brown, et al, 2016, 7). Being authentic in metal is opposing dominant ideas, institutions, and societal and political moralities, which sometimes pours into the conflict between global and local cultures (ibid., 4). Authenticity lies both in sonic and lyrical content in metal, the former of which seems to take lead. A large component of the authentic sound of metal is distortion, whether it be vocals, drums, guitars, bass, etc. As Mynett (2016, 68) in "The Distortion Paradox" argues, heaviness of the metal genre is deeply dependent on the production side of the process, where a specific role is carried out by recording, mixing, and mastering engineers. Since an essential part of heaviness is distorted instruments and vocals, this typically leads to spectral masking, where the guitars, for example, can mask (obscure) other instruments in the mix. This is important since intelligibility (not only vocal) and distortedness are what appeals to the listener in their sonic environment, and these elements provoke a certain interpretation by the listener (ibid., 71). Since authenticity might be viewed as adopting practices against the global culture, one should attempt to trace the local voices within the heteroglossia of a metal soundscape. What this signifies for this paper is that in order to clearly convey the character, the multivoicedness in a metal soundscape, one will have to address the issue of spectral masking. Listeners' way of perceiving music is impacted by their bodily language of producing knowledge, where the concept of voice can partially explain the significance of visceral and stimulating distorted vocals (ibid., 71). Importantly, vocal aggression can be partly simulated by the mixing engineer via processing (ibid., 75). This indicates how a recorded song might be different from a live song in terms of sonic quality, which might provoke different interpretations by the listeners.

Another way that the concept of authenticity is important for the metal community is through the establishment of the common footing of a sub-culture. Subcultures are influenced by a variety of locales (work, home, school, etc.), which are in some degree shaped by the relations between labour and the capital (Hedbige, 1979, 84). These subcultures get new members through exposure through different means, which brings new elements to the superdiversity of the community. One way that these subcultures get attention from the media and other institutions is through their stylistic innovations, which becomes the central object of investigation for the book (ibid., 93). There are two ways that the deviant group becomes part of the larger society: "the conversion of subcultural signs (dress, music, etc.) into mass-produced objects (i.e. the commodity form); the 'labelling' and re-definition of deviant behaviour by dominant groups – the police, the media, the judiciary (i.e. the ideological form)" (ibid., 94). Here emerges a conflict between original and commercially exploited, and the authenticity becomes crucial to the group's identity. Some attributes can have quite interesting meanings, for example, "metal combs, honed to a razorlike sharpness, turned narcissism into an offensive weapon" (104). Subcultures have a logical order, where all its components are formed or appropriated to represent their certain aspects, creating a homology (ibid., 114). Homology is the perceived common ground, which relies on the mostly intangible authenticity, such as knowledge, musical taste, and other. For the sonic environment authenticity is then an interplay between global features of metal music and local voices, since completely following the global trends is somewhat contradictory to the concept of non-conforming authenticity.

Moreover, another area of relevant research concerns questions around global vs local cultural and social aspects of metal as a community of practice, and metal as a musical genre. In the above sections of the paper, I have reviewed some works that have tended to discuss the ways

local practices become either translocal, glocal, or remain separated from the global in order to promote authenticity of both sound and meaning. Nevertheless, I presume it important to reiterate on some of the claims of the works already reviewed, having grasped a portion of the metal community in Kazakhstan. As will likely become evident in the next chapter of this paper, metal communities arguably are the soft promoters of Western capitalist values (Brown, et al. 2016, 4). As claimed, participation in the metal culture, buying merchandize, music as well as attending concerts requires a certain level of affluence. A large component of this culture is access to the internet, which is not universal. Only certain countries, and communities within those countries tend to be able to enjoy the fruits of "modernity" and industrialization. Global inequalities are evident in almost every aspect of our lives, yet one could argue that metal is also the genre of music that sheds light on these inequalities (ibid., 4). As might be evident in the lyrical content of many popular metal bands, such as Gojira, Rings of Saturn, and others, global issues are often the center of the ideological discourses and rhetoric. In this regard, metal bands still fall within the global cultural milieu. It is quite often to see bands aiming to become marketing targets, where traits of their appearance or style get appropriated and sold. This in turn leads to situations where the metal cultures lose their stamina for resistance to global trends, their authentic value (Haenfler, 2014). This consequently impacts the level of perceived authenticity, as discussed in the literature review, as bands lose their appeal of being "true," or making music for the sake of music, style for the sake of style. One way metal bands attempt to remain authentic is through incorporating their local cultures into music, which by virtue of globalization might become translocal, as in the case of the Japanese metal bands Gotsu Totsu Kotsu, and Taiwan's Chthonic. As claimed by Brown et al. (2016), black metal bands use "traditional instruments into their sound, while drawing on ancient or pre-modern myths in order to critique the perceived 'shallowness' of modern life" (7).

A similar trajectory has been taken by a Kazakhstani black metal band called "Seven Sins," which used Kazakh folklore as the lyrical focus of their songs. I will discuss this in more detail in the second chapter. Even in their struggle to fight the shallowness of modern life metal bands tend to utilize sounds and other tools of modernity. All in all, this might imply that the discussion of global versus local cultures in metal is quite a complex issue, where even local practices of incorporating folklore or musical instruments, addressing global issues and opposing the mainstream are also within the scope of what might be deemed global culture. Nevertheless, what this means for the metal as a musical genre is that while there are globalizing sonic features such as distorted guitars, fast paced drums, at times distorted vocals, the genre is quite flexible. One can include a variety of sonic representations of the local voices into the music and still retain the metal appeal. Moreover, as authenticity implies, one should incorporate elements of the local culture. As the concept of heteroglossia implies, one will incorporate those local voices consciously or subconsciously. The question that remains is how a sound engineer negotiates these elements in a metal soundscape, considering the issue of spectral masking that is pervasive in global metal music.

Moving onto the relevant case studies, in a lot of metal subgenres one can find elements of hardcore punk. With this came a set of other attributes characteristic of a punk subculture. In her work on the Grindcore scene in Leeds, UK, Riches (2016, 126) argued that this subculture is woven with radical anarchism and nihilism, leading bands and fans to be concerned of many global issues. The scene emphasizes environmental issues, anti-war initiatives, and devotes a lot of their lyrical content to religions. This genre of music incorporates elements of guttural vocals, fast-paced drums and beats, with the punk satire and political ideologies. The fusion of the punk culture and metal culture is fairly evident in the Kazakhstani metal scene. However, it is a bit more diverse than that.

As was evidenced by Riches (2016, 128), a considerable portion of the extreme metal culture is protests against conformism, valuing expression over commercial success, unlike the more popular branch of heavy metal. However, as is pointed out in the article, political interests should remain secondary, and the taste for music primary. Many members are criticized if their political interests exceed the love for music. Interestingly, the grindcore scene incorporates many elements into its subculture aside from musical preferences. "Corporeal practices such as moshing, excessive drinking and drug use, tattooing, piercing, dreadlocks, dietary lifestyles (veganism, vegetarianism), and more alternative forms of dress are bodily expressions of anarchist philosophies that distinguish grindcore from other extreme metal genres such as death metal, black metal, and thrash metal" (ibid., 129). Nevertheless, metal communities are the amalgamation of different cultures, making even small scenes superdiverse. Thus, such "distinctive" elements as mentioned above can be found among fans and bands of other metal subgenres. Lyrically, the protesting content of songs is evident. Yet, a question of how this content is perceived sonically remains.

The grindcore fans emphasize the voice as a sonic spectrum that moves them. The first issue that gets repeated in the metal literature dealing with lyrical content is intelligibility of the vocals. Since vocals carry the written meaning of songs, their sonic version, the voices, carry a different meaning. Even in cases where people can distinguish the lyrics, its contents, discourse, rhetoric can be quite ambiguous, ridden with metaphors, which makes the perception of the protests more difficult (ibid. 129). What is influential about grindcore, as well as other subgenres of metal, is its incorporation of such rituals as moshpits, where the conversation of the metal bands with the fans are the most pronounced. The soundscape that accompanies the ritual is what often

conveys the semantics of the musical composition. Protest here might become a bodily experience, a feeling.

Music can be played by a variety of technologies, which affects the overall ambience that is achieved in space. Such things as radio are often deemed as more relevant for background sounds (ibid., 408). In radios the music is not pre-chosen by the teen, thus they are exposed to a variety of music. While the decision to turn on the radio is a conscious choice, the selection of the music is rather experienced as something out of one's control. Surely, by choosing a station you consciously make a decision of what type of music to listen to. Yet this is still less control than playing specific songs on other sources. Here the internet is a more individualized tool of musical experience. Surfing for particular songs, or researching about the artists, the lyrics, enrich one's experience of something represented sonically and visually. This enriched practice then becomes a definitive feature of the cultural interests and social lives (ibid., 411). There are several actors that shape one's musical preference, such as family or friends. Yet, the emergence of the internet can allow for a more individualized experience of music, which then increases the superdiversity of sounds and cultures. Having access to a variety of music may have other implications determined by the way music fans see themselves. This is why I will mostly analyze the digital side of metal music production on a digital streaming platform since this site of metal music experience has become primary.

As for the metal sounds and songs, composition-wise they tend to use techniques adopted from other genres. As Elflein (2016, 35) states, heavy metal music incorporates power chords, augmented fourths, modes and chromatics. These are not innovations of metal. The process of composing metal songs takes root in many other genres of music, including hard rock, progressive rock, blues rock, even pop music (ibid., 36). With shifting influences, we can achieve a variety of

sounds, sonic pieces that tend to be categorized into their respective subgenres, such as heavy metal, metalcore, extreme metal. All of these subgenres utilize distorted guitars, however the level of distortion that the bands incorporate determines their sub-genre affiliations. For example, with the inclusion of more distorted bass and vocals, we can arrive at what is usually perceived as the extreme metal side. When we put distortion on the drums, we achieve a more industrial sound definitive of electronic music (ibid., 36). Of course, the genre is also defined by the lyrical content, yet there are compositional techniques that still push the perception of the song as belonging to a specific subgenre. A combination of the above-mentioned techniques is what makes metal distinctive from its surrounding genres.

Subgenres of metal music have some tendencies regarding the structure of composition, but they are not bounding or mandatory, or distinctive of metal. Heavy metal is based on riffs, which are "short rhythmic, melodic or harmonic figures repeated to form a structural framework" (ibid., 38). A metal song is often then based on a sequence of guitar riffs. There are several macrocomponents to a song, including an introduction, verse, pre-chorus, chorus, chorus, bridge, instrumental interlude, break, solo, playout and outro. Micro-components are riffs and chord progressions that are defined length-wise. Generally, a metal song is not bound to use all of the above elements, but there are some tendencies. Guitar riffs are usually at the forefront, and their variation, along with supporting drums, determines the flow of the song. The guitar riffs are composed of power chords of a dissonant tritone intervals, or of perfect fifths or fourths. These represent semitonal distances between used notes within the musical scale. Riff variations can be temporal, or tonal. A band might use the same power-chord progression with different timing, or same timing with a different progression, all of which is up to the composer. What is definitive about metal is its extended breakdown sections, where a song changes its feel, becomes "stripped-

down." Moreover, some metal bands use dual structures, where they partly or completely change the song midway with a different structure. Nevertheless, it is purely a creative choice of the band whether to stick to the structural tendencies of their respective subgenre of metal. Metal is, thus, an even more flexible genre of music, allowing for a great variety of sonic intricacies.

As Mynett (2016, 68) states, metal music's defining quality is heaviness achieved through high levels of distortion. Yet, it constitutes the paradox of metal music's sonic qualities, which the author calls the "distortion paradox." In situations where a song contains a lot of distorted sounds, these sounds tend to occupy a vast frequency spectrum, which leads to passive masking of instruments. Thus, the dynamic qualities of complex and technical compositional techniques definitive of metal become "muddy," unintelligible (ibid., 68). For this reason, the work of the sound engineer becomes essential to the achievement of what is modernly understood as metal. This inherently implies that the "rawness" of sound that was previously sought after by many bands has now been replaced with the aim of bringing intelligibility. Heaviness here is "the perceived 'weight' and frequency density displayed by acts from this style" (ibid., 69). Such metal heaviness is achieved through distortion.

Distortion of the guitars is the amplification and attenuation of the direct input signal, where newly formed frequencies are formed through the increase of harmonics above and below the original signal. Harmonics are "frequencies that are whole number multiples of the fundamental frequency" (ibid., 72). When it comes to guitars, the essential element of metal music, the distortion is most impactful in the higher frequency region between 1.5kHz and 7.5kHz. The increase in this frequency region is what is commonly perceived as heavy, and such increase in harmonics makes the sound appear closer, or upfront (ibid., 73). This is caused by the fact that higher frequencies dissipate faster than lower frequencies, thus, the farther away we stand from

the source of the music, the less higher frequency spectrum we will perceive. By deliberately pushing these frequencies up we create a feeling that this sonic source is closer to the listener. This "in your face" sound is perceived harsher, harder, heavier, louder. Distortion also provides solidity to guitars because it also increases frequencies at and around the fundamental (ibid., 74). On the other hand, this also reduces the dynamic range of the guitars, making them flatter with infinite sustain. This comes at the cost of losing note definition, where a mix becomes either muddy, if there is too much lower frequencies, or harsh and raspy, if there are too much higher frequencies (ibid., 77). Additionally, in metal vocals can also be considered heavy if they are guttural, distorted, amplifying the issue of spectral masking. The vocals can be distorted by the singer through vocal techniques, or in the production process, yet the former is what makes metal vocals appear heavy (ibid., 78). However, how do we actually perceive this heaviness?

According to Mynett (2016, 70), the experience of sound that people get is achieved thorough ecological perception. It is direct perception based on pragmatic reality, primary of cultural interpretations. This might mean that there is some level of universality of how our bodies react to the sonic environment that are not defined by our secondary cultural experiences. Certain sounds provoke certain responses. The way we interpret these sounds is heavily influenced by our linguistic signification, by the knowledge and experience of oral sound, and by the degree of knowledge we have of music production (ibid., 71). For example, newborns express their emotions and energy vocally, where high degrees of both are expressed mostly through screaming. With high volume of sound there is audible distortion. Thus, from our early age we associate volume and distortion with all kinds of high energies and emotionality. As we increase our experience of the world, we start to form different interpretations of sound, yet our primal responses tend to remain. The appeal of metal then is in that we associate its distortion with high energy and

emotionality through our bodily experiences. The metal production is hence audiotactile, aimed at moving the listener (ibid., 81). The connection between bodily experience of music and the production of music is vital to understanding the semiotics of sound, its frequency distribution, level of distortion, gain, definition and intelligibility. With these concepts in mind, we can conceptualize the relations between subcultures and the sonic environments they contain, and the role of the sound engineer in negotiating the emerging soundscapes, its uniqueness and heaviness.

Overall, listening is a cultural practice, where people infer meanings based on the soundscapes they are exposed to, perceived common footing, written text in the form of lyrics, access to resources, self-perception of own body, and ecological perception. What these mean for the current paper is that it is important to establish what is considered the common footing inside the Kazakhstani metal community, which involves metasemiotic processes and metapragmatic stereotypes, and how they translate into soundscapes. As the above examples, specifically that of Korean "clean" singing, demonstrate, different sonic qualities of voices and instruments might convey complex semiotic meanings. The perception of the soundscapes in turn are influenced by levels of affluence, access to information technologies, self-perception and ecological, bodily, experience. All of these indicate the need to investigate what the metasemiotic processes and metapragmatic stereotypes are in the local metal subculture, who it consists of, their backgrounds and perceptions. What can be summarized from the existing literature about metal is that it is a flexible genre, which pushes for authenticity, inclusion of local voices while retaining the heavy appeal. This information will then help me to reconstruct the multivoicedness of the local culture in a more balanced mix with the globalized metal sound, as well as showcase the processes of how these voices are created and altered. As evidenced by Mynett (2016), a more balanced mix will need to address the issue of spectral masking, one of the greatest challenges in a unique metal sound production.

Through engaging with the spectral analysis and related semiotic processes behind technologically mediated processes involved in music making, I aim to move beyond the conventional division of language and music. Both of these are impacted by our heteroglossia, since music and language serve some communicative functions imagined, constructed by our identities, perceptions, expectations, and other cognitive processes. Moreover, these ways of communication exist in shared sonic domain. By analyzing this domain without relying on the concepts discussed in relation to language about/in/and music literature such as meter, pausing, prosody, tempo, etc., one can move beyond the conventional division. Spectral and dynamics analysis of the frequency content, sound waves, phase, does not follow the same principles, thus present some novelty in relation to the semiotic processes of music composition and production, their complex communicative spectrum. This is the aspiration of this paper.

Methodology

I have divided this project into four different stages of mixed methodologies. The first section centers around gathering data about the community, the multiple voices and their overlap inside the subculture. Here I will follow the methodological concept introduced by Charles (2018) titled Musicological Discourse Analysis (MDA). This method aims to "retheorize genre and produce a more specific, useful, and detailed musical classification system" (ibid., 1). This framework includes interviewing, questionnaires, participation in forums, online analysis, as well as participation in musical rituals. For this section of the methodology, I will use media search and interviews. Since one of the most popular social networking platforms is VKontakte, an analog to Facebook, my online search will start there. This platform has a feature called "VK wall," where people can post or repost content in order to express themselves, their social and political ideas, or to have fun. At many times this wall becomes a representation of the voices that the owner of the account wants to present about oneself, which contains visuals and music. This wall can become the place where people would try to show their participation in subcultures, such as metal, show their preferences, or "idealized" image of themselves with "proper" tastes. I will attempt to analyze what the VK walls of the metal community members and bands look like, what kind of information they contain and its semiotic meaning. With interviews I aim to understand how what the metal bands post online translates into real life. The overall objective with the interviews is to define common features, or voices, of the participants' identities and styles through investigating their biographies.

The next section of the methodology centers around musical production. As MDA recommends, I will conduct semi-structured interviews and participant observation of a metal concert or social gathering. A specific focus of my interviews will be on sound engineers and

producers in order to ask them about their approaches to mixing and mastering music, as well as the semiotic meaning behind them, including the negotiation of voices. Many producers and mixing engineers have their own style of producing and processing sounds that contain some semiotic meaning. They expect the audience to react to a sound in a certain way, and that is what I am hoping to find out. This includes the questions about the authenticity of sound, vocal tuning, specific ways of processing and recording instruments and vocals. I will specifically inquire about the technical aspects of composing and processing metal music, and this will navigate my understanding of what metal is to the different agents of the community. This will also include questions about what they think about the genre, its place in global music, in local music, as well as what makes metal either challenging or easy to make.

The third section of the methodology revolves around the fans and performers of metal music. In this part of the project, I will conduct surveys online, analyze chats, or meet with the participants in real life. I will ask the fans and performers about how the music makes them feel to address the ecological perception questions. The surveys will also contain questions about what makes metal appealing, and what it conveys in terms of language, style of dress, modes of behavior, etc. I will also ask about what a potential mix between metal and Kazakh traditional music might be, what will constitute a unique overlap of the multiple voices.

The information obtained in online chats or VK walls will undergo content analysis. This will include identifying common themes, outliers, language use, imagery, level of interaction with different themes, and the level of formality of the written text.

In the last section I will look at the technologically mediated challenges associated with composing and producing a metal track that has both the globalized features essential to metal and local culture in an authentic/unique multivoiced representation. Here I will apply spectral analysis

to several recordings, keeping in mind the concept of spectral masking, in order to get a grasp on how sound engineers process music with relation to semiotics of sound. I will also provide my own version of how I imagine Kazakhstani metal can sound, having applied the knowledge accumulated in this research, and my own experience.

Fieldwork Results

During the course of the summer and fall of 2022 I have gathered a range of data that might shed light on the Kazakhstani metal community and its unique or universal features, its multivoicedness. In this chapter the voices of the local metal subculture are the various instruments, vocalizations, which can possibly include various creative and pragmatic decisions made by various agents in the process (musicians, engineers, producers, audience) in arranging instrumental, vocal, technological ingredients. All of these voices are meant to both conform to the metal canons of sound, and include elements of authenticity, i.e. non-conforming completely to the established globalized features of metal. Based on the findings, the overall impression is that the metal community/subculture in Kazakhstan includes people with quite different backgrounds, which at times reflects on the way they interpret the community, the music, and their role in and relation to the global and local subcultures. Ranging from commonly presupposed community dynamics, the Kazakhstani community/communities portray interesting tendencies, indicating a sort of uniqueness, or authenticity. Uniqueness is understood as deviation within established metal sound "norms," which can be called "being authentically metal." In practice this means a balanced mix between sonic representations of the local and global voices. Of essential importance are these various creative and pragmatic decisions, instruments and vocalizations, that constitute the common footing in the community.

My fieldwork has consisted of several stages. The first stage can be summarized as a media and digital analysis of the content that is circulated inside the community/communities. This has included investigating people's social networking account pages and digital public sites. The digital data that I have accumulated show both the unique features pertaining to the genre. The second stage included a multi-sectional questionnaire that was distributed on most used online

platforms, and through snowballing. The results of the questionnaires yield many themes, revealing the ideological diversity of the participants, which sometimes followed the presupposed universal tendencies, or stereotypes, and at times showcasing the limitations of my own perception of the community, proving quite insightful. The questionnaire addressed questions about the subculture and identity, music associated feelings, or the ecological experience, the components of the perceived metal sound, and the lyrics. The third stage of the research was dedicated to the interviews with currently active metal bands in Kazakhstan. The interviews were meant to cover the intricacies of their musical experience, their interactions with the communities, as well as provide a more in-depth insights into the questions associated with the questionnaire. All in all, I have managed to talk to people with diverse musical backgrounds in metal. Yet there has also been an opportunity to talk with the local ethno-music band "Arkayim," who have worked with the extreme thrash metal band called "Zarraza" on the crossover of the Kazakh traditional music and metal. I was fortunate enough to observe their co-concert in Almaty in December 2022. Based on what I observed, the Kazakh traditional music and metal share quite compatible sonic elements but they are eventually obstructed by spectral masking. The fourth stage of the fieldwork included interviews with local sound-engineers who have either worked with metal music or specialize in it. The results of these interviews adhere to the global trends of metal music production, yet none specifically mentioned spectral masking as a significant challenge. Throughout the fieldwork I have also observed several metal concerts, where I observed the common, or some can even say universal, rituals, as well as the overall mood and social interactions pertaining to the concerts. Yet the overall experience in the community, my personal experience in music production and sound engineering, and the data I have collected in this fieldwork indicate that the Kazakhstani metal community has unique voices, i.e. instrumentations and vocalizations with some creative techniques, but they tend to be underrepresented in local metal music. As the participant observation has demonstrated, the issue of spectral masking prevents these local voices from being clearly audible, thus well-represented, in the local metal soundscape.

The current chapter will follow the multi-staged fieldwork. The first section of it will be dedicated to the media digital analysis of the social networks used by the subculture members. The second section will address the results of the questionnaires categorized into four overall themes. The third part of the chapter will deal with the themes and content of the interviews with the local metal bands. The fourth part will summarize my participant observation of the local metal concerts. The last part of this chapter will report on the sound-engineering side of metal music production and performance in Kazakhstan.

In terms of the media search results there have been interesting findings, yet in their entirety the most demanding conclusion is that the community/communities are highly diverse in Kazakhstan. The media search can be broadly divided into three sections: metal music fans` pages, metal bands` pages, and online communities. Regarding the contents displayed on personal pages of the metal fans, this is the area where multivoicedness shines. On one side of the spectrum, I have found several pages which contained elements of metal non-conformity. These include a specific style of clothing, such as the leather jackets, beards, long hair, tattoos, black clothing, face make-up, or paints (see image below).

As indicated by Bozkurt and Tu (2016), digital spaces have become a new venue for identity formation in a sense that the relationship of time and space acquire a new meaning. Such processes as self-actualization, self-presentation, and self-disclosure are emphasized in the digital space. In the discussion of voices, the digital domain is both the display of the pragmatic and creative decisions that come to form the local common footing, and the sire of its formation and

alteration. Furthermore, besides the formation, representation of identity, these sites become the places of emotional and social presence. Moreover, this is one of the sites where the distortion of social norms is most practiced (see images below).



Thus, the digital space constitutes a way of conveying a different, "metaphorically distorted" image of oneself, or an adjusted, "true," one. The accounts also have references, videos of, moshing and other rituals taking place in a metal concert, which indicates that something that is confined by time, setting, and space gets translated into a different domain to support a certain aim or claim. These chronotopic settings represent venues of further non-conformity, yet conformity to metal canons, which I call the evidence of authenticity for the members of the community. By displaying severed heads, cannibalism, gore-ish makeup, and a lot of references to demons in Christian religions the fans, the bands seem to engage in practices on non-conformity (Sefton and Sirek 2020). More generally, such imagery is not a followship of the devil or evidence of the people's violent tendencies. In many cases these are meant to represent "youth identities that are not burdened by religious or authoritarian pressures of conformity, traditional culture, or mainstream commercialism" (Brown et al. 2016, 8). However, the extent to which the nonconformity is a veiled conformity to the canons of the genre is a different discussion, which is also relevant for the questions of the nature of the Kazakhstani metal subculture. What this practically means for this paper is that an essential part of the metal voices is not just the distortion of sound,

but also of norms. Yet one is to stay within the ideological spectrum of the metal community. What this means for the metal soundscape is that by extension the sound is meant to represent this ideological interplay that negotiates the pragmatic and creative decisions that mold the authentic local soundscape. As might be evident from the results of the fieldwork, this interplay is dominated by the globalized metal attributes. As Brown et al. (2016) explains, metal bands can become "soft promoters of Western capitalist cultures and individualist consumer identities and lifestyles" (4). Engaging in the subculture presupposes some level of affluence through such means as the internet, ability to go to concerts, to buy clothes, or have necessary gear to perform metal. This alongside the influence of the digital spaces creates conditions for the spread of hegemonic values of the West, that may translate into the way the local bands and fans experience music and sound in general, their creative and pragmatic choices, i.e. their authentic voices. In the context of metal music production this indicates a proclivity of the local bands to copy works of big commercial ones in pursuit of replicating their success, and not just expressing themselves through music. This certainly might help explain the reason local voices in the form of Kazakh traditional instruments and vocals are underrepresented in the community.

Having collected some of the digital data about the communities, I compiled a questionnaire addressing themes that I had discovered and presupposed. I have collected 38 responses. The first section deals with the subculture as a communal experience, and its relation to the sense of one's identity. According to the respondents, an important part of participating in the subculture is attending concerts, or metal associated events, collectively. This might imply that being part of a subculture is a physical presence in relevant events. Yet some responses indicated that listening to metal music is the key component of being in the community. By the virtue of

approximation, such emphasis refers to the notions of soundscapes as part of the cultural experience.

In order to learn about the perception of the community from the inside, I asked the respondents if they think the Kazakhstani metal community/communities are unique, and what makes or does not make them unique. About 75% of the respondents responded negatively, claiming that the community is not unique. The reasons for such an opinion are versatile. The first reason, and the most common one, is that metal communities worldwide are meant to possess universal features, the so-called staples of metal music, "некоторые принципиальные моменты должны быть одинаковыми - черные майки, куртки, украшения, волосы (some essential elements must be the same – black tank tops, jackets, jewelry, hair)." The other reason was that the community is not unified, fragmented: some are fanatics of their idols who cannot be criticized, the others are exclusivists who disrespect all other genres of music. The local metalheads by engaging in the above-mentioned practices become unattractive to be associated with, as the respondent laments, some of them are "недалёкие (mediocre/dumb)." Thus, it is easier and more prestigious to identify with like-minded people from other countries. Yet another reason was that the local bands just copy their Western counterparts in music and style, or just do covers. This indicates that as was claimed above, much of the local metal subculture is soft promotion of the Western cultures. In other words, in the social domain conforming to the global image was perceived more prestigious than enjoying the local peculiarities. Such tendencies leave little room for the expression of the local voices (Cowen 2002). This includes mimicking commercially successful Western bands, adhering to a certain style of clothing, which is unavailable to some people, as indicated in one of the responses "если у человека есть возможность соответствовать внешним атрибутам металхэда, он это делает (if a person has a possibility to meet the outward attributes of a metalhead, he will)." Thus, the underrepresentation of the uniqueness of the local metal scene can then be attributed to the hegemonic practices of the global metal subculture.

Among the responses which deemed the local scene as unique, or potentially unique, there were few themes. The first reason is that each country can add to the subculture its local cultural features. In the case of Kazakhstan, the local mentality and musical instruments can be a way to become or remain different. The local "калорит," or the cultural features, was mentioned several times, where two even specified the use of the Kazakh language in screaming or growling as a defining feature. The other reasons were that the members of the community listen to less famous bands. All in all, this indicates that insistence on the local Kazakh culture, i.e. the Kazakh creative and pragmatic decisions, instrumentations and vocalizations, is a way to remain authentic with the globalized metal culture, to express local voices within the metal heteroglossia, within the metal soundscape.

When asked about the unique attributes of a metalhead against other subcultures, the respondents had diverse takes. About 20% claimed that the average metalhead is different from other music fans either only in terms of appearance, in case one follows the stereotypical style, or musical tastes. Some indicated that through heavy music metalheads feel better. One response said "металхэды более спокойно воспринимают негативные стороны жизни, которые обычная поп-культура попросту игнорирует (a metalhead takes the negative sides of life, which the ordinary pop-culture ignores, more calmly)." One even claimed that in metal there is more gender equality, which certainly adds to the discussion by Strong and Raine (2019). Moreover, a different response stated that the community is nonformal, where women tend to have more profound understandings. Among other themes are perfectionism, knowledge, elitism, sincerity, loyalty, more noise tolerance, and specific practices like listening to full albums, and either other music

genres or no other music genres. Nevertheless, none of the mentioned attributes can potentially be linked with the creative and pragmatic choices that make up the authentic multivoicedness of the local subculture, only indicating that the participants perceive themselves unique to outsiders. The latter is indicative that being unique is also being authentic, because that is the underlying common footing of the community differentiating outsiders and insiders. Representing this uniqueness within the local metal soundscape can then be claimed to have pragmatic value to the participants, since it reinforces the perception of authenticity.

The next section of the questionnaire addressed the topic of feelings experienced and associated with metal music in Kazakhstani metal communities, i.e. the ecological experience, that can further indicate the importance of experiencing uniqueness and authenticity. The first question asked what feelings the respondents imagined to be associated with metal, since feelings are believed to impact the creative and pragmatic choices that make up the local metal soundscape, i.e. the voices. Here the responses showed a variety of feelings that the participants reported while listening to, performing, or making metal music. Most of them would agree that metal can provoke all kinds of feelings, where few recognized the influence of the artist's intension for a composition. Several others indicated that metal music is a way to escape from the mundane reality, from relationships, work, study. About a quarter of the answers mentioned aggression, melancholy, sadness, yet these feelings were not framed as negative. When asked about personal feelings about the music, one of the most common answers was that it gives energy, euphoria, and transcendence. Several rendered some metal music as soundtracks to some isolated pieces of their lives, "closed in a bottle," along with the bodily experience of these tracks. Among the common themes was transcending the mundane, feeling as if you are lifted in the sky and everything becomes miniscule. It appears that some respondents reported feeling accomplished if they could play a difficult section of a song on an instrument. Thus, it seems probable that our bodily knowledge and skills also shape the imprint of music on us. As Lincoln (2005) states, through music as soundtracks to their lives, teenagers, but not limited to just them, change their experience of the mundane, making it authentic, unique. The importance of finding unique sound in metal can then be correlated with either reinforcement of the local cultural feelings, or their modification. Yet the way people experience music is unique by itself, often influenced by local cultures, knowledge, and skills. Thus, despite the claimed external similarity of all fans of metal around the world, the bodily experience of music introduces local unique voices, which eventually will find a way to impact not just the listening practices, but composition of local metal music as well.

The next section of the questionnaire addressed the theme of sonic features of metal music in Kazakhstan's metal subculture. The first question asked what the participants thought was the sound of metal, that is the sonic representation of what metal is. The overwhelming majority identified distorted guitars as the primary sound. Some even wrote down the names of distortion guitar pedals. Additionally, these guitars were reported to be rhythmically diverse, but mostly fast paced, and centered around riffing against chord progressions. It is interesting that the respondents differentiated between guitar riffs and chord progressions. Yet, as stated by Garza and Jose (2021), riffs are variable, with some following particular note, or even chord, progressions. Moreover, many subgenres such as metalcore have more conventional chord progressions during song sections. Another essential element, according to the majority of responses, was "strong," "tight" drums. This includes double-kick, "blast beats," where one claimed that the cymbals must have a metallic sound or consist of metal material. Furthermore, some mentioned both distorted bass and vocals, while one person claimed that metal is about the meaning that the artists put into their composition, not the individual elements. When asked to list unique sounds of metal, most reported

the double-kick, distortion, and screaming and growling. Some other mentions were guitar techniques, clean and strong vocals, melodiousness, blast beats, and capable vocalists. Several responses claimed that there are no unique sounds to metal. Overall, it appears that despite few exceptions, metal sound from the perspective of Kazakhstani metalheads is distorted guitars, bass and fast paced drums. These constitute the globalizing voices of metal, the ones that need to be included in order to conform to the metal canons.

Later I asked the participants to comment on the type of distortion that is essential to metal. The most common one was the guitars with about a third of all responses, distorted vocals and bass both constituted 6 and 9 percent respectively. Here it is important to note that the participants viewed distortion more like an effect, rather than a technique of performance. Thus, they probably did not deem screaming or growling as a variety of distorted vocals. To achieve the effect of distortion most respondents would use effect pedals and plugins. When it comes to the emotional experience of distortion, the common themes were delight, excitement, adrenaline. Yet several have reported being too used to the sound, thus, had no associated feelings. Moreover, according to most responses, distorted vocals, both as an analogue or digital effect and as vocal technique, are unnecessary to metal. Thus, the essential sounds of metal are primarily distorted guitars, fast paced drums, double kicks and overdrive. It is worth adding that when asked about whether there is a unique Kazakhstani sound in metal, most claimed not. Yet, some have mentioned bands such as Zarraza, which include Kazakh national instruments into their music. Furthermore, two people addressed the issue of mixing, claiming that the local sound is mostly "muddy," or that the mids on the guitars are too scooped out, and the higher frequencies are overboosted. This indicates that one possible way to retain the authenticity of the local scene unique is through inclusion of local traditional musical instruments. This in turn necessitates appropriate sound negotiation by the sound engineer, as evidenced in the discussion of the distortion paradox by Mynett (2016).

The last section of the questionnaire dealt with the topic of lyrics in metal, in order to collect information on the local vocalization practices that contribute to the local multivoicedness, metal soundscape. The first question asked if the language of the lyrics is important in achieving the metal sound/sounds. Here the answers have split into two groups. The first group claimed that language itself is not important to metal. Here, it is deemed rather as an instrument whose sonic qualities must match the overall theme, feel of a song, especially when the distortion is strong, and the lyrics become unintelligible. The other half of the respondents claimed that language is important. Here many answers consciously or subconsciously referenced such language ideologies as one language is harsh and rude. The language also is thought to represent the band's identity, audience, signature, and generally authenticity. When asked about the bands that use Kazakh lyrics, most respondents expressed no knowledge, and just a couple mentioned "Aldaspan," "Far in gate," "Nu Horizon." Most of the local bands use Russian and English, as reported by the participants. Moreover, the participants claimed that English is the main language of metal with few exceptions, which emphasized the language of emotions, of heart. I also asked the respondents whether they would listen to Kazakh lyrics in any genre, and to Kazakh lyrics in metal. The overarching theme was that if the song had high quality, great melodies, then people would listen to it, further indicating the importance of an adequate sound engineering work. Yet there were some who would only listen to metal, or metal in Russian and English. Furthermore, most of the participants claimed that they see no difference in meaning between using Kazakh, English, or Russian in metal, but pointed out the variety of grammar, and of sonic qualities. In some cases, the language features would determine the comprehensibility of the lyrics, where Kazakh is said to be

quite challenging sometimes due to its grammar features. A few claimed that the lyrical content would be different in these languages. Overall, the use of language, as vocalization in general, seems more important sonically, and less important in terms of the conveyed meaning. This proposes the idea that language does impact the sonic qualities of vocalization, and consequently the sonic representation of the local voices.

Considering the next stage of the fieldwork, I conducted several interviews with the active metal bands in Kazakhstan. While I attempted to include as many participants as possible, meaning whole bands and their colleagues, half of the potential participants showed reluctancy towards speaking of their own musical projects and sounds. Thus, I will concentrate on the few that responded, this includes Zarraza, Seven Sins, Savage Soul, Difat, Demented God, and Nu Horizon (my personal band). The interviews were semi-structured, at times quite flexible, and lasted for more than an hour both online and offline where possible. The first several questions asked for more in-depth take on the subculture, metal scenes in general and in Kazakhstan. Overall, the answers that I have collected show similar trends of thought as in the questionnaire results. In terms of the technical component of metal music, the approaches were quite different. Several reported to have specific structures in mind, such as intro, chorus, verse, bridge, chorus, solo, break, bridge, chorus. While others claim to have no specific structures in mind when composing, claiming that metal is a free genre of music, where you can achieve the essential sound through myriads of ways. It is important to note that some sub-genres of metal require following an established pattern. The pattern not just of structure, but of compositional techniques, of creative and pragmatic choices, voices. For example, while utilizing a lot of riffing in songs, metalcore also uses chord progressions and time signatures common in pop music. All of the interviewees would still agree that metal is based on guitar riffs, whose cohesion is achieved through trials and error,

not a presupposed, laid-out formula. Here a couple of interviewees mentioned that the next elements that drive the composition are bass and drums, while vocals and other added instruments come in last. Nevertheless, two respondents specified that a truly diverse and interesting song comes from cooperation of all parts, where there is a common footing of understanding the soundscape, the source and the interpretant. Here the voices of the participants, of the bandmates, are negotiated and merged with an aim of creating a cohesive piece. These are reportedly achieved through rehearsals and gigs, where the soundscape is an essential, yet not exclusive element of the environment. Non-sonic clues such as body language, the experience of music through the body, become important. However, this is an imagined situation for most interviewees, since their process of making music is based on sequential stages, where one composes the song, and the others add on to it, or one does all the work. This is not to say that multivoicedness is then not expressed, since, as discussed earlier, our individual voices are in dialogue with perceived voices of others even in situations of complete solitude. The song writing just seems to be taking on more of a one-sided take on the dynamic nature of voices in metal, and outside. In practice this means that the locally produced music is a set of compositional, creative and pragmatic decisions that is usually constructed and negotiated by few individuals, the composer and the engineer. How this impacts authenticity is then determined by the ideological set that impacted these choices, i.e. voices.

Another way that metal voices are expressed in metal is through specific sonic features, compositional and performance techniques. As reported by the interviewees, distorted guitars are essential to the metal sound. The diversity of the sound of this instrument is achieved both through plugins, amplifiers, cabinets, guitars, and microphones, notwithstanding all the intricacies of sound extraction and processing, and through the playing techniques of the musician. As two respondents

reported, they often understand music through feel, through the way it is physically played, in other words, through their bodily experience and knowledge. In order to make the track sound fuller, they use guitars to fill in the sonic spaces, through parallel tonality, meaning that individual guitar tracks are playing different notes with varying relations to each other. This further exacerbates the issue of spectral masking. Moreover, several responses indicated that metal must be performed live, even in studios, with little influence of sampled instruments, because it then better conveys all the diverse elements, such as ghost notes, timing, velocity, attack, and other, representing the identity of the musician. Thus, many, except for the metal/electronic music band Difat and me, prefer the live sound of drums, untouched by overdrive or distortion. Bass can be both heavily processed or clean depending on the subgenre. Vocals as well can be clean, distorted digitally or as a singing technique. Yet, one respondent was quite against applying distortion effects on vocals. Nevertheless, all of these aspects indicate that metal has to have distorted guitars, where other elements can be quite diverse, negotiated by all the actual and imagined participants based on understandings of personal and communal voices. Metal is then a negotiated soundscape, where relations of sign-vehicles are essentially dynamic, as in compositional techniques, discourse, or visuals. Live drums comprise authenticity for many respondents, yet a well-mixed set of sampled drums is difficult to differentiate from the live performance and is often easier to achieve.

The sound of Kazakhstani metal in general is understood by the participants as an inclusion of either musical instruments like kobyz, dombra, or other shell-based or string-based instruments, or/and lyrically, i.e. the local instrumentation and vocalizations. The latter is achieved through the inclusion of the Kazakh language, or through content about local folklore. Yet few of the interviewed bands ever used Kazakh lyrics in their songs. Seven Sins is the band which used

excerpts from popular Kazakh folklore as intros to their songs, which included Russian lyrics about the specific legend. In the interview the author of the album specified that he wanted to use more Kazakh, even asked some people to help translate his texts into Kazakh, yet ultimately, he explained that through lyrics he wants to express himself, and the only possible way for that is through language he understands. When asked about whether one language is more suitable to metal, the answers diverged. The vocalists for Nu Horizon, Savage Soul, and Demented God claimed that metal can be performed in any language, whereas the front person from Zarraza stated that English is more suitable, since it is more laconic, easier and simpler in terms of grammar, and is definitive of the genre. He made an analogy with opera, where singing in other languages besides Italian either sounds like Italian, or incomprehensible. One interviewee added that becoming widely successful is very difficult, thus many of the local bands try to extend their reach through the use of English lyrics. Despite some traces of language ideologies, it may seem that the use of Kazakh in metal is quite imaginable by the interviewees. Nevertheless, only few bands of the interviewed actually used Kazakh, which might indicate that in the negotiation of local vs globalized voices language ideologies might skew the process towards the latter.

When it comes to the potentially unique sound of the local metal scene, several interviewees mentioned Kazakh musical instruments. The Zarraza band actually used kobyz and shankobyz in their songs. They also organized an even called "Voices of Tengri," where they collaborated with an ethno-music band "Arkayim" to create the merge of metal and Kazakh traditional music. Yet one interviewee claimed that "dombra or kobyz are not metal," meaning they cannot be really combined. Nevertheless, in cases where the bands used these instruments, they emphasized the difficulty of making the complex tonalities, and overall, the sonic features of these instruments pronounced under the veil of distorted guitars, i.e. spectral masking. Spectral

masking is an issue that a sound engineer can deal with, ultimately deciding the dynamics of the multivoicedness of a metal track by altering sounds, thus introducing their own voices. The authenticity within metal, i.e. the expression of the unique, is then understood as the inclusion of Kazakh instrumentations and vocalizations alongside the distorted guitars, bass, and fast paced drums. This, however, presents a challenge due to the issue of spectral masking.

Sadly, I have not found many sound engineers who specify in metal music in Kazakhstan, who were willing to participate in an interview. For what I have discovered, there are few sound engineers in Kazakhstan, where most specify on commercial music, or tracks in other genres of music. I only conducted three interviews. In terms of the general tendencies in metal mixing, recording and mastering, two interviewees preferred live drums, live recorded instruments. Relating back to what the front person for Zarraza said, the essential element of metal is the feel, and skills of the musicians, the intricacies of the way the instruments are played, the kind of instruments, and the gear overall. Here it might be considered as a way to express one's own voices through skills of one's body and mind. To the listeners, however, skills are not the primary element of metal. This is linked by the interviewees with authenticity, thus authentic metal music is one where the voices of the musicians are heard, their creative and pragmatic choices are audible. Yet, the level of skills must be great, since the drummer, or the guitarist, or the vocalist, must play "evenly." Hence, there arises a tension between how much room is allowed for the expression of oneself in the recording that needs to be perfect. Of course, as one engineer stated, some bands push for raw sounds, which allows more freedom in terms of the overall production. Yet, in the commercial settings playing raw and poorly is insufficient. Thus, a large emphasis is on the professionality of one's skills as a musician. The need to be in phase, in synch with other instruments, and other tracks within the composition sometimes pushes engineers to edit the

unprocessed stems, in order to achieve a "tighter" sound definitive of metal. Here it can be argued that the multivoicedness of the performance or a recording is further altered by the need to create a certain soundscape.

In terms of the mixing techniques, there were no specific ones that must be used, as reported by the interviewees. In general, they claim that mixing decisions are based on the source material, and not every guitar sound, or bass, or drums, can be mixed the same way. Of course, there are staples of mixing, yet they must allow freedom. Mixing is claimed to be a creative process, where the same track mixed by two people separately may sound drastically different. The only essential feature was said to be the intelligibility, clarity, of all instruments. This includes vocals, however distorted they might be. In terms of the manipulation of dynamics and frequency images, they did not specify any techniques or staples, except for the need to heavily compress screaming or growling vocals, because of the heated, overly loud, input. Thus, the sound of metal is the sound of clear distortion, something very difficult to achieve, especially in a sonically dense environment. When it comes to the specific sound of Kazakhstani metal, none was reported. Many have just lamented that the local bands seem to sound the same, although they are quite "talented" musicians. It then might mean that Kazakh vocals, or/and traditional instruments, need to be clear and comprehensible, cutting through the wall of sound of the distorted guitars in order to achieve this clear representation of the multivoicedness in a metal soundscape, that is authentic within metal canons.

The question of clarity of the sound is especially relevant in metal concerts, based on what I have observed. During the course of the summer, fall, and winter of 2022 I participated in 4 metal, and one metal/rock concerts. In terms of the sound aspect of the performances, the work of the sound engineer is paramount. Many of the bands used a variety of sounds during their

performance. Most of them had some sorts of backing tracks that accompanied their live performance, including atmospheric instruments, and in one case sampled drums. The issue of combining the sounds with proper articulation, as claimed by the sound-engineers in the interviews, is prevalent. Many basic aspects, such as leveling the inputs and outputs of source signals, seem to be somewhat overlooked. It is especially noticeable when the backing trucks contain textural sonic information, such as ambience, which often gets completely masked by the overdriven bass from all the instruments. In terms of the sounds themselves, all of the bands used distorted guitars, overdriven bass, both live and electronic drums, screaming and growling, and one band used throat singing, because "it was in the original song" that they covered. The bands also used code-switching when talking to the participants, and performed in English. One concert which included the merge between the Kazakh traditional music and metal also had some areas of improvement in terms of the sound mixing. Even though the places where the bands performed were just bars, not acoustically treated, several adjustments would still have yielded better intelligibility and articulation of the instruments and vocals. Especially in the case of combining traditional Kazakh instruments, such as kobyz and dombra, with the throat singing performed by Arkayim, the distorted guitars and bass completely masked them to the point where none of the sounds were sipping through. Even though musically the way the bands combined the two genres of music was incredible, and unique for the local scene, spectral masking nullified all the efforts to make a comprehensive sound. Thus, in attempts to achieve a unique local sound for metal, the work of the sound engineer is paramount.

Overall, the fieldwork results inform several inferences about the multivoicedness of the community. First, participation in the community indicates traces of globalization. Simply having access to different types of music inside metal, to concert attendances, and adequate technology in

order to conform to the globalized culture of metal is somewhat exclusive. What this means for the expression of local voices inside the community is that these tend to be underrepresented because of the proclivity to mimic the Western commercially successful metal bands. Exclusivity of the subculture further exacerbates the questions of who gets to be the insider, where the concept of authenticity becomes crucial. Authenticity is then non-conformity to the mainstream, the expression and experience of distortion of sound and norms. It is further complicated, since the genre contains canons that must be met, or conformed to. The authenticity is then thought to include the experience of the unique, which necessitates the inclusion of the local voices, which are essentially the sonic representations of the local creative and pragmatic decisions, instrumentations, and vocalizations, i.e. the Kazakh instruments and vocals. Thus, the unique, authentic, soundscape is the one which includes these local voices and the globalized canons of metal. The latter ones are sonically represented by the inclusion of distorted guitars, bass, and fast paced drums. When local bands attempted to achieve this more authentic, unique sound, they were faced with the challenge of creating a clear comprehensible soundscape that incorporates both their local pragmatic and creative choices, instruments and vocals, and the staples of metal music. One of the most challenging parts of such a project is the issue of spectral masking, a by-product of the distorted guitars, which creates a wall of sound preventing clarity and audibility of other instruments in the soundscape. This issue is to be addressed by the sound engineer, who then becomes the modifier of this multivoicedness, soundscape, and ultimately negotiates the local and global voices in order to create an appealing/authentic soundscape. Thus, for the production of a balanced representation of the local and global in Kazakhstani metal, it is crucial to explain the negotiation process of addressing the said issue, of making a clear authentic metal soundscape by the sound engineer.

The concept and implementation of authentic in Kazakhstani metal soundscape

First of all, the bigger question of how a sonic analysis of locally produced metal music is relevant to the current literature must be addressed. Since the conceptual division between language and music is not universal, as was discussed in the first chapter, looking at the sonic representation of the local heteroglossia might prove useful since it moves beyond the conventional language in/and/about music analyses. While technical sides of music and language have been well-researched, including such concepts as meter, pausing, prosody, tempo, etc., the actual sonic representation of the bridge between language and music has not been sufficiently investigated. I have claimed that this bridge is heteroglossia, since it incorporates both elements of language and social environment. As we are inevitably impacted by the myriads of things in our environment, our heteroglossia, or the plurality of the voices we adopt, adjust, and overlap, impacts our communication not only in terms of spoken language, but also in terms of our self-expression through music. This communication exists in many domains, and the most important one is sonic, where music and language merge to perform a certain function/s. Thus, by analyzing the sonic representation of our heteroglossia, i.e. the soundscape, through the prism of spectral and dynamics analysis, which I will discuss in this chapter, one can move beyond discussing language and music separately, since they both live in the same domain. To analyze the local metal soundscape is to understand how local and global voices are negotiated and expressed sonically, which might not just shed light on the underlying social dynamics, but also showcase the complex technologically mediated processes involved in this communication. Before moving onto the spectral and dynamics analysis, it is important to discuss the findings so far.

Based on the results of the questionnaires, personal experience, and interviews, for the Kazakhstani metalheads the most essential elements of the metal sound are distorted guitars, bass

and fast-paced live-sounding drums. Of course, distortion itself is not unique to metal, there are many genres, including pop-rock, which utilize varying types and degrees of distortion. Yet there is something people still recognize as metal distortion, or "heavy distortion." The metal production should be audiotactile, aimed at moving the listener (Mynett 2017). Creating a local/unique metal soundscape capable of doing so means attempting to recreate this heaviness within the local setting, including the local voices. The need to engage in such practice is based on two things. First, as the literature and the results of the fieldwork indicate, metal subculture is based on the concept of authenticity. If one is to be perceived a part of the community, one is to engage in certain cultural practices, which include listening and composing/performing. Authenticity is then linked with non-conformity to the mainstream through the introduction of the unique sonic experiences, while still adhering to the staples of globalized metal music, according to the results of the questionnaires. The unique is then expressed sonically as the inclusion of local voices, i.e. local/Kazakh creative and pragmatic instrumentations and vocalizations. Local instrumentations and vocalizations just seem like more tangible representations of the local voices, according to the respondents. The second reason for making a unique local metal soundscape is that not only is there a pragmatic value to the members in doing so, but it is also inevitable for the local voices to be expressed one way or the other, since the concept of heteroglossia implies that we engage in this plurality of voices both consciously and unconsciously (Bakhtin 1981). As the research has shown, such representations have already found ways to be expressed in metal heteroglossia. The local bands "Zarraza" and "Arkayim" have demonstrated that the mix is quite possible and uniquesounding. I will analyze one of the two tracks that these bands have produced together, "the Grudge," as well as their live performance. Thus, on the one hand, the inclusion of these instruments and vocalizations seems useful to achieve an authentic metal sound.

On the other hand, any inclusion of additional elements means that there is less sonic space for each of the elements and their respective unique features (Hafezi and Reiss, 2015). Spectral masking is a considerable issue for any music that is based on combining multiple instruments, especially with distorted guitars. Clarity and audibility of the instruments and vocalizations, according to the literature and the results of the fieldwork, are essential parts of the authentic, unique, metal soundscape. Yet, the distorted guitars need to have enough distortion to be considered "heavy," audiotactile. Distortion has rich harmonic content. The distorted guitars occupy a wide range of the frequency spectrum audible, especially in the mid ranges, the "in your face" regions. The "heavier" the distortion, the less room is there for other instruments and vocals, which tend to live in the same frequency regions. Attenuating for this issue implies adjusting the distortion levels in certain areas to allow more room for other instruments and vocals. It is a dilemma that must be negotiated, compromised over, but always addressed. This negotiation is the prerogative of a sound engineer, both during live performances and song production. The sound engineer ultimately decides on the sonic representation of the heteroglossia, its communicative canvas, the local metal soundscape, and the authentic balance between the unique and canon. Concerning the question of what levels of distortion still pass as "heavy," canon, and audiotactile, the works of the "Nightwish," and "Sepultura" bands indicate that metal distortion is a flexible sonic feature/effect.

Nightwish is a symphonic metal band that makes songs or compositions containing many instruments, like symphonic orchestral instruments or/and operatic singing. This necessitates an attenuation of the level of the distortion applied to the guitars. Nightwish is a Finnish band, that is claimed to be the first Finnish metal band of its generation (Ollila 2008), alongside Iron Maiden and others. They have poetic lyrical content, a lot of symphonies. Their guitars are not heavily

distorted and have comparatively less low, mid-low frequency content. The bass appears also to be distorted in many of the tracks, which I cannot show in this paper for copyright reasons. However, I can provide the spectrogram of the guitars from the track "Amaranth." This song contains a drum kit, bass, distorted electric guitar mono and stereo, piano, synthesizer, synth pad, synth voice, brass, string, sound effect, backing vocals, lead vocal.

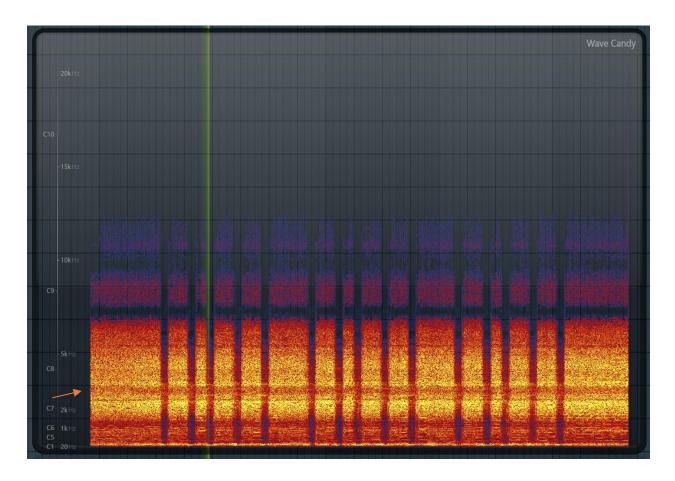


Figure 8.1 Guitar mono and stereo spectrogram

The y-axis in Figure 8.1 represents frequency spectrum, and the x-axis is the time. Since I do not possess software to analyze the duration of the wave-sound, I cannot show which frequencies had greater duration. However, in this spectrogram we can see the distribution of frequency energies. The brighter colors represent higher frequency content/energy. Thus, we can observe a lot of energy in regions between 1.5 to 6 kHz, with some cuts. The lower frequencies

are present, yet quite tamed. The region above 7 kHz is very weak, subdued, probably in order to allow for crispier/airy (containing more frequencies above 8 kHz) vocals and higher synthesizers (typically not exceeding 10-12 kHz). The body of the guitars, the 1.5 to 6 kHz region also has cuts, like the one I have pointed out with the arrow around 2.5-3 kHz. This frequency range is supposed to represent the overall presence of the instrument, here it is cut out to allow more room for vocals. Thus, I infer that the guitars in this multitrack are playing the supportive role, rather than central. This in turn may indicate that for metal the distorted guitars do not need to be always "in your face." Such instrumental arrangement, creative and pragmatic choices indicate a certain aim that the band and the sound engineer have negotiated and conveyed. This communication is indicative of the voices of the composers who have decided to include all these other instruments and vocals, and of the sound engineer who ultimately decided which of the will have more sonic impact, which will be more loudly communicated. These in turn impact a lot of social aspects, including imagined and perceived identities. For the composition of the Kazakhstani metal track this implies great flexibility of the way a song can be mixed and still considered heavy and metal. The mentioned cuts in frequency content may serve as starting points in the way we do the frequency processing of guitars for a potentially balanced representation of the local traditional instrument and vocals and the globalized metal sound. More importantly, it showcases technologically mediated creative and pragmatic choices behind this product.

Another important and useful example for the discussion of making a unique/authentic sound through the incorporation of local voices is Sepultura, specifically, their album "Roots." Sepultura is a heavy metal band in postdictatorial Brazil. I believe this is where Zarraza got their inspiration to represent the Kazakh traditional music, the local voices, in metal, since they have also made tribute concerts to Sepultura, and seem quite fond of their music.



Figure 9.1 and Figure 9.2 retrieved from https://vk.com/zarraza_official

On these pictures you can see Zarraza band members with Sepultura. Such connection is quite informative to this paper, since it serves as a guide towards a potential way Kazakhstani metal can be unique and internationally recognizable. More interesting is that the way Sepultura applies distortion to the guitars is quite cautious, and quite different from the local Kazakhstani bands. In some of their music Sepultura recorded different tribal music in Brazil when they were staying with the Xavante tribe in the northern state of Mato Grosso (Avelar 2018). In order to allow for more room in the recordings for the indigenous sounds, since Sepultura used a lot of the tribal percussive elements rich in both low and mid frequencies, the producer for the band Jens Bogren has applied several processing steps to the guitars.

I pre-treated the DI's a little bit with a pedal emulation, called the Green screamer. This is a Tubescreamer emulation made by Brainworx/Plugin Alliance. I used it to tame the low end a little bit, and to make it a little bit more mid focused. (Jens Bogren)

Unfortunately, I have not been able to find any of the tracks with isolated stems, including the guitar tracks, thus I am not able to provide a spectrogram to analyze the frequency distribution. Nor can I attach any of the fragments of their songs due to copyright. Yet, based on the claims made so far and personal experience, I can infer that the guitar distortion in the songs in "Roots"

contains quite thin distortion, since they rely heavily on the percussive elements of the tribal drums, as well as overall Nu-Metal appeal. Lesser distortion allows for better control over the transient information and conveys better character of the musician, his/her ecological experience and related personal voices.

Before I explain my own vision and process of creating that soundscape, it is important to analyze the work that has already been done towards this direction. In particular, the song by Zarraza "The Grudge" features kobyz, and shankobyz. The front person for the band has generously provided me with some isolated unmixed tracks of the song. The band has two songs which utilize kobyz, yet the other one is a cover of "Raining Blood," thus I could not get access to the stems due to copyright issues. "The Grudge" is an original song in a style I have difficulty in describing. In terms of the composition, the song features both intro elements where the center of the sonic focus is the kobyz, as well as "heavier" sections with faster and punchier guitars and drums. The band also utilizes distorted vocals for impact purposes just shortly in the middle of the song. The overall track is only two and a half minutes long. Among the instruments used are the drums, the above-mentioned Kazakh instruments, some percussive elements, bass, guitars, and the vocals. Please listen to a section of the song below.



Grudge intro.mp3

In this example you can hear the kobyz at the center of the stereo field, lower drum shells and bass in the center below, and high-hats panned top right, the guitar are significantly panned to the sides, achieving a stereo-wide mix. The creative and pragmatic choice to include these instruments in this particular sonic representation already indicates a complex communicative set

of functions this track is meant to perform. The utilization of the Phrygian half-step dissonance, alongside the wooing kobyz create an eerie feeling. In terms of the spatial arrangement, placing different instruments which share a lot of frequency spectrum in various positions helps alleviate the problem of spectral masking, allowing the listener to hear more of the character of the instruments and the performer. Interestingly enough, based on the provided stems, both guitar tracks share the same space with two other kobyz recordings, which play the same progression as the guitars. On the released song I have difficulty discerning the kobyz from the slightly distorted, but mostly clean, guitar sound. It might indicate that the guitars have taken a priority in the mix over the eerie kobyz, something that is mediated and negotiated by the performers and the mixing engineer, since kobyz and guitar occupy quite similar frequency spectrum. This is another indication of how in the negotiation process of local representation with the global the latter takes priority. Below you can see a spectrogram of the guitars in that section. The DI (direct input without distortion, reverb, chorus, etc.) signal is basically a guitar plugged into an audio-interface, sometimes with some analogue or digital saturation, limiting, compression, or EQ, which are all determined by the recording engineer. The figure 10.1 shows that much of the sonic energy is in the lows, and low-mids, between 20 Hz to 2 kHz.

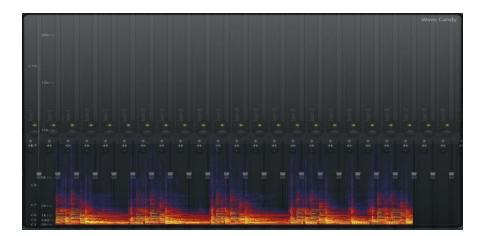


Figure 10.1 guitar intro DI signal spectrogram

Yet, in the recording itself the guitars sound quite saturated, despite being unaffected by the conventional metal distortion. Still, saturation is distortion as well, and in this case, it masks the side kobyz.

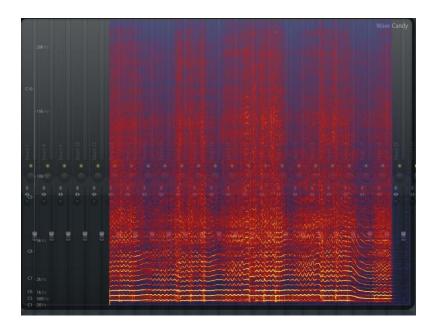


Figure 11.1 Kobyz center spectrogram

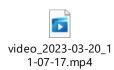
The above spectrogram shows the Kobyz, which is sonically much richer than the intro side-guitars. One could even claim that this instrument has more character. Yet, the densest sonic energy is concentrated in the lows, and the low-mids, which the clean guitars tend to occupy as well. The brightest lines with space in between in the region from 500 Hz to 1.5 kHZ indicate an interesting way the kobyz was processed. The sound engineer working with the track might have extensively used surgical EQ boosts and cuts, as well as some type of harsh saturation, to achieve this. Surgical EQ moves mean that very narrow frequency ranges are affected. This was perhaps done as an attempt to achieve a more glued sound between the guitars and the kobyz, where the latter would fill in these narrow spaces in the guitars.



The next section of the song does not use the kobyz or other Kazakh instruments to let the distorted guitar breathe. This certainly informs us that for the bands and the engineer the quest to achieve the metal sound might have meant that at some crucial points the Kazakh instruments need to be cut out. This again refers us back to the concept of spectral masking, which can destroy the "heaviness" of the metal track. Moreover, it further indicates the direction the negotiation of voices has taken.



Indeed, even though the band later in the song included the shankobyz, to my ear it is completely subdued under the guitars, becoming more of a textural addition, rather than a musical input. Of course, it is difficult to grasp the intended meaning behind a mix of a song without participating in its creation. Nevertheless, while the reasons behind such technologically mediated creative and pragmatic choices are unclear, the voices conveyed are still indicative of the semantics of sound decisions behind the song. All in all, while the sound quality and the virtuosity of the Zarraza and Arkayim bands are undeniable, it still seems as though they are not focusing on trying to create a more balanced representation of the local voices in metal.



In the snippet of the live performance during the "Voices of Tengri" concert you can observe both bands performing. Yet, not much of what the Arkayim band plays is audible. I have tried moving around the bar to find a "sweet spot," still to no avail. This demonstrates that even when in commercial recordings the instruments are intelligible, performing it live still remains a challenge. Thus, the different domain implies a different kind of negotiation, mediation, and ultimately communication. With this in mind I will attempt to demonstrate the technologically mediated negotiation of local and global metal voices in order to create a unique/authentic metal soundscape.

For this project I have composed a Kazakh epoch in the style of modern metal, being influenced by modern metalcore and Sepultura's album the "Roots." The first challenge for me was the search for musicians who would be willing to participate in the project. While in the first stages I was able to recruit several people, including one of the interviewed sound engineers, later they expressed reluctance to creatively participate in the project. Then I have taken it on myself to try to recruit people just as performing musicians. The idea was that I would write the whole song with the fieldwork results in mind, the common footing, and just record the instruments in the studio with these people. Yet, the financial rates at which this process operates has been well out of my budget. Thus, I have decided to use sampling and sound design to potentially substitute the need for real musicians. Sampling is a process where a person would find a recording which they chop up, alter in many ways, and often heavily process in order to create their own sounds. Sound design is a process of using software, or hardware, to create specific sounds through fiddling with oscillators, envelopes, etc. This may often include some samples of the recorded instruments, just adjusted for flexibility in terms of the composition. Of course, this certainly takes out the voices of the person performing an instrument live, yet it sometimes might be flexible enough to express

certain ideas, convey certain communicative functions, informed by the results of the interviews and questionnaire, of a person like me, since a big part of heteroglossia is imagining voices of others. So, it is time to move onto the process itself.

I started off by searching recordings of real dombra and kobyz of good enough quality. After a couple of hours of searching I found a recording, a song composed and performed with kobyz on a what seemed to be an abandoned website. I had no such luck with the dombra, for which I have found a plugin, a vst, a library of sounds, for a program called "Kontakt," which cost only 30 dollars. After successfully installing the library and chopping up sections of the kobyz song I have made several sounds, with some extensive tweaking to make it sound a bit more alive. Here is the original kobyz song.





Figure 12.1 Dombra VST plugin

The Figure 12.1 is what the Dombra vst looks like inside the digital audio workstation (DAW). It has several parameters, such as tuning, reverb, some equalizer, and the volume mixer for different samples within the library. Only the latter was of interest to me at this stage, since all

the other components would be tweaked later during the mixing stage. I used the Kobyz recording as the main atmospheric instrument, using it as a way to reinforce an idea, express a certain voice, a feeling throughout the song, reminiscent of drone music, where one note is played throughout the composition. I used the dombra for its both melodic and percussive sounds, where the strums were the additional rhythmic component of the intro, interlude, and the break of the song, and the individual plucks as the main lead melody during the chorus and intro. For the drums of the song, I used the Modern and Massive library by GetGoodDrums. For other elements I used synthesizers, sampling, personal guitar recordings, and sound design. Overall, I have arranged the chord progressions, riffs, beats, in a way to create a little contrast in terms of the perceived velocity and intensity of the song, something which is quite extensively used in both Kazakh traditional music and metal. In the instrumental, I used quite a metalcore-ish first part, composed of an intro which introduces a motif, and the chorus which reinforces it. The next section, the interlude, is a little more riffing on the electric guitars. After the interlude I moved on to the break section which was inspired by Sepultura in terms of its grooviness. Lastly, I came back to pre-chorus and eventually the chorus of the song. Now let us look at the sound engineering challenges that I have faced, and technologically mediated actions I have taken to negotiate the resulting soundscape.

First, due to the lack of professional recording equipment, gear, environments, getting a well-recorded DI signal from the guitars has been an issue. I use an entry level Focusrite audio-interface, and a Harley Benton Amarok 6 with EMG Retro Active Hot 70 Ceramic (bridge) humbucker & EMG Retro Active Hot 70 Alnico-5 (neck) humbucker pick-ups. Generally, it is an entry level equipment to professional music production in a home studio. Nevertheless, I have still recorded the DI signal of the guitars, ensuring that I get no unwanted clipping at the source, follow

the metronome, and adjust for any sound artifacts caused by static electricity and ringing guitar strings.

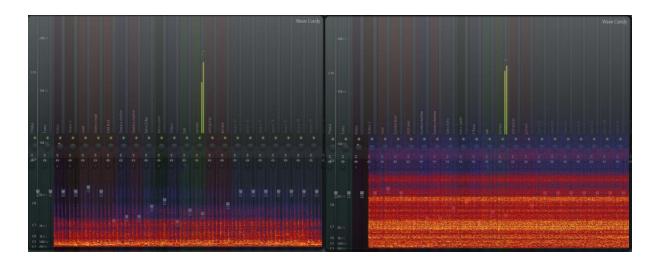


Figure 13.1 DI signal of the guitars

Figure 14.2 Processed signal from the guitars

In Figures 13.1 and 13.2 you can see both the unprocessed and processed guitar signals. On the DI signal most of the frequency energy is in the lows, low-mids, similar to the example of Zarraza's DI guitars. Yet, after the processing, after applying the distortion and EQ and dynamics processing the signal became richer, especially around frequencies of 2 kHz and 5 kHz. I had to use significant surgical EQ cuts in several areas in order for the dombra, kobyz, and snare drums, and vocals to "breathe." All the dimmer areas in the Figures represent these cuts, like the areas of 6 to 8 kHz, which are also meant to be the "in your face" frequencies. I did not make the guitars stand out in the mix because I was more interested in the sounds of the drums, dombra and kobyz,

which indicates my voices both as the composer and mixer of the music.

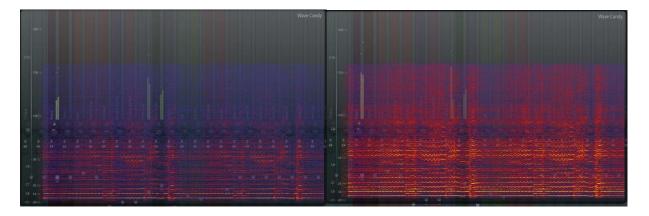


Figure 15.1 unprocessed kobyz and Figure 15.2 processed kobyz

In the Figures 15.1 and 15.2 we can see the sonic spectrogram of the kobyz pre and post processing. What can be immediately observed is that the processed sound is richer in terms of the frequency energy due to different kinds of saturation I have applied to it. I wanted the instrument to have greater energy in areas where there was space, like the highs, especially the 8 kHz, in order for it to be more audible, to bring out more of its character/voice into the mix. I have also used dynamic EQ and sidechaining, so that when the crucial instruments, like dombra and kobyz play, some of the most conflicting frequencies would be shortly reduced from the guitars for the duration of the initial signaling instrument. The reason I am choosing to bring out more of the local traditional instruments into the mix is because these represent the local voices, which introduce musical variability to the soundscape of the song, hopefully resulting in a more balanced representation. With this I attempt to communicate that this is a Kazakh metal song, where local voices are louder, more important.



Figure 16.1 Figure 16.2 unprocessed and processed lead Dombra

In these spectrograms you can see the lead dombra pre and post processing. In the preprocessing, the original signal had weak transient information, most of the energy was in the lows, which for the leads is not enough. The processed sound has much stronger transience, as can be observed from the brighter columns of the sound, and overall greater energy in the mids, highmids. Somewhat low frequency content indicates that this is a synthesized instrument, since acoustic recordings would have much energy throughout. With this processing I wanted to make sure the lead dombra cuts through the guitars, thus I have also used side-chain dynamic EQ, so that at the time of the pluck of the dombra strings, the crucial mid, and high mid information of the dombra would dominate the guitars. I also used transient processing to enhance the attack of the instrument to retain some of the percussive nature of the instrument. For several elements of the song, I used short reverb and little delay, since the composition consists of many elements residing in similar frequency regions. Long reverb and delay would result in a lot of overlapping of these instruments, which in turn would negatively affect their definition, filling up the stereo space, creating rumbling effects and muddiness. I used moderate reverb on vocals mostly, to keep them a bit more upfront. I triple tracked the vocals, to add a little more width to the overall performance, watching out for phase issues.



Vox 1 example is a single tracked vocal take, without processing. Vox 3 unprocessed is the triple tracked vocals, whereas the processed one has many EQ corrections, slight compression, saturation, and mid-room reverb. The use of reverb is to imitate a recording done in a natural setting. This usually helps to vocals to blend with the other instruments.



These are two examples of the "dry" vocals, meaning unprocessed, and the "wet" ones, meaning processed, within a section of the song. To make the vocals stand out a bit more I needed to enrich its frequency content through saturation, and boost certain frequency areas, like the mid, high-mid range (1.5-3 kHz), as well as around 8 kHz and higher to add crispiness.

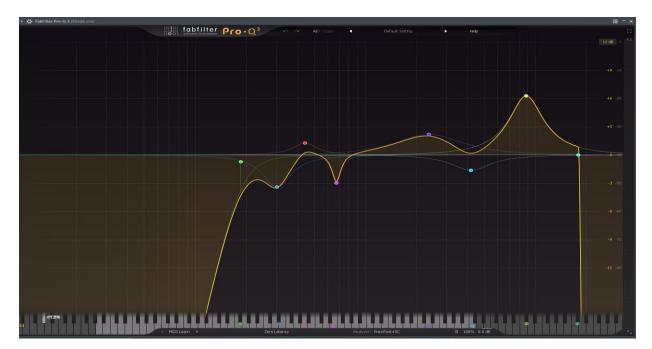


Figure 17 Fab-Filter Pro Q 3

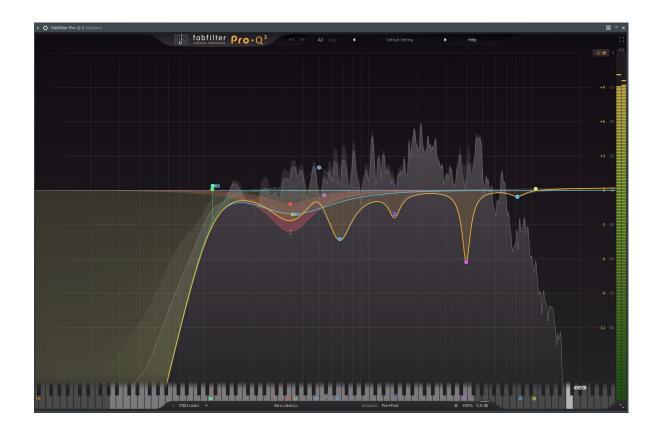


Above you can see a visual representation of the EQ corrections I made, as well as examples of pre and post EQ correction. I completely cut frequencies below 100 – 150 Hz, since they do not contain useful spectral information. The first scoop is around 200-300 Hz, to decrease the boominess of the vocals, and allow more room for the body of the snare, dombra, and guitar. More surgical eq is the area of 700 Hz which is the sound of the radar on submarines, and is a bit fatiguing to the ear. The two boosts are for presence and clarity. The high-cut is to clean out unwanted frequencies not integral to the sound.



These are the examples of how compression affects the signal. In this case, it makes quieter parts of the recording a bit more balanced in relation to the transients and loud peaks. By adjusting attack and release of the compressor we can tell it how fast and for how long it should compress the signal, thus affecting the overall dynamics. After this, I used saturation, which is basically adding harmonics, and reverb. The importance of bringing out the vocals in the track is linked with the semantics of the lyrical content of the song, and multivoicedness of the musicians. As informed by the results of the fieldwork, the local voices are the Kazakh vocalizations.

For the guitars, I made them quite thin, only reserving some integral information.



Basically, I mostly made cuts to the signal, so that other instruments and vocals had more space to "breathe." I also used side-chaining in areas of frequency conflict, so that at the times that this instrument is played, the respective EQ corrections are activated. Also, I used heavier compression and limiting to get a steadier, consistent signal. I used some saturation to enrich the areas where the conflict of frequencies between the instrument was not significant so as to retain a metal sound. I applied different processing to side and mid signals of the guitars as well. For the sides I highpassed the lower frequencies to essentially make all the bass in the track mono. This is done to achieve a punchier and "heavier" sound.

As per the dombra, I had to pan it to the sides and apply considerable reverb to increase its overall presence. This has also introduced ghost frequencies inaudible in the recording, which eventually added more energy to the initial sound. Since the lead dombra has most of its frequency

energy within similar regions to the vocals, I needed to separate them spatially. This means that both voices are playing similar roles in terms of the overall communicative purpose.



Here the dry example has a lot of clashing with the whole mix, sounding out of place. Yet, after EQ, compression, saturation, and reverb it feels more glued with the rest of the instruments, and still retains its stringed character. In terms of the other instruments, I applied similar tactics, keeping the principles of stereo and frequency spectra in mind.

For the lyrical content of the vocals, I have decided to use both English and Kazakh to make the track a more balanced representation of the local and global voices. I have selected the epos of Tomiris, a significant figure in the history/histories of Kazakhstan because of a war/battle feel from the whole track. In terms of the vocal techniques, I used both clean and screaming vocals, since both are acceptable, preferrable, within metal, situating them differently within the track parts inspired by different genres. Overall, I have also mastered the track based on my knowledge, gear, and experience. On the mastering stage I applied clipping to shave off unwanted peaks and limiting to level out the overall energy and achieve greater loudness, which is an essential element of modern music. I applied more EQ moves to attend to resonating frequencies and get a more balanced distribution of the overall frequency energy of the track. I have also saturated the sides in order to make the track feel wider, so that the voices occupying side stereo fields are audible and loud. More importantly, it is vital to mention that I am in no way a professional sound engineer, nor do I have resources to try to become one. Yet, if we are to take the concept of heteroglossia into play and the negotiation that at times wipes away the character of some parts of the

composition, making it wholly yourself is somewhat liberating. It is liberating since I have a final say in how the individual elements are represented, I have more control of how the local voices are positioned in comparison to the globalized metal voices, what communicative functions the soundscape conveys. With better tools and experience anyone can achieve an in–depth understanding of how to account for the spectral masking in pursuit of a balanced composition.

Each part of the song has its symbolic meaning. The inclusion of Kazakh lyrics is a signifier of the more direct way local voices are pronounced. The Kazakh language has become integral to many, if not all, who live in Kazakhstan, thus its inclusion feels natural in the representation, or overlap, of the local multivoicedness. Even if we do not speak Kazakh regularly, we encounter it everyday, and subconsciously it becomes part of our communicative constructions. It is important to note that the local metal sound does not have to necessarily include Kazakh vocalizations, a lot depends on the language ideologies that the musicians have, as evidenced in the fieldwork results. Here the inclusion of local traditional instruments with their specific techniques might be sufficient. The dombra and kobyz symbolize the local music culture since these are the most popular Kazakh musical instruments in Kazakhstan. Sonically and musically they are very compatible with the staples of metal music that can serve as an alternative representation of many elements used in modern metal, such as lead guitars, synthesizers, vocals, and other. That means that the local voices might potentially perform similar roles as the global ones. The reason why I included these particular instruments extends to what I have learnt about the local perspectives on unique Kazakhstani metal. Moreover, these instruments have a distinctive sound, thus can be used more easily to represent a contrast of the local voices to global. In terms of the spoken component of the soundscape, the epos of Tomiris is meant to represent the feelings associated with metal, such as vigor, aggression, drive, elevation, transcendence, because it is based on a charismatic

figure who the Kazakhstanis learn about since middle school. Aggression, vigor, and drive are represented in the words of battle, elevation and transcendence are linked to reverence and devotion part of the lyrics, where people are transcending their mundane lives to become a part of the imaginary, conventionally heroic scenario. Also, epos is an essential part of the local musical traditions. Additionally, I used screaming and growling vocals due to their association with the above feelings based on the concept of ecological perception discussed above.

Here is the complete composition:



Overall, the technologically mediated processes that I have discussed indicate not only the negotiation process behind the production of a comprehensible/clear metal soundscape, but also that I am also introducing my own voices as a sound engineer. My heteroglossia also inevitably finds ways to impact the creative and pragmatic choices I make in order to convey certain communicative functions, imagined, negotiated, and anticipated through this soundscape. Such technological processes might indicate that music is a domain of very complex communication, where such features of sound as stereo image, frequency spectrum, dynamics, and phase perform certain communicative roles. Adjusting these parameters is changing the voices and the way they are experienced by the listeners, what becomes important and what loses its sonic and communicative relevance. This in turn affects perceived authenticity, or uniqueness, and by extension shows social dynamics of the people engaged in the process.

Conclusion

The current project has attempted to analyze the local metal subculture in terms of its sonic representation in music. In terms of the bigger theoretical discussions, the work attempts to fill in the gap of music and/in/about language literature by moving beyond the conventional divisions of the two. The work is based on the concept of heteroglossia by Bakhtin (1981), which means that in our daily communication we overlap many voices that we have gathered and adjusted both consciously and unconsciously, which reflect our socio-linguistic environment. Language and music are both representation of our multivoicedness/heteroglossia, since both serve certain communicative purposes. In order to move beyond the conventional distinction of the two I have applied the concept of heteroglossia to the concept of soundscapes, which means everything that an ear is exposed to sonically. By utilizing this concept, I have aimed to analyze this shared domain of language and music where its features can then be correlated with different communicative and semiotic functions. In this process I have used spectral and dynamics analyses and their semantic processes since they treat both language and music as one sonic canvas. In the end of the work I have composed and processed a Kazakh metal soundscape in order to showcase the complex technologically mediated interplay of the multiple voices and their communicative functions negotiated by the sound engineer, the person in charge of sonic spectral and dynamics processing.

Based on the results of the conducted fieldwork, the metal subculture in Kazakhstan is a diverse community, where the underlying common footing is based on perceptions of authenticity. Authenticity then finds ways of representation in metal heteroglossia through the clear inclusion of local voices, which in this paper are the local instrumentations, vocalizations, and creative and pragmatic decisions behind them. This in turn is also related to the concept of uniqueness. Through this process the local metal soundscape can be authentic and unique, yet the former also implies

adherence to the staples of the globalized/globalizing metal sound. This presents a challenge since an integral component of this authenticity is the use of distortion. In other words, the most essential global element of metal is distorted guitars, which create a sonically dense signal, which in turn creates a wall of sound that masks other instruments occupying similar frequency ranges. This issue/challenge is called spectral masking. For the creation of an authentic local metal soundscape it means that in order to have a clear sonic representation of both local and global voices of metal, one will have to attenuate to that issue. The person in charge of this process is the sound engineer, who ultimately molds the heteroglossia, and introduces his/her own creative and pragmatic decisions that affect the overall communicative soundscape of the song. Through spectral and dynamics manipulations the engineer negotiates which voices/instruments/vocalizations are the most pronounced, how and where they are most impactful, thus negotiating the overall communicative soundscape. More importantly, this person oversees the retention of the authentic value of the track.

The limitations of the current project are manifold. First, I was not able to find many local sound engineers that have worked on metal music production. I believe this stems from the fact that this field of music is not as popular in Kazakhstan as in other places, and I could not provide any monetary reimbursement for their time. Thus, many felt unmotivated to participate in the research. Since the work touches upon the semantic processes involved in spectral and dynamics processing, a comprehensive overview of this can only be achieved through extensive interviews and participant observation in the process of mixing and mastering by relevant engineers. Second, I do not possess enough technological tools to make in-depth analysis of the sonic material, thus the intricacies of certain elements cannot be emphasized. One way to compensate for that is through acquiring diverse software and hardware, and original multitracks of the songs in question.

Third, I have not subjected my participants to different sonic environments to record their cognitive and emotional feedback. Thus, it is very difficult to make inferences about the intended and perceived communicative purposes of specific voices, and their sonic processing. Fourth, I have not had enough time to work more directly with my external advisor Dr. Mynett in order to make more educated inferences and have better understanding of the processes involved in comprehensive metal production. Lastly, this research field is somewhat understudied, thus much of this work's content requires big cognitive bridges/jumps, that are not apparent.

The overall point of this paper is to attempt to move beyond the conventional division between language and music. Heteroglossia is a general concept that can be applied to both ways of communication. By understanding this concept within the productions of metal soundscape, one can make inferences about larger socio-linguistic dynamics. Heteroglossia helps to understand that any soundscape is a negotiation of multiple voices, of multiple influences, and that even technologically mediated processes can show traces of these influences. Processing soundscape is a very creative process that introduces a plethora of semantic meanings to a seemingly "technical" side of art. If one is to conduct a more comprehensible analysis of this process, one should focus on the production side through the lens of heteroglossia. This means that one is to extensively participate in the process of mixing and mastering done by relevant sound engineers, conduct extensive interviews, and questionnaires where people are subjected to different ways a sound is processed, whose reaction/perception is then recorded. I would suggest having substantial funding in order to recruit a lot of sound engineers and book time with them. Also, one should have sufficient understanding of the process itself, its technical sides. This implies having access to software and hardware to be mindful of their impact in these processes. The most important goal of this work is to observe the semantics behind the creative and pragmatic decisions in composing,

mixing, and mastering metal soundscapes, and how technologically mediated processes correlate with said decisions.

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Appendix A

Questionnaire in Russian

Звуки Метала в Казахстане

Исследование значения звуков в метале Казахстана для слушателей, исполнителей, и инженеров звука.

Вступление. Приглашаем Вас принять участие в исследовании «Голоса Метала в Казахстане: семиотика скриминга и гроулинга».

Процедуры. Целью данного исследования является анализ значения, которое люди придают скримингу и гроулингу в Метал-сообществах Казахстана, посредством анализа дискурса и наблюдения. Это анкетрование займет 20-30 минут.

Риски. Потенциальные риски участия в этом исследовании: нарушение конфиденциальности, тревога.

Выгоды. Ожидаемой пользой от данного исследования является обогащение литературы по семиотике звука и анализу дискурса в казахстанских субкультурах.

Компенсация. Участники могут иметь право на денежную компенсацию за уделенное время в зависимости от индивидуальных обстоятельств посредством банковских операций или наличными. Однако на данный момент не было выделено нужного финансирования, к моему сожалению.

Конфиденциальность. Любая информация, полученная в ходе этого исследования, будет максимально конфиденциальной. Будут предприняты все усилия, в разумных пределах, для сохранения конфиденциальности Вашей личной информации в Вашей исследовательской документации, но полная конфиденциальность не может быть гарантирована. Все данные будут храниться на персональном компьютере с паролем и будут доступны только исследователю и его консультанту.

Добровольный характер исследования. Участие в этом исследовании является строго добровольным, и если дано согласие на участие, оно может быть отозвано в любое время без ущерба участнику.

Контакты. В случае возникновения каких-либо вопросов или комментариев относительно этого проекта или получения травмы, связанной с исследованием, следует связаться с главным исследователем Али Дукаевым, +7 702 281 78 09. Любые другие вопросы или опасения можно направлять в Комитет по этике институциональных исследований Назарбаев Университета, rethics@nu.edu.kz.

1. Нажимая «Я согласен» ниже, Вы указываете, что Вам не менее 18 лет, вы прочитали и поняли эту форму согласия и согласны участвовать в этом исследовании. *

Я согласен/согласна

Я не согласен/не согласна

Сообщество/личность

Вы можете пропускать вопросы, если хотите, но, пожалуйста, ответьте на все возможные.

- 1.1 Как Вы думаете, есть ли в Казахстане метал субкультура\сообщество (группа людей, которые общаются друг с другом на основе общих интересов)? Если да, можете ли вы его описать? Если нет, вы можете пропустить вопросы 1.2-1.5.
- 1.2 Считаете ли вы себя частью этого сообщества? Почему?
- 1.3 Является ли метал-сообщество в Казахстане уникальным? Если да, то чем оно отличается от других сообществ?
- 1.4 Каковы атрибуты человека, которые делают его металлистом в Казахстане?
- 1.5 Ожидается ли от Вас определенное поведение, когда вы находитесь на определенных метал-сходках, концертах, форумах? Если да, то можете описать, пожалуйста?
- 1.6 Каковы основные атрибуты металлиста? Отметьте все подходящие варианты.

Длинные волосы

Аксессуары типа цепочек, браслетов, серёжек

Тату

Макияж
Пирсинг
Умение играть на гитаре, басу, барабанах, скримить, гроулить
Слушать малоизвестные метал группы
Слушать Металлику
Носить мерч с Металликой
Носить мёрч со Слэйером
Пить пиво\алкоголь
Курить
Ходить на концерты
Мошить (участвовать в wall of death, moshpit)
Не любить поп-музыку

Не любить рэп, рнб, хип-хоп

Идти против мейнстрима (в любом смысле этого выражения)

Отрицать некоторые нормы неметального сообщества

- 1.7 Какие, по Вашему мнению, должен слушать метал группы любой настоящие металхэд? Почему?
- 1.8 Чем фанат металла отличается от поклонников других жанров?
- 1.9 Как Вы думаете, есть ли люди, которых в металле называют «позерами»? Если да, можете ли Вы их описать?
- 1.10 Как Вы думаете, существует ли настоящий металхед? Если да, то каковы его/ее атрибуты?
- 1.11 Отличаются ли фанаты металла в Казахстане от фанатов металла в других странах, таких как США, Великобритания? Если да, то каким образом?

Чувства

- 2.1 Верите ли Вы, что игра, сочинение, прослушивание музыки могут вызывать определенные чувства? Если да, то можете назвать несколько?
- 2.2 Как бы Вы описали, что Вы чувствуете, играя, сочиняя или слушая метал-музыку? (можно несколькими определениями)
- 2.3 Можете ли Вы назвать метал-музыку «жестокой»? Если нет, то как бы Вы это описали? (можно использовать любой язык, не только русский)
- 2.4 Есть ли какие-то особые чувства, связанные с метал-музыкой, которые делают этот жанр уникальным? Если да, можете ли Вы их описать?

Дисторшн

- 3.1 Опишите, пожалуйста, что в Вашем представление является метальным звучанием?
- 3.2 Каковы уникальные звуки метала? (скриминг, гроулинг, дисторшн, двойная бочка? (что угодно) Отметьте все подходящие варианты.

Скриминг\гроулинг

Дисторшн

Двойная бочка

Другое:

3.3 Считаете ли Вы, что дисторшн играет большую роль в метал-музыке? Если да, то какого рода дисторшн? (на вокале, на басу, гитаре, синтезаторе, барабанах)? Отметьте все подходящие варианты.

На вокале

На басу

На гитаре

На синтезаторе

На барабанах

Другое:
3.4 Знаете ли вы, как можно добиться такого искаженного/дистортного звука? Отметьте
все подходящие варианты.
плагины
педали эффектов
детюнинг
Другое:
3.5 Искажение/дисторшн вызывает у Вас какие-то специфические чувства? Если да, можете ли Вы их описать?
3.6 Как Вы думаете, нужен ли дистортный вокал для метального звучания? Если да, то почему?
3.7 Есть ли казахстанское звучание в метале? Чем он отличается от других?
Лирика
4.1 Считаете ли Вы, что язык играет значительную роль в создании металлического звука
в Казахстане или других странах? Если да, то какими способами?
4.2 Знаете ли Вы метал-группы, которые используют лирику на казахском языке?
4.3 Знаете ли Вы какие-нибудь казахстанские метал-группы? Какие языки они
используют? Отметьте все подходящие варианты.
Английский
Русский
Казахский
Другое:

4.4 Есть ли основной язык металла? Если да, то можете назвать?

- 4.5 Вы бы слушали музыкальные группы любого жанра, которые используют казахский язык? Почему, почему нет?
- 4.6 Вы бы слушали метал-группы, использующие казахский язык? Почему, почему нет?
- 4.7 Как Вы думаете, есть ли разница между английской, русской или казахской лирикой (слова песен) в металле? Если да, то что это?

Questionnaire in English

Sounds of Metal in Kazakhstan

Exploring the meaning of sounds in Kazakh metal for listeners, performers, and sound engineers.

Introduction. We invite you to take part in the study "Voices of Metal in Kazakhstan: the semiotics of screaming and growling".

Procedures. The purpose of this study is to analyze the importance that people attach to screaming and growling in the metal communities of Kazakhstan through discourse analysis and observation. This survey will take 20-30 minutes.

Risks. Potential risks of participating in this study: breach of confidentiality, anxiety.

Benefits. The expected benefit of this study is to enrich the literature on the semiotics of sound and discourse analysis in Kazakhstani subcultures.

Compensation. Participants may be entitled to monetary compensation for their time, depending on individual circumstances, through bank transactions or in cash. However, at the moment, the necessary funding has not been allocated, to my regret.

Confidentiality. Any information obtained during this study will be kept as confidential as possible. Every reasonable effort will be made to maintain the confidentiality of your personal information in your research documentation, but complete confidentiality cannot be guaranteed. All data will be stored on a personal computer with a password and will be available only to the researcher and his consultant.

Voluntary nature of the study. Participation in this study is strictly voluntary, and if consent to participation is given, it may be withdrawn at any time without prejudice to the participant.

Contacts. Should you have any questions or comments regarding this project or experience an injury related to the study, please contact Principal Investigator Ali Dukaev, +7 702 281 78 09. Any other questions or concerns can be directed to the Nazarbayev University Institutional Research Ethics Committee, rethics@nu.edu.kz.

1. By clicking "I agree" below, you indicate that you are at least 18 years old, you have read and understood this consent form, and you agree to participate in this study. *

I agree / I agree

I do not agree / do not agree

Community/identity

You can skip questions if you wish, but please answer as many as you can.

- 1.1 Do you think there is a metal subculture/community in Kazakhstan (a group of people who communicate with each other based on common interests)? If yes, can you describe it? If not, you can skip questions 1.2-1.5.
- 1.2 Do you consider yourself a part of this community? Why?
- 1.3 Is the metal community in Kazakhstan unique? If so, how is it different from other communities?
- 1.4 What are the attributes of a person that make him a metalhead in Kazakhstan?
- 1.5 Are certain behaviors expected of you when you are at certain metal gatherings, concerts, forums? If yes, can you describe please?
- 1.6 What are the main attributes of a metal worker? Check all that apply.

Long hair

Accessories such as chains, bracelets, earrings

Tattoo

Makeup

piercing

Ability to play guitar, bass, drums, scream, growl

Listen to obscure metal bands

Listen to Metallica

Wear merch with Metallica

Wear merch with Slayer

Drink beer/alcohol

smoke

go to concerts

Mosh (participate in wall of death, moshpit)

dislike pop music

Dislike rap, rnb, hip-hop

Go against the mainstream (in any sense of the term)

Deny some of the norms of the non-metal community

- 1.7 What metal bands do you think any true metalhead should listen to? Why?
- 1.8 How is a metal fan different from fans of other genres?
- 1.9 Do you think there are people who are called "poseurs" in metal? If yes, can you describe them?
- 1.10 Do you think there is a real metalhead? If so, what are his/her attributes?
- 1.11 Are metal fans in Kazakhstan different from metal fans in other countries like USA, UK? If yes, how?

Feelings

- 2.1 Do you believe that playing, writing, listening to music can cause certain feelings? If yes, can you name a few?
- 2.2 How would you describe how you feel playing, writing or listening to metal music? (multiple definitions possible)
- 2.3 Would you call metal music "violent"? If not, how would you describe it? (you can use any language, not only Russian)

2.4 Are there any special feelings associated with metal music that make this genre unique? If
yes, can you describe them?
Distortion
3.1 Describe, please, what is the metal sound in your performance?
3.2 What are the unique sounds of metal? (screaming, growling, distortion, double kick? (whatever) Check all that apply.
Screaming / growling
distortion
double barrel
Other:
3.3 Do you think that distortion plays a big role in metal music? If so, what kind of distortion? (on vocals, bass, guitar, synth, drums)? Check all that apply.
On vocals
on bass
On guitar
On the synthesizer
On the drums
Other:
3.4 Do you know how such a distorted/distorted sound can be achieved? Check all that apply.
plugins
effects pedals
detuning
Other:

- 3.5 Does distortion/distortion cause you any specific feelings? If yes, can you describe them?
- 3.6 Do you think you need a distorted vocal for a metal sound? If yes, why?
- 3.7 Is there a Kazakh sound in metal? How is it different from others?

Lyrics

- 4.1 Do you think that language plays a significant role in creating metal sound in Kazakhstan or other countries? If yes, in what ways?
- 4.2 Do you know any metal bands that use Kazakh language lyrics?
- 4.3 Do you know any Kazakh metal bands? What languages do they use? Check all that apply.

English

Russian

Kazakh

Other:

- 4.4 Is there a main metal language? If yes, can you name it?
- 4.5 Would you listen to musical groups of any genre that use the Kazakh language? Why, why not?
- 4.6 Would you listen to metal bands using the Kazakh language? Why, why not?
- 4.7 Do you think there is a difference between English, Russian or Kazakh lyrics (lyrics) in metal? If yes, what is it?