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### 6.4. Delimitations: Music and Power

*Delimitation* is an antiquated word for the rectification of a boundary or border, now used in English with the meaning 'demarcation' or 'enclosure'. Music and power can be conceived as concepts that touch each other, that may intersect or merge. In the process, new demarcations will inevitably occur, resulting in further rectifications or delimitations. When music is described as a power, it is often done in terms of aesthetics and affects - music is not only a power to be heard, but also to be obeyed.<sup>1</sup> When one's own pacing involuntarily adapts to the rhythm of music overheard, or when music leads to a cathartic experience, it exerts a powerful effect. Other facets of this relationship are indicated when music takes on a representative function in political power relations, when it becomes a mobilizing factor in political movements, or when a potential for resistance is expressed and activated with and through it. Beyond its aesthetic and affective effects, however, other, more deeply interwoven relationships between music and power can be discovered. Relations exist between the two in which one refers to the functions of the other; thus, power may be involved in the creation of

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<sup>1</sup> This linkage shows in the etymology of the German words *Gehör* (hearing, audition) and *Gehorchen* (to obey).

a musical form, or music may be functionally tied to powers. The contours of the genealogy that develops from these interrelationships are traced below.

In *Crowds and Power*, Elias Canetti uses the figure of the conductor to sketch an analysis of one of the possible junctures in this relationship:

There is no more obvious expression of power than the performance of a conductor. Every detail of his public behaviour throws light on the nature of power. [...] A conductor ranks himself first among the servants of music. He is so full of it that the idea of his activity having another, non-musical meaning never enters his head. No-one would be more astonished than he at the following interpretation of it. The conductor *stands*: ancient memories of what it meant when man first stood upright still play an important part in any representations of power. Then, he is the only person who stands. In front of him sits the orchestra and behind him the audience. He stands on a dais and can be seen both from in front and from behind. In front his movements act on the orchestra and behind on the audience. In giving his actual directions he uses only his hands, or his hands and a baton. Quite small movements are all he needs to wake this or that instrument to life or to silence it at will. He has the power of life and death over the voices of the instruments; one long silent will speak again at his command. Their diversity stands for the diversity of mankind ; an orchestra is like an assemblage of different types of men. The willingness of its members to obey him makes it possible for the conductor to transform them into a unit, which he then embodies. [...] During a concert, and for the people gathered together in the hall ,the conductor is a leader. He stands at their head with his back to them. [...] His eyes hold the whole orchestra. Every player feels that the conductor sees him personally, and, still more, hears him. The voices of the instruments are opinions and convictions on which he keeps a close watch. He is omniscient, for, while the players have only their own parts in front of them, he has the whole score in his head, or on his desk. At any given moment he knows precisely what each player *should* be doing. His attention is everywhere at once, and it is to this that he owes a large part of his authority. He is inside the mind of every player. He knows not only what each should be doing, but also what he is doing. He is the living embodiment of law, both positive and negative. His hands decree and prohibit. His ears search out profanation. Thus for the orchestra the conductor literally embodies the work they are playing, the simultaneity of the sounds as well as their sequence; and since, during the performance, nothing is supposed to exist except this work, for so long is the conductor the ruler of the world. (Canetti 1978, p. 894-396)

Canetti's interpretation is more than an allegory or a parable. The conductor is endowed with absolute power in the specific situation of the performance. The aesthetic context of the concert results in a structure of social hierarchy, expressed in a division of space, the arrangement of people within it, and a directionality in the topography of the auditory. But only from the extension to socio-political contexts outside the concert hall does a field of musical-political metaphor emerge in which the power of the conductor can be transferred to other figures of leadership. The relation between music and power portrayed by Canetti arises from the specific context of European classical music – the musical epoch whose development extended from the 18th to the 19th century and which, among other things, gave rise to the

profession of the conductor. The similarity between the leader of the orchestra and the 'battle-ruler' did not go unnoticed by the music-interested public of the time. The conductor and musicologist Peter Gülken writes about the baton as a symbol of the new profession:

[T]he importance of the baton as a rather external accident [seems] overrated. Contemporaries felt differently; it did not go off without resistance, in which sensitivities against disturbing insignia of the exercise of musical power [...] played just as much a role as the field commander gesture, which Spontini embodied unequivocally and for which the young Wagner fervently envied the conducting Weber. (Gülke 1996, p. 1263 f.)

In his metaphorical function as a wielder of power, the conductor appears like a navigator, a cyberneticist *avant la lettre*.<sup>2</sup> In the discourses of cybernetics, however, he has left hardly any traces; the metaphors and analogies that entwine themselves around this figure rather fall back on the vocabulary of the military: "Just as the enlarged apparatuses [of the orchestra] demanded the elevated person [...] who is dispensed from the instrument, the developments of composing forced new forms of orchestral work and the one who can enforce them. [...] This had to be hard-earned if not [...] enforced by barracks-yard-like drill [...]." (ibid., p. 1264). Barracks and drill refer to the social mechanics of discipline, a process that seeks to enforce obedience and is close to hearing (in German, the etymological series of *Gehör-Gehorsam*). Discipline itself functions as a link between violence and power. The former acts as its point of departure, while it aims at the latter. Between music and discipline a field of overlaps and transmissions opens up, in which aesthetic and social factors intermingle. Music can thus become a metaphor for historical processes, while at the same time these can be read from it.<sup>3</sup>

This relationship can be illustrated by a parallel development: The change in the techniques of power in the transition from the 18th to the 19th century has been matched by a reshaping of musical practice. In this transition, the relationship between violence, power, bodies, voices, music, and discipline was reordered. Not least, it can be deduced that at the cradle of the classical epoch of European art music, a shift took place from a violent grip on the human body to a disciplinary one.

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<sup>2</sup> The term cybernetics derives from the old Greek *κυβερνήτης* (*kybernētis*), meaning steersman or navigator. Cybernetics is thus the science of steering.

<sup>3</sup> This tends to work best in hindsight, the 'prothetic' function of music that Jacques Attali proposed in *Noise – The Political Economy of Music* is debateable (cf. Attali 1985)

In *Discipline and Punish*, Michel Foucault traced the emergence of the epoch he named disciplinary society. The sites of this development are the prison, the school, the factory, and the army – the "environments of enclosure",<sup>4</sup> in which new forms of social organization were explored, from which an altered division of time, other means of seizing the human body, and a new kind of subjectivation were to develop. The disciplinary society historically follows on from feudalism and absolutism. In the context of *Discipline and Punish*, the two forms are compared on the basis of the penal system: While in societies of sovereignty the offense is seen as an attack on the body of the sovereign and the punishment is carried out as a proportional torture on the bodies of the criminals, disciplinary society designs an elaborate system of drills and confinements to breed the delinquent bodies into new ideal forms. While the transitions between the two forms are fluid and difficult to date, the French Revolution of 1789 to 1799 can be seen as the most obvious watershed in this process. According to Foucault, the changes in society took place primarily in the penal and educational systems, in the military, and in the spheres of labour and economics. But they affected Western societies as a whole between the 18th and 19th centuries, permeating deep into the fabric of the social.

*Discipline and Punish* is for the most part built around a metaphoric of the visual. At the focal point of the book stands panoptism as the central instance of observation: its surveillance techniques are executed through gazes, and the architecture of the prison, which is oriented toward visibility, forms its center.<sup>5</sup> However, in the deep structure of the book, auditory-musical metaphors can be detected. These make themselves felt when it comes to a reordering of time under disciplinary auspices and the effect of these techniques on the "docile bodies".<sup>6</sup> The mode of execution of disciplining consists, according to Foucault, in "an uninterrupted, constant coercion, supervising the processes of the activity rather than its result and [...] exercised according to a codification that partitions as closely as possible time, space, movement." (Foucault 1995, p. 137). From the monasteries and orders of the Middle Ages, the developing disciplinary power takes over the three elements of "establish rhythms, impose particular occupations, regulate the cycles of repetition." (ibid. p. 149). In the rooms of the

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<sup>4</sup> Gilles Deleuze, in discussion with Foucault, subsumes prisons, hospitals, factories, schools, and families under this term; cf. Deleuze 1992, p. 3

<sup>5</sup> Deleuze summarizes the primacy of the visual in his book on Foucault as follows: "The prison, for its part, concerns the visible: it not only claims to make the crime and the criminal visible, but itself constitutes a visibility, it is an order of light before it takes on a stone form [...]" (Deleuze 1992 B, p. 49)

<sup>6</sup> Cf. Foucault 1995, p. 135-169 ("A body is docile that may be subjected, used, transformed and improved." p. 136).

schools that emerged in the 18th century, "synchronized intervals are chanted" (ibid., p. 147)<sup>7</sup> while the successive instruction by a teacher is increasingly replaced with the "contrapuntal interplay of simultaneous group work". The crescendo toward which these developments are headed is what Foucault calls a "disciplinary polyphony of exercises" (ibid. p. 159).

One of the areas in which the new disciplinary techniques were to have a resounding effect (an area however that does not appear in Foucault's power-analytical investigations) is that of music itself. Baroque and Rococo as art forms of the society of sovereignty do not merely differ stylistically from the music of the 19th century. In the decades between 1780 and 1850, analogous to the paradigm shifts that Foucault has demonstrated for the penal system, the parameters of music production also change. Disciplinary society invented a new relationship to practice that did not leave musical praxis unscathed.

Paradigmatically, this change can be seen in the role of the *primo uomo* in Italian opera. Opera emerged as an art form during the late Renaissance and cannot be separated from the practice of castrating boys. In the figure of the castrato singer, one encounters an audio-aesthetic dispositif diametrically opposed to the bourgeois art music of the 19th century. The castrato received his special voice through an irrevocable intervention in his physicality, which combined the vocal cords of a child with the lung volume of an adult man, marking him throughout his life as deviating from the norms of the gender binary.<sup>8</sup> Musically, he was much more of an interpreter, in the sense of a creative interpretation of musical material, than later generations of opera singers were allowed to be.<sup>9</sup> The improvisational arts of the castrati reveal a different relationship to musical time and material than the strictly regulated tempos of 19th century music.

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<sup>7</sup> This is my translation from the German text of Foucault's book. In the English translation by Alan Sheridan it reads "It is a perpetual movement in which individuals replace one another in a space marked off by aligned intervals." which loses the musical connotations.

<sup>8</sup> The characteristics of a castrate body are summarized by opera scholar Hubert Ortkemper as follows: "Due to the elimination of the gonads, the growth spurt of puberty is absent, and the maturation of the bones is delayed. As a result, length growth continues after the age of 20, in extreme cases into the third and fourth decades. A castrato therefore often reaches a height above the average, arms and legs are too long compared to the torso. [...] If the temporally stretched growth finally ends, a further physical anomaly very often occurs. If the boy already tended to corpulence, the adult castrato, as soon as the bone maturation is completed, becomes extremely fat. In the numerous caricatures of the 18th century, we encounter the castrati either as spindly laths or as roly-poly fatties." (Ortkemper, Hubert: *Engel wider Willen. Die Welt der Kastraten*, Munich: dtv 1995, p. 40).

<sup>9</sup> Improvisations or coloraturas were an integral part of baroque opera. The 19th century developed a different relationship to the musical text and the composer as author: "It was not politics that drove the castrati from the opera stage, but composers who could and would no longer integrate their vocal art into their work." (ibid., p. 341)

Around 1600, drastic changes took place in both secular and sacred music. Polyphonic singing had already played an important role at the Italian princely courts for quite some time and had triggered a desire for high voices among the public. Musicologist Susan McClary writes of a "17th-century addiction to high voices" (McClary 2002, p. 208) that was initially satisfied by female singers, at least in the realm of secular music. However, due to a constellation of patriarchal religious and social reasons specific to Christianity, women were strictly forbidden to sing in public, at least as far as the field of sacred music was concerned. The Apostle Paul's Corinthian letters, written around 50 A.D., note: "As in all the churches of the saints, let your wives keep silence in the church; for let them not be permitted to speak, but let them be subject, as the law saith." (1 Cor 14.34 in Luther's bible translation). The triumph of the polyphonic art of singing and the high voice, also in church music, brought about various emergency solutions; for example, one made do with the hiring of Spanish falsettists, who held a kind of monopoly position for decades. In 1601, there is documentary evidence that the castrato Girolamo Rosini sang for Pope Clement II, which earned the singer an engagement in the Sistine Chapel (cf. Ortkemper 1995, p. 23). Within a few years, all soprano voices in Italian church choirs were filled by castrati. The specific timbre of their voices struck a chord with the spirit of the times, and the fascination they exuded was so great that they became an indispensable part of the just-developing art form of opera.<sup>10</sup>

Early opera was an attempt, born of the spirit of the Renaissance, to revive ancient Greek theatre. It was initially performed only on special occasions at princely courts, but popularized over the decades so that soon every major Italian city had its own opera house. The first one opened in Venice in 1637, which soon found imitators throughout Europe. Italian opera remained the western world's most popular form of musical performance until the 19th century, and it was fundamentally dependent on castrato singers. Most of them came from poor backgrounds. They usually underwent surgery at the age of eight, before the onset of puberty. Like all surgical procedures of the 17th century, castration was risky. Hygienic conditions were poor, and the risk of inflammation and complications was high. Officially, the procedure was strictly forbidden and was punishable by death or excommunication from the church. Because of this prohibition, castrations were often performed unprofessionally, and it is impossible to give figures on the number of castrates. However, it can be assumed that

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<sup>10</sup> McClary writes of this fashion phenomenon: "Parallel to the increasing demand for male soprano voices in seventeenth-century opera, a growing aversion to lower male voices developed." (McClary 2002, p. 212)

between the beginning of the 17th and the middle of the 19th century, hundreds of male children were castrated annually in rural Italy, without knowing at all whether they would become great singers.<sup>11</sup>

Contemporary sources speak of a fascination not only with the sound of their voice, but also with their androgyny. The Baroque seems to have cultivated its own relationship with those who occupied the interstices of gender difference. Ortkemper writes: "In the castrati, the hermaphroditic pipe dreams of the Baroque were fulfilled. The search for the philosopher's stone, which preoccupied the speculative thinking of the time, was the search for a mythical symbol that was half male, half female. In the castrati this ideal seemed to be found." (Ortkemper 1995, p. 85). But this fascination was not to last. Already the musicological writings of the Enlightenment philosopher Jean-Jacques Rousseau speak not only of a deep disgust with the practice of castration, but also with the appearance and voice of the castrati. In his dictionary of music we find this passage:

Incidentally, the advantage of a beautiful voice in castrati is offset by many other losses. These people, who sing so beautifully but without warmth and passion, are the most boring performers in the world on the stage; they lose their voice very early and get a repulsive pointed belly. They speak and articulate worse than normal people, and there are even letters like 'r' that they can't pronounce at all. (Rousseau 1969)

During the transition from the society of sovereignty to disciplinary society, not only musical dispositifs changed, but also notions of sexuality underwent a restructuring. Regarding gender difference, the castrato takes on a third position, which cannot be located on either side of the gender binary. In the opposition of two genders, they act like a noise, an ambiguity. The sexual indifference implied in the figure of the castrato no longer undergoes a mythicizing revaluation, as it still did in the Baroque period; rather, the hermaphroditic echoes of the castrato's body are declared an anomaly that no longer fits into the increasingly normative grids of natural sciences and jurisprudence. In the preface to Herculine Barbin's memoirs that he published in 1978,<sup>12</sup> Foucault points out that until the eighteenth century it was common practice for hermaphrodites, once they reached marriageable age, to choose their own gender. This was to change:

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<sup>11</sup> Cf. Ortkemper 1995, p. 33 f.: "The operation was strictly forbidden everywhere in Italy. But everyone knew that it had been carried out thousands of times, because where else could the many castrates have come from? The operation was not officially taken note of."

<sup>12</sup> Barbin (1838-1868) was a french intersex person who was assigned female at birth but got her civil status changed to male at the age of 21. Nine years later she took her own life.

Biological theories of sexuality, juridical conceptions of the individual, forms of administrative control in modern nations, led little by little to rejecting the idea of a mixture of the two sexes in a single body, and consequently to limiting the free choice of indeterminate individuals. Henceforth, everybody was to have one and only one sex. [...] from the legal point of view, this obviously implied the disappearance of free choice. It was no longer up to the individual to decide which sex he wished to belong to, juridically or socially. Rather, it was up to the expert to say which sex nature had chosen for him and to which society must consequently ask him to adhere. (Foucault 1980, p. viii f.)

Of course, castrati are not hermaphrodites or intersex people; their physical disposition is the result of surgical intervention, not innate. But it is of interest that in the period under consideration here the parameters of a normative heterosexuality were shifting as well as those of a specific form of singing, and that both processes were intimately intertwined in the most popular of musical performances of the time. In the bourgeois society of the 19th century, there is no longer a place for castrati. The violent overthrow of the *ancien régime* created cultural precedents that reverberated in the coming decades. In his theory of the voice, Mladen Dolar notes for the years of the Revolution that

[i]t is highly indicative that one of the first decrees of the Revolution was the prohibition of public singing by castrati, who became the emblematic and monstrous figureheads of the perversity and corruption of the *ancien régime*, the embodiments of its degenerate *jouissance* epitomized by the voice. They were not only the heroes of the baroque and classical opera (up to and including Mozart), but also the figureheads of Catholic music; their cradle and sanctuary was the Sistine Chapel, the core of perversity at the very heart of the Church. (Dolar 2006, p. 51 f.)

Finally, it was the Catholic popes who allowed the history of castrato singers to continue into the 20th century, preserving this practice that had been overtaken by the *zeitgeist*. Until 1903 castrati sang in the Sistine Chapel, the abolition of this custom was obtained only through a reform of church music carried out by Pius X. At that time, Alessandro Moreschi, born in 1858, was choirmaster of the Sistine Chapel. The only known recordings of a castrato voice were made by him. His *Ave Maria*, recorded on gramophone records in 1904, is the only available audio document that can give an idea of the sounds of that bygone era.<sup>13</sup>

The practice of castration showed an entirely different relationship to discipline than the bourgeois work ethic suggests. Castrato singers did have to practice in a disciplined manner; between the ages of eight and 16, their lives consisted of little else. But the serious difference from later music education practices lies precisely in the irrevocable modification that made

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<sup>13</sup> Cf. Ortkemper 1995, p. 251 f.



their vocal disposition possible in the first place. According to Foucault, during the transition to disciplinary society, the grip that discipline and practice had on the body changed. Instead of making a physical modification the basis of virtuosity, the body and its capabilities were subjected to an increasingly narrow grid of drills based on abstract time; until gradually a new understanding of the body emerged:

Through this technique of subjection a new object was being formed; slowly, it superseded the mechanical body - the body composed of solids and assigned movements the image of which had for so long haunted those who dreamt of disciplinary perfection. This new object is the natural body, the bearer of forces and the seat of duration; it is the body susceptible to specific operations which have their order, their stages, their internal conditions, their constituent elements. In becoming the target for new mechanisms of power, the body is offered up to new forms of knowledge. It is the body of exercise, rather than of speculative physics; a body manipulated by authority, rather than imbued with animal spirits; a body of useful training and not of rational mechanics but one in which, by virtue of that very fact, a number of natural requirements and functional constraints are beginning to emerge. (Foucault 1995, p. 155)

What is at stake here is a new concept of the human body as a carrier of forces that is susceptible to training. Above all, it is about a natural body that is sacrosanct as such. The voice that this body possesses is to be disciplined, and this very body is to be left in its nature-given unity – or rather, it must be adapted to the ideal conception derived from this unity. The enlightened, humanistic and disciplined subject ideally has an uncastrated body.

The story of the castrato singers reveals a junction in occidental musical tradition in which aesthetics and violence are interwoven in a peculiar way. It belongs to a realm in which the thinking of the auditory leaves behind the intuitive relation of noise and violence and establishes a new frame of reference with different coordinates. In this system, violence is not to be associated with excessive noise; rather, it becomes a tool that makes a highly aestheticized form of music possible in the first place. From here, a space can be conceived in which various principles of structuring interact, forming caesuras, making incisions, or creating new nodes from which previously unknown strands emerge. The story of the castrato singers can thus be understood on different levels: as a real, physically destructive caesura (the cut in the *ductus deferens*)<sup>14</sup> which, however, produces a new vocal disposition, from which a new audio-aesthetic practice (the opera) develops, whose genealogy is in turn transformed by a historical incision (development of disciplinary powers, bourgeois revolution, and the emergence of the composer as the author of music to be faithfully reproduced). Thus, violence

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<sup>14</sup> I.e. a *real* castration that does share very little with the psychoanalytical understanding of this operation. It is the actual transformation of a body – a metamorphosis – not a metaphor.

can be thought of not only as a simple but effective means of structuring the social, but also as a direct grip on the body and its assets; while power can denote more or less complex forms of structuring that can affect both the *corps social* and the *corps individuel*. Music or, in the broadest sense, audioesthetics are structurations of the audible. In the auditory field of the social, the two forms interact – music emerges as much from acts of violence and power structures as it can have power-like and violent effects on the social.

This is where the role of music in public space, beyond the sphere of the private and the semi-public of the concert hall, comes into play. The focus here is not so much on the interplay of power, resistance, and representation as it is staged, for example, in the political use of music: in demonstrations, acts of state, or celebrations, music is indeed used in a thoroughly functional context, in that it can be employed as a vehicle for ideologies, protest, or commercial interests. What these examples have in common is an eventful character that usually remains limited in time and place. Rather, music also enables territorializing functions, which will be discussed in the following and which historically could only unfold through its technical reproducibility. In this context, territorialization corresponds to an acoustic occupation and marking of space, which is accompanied by a rhythmization of time. This function maintains a connection to the disciplinary techniques described by Foucault. It becomes explicit in the genesis of functional music. Its roots can be found in the military-entertainment complex described by Friedrich Kittler and Steve Goodman:<sup>15</sup> the node where technology, techniques of power, violence, aesthetics, and economics produce hybrid forms that permeate the everyday life of society.

George Owen Squier was chief of the U.S. Army's intelligence corps during World War I. A graduated physicist and retired major general, he became interested in alternative uses for the telephone network after the war ended. In 1922, he founded Wired Radio, for which he "secured a patent on the transmission of music over telephone or power lines." (Neitzert 2014, p. 187). In contrast to the medium of radio, which was aimed at the private sphere, Squier was more interested in highly frequented public spaces, according to sociologist Lutz Neitzert. Sound recording and telephone transmission were merged by Squier into a new medium that was in direct competition with radio and the jukebox. In 1934, shortly before his death, Squier gave the company the name 'Muzak Corporation', a neologism composed of 'music' and

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<sup>15</sup> Cf. Goodman's *Sonic Warfare* (2010) and Kittler's *Rock Music: A Misuse of Military Equipment* (in: Kittler 2014)

'Kodak,' a corporation he admired for it had succeeded in "turning high tech into a product suitable for everyday use." (ibid). Muzak's business model of providing pre-programmed entertainment music to businesses (specifically factories and offices, the modern successors to the enclosure milieus described by Foucault) would achieve its commercial breakthrough during World War II. Under new management, profitable cooperation with the arms industry was sought. "Burriss-Meyer [...] was commissioned by the U.S. military to acoustically boost American weapons production. Music systems were hastily installed everywhere in the armaments forges [...] - and so it came about that henceforth workers welded their tanks and torpedoes to sweet string sounds and discreet swing." (ibid. p. 188). The principles of Taylorism and the logic of assembly line work were brought into the auditory by Muzak from the perspective of increasing efficiency, where they were intended to enable programming of temporal sequences and mood progressions. This gave rise to a specific form of music, a genre of its own, which Neitzert characterizes thus:

[I]nstrumental pieces (the use of the human voice runs counter to the desired purpose because it draws too much attention to itself), medium tempos, renunciation of blaring brass, virtuoso solos and percussion swirls [...]. Muzak perfected the result recording-wise – for example, by filtering out bass and treble or balancing loud-quiet differences. [...] Special attention was paid to the control of tempo and rhythm. If there is one effect of music on the human organism that can be clearly demonstrated, it is the transfer of musical rhythms to the physical motor system and through this to our mood. [...] 'Stimulus Progression' is a neologism from the muzak jargon. According to this recipe, which is strictly guarded as a company secret, one orients oneself to the human biorhythm by compiling 15-minute medleys, each consisting of two to three-minute individual titles, which are varied in the course of the day and which are supposed to develop their effect imperceptibly [...]. Muzak supplemented the 'Stimulus Progression' with the principle of 'Quantum Modulation'. It is intended to ensure that a uniform, sonically homogeneous atmosphere is always maintained during the transition from track to track. (Neitzert 2014, p. 189)

In the USA in particular, this form of background music was to determine the acoustics of production and consumption for decades, so much so that Muzak and background music remain synonymous in the English-speaking world to this day. Over time, however, the ubiquity of Muzak developed into a symptom of crisis – the emphasis on individualism in the wake of the neoliberal restructuring of the economy, and thus of the world of work, made the acoustic uniformity of Muzak's products noticeably obsolete. Goodman has described this paradigm shift as an effect of changing technologies of power: "From the mid-1980s onward, Muzak's strategy of sonic intervention shifted as a response to the already sensorially overloaded

environment. Muzak in this sense provides a microcosm of what Deleuze described as the shift from disciplinary societies to societies of control." (Goodman 2010, p. 144).

The characteristics of Muzak can be inserted into the topology of the auditory field by means of the spatiotemporal metaphors used by Foucault and Deleuze in their descriptions of disciplinary and control societies. *Stimulus Progression* takes on a rhythmization of the workday that is analogous to the fixing of rhythms by disciplinary power described by Foucault, with its increasingly finely differentiated divisions of time, movement, and space. What Muzak introduced into this arrangement is, on the one hand, the element of dynamic clocking. A section of time is not divided by a mere sequence of signals but is subjected to a sliding intensification of the subjective experience of time through changes in tempo.<sup>16</sup> On the other hand, this acceleration and deceleration uses a form of music as its medium which is meant to be perceived as gentle entertainment rather than as a draconian means of disciplining and conforming to a predetermined work rhythm. Outside of workplaces, factories, and traditional enclosure milieus, Muzak found use as that proverbial elevator or background music that was intended to function as ambience and acoustic wallpaper in the sense of Erik Satie's *musique d'ameublement*.<sup>17</sup> The shift in the strategies of functional music mentioned by Goodman that began in the 1980s resulted not least from a change in listening habits and a concomitant decline in the willingness to perceive the uniform products of Muzak Corporation in the intended form of acoustic background. They began to push themselves into the foreground and were consequently perceived as an annoyance.<sup>18</sup> Although, according to Goodman, Muzak anticipated the general social incorporation into an "ubiquitous sound culture",<sup>19</sup> it was precisely its character of shallowness and unobtrusiveness, as well as the impression of

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<sup>16</sup> "Each 15-minute segment of MUZAK contains a rising stimulus which provides a logical sense of forward motion. This affects boredom or monotony and fatigue." Muzak Corporation advertising slogan from the 1960s, quoted from Schafer 1994, p. 97

<sup>17</sup> Cf. Kahn 1999, p. 179

<sup>18</sup> During the 1970s, Muzak increasingly turned into a combat term for the forming 'countercultures' of Industrial, Punk and Noise. A reference can be found on the cover of Throbbing Gristle's first LP: "We also hope to continue our film work and to extend into a new area of preparing customized tapes of piped music for shops and factories [...]" (Throbbing Gristle 1977). In an ironic gesture, in 1979 the band also released a cassette titled *Industrial Muzac*, containing factory-like noises as the proposed soundtrack for a factory. Einstürzende Neubauten also referenced Muzak on their 1983 LP *Die Zeichnungen des Patienten O.T.* in the song *Die genaue Zeit*: "Alles wird Muzak / Alle werden gleich / Wie spät mag es sein? Die Macht ist ein laufendes Tonband" ("Everything becomes Muzak / All become the same / What time may it be? / Power is a turning tape")

<sup>19</sup> Cf. Goodman 2010, p. 144

centrally controlled acoustic uniformity, that it had to give up in order to endure in a changing media landscape.

Muzak's aesthetic turn dissolved the boundary between musical foreground and background by drawing on the generally available pool of popular music. From then on, the company's unique selling point was to market playlists tailored to its respective customers. These playlists were to underline the special character or identity of the respective company, brand or situation through the more or less careful selection of genres, performers and songs.<sup>20</sup> This form of audio branding should form an acoustic image of economic organizational units and provide the 'soul' of the company with its musical signature. As far as music, like all sound, can be defined as a vibration of air molecules, the simulacrum of a concrete breath of the abstract company can be heard in this operation: an attempt to put its 'psyche' into work.<sup>21</sup> In this can be seen one of the characteristics of functional music in the context of the control society described by Deleuze. Control here is understood as a refinement of disciplinary rhythmization into a modulation. While a modulation in music describes the transition from one key to another, in communications engineering the term is defined as the imprinting of one signal on another. A low-frequency useful signal, in the case of a radio transmission of voice or music, modulates a high-frequency carrier signal, which is in turn demodulated by a receiving device. This process is used by Deleuze as a metaphor for the operation of control, which resembles a "universal modulation" that replaces the rigid clockings of discipline with a flexible glide. "[T]he corporation, the educational system, the armed services being metastable states coexisting in one and the same modulation, like a universal system of deformation."<sup>22</sup> The disciplinary rhythm of time is refined by control into a microtonality of frequencies. While a rhythmization is quantitatively in the realm of countable time, i.e., within the possibilities of direct bodily response (the physical effects of a rhythm, matching one's pace to a musical measure, etc.), modulations are contained within an order of time perceived as sound or pitch. In Deleuze's terminology, modulation as a medium of control brings a moving, fluid element to the rigid structures of discipline, it changes the aggregate state of power: "Enclosures are molds,

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<sup>20</sup> Since this text was originally written, streaming services like Spotify have further refined this technique. Now every person with a smartphone can be the potential target for algorithmic music selection or the curator of mood stabilizing playlists.

<sup>21</sup> Just as the ancient Greek *ψυχή* (*psychē*), analogous to the Latin *anima* or *spiritus*, originally refers to breath, that is, to moving air.

<sup>22</sup> Deleuze 1992, p. 5

distinct castings, but controls are a modulation, like a self-deforming cast that will continuously change from one moment to the other [...]."<sup>23</sup>

The functions of Muzak as background music, as 'stimulus progression' and 'quantum modulation' can be understood as an audio-aesthetic model of the considerations made here. What Muzak was intended to provide was a comprehensive and clearly regulated spectrum of frequencies, a concert pitch of efficiency that would synchronize and relate the flow of activities to an affective mood during a workday. In its modern use, functional music has largely left behind this uniforming function aimed at immediate activity. Today it aims at the mood of places, environments and abstract entities such as companies and brands; at their acoustic identity and at a certain 'auditory image' to be associated with them. It delivers their ideophony.<sup>24</sup> At the same time, what used to be Muzak, background- or functional music has developed into different genres and musical niches, ranging from ambient through 'easy listening' to vaporwave. These sometimes ironic and/or post-ironic 'genrefications' hint at the fact that not only the division between foreground and background music, but also between wage work and leisure time have become increasingly porous in the last few decades.

In 2011, Muzak Corporation was acquired by Mood Media, which dropped the brand name in 2013. The company added 'multi-sensory branding' to its functional music business, offering its clients "scent marketing" among other services.<sup>25</sup> One of the areas of application for Mood Media's products is Hamburg's main train station. Here, classical music was first played over outdoor loudspeakers in a pilot project in 2002. In 2014 this program was replaced by electronic lounge music:

Initially, the intention was to valorize the area through music and to increase the subjectively perceived sense of security for the travellers. Another effect was quickly noticed: the number of groups of people who had settled there and made the station their everyday place of residence quickly became smaller. (Hirsch 2017, p. 214)

The recourse to the 'euroclassical' canon for providing public spaces with music shows an ambivalent relationship both to the music used and to the groups of people who are located in the public sphere. In a 2011 issue, the tabloid Bild-Zeitung reduced this process to a populist

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<sup>23</sup> Ibid, p. 4

<sup>24</sup> Ideophony: ideology in sonic, hearable form.

<sup>25</sup> Companies don't just have a psyche, they have a scent. About "Scent Marketing" the following can be found on the Mood Media website: "With their unique ability to conjure strong memories and emotional associations, fragrances for business via scent diffusers are a powerful tool. The right aromas can encourage customers to linger longer, spend more, and become loyal advocates of the brand." <https://moodmedia.com/au/scent/>

formula that, precisely in its falsity, reveals the deeper truth of a sadistic desire: "Classical music has been sounding at Hamburg central stations since 1998. It is supposed to relax travellers and drive away uninvited guests – junkies find the high violin tones painful. But that effect has worn off."<sup>26</sup> In this sense, classical music could be construed as a direct form of acoustic torture, a pain-inducing weapon that acts on undesirable groups of people. While this linkage says much about the sadistic potential of certain social circles, it says very little about a relationship between music and power that actually exists in this form. As an agent of affective mobilization, music is fundamentally embedded in a complex network of relations – even in its intended deterrent effect. On the use of music against 'loitering youths', which has been common in the UK for decades, Marie Thompson writes:

Classical music's deployment as an everyday sonic weapon exemplifies the entanglement of affective, discursive and semantic registers: its extramusical associations and symbolic connotations (e.g. of 'propriety', 'civility', 'oldness') both inform and are reinforced by classical music's use as audio-affective deterrent. However, affective states and bodily capacities are 'not linear effects of apparatuses and the ideas and intentions that make them'. [...] [S]ounds affectivity is neither subjective nor objective but contextual, arising in situ. By extension, there is no guarantee that this music will generate the affections it is intended to in the bodies that it targets – that is, irritation and annoyance. Affect exceeds such determinations. (Thompson 2017, p. 73)

The use of music from the classical canon can therefore only have the intended dispersing effect to a limited extent and in a mediated manner. In the case of Hamburg's main train station, other factors can be listed that have led to a shift in the drug scene, e.g.: Opening of counseling centers, increased police checks, presence of security services, etc. In this case, the segregating effect of music is more a phantasm than a real effect. But it is precisely this phantasm that is revealing, because in it shows both an audiology<sup>27</sup> as a discourse conducted through music, and an ideophony that seeks to make music an agent in power structures concerning the public. In this case, there is a juxtaposition of social groups that are given certain attributes. On the one hand, a bourgeoisie that is assumed to have an affinity for the audio-aesthetics of the classical canon (to which it is supposed to respond with aesthetic pleasure and subjective feelings of security), and on the other hand, a 'plebs' that is imagined

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<sup>26</sup> Gehrmann, Laura: »So empfängt Hamburg seine Gäste«, in: *Bild*, 14.6.2011, <https://www.bild.de/regional/hamburg/alkoholmissbrauch/saeufer-schnorrer-obdachlose-hamburg-hauptbahnhof-empfang-gaeste-18353470.bild.html>

<sup>27</sup> Audiology: in this case, an ideological form of discourse on music and the sonic.

as intrinsically so disruptive and noisy that the presence of bourgeois audio-aesthetics causes it physical discomfort and is perceived as an order to vacate the scene.

Public space, in this case a train station, can be read as a territory where different social classes inevitably encounter each other and which is a site of power struggles on an auditory level. One aspect of this struggle is the decision about what is perceived as noise. Thus, correspondingly, the opposite of centrally controlled functional music, the introduction of an individual musical practice into public space, is regulated, perceived as noise pollution, or subject to prohibitions. An auditory division of this space along the boundary of music and social noise would be analogous to Aristotle's division into rationally speaking beings participating in the *λογος* (*lógos*) and those possessing only the primitive voice of the *φωνή* (*phōnē*). According to its functional use, 'classical' music fits into this logic by providing a phantasm of the values associated with it (propriety, order, stability); a musical ideogeme projected into the public sphere. Pierre Bourdieu polemicized against this understanding of music in *Distinction*. In his remarks on music as the most spiritualized of all the arts, the ideogeme of *music* can be rediscovered – a highly specified definition of audio-aesthetic practice that is supposed to denote *pars pro toto* music *par excellence*, declaring anything that departs from its aesthetic set of rules to be a deviation from the norm:

Music is the most 'spiritual' of the arts of the spirit and a love of music is a guarantee of 'spirituality'. One only has to think of the extraordinary value nowadays conferred on the lexis of 'listening' by the secularized (e.g., psychoanalytical) versions of religious language. As the countless variations on the soul of music and the music of the soul bear witness, music is bound up with 'interiority' ('inner music') of the 'deepest' sort and all concerts are sacred. For a bourgeois world which conceives its relation to the populace in terms of the relationship of the soul to the body, 'insensitivity to music' doubtless represents a particularly unavowable form of materialist coarseness. [...] Music represents the most radical and most absolute form of the negation of the world, and especially the social world, which the bourgeois ethos tends to demand of all forms of art. (Bourdieu 1984, p. 19)

The mere fact that music has been relegated to a means of occupying an acoustic background traces the temporal gap that lies between the writing of Bourdieu's study in the 1970s and the more or less current situation of public space. The values attributed to *music* are no longer as much distinctive features of the bourgeoisie as they have become building blocks of a sound design whose brand message consists of security dispositifs and the acoustic enhancement of environments. This is one of the reasons why the classical music provided at Hamburg's central train station was replaced by lounge music from Mood Media's programs. The audio branding of a dignified bourgeois environment was replaced by the image of relaxed but tasteful



urbanity. What has remained is the attempt to control the public sphere through sonic territorialization. As in the case of sound design as a general media technique, a message is communicated unidirectionally, with the difference that it is not scattered on multiple information channels but concentrated on a concrete place. This acoustic occupation amounts to a paradigmatic opposition: of noise and music, of noise and sound, of desired and undesired social behavior and status, of economic reason and destitution. Within this paradigm, Noise can only appear in its fixed definition as the negative Other, as the object of prohibitions, regulations, and expulsions. But every paradigm, every juxtaposition inevitably also produces a distance, and thus an in-between space, a tension and an ambivalence in which disturbance, security, noise and music can change places. Just as the delimitation between noise and music is an unfinishable process, so too the transitions between power and violence, between discipline and control, are not fixed in time or space. Every power, once it reaches a crisis, can turn into violence. Any control requires prior disciplining, much as musical modulation develops within the temporal structure of tempo and meter. As Foucault writes, "[Power] is the name that one attributes to a complex strategical situation in a particular society." (Foucault 1978, p. 93). The idea of a central instance of power misses the complexity of this situation, just as music as a concept misses the complex assemblages of audio-aesthetic practices that it actually seeks to subsume. "Where there is power, there is resistance" (Ibid, p. 95) – and where there is 'music', there is 'noise'.

Just as there cannot be a single definition of music from which all further audio-aesthetic practice can be derived, there is no central definition of noise. Noise can neither be reduced to an acoustic form of violence, nor does it merge into a definition as resistance in the auditory. If power is omnipresent in Foucault's sense, then it produces a multiplicity of resistances: "possible, necessary, improbable; others that are spontaneous, savage, solitary, concerted, rampant, or violent; still others that are quick to compromise, interested, or sacrificial; by definition, they can only exist in the strategic field of power relation." (Ibid, p. 96). Analogously, manifold forms of noise are conceivable, but they can only be labelled noise insofar as they are placed in relation to music, sound and order. Or, more precisely, Noise as noise and disturbance can make its effects perceptible only in relation to a particular audiology and ideophony of the social. In the auditory field of the social, a space of relations between strategies of power and potentials of resistance unfolds. In this space, nodal points and lines of intersection can be located, formed from metaphors that allow to sketch its topology – e.g.

when the extent of socio-political conflict potentials is captured in terms of tension (dissonance) or harmony (consonance), through the synonymy of turmoil and noise (social noise), or through the more or less unconscious assignment of certain audio aesthetics to social groups and classes. In this space, the intentions and affective effects of audio aesthetics matter more than the sociocultural and aesthetic attributes assigned to them. Thus, music can become a weapon, a tool of torture, or a means of control, just as noise can take the place of music.

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