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Introduction: Listen Closely

I just want to make it clear from the beginning that I am not going to fix your spam problem. Part of the perks of doing research on spam is having to explain it, and then getting people to want you to fix their email spam. "Oh really? I have so much spam in my inbox you have to help me!" Every. Single. Time. But then, after a while, I realized how deeply rooted people's understanding of this media phenomena is—that it is that thing that should be shoved into a folder to be forgotten forever. This was one of the strongest indications of how much this topic was neglected, but at the same time brought to the fore how spam elicited very strong, disgusted emotions from people. But it was not only overlooked by my family, friends, and those people who start to talk to you in the tube at 8 A.M. before you had your coffee, but academics as well.

Despite being an inseparable part of our lives, we actually know very little about this media phenomenon. Spam is a 'thing' that computer scientists should deal with to make our lives easier and more efficient. But what exactly *is* spam? Is it a format? Is it a software? Is it a Nigerian prince? Or is it Monty Python's excellent sketch? It is all of these and none of these altogether. Like most social sciences scholars, I am not going to give you a short and simple answer; this is why this book is here. But what I am going to do throughout the following pages is show you the politics of making spam, well, *spam*. I am going to show you how spam has always existed, received different names in different periods, and in fact is extremely important to the way we understand ourselves and our surroundings.

So how does spam relate to our everyday lives? Think about it this way - We process things every day. We process different kinds of information to make sense of the world: the experiences we had on our last vacation, the last conversation we had with our broadband supplier (although, we wish we could forget that one), and the details of that media course we took at the university. These processing procedures are driven by our background, standards, experience, emotions, level of (good) coffee in our blood and other factors. But these procedures also give meaning and order to people, things, and events; which in turn affect the way we form our identity, make decisions, behave, and feel. For example, in January 2016, I watched the new X-Men film, *Apocalypse*, and after processing it, I realized I was bored with superhero films and would probably not watch another one any time soon. That changed after watching *Deadpool* a few months later.

Media technologies also process things. People design media technologies to measure, collect, categorize, organize, sort, filter and order different forms of information, from text to images and sound. As I am writing this paragraph in Microsoft Word Processor, the computer software is receiving the input I give it through my keystrokes and translating the information into English letters. These letters appear on the 'front end' of the screen simultaneously to my button pushes, according to instructions and standardised formats (Arial font, size 12, 1.5 line spacing) and other conventions (white 'paper', left to right, 'normal' margins) developed and standardised by Microsoft. Whether conducted by humans or machines, processing is never neutral: it is a mode of power.

It is exactly this power behind media standards, categories, and processes that this book aims to reveal, especially those portrayed as deviant, evil and unimportant. Spam and noise are usually conceived as 'technical' media categories and are taken for granted. Engineers and computer scientists present these categories as machine disturbances that should be eliminated. But, even if we try to ignore them, both spam and noise are part of our everyday life experiences with media. Who created these categories? Why and with what rationale? Who does this category serve? How do these categories affect the way we engage with and understand media? To address these questions, this book takes a few steps back and listens to the whole symphony, beyond the conventional understandings of these categories.

The evolution of the concept of spam has involved conflicts, standardization, competing arguments, and specific infrastructures that helped shape our current understanding of spam. It is precisely these procedures that should be questioned and re-told in a way that will reveal how we reach our 'common sense' perceptions of this phenomenon, and the various motives and factors involved in the way it has become a 'truth' discourse.

In his documentary *This Film is Not Yet Rated* (2006), Kirby Dick exposes the politics behind the American Film Industry's rating system. The Motion Picture Association of America (MPAA), as the documentary shows, is a 'voluntary' organization that rates all the films that come out to the cinema. For each film, the MPAA provides a rating according to the age group they think the content fits. Ratings range from: G (General Audiences), PG (Parental Guidance Suggested), PG–13 (Parents Strongly Cautioned—some material may be inappropriate for children under 13), R (Restricted—under 17 requires accompanying parent or adult guardian), and the harshest rating—NC–17 (No children under 17 admitted). Dick shows the politics behind these rating standards and their consequences. He shows how the big film studios pay money to the MPAA board, which allows their films to get more lenient ratings than independent studios.

In one of the interviews in the documentary, Matt Stone, one of the creators of *South Park*, argues that they received a completely different treatment from the MPAA for their film *Orgazmo* (1997), a sex comedy produced in an independent film studio Troma Entertainment, and *South Park: Bigger, Longer, Uncut* (1999), which was released on Paramount Pictures. With *Orgazmo*, Stone and his co-creator Trey Parker got no explanation as to why they received NC–17 rating, while with *South Park* they received a call from the MPAA telling them which scenes to cut or edit to get a better rating. Part of the politics that Dick shows is how LGBTQ+ sex scenes are more strictly rated than similar scenes portraying heterosexual sex scenes. For example, Kimberley Pierce, the creator of *Boys Don't Cry* (1999), talks about the way scenes of one of the lesbian characters portrayed had to be cut from the film. Pierce says there was no explicit sexual visualisation in the film, only a close-up on the protagonist (Lana)'s orgasm. In addition, Dick shows how scenes that portray violence get much more relaxed ratings. In this way, American conservative values are baked into the way films are made; and since much of the Western world sees at least part of these films, their influence is significant.

Ratings matter because they affect distribution of films and how they can be promoted. For example, if a film gets the notorious NC-17 rating, it will not be screened as widely and will not get ads in various media to promote it. Importantly, ratings affect the way we understand different cultural and social categories such as sex, gender, violence, relationships, and ourselves. Ratings involve decision-making processes around standards and values that affect the way they are mediated. But what happens when these decision-making processes are automated and delegated to machines and algorithms? What happens when it is not only narrative that is being reordered, but the architectures and interfaces we engage with in our mediated lives? What kinds of things are hidden from us and how does hiding them affect how we behave, think, and imagine? Just because the decision-making process becomes more automated, does not mean that there are no humans behind such procedures. It is just much more difficult to separate them and point to their bodies. So let us dive into the wires, shall we?

Don't Be Evil! But I'm Not!

The main objective of this book is to make a theoretical intervention that develops an understanding of the processes that (re)produce deviant media. Spam and its earlier configuration, noise, need to be understood as key media categories that are used as powerful instruments to influence the way people and spaces are processed and (re)configured through media. The power of using these categories lies in their ability to influence the way boundaries are drawn between what is human and non-human, what is a legitimate behavior and importantly—what is sociality.

Media Distortions begins with several interrelated assumptions. First, that there is a lack of scholarly work on spam. This assumption is important, as many media and communication scholars do not consider spam to be a media phenomenon at all. When I started to search for academic material on spam, I was surprised by how few people have engaged with the topic and realized that most of the texts written on spam have originated from computer scientists. The problem with those texts is that they already had a rough idea of what spam is or is not, whereas I wanted to dig deeper. These scholars tend to adopt conventional presumptions about what constitutes media and communications, without questioning *why* and *how* these categories and practices have been categorized as such.

These questions are exactly what I am focusing on in this book. I aim to listen beyond the statistical measures scholars use to naturalize power relations embedded in creating spam as a media category. Instead of understanding spam as a binary topic, I wanted to show the nuances and struggles behind the way it has been created. I realized that there is a real need to have more understanding of spam from the perspective of the social sciences and humanities.

When I started my research, Finn Brunton, a media and communications scholar from New York University, published the first thorough work on spam. However, Brunton's argument that "spamming is the project of leveraging information technology to exploit existing gatherings of attention" (2013: XII), explains only part of the story. Spam, and other deviant media categories such as noise, are indeed an attempt to harness people's attention. However, constructing specific behaviors as wanted and unwanted serves as a control mechanism to shape the way people are filtered through, engage with, and understand media technologies. Spam and spamming have become meaningful through processes of categorization (or lack thereof as I will show in Chapter 4) and their operationalization. Thus, spam is much more than a battle for attention; it is used to produce and manage people's bodies, preferences, behaviors, and understanding of mediated territories. Therefore, *Media Distortions* plays a different tune.

Which leads me to the second assumption. Brunton (2013) framed the time period of spam in three 'epochs': first, computers and networks before the internet between 1971 and 1994; second, the introduction and commercialization of the World Wide Web between 1995 and 2003; and third, the introduction of social media from 2003 until today. In this way, Brunton focuses mainly on the (conventional) way spam functions on the internet. However, this book takes spam as a much larger project of (re)producing people and territories, and these are not confined merely to the internet. Therefore, instead of examining 'the usual suspects' of the spam media category, as Brunton does, such as chat rooms in USENET[1] and Nigerian Princes scams, I examine the ambiguity of spam and show how flexible and permeable the boundaries are. Importantly, *Media Distortions* shows how this ambiguity and fluidity of what seems to be a fixed category is used by media companies to make important decisions about who and what get to be categorized as deviant – it is about power. Examining spam from a broader perspective that moves between territories and time periods allows (media) scholars to follow continuities and similarities in strategies deployed by the use of media categories.

The third assumption is that sound and its associated concepts, in particular, listening and rhythm, can be more productive when examining power relations enacted through and by media. It is quite astonishing that our whole way of thinking about knowledge and power relies on optic vocabulary. We commonly use terms like 'I see', 'it is clear', 'I look at' or 'observation' as ways to indicate we understand or know something. This was quite an exercise for me writing this book, as every time I instinctively wrote 'looks at', 'seeing' or 'vision', I had to think about an alternative word and rephrase the sentence. We also often use phrases such as 'black box' and (in)visibility to describe things that are 'opaque' in media networks. Because this conceptual framework is so ingrained into our thinking, it has also dominated our ways of doing research. As James Bridle argues in his recent book:

> We often struggle to conceive of and describe the scope and scale of new technologies, meaning that we have trouble even thinking them. What we need is not new technology, but new metaphors: a metalanguage for describing the world that complex systems have wrought. (Bridle, 2018: 5)

This book seeks to open another way to think, conceptualize and do research into media power by using sound as a theoretical framework. Sound is also important to me personally. I have been passionate about music and sound throughout my whole life, from being a radio broadcaster of electronic dance music, editor of music television channels as well as working in the music industry, writing about music for *Time Out Tel Aviv* and other magazines and even my first book *TranceMission* (about the Israeli Psytrance culture). Not to mention that from the age of 13 I have been going to thousands of parties, concerts, festivals and shows that made me think, move, and communicate better. Sound and music are powerful ways to communicate, feel, and think about things; they *resonate*.

Sound can express things that cannot be said with words. After experiencing the ways artists and DJs use different elements of sounds through mixing and the speakers to move people's bodies, minds, and emotions, I knew that rhythm and the ability to conduct it holds a productive power. Nina Kraviz manages to enchant me with her Techno sounds; dancing at the Block club in Tel Aviv and immersing myself in the fast beating sounds and the light, smoke and sweaty bodies dancing next to me it feels like euphoria. Pulp made me jump like crazy under pouring rain at Melt Festival in Germany while invigorating my nostalgia of the days I was listening to their albums on repeat as a teenager. I have a song or album for each one of my ex-boyfriends, reminding me of different moments we shared. Die Antwoord made me dance and scream to their crazy energy, singing "I fink you're freaky and I like you a lot" at London O2 venue. Each of these artists used different instruments to shape, influence, guide and manage people's bodies, minds and emotions. Each person reacted differently, according to their past experiences, tastes and current state. Nevertheless, this experience was conducted by a powerful force, and this book will explore similar forces.

There is an overwhelming focus in the media and communication field (but also in STS, history of science, and digital sociology) on vision, (in)visibility and seeing as ways to theorize and conceptualize power and ways of knowing, especially when it comes to new media. Many scholars from different fields (Campbell and Carlson, 2002; Chun, 2006; Bucher, 2012) use Michel Foucault's (1977) thought experiment, taken from Jeremy Bentham's prison design—The Panopticon—as a metaphor to explain the surveillance architecture of the internet. The

Panopticon is a prison with a special design that puts a guard at the middle of a round architecture where the prisoners' rooms are scattered. Because there is an asymmetric architecture structure, only the guard can see the prisoners, and they cannot see him—making it unnecessary for the guards to be there. In this way, thanks to this specific spatial design, it does not actually matter whether the guard is actually there because the prisoners are disciplined to change their behavior by fearing they might be watched at any given moment. Scholars use the Panopticon to explain surveillance as discipline through modes of visibility which are used for commercial and government endeavours. Nevertheless, as the sociologist Zeynep Tufekci argues about the use of this metaphor, as well as using the metaphor of George Orwell's dystopian novel *1984*, we are living in a different type of dystopia:

> The Panopticon is a thought experiment: a model prison meant to control a society of prisoners. But we are not prisoners. We are not shackled in cells, with no rights and no say in governance. In our world, pleasure is not banned; it is encouraged and celebrated, albeit subsumed under the banner of consumption. Most of us do not live in fear of the state as we go about our daily lives. (Tufekci, 2014)

I agree with Tufekci's point but take it a step further and argue that another problem with these metaphors has been their overemphasis and reliance on modes of visibility as ways of knowing (and controlling) objects and people, which consequently produce power relations. So while these accounts provide important insights, they are also limited (as I explain further in the next chapter). I propose two sound concepts in this book: I argue that by deploying *processed listening*, various media practitioners (individuals, organizations or governments), listen (monitor, measure, categorize, record and archive) to different sources (digital bodies or locations), by using several tools (manual or automatic), in different times for similar purposes—to (re)produce knowledge into quantified, exchangeable, and monetizable data. This dynamic archive is then orchestrated according to a particular rhythm I call *rhythmedia* (by filtering, adjusting, removing, minimizing and deleting), which spatially and temporally orders and regulates people and objects, through multi-layered communication channels to produce a desired sociality.

This is not to say you need to replace all your vocabulary and ways of thinking (although it could be an interesting temporary experiment). I do not offer a complete overhaul of theoretical thought into sound. What I do propose is that this theoretical approach, and the two previously discussed concepts, can be used as another way to examine power relations enacted through media. Although I mostly use listening and rhythm as analytical and conceptual tools, it does not mean that vision should be discarded. If anything, there is a need for an integration and acknowledgement of more senses, including touch (check David Parisi's [2018] work), for example. Such power dynamics involve many complex processes, and the term 'process' is central to this book, below you can understand why.

Conducting Processes

The term 'process' is used in this book as a central concept for several reasons. First, to draw attention to the fact that both humans and machines do this activity.[2] Humans process the world around them through their senses to make sense, understand, (re)order, and perform life. Computers process data that humans, other living beings, objects and/or other machines give them through inputs. This data is then translated into code that give instructions through specific protocols to execute programs. Second, a process is always part of other processes, and several processes can be connected to the same program or activity. Therefore, interrelated processes can be done at different times and in different spaces. In that sense, a process is relational and corresponds to other conditions, which are negotiated and conflicted. Such notions come from feminist technoscience theory, which reject essentialism and argue for processes that are co-produced by humans and machines (more on this in Chapter 2).

As processes get intermingled with different types of actors, it is important to explore beyond strictly human agency, which media studies tend to focus on. It is also important to explore beyond what the (somewhat) new software/platform/code/app studies focus on, which is the centrality of algorithms and code in ordering sociality through media. I want to emphasize that it is more fruitful to explore these processes as co-produced in different capacities and intensities. But, contrary to Actor Network Theory's (Latour, 2005) arguments about co-production, I do not assign symmetrical powers in this co-production; far from it.

Third, 'process' also points to the notion that these co-productive procedures are ongoing and constantly evolving processes. In the context of *Media Distortions*, these processes happen on several occasions: the unwanted media categories (from noise to spam and onto amorphous deviancy); the interest groups that aim to produce, structure, control and manage people and the mediated territories they engage with; the strategies that they use; and, finally, the architecture—all of these elements change constantly. Part of the problem with still clinging onto fixed categories, as the geography scholar Reece Jones argues, is the fact we keep analyzing "the categories rather than the process of 'bounding' and 'bordering' of which these categories are the result" (2009: 175). Jones argues that categories are not mere representations of the world but also create, shape, organize, and limit it. Categories, he suggests, do not have stable boundaries[3] kept in sealed containers; they are in a constant process of mutating and penetrating into one another, in what he terms an *inchoate process of bounding*.

Following this argument, what *Media Distortions* examines is the processes that precede the creation of deviant media categories *and* the (re)production, (re) negotiation, and (re)construction of these categories as time and space develop and shape their form and substance. Although Jones's (2009) term corresponds with several notions of this book, there are still things that are missing that I will show below. Specifically, I illustrate how the term 'conducting' can be used as a powerful and political way to enact processes. Whereas *inchoate bounding processes* focuses on the form of categories and their fluid bounding procedures, I focus on how specific actors are using these flexible and permeable boundaries to enact power, and how these affect the conduct of others.

'Conduct' is a key term for Michel Foucault, whose theory of governmentality guides this book. As Foucault argues, "to 'conduct' is at the same time to 'lead' others (according to mechanisms of coercion which are, to varying degrees, strict) and a way of behaving within a more or less open field of possibilities" (1982: 789). It is precisely the way media companies lead through seemingly 'free options of living' that I focus on in this book. Moreover, a conductor also serves as a channel or medium of electricity or sound. Conducting is also related to the person who guides the sound's rhythm, the ensemble of all the people who play the instruments, managing the movements and their tempo into a particular order of sound. Thus, conducting is an intentional use of power to guide, manage, control and order people, tools, actions, and processes towards a specific desired sound.

In the context of media, 'to conduct' is an important strategy to establish a power relation by creating the rhythm that orders subjects and territories. This means that conducting is the power to create, manage, and control the rhythm that orchestrates different elements that produce people's mediated experiences. *Media Distortions* argues that this is conducted on people's experiences be they on the streets of New York City or on the World Wide Web. I show how the different ways of conducting processes by using deviant media categories are characterized by Michel Foucault's modes of governmentality: sovereign, discipline, and biopolitics. But, while Foucault focuses on the notions of circulation (I use the term *rhythmedia*) of the city, including its architecture, roads, people, behaviors, and desires, I aim to show that similar strategies are deployed also in 'online cities' such as the European Union web and Facebook.

By putting these concepts together, *Media Distortions* develops a critical perspective and provides analytic tools for (media) scholars to challenge several types of boundary. First, interdisciplinary boundaries within and outside media and communications such as history, law, 'new' media, software studies, and sound studies. These boundaries have been instrumental in crafting specialities and focused research topics but have overlooked other important insights by not engaging with intersections, connections and genealogies that come through multiplicities. Second, the struggles and politics that lie behind producing legitimate media categories and importantly, the illegitimate ones. Third, as mentioned above, the boundaries between the involvement of human and non-human actors in these processes.

Breaking such boundaries comes from a feminist perspective, inspired by Donna Haraway and her seminal work *A Cyborg Manifesto* (1985), which will be discussed more thoroughly in Chapter 2. Explained briefly, what Haraway proposes is an overhaul of many masculine-capitalist-modernist categories that, as she argues, have never really made sense. Such categories served powerful groups (spoiler alert—mostly old white men) to establish their position in various fields such as culture, economy and politics. Some of these categories are what it means to be human, animal, and machine, but there is an important category she mentions briefly that is central to the three stories examined in this book—the boundary between private and public. This boundary will be explored in all the three stories examined in this book when it comes to the way media companies redraw spaces, bodies and time.

Three stories were chosen to examine the way that 'deviant' media categories are (re)produced in different media, times, and territories. Using stories from different time periods, *Media Distortions* aims to amplify that producing illegitimate categories in media is not a new thing. This is important because many scholars tend to point to processes that happen in one period related to a particular medium and present them as novel, without considering that similar strategies were deployed in the past. I began this research with the initial intention of exploring spam. However, the deeper I dug, the more I realized that spam is just the contemporary name that this deviant media category has received on the internet. So, I kept digging.

Understanding the fluidity of deviant media categories allows us to seek beyond the medium-specific characteristics and gain a better and critical understanding of how historical, cultural and political processes have been influencing the way they have received their boundaries, their current configurations. This matters because media has a time span, and with the internet it seems to get shorter. Two decades ago, media scholars focused on Netscape, a decade ago, they focused on Myspace. If you ask people about these companies today they would probably not know that they existed. These days, it is popular to conduct research on Facebook, Twitter and Instagram, as well as on companies such as Google or Microsoft. Some of these companies may make it to the next decade, but some will not. So how do we make sense from our research and the stories that they tell in this fast rhythm turnaround?

In a blog post about the problems new media scholars encounter when the objects of their research become obsolete by the time they manage to get it published, Jonathan Sterne argues that this has been a dilemma media scholars have long been facing. Sterne gives the examples of Stuart Hall's *Encoding/Decoding* and Pierre Bourdieu's *Distinction*, works which were dealing with examples that fitted that time but nevertheless remain canonical texts for media studies. This is because, "the ideas in them transcend the examples, and even where the conclusions no longer obtain, the questions they ask might be useful for students to ask today" (Sterne, 2015). Some of the stories and examples you will read in this book might be slightly outdated by the time you read them. But the idea that *Media Distortions* aims to put forward is why and how specific media categories become 'deviant'? And this question will resonate as long as we have media technologies and the human race is not destroyed. In the following chapters I will focus on the context of three deviant media stories, on their specific temporal, cultural and technical considerations, in order to understand how media power works in each of these situations.

Three Distortion Stories

Media Distortions explores three stories in three different time periods: the 1940s, 2000s, and 2008 and after. The periods in each of the stories are marked by huge transitions in mass communications technologies and practices, political turbulence (WW2 and various uprising 'springs' of 2011 onwards) and economic crises (the 1930s Great Depression, the 2000–1 dot-com bubble burst, and the 2007–8 economic crisis). The transitions between the second and third periods are less dispersed, but as time progresses the evolution of media accelerates as well.[4] The second and third decades of the internet are different in many ways, and the evolution of this medium and the multiple media it consists mutate more rapidly than previous media.

These structural changes forced a re-evaluation and adjustment of the market and introduced different power relations that required new conditions. Michel Foucault points to such a possible direction when analysing power relations by saying that such "analysis of mechanisms of power may also join up with the history of economic transformation" (2007: 2). A new or different ordering of media technologies in each of these periods introduced new business models, re-organization and measurement of populations (their profiles, behaviors and preferences) and the territories in which they operate.

These turmoils, introduced a re-configuration of what it means to be human, worker, consumer, and citizen. The new rhythm introduced new power relations that changed the way all these roles have been ordered, performed, expressed, and understood within different territories. These new formations have also influenced governments, corporations and law, and the way all of them are entangled and accountable for one another in a recursive, complex and asymmetric manner. This kind of excavation procedure has also been deployed by Lisa Gitelman (2006) and Bernhard Rieder (2012), both of whom focus on two turning points, one in the past and one on the current configuration of the internet. Gitelman explains the rationale behind focusing on two stories from different periods:

> I offer two case studies in order to benefit from contrast and comparison, not to refine one at the expense of the other. The chronological gap between them has helped me keep 'one eye focused on historical variability and the other on [elements of] epistemological constancy' that underwrite the humanities still, and that like all protocols, can be difficult to see without seeking or contriving some penumbra of discontinuity, such as the joint discontinuousness of time frames and newness of new media rendered in these pages. (Gitelman, 2006: 12)

By choosing three periods to conduct my excavation, I intend to, as Gitelman argues, draw epistemological and ontological connections that correspond with one another. Focusing on three periods will also allow me to show the way deviant media categories have been tools that epitomize media power relations in each era. Each period is characterized by a different approach to the way media and their architecture are configured and theorized. Each story focuses mainly on media companies, meaning that, I discuss their negotiations, conflicts and collaborations with local authorities (such as Bell Telephone with New York City in Chapter 3), regional authorities (like the digital advertising associations with the European Union in Chapter 4) and global authorities (such as Facebook with other global players in Chapter 5). The power struggles of media companies in that sense is always historically located, relational, and conflicted with more traditional powers such as states. While media corporations still have to establish and fight for their legitimacy and authority, they gradually hold a stronger position in constructing power relations.

Media Distortions reveals the natural and taken-for-granted understanding of activities that have been categorized as a disturbance in communication systems. In this way, spam and noise also relate to how bodies are (re)configured through media. But how do different practitioners define, construct, control and manage behaviors? *Media Distortions*' main argument is that media companies in different periods have been using processed listening and rhythmedia as part of seven sonic epistemological strategies to (re)produce subjects and territories. The first three strategies are associated with processed listening: **new experts**, **licensing** and **measurement**; the next four strategies are related to rhythmedia: **training of the body**, **restructuring territories**, **filtering** and **de-politicizing**. Through the three stories, I will illustrate how these strategies have been deployed in different ways and degrees to show how power is put into action, as Foucault would phrase it (1982: 788). I will demonstrate how such power came into action by restructuring mediated territories and training people to become subjects. These procedures will be questioned and re-told in a way that should reveal how we reach our 'common sense' perceptions of deviant categories, and the various motives and factors involved in their creation.

Structure of the Book

Chapter 2 synthesizes transdisciplinary approaches such as media theory, feminist technoscience, sound studies, and software studies into a new composition. It introduces two new concepts for the analysis of media power—*processed listening* and *rhythmedia*. These concepts entail two interrelated stages: first, how media practitioners listen to people's behavior in a continuous process to create a dynamic database. This knowledge is then spatially and temporally (re)ordered with specific rhythms, using a favoured rhythmedia to exclude, minimize or eliminate the noise. The outcome of these strategies is the production of subjects who behave in an efficient and economically desired way through media. In this way, I show the theoretical inspirations for this research and how they are woven, while making selective choices and adaptations into the unique approach this research takes.

Chapter 3 focuses on the biggest media company of the early 20th century—Bell Telephone Company and how they produced the media category of noise. Measuring and deciding what types of behaviors should be categorized as noise enabled Bell to remove anything that could harm their business. The chapter focuses on two examples that show how they enacted power by categorizing actions as noise: The first event goes back to the 1930s and the Noise Abatement Commission (NAC), which collaborated with Bell to create a map to spot problematic noisy groups of people and practices. The main goal was to turn various spaces across New York City towards commerce-orientated activities. But to do that, Bell had to define the people and behaviors that interfered with that goal as noisy. These included immigrants who conducted street commerce, the Black community in Harlem who organized unauthorised house parties, and also union protests in Union Square.

The second event focuses on the 1940s and the way Bell needed to categorize behaviors that jeopardize their telephone service and apparatus as noise. Here the focus is on the telephone operators' training program, called *A Design for Living*. Since the operators embodied the telephone it was essential to train them to avoid noisy behaviors. Training their bodies was meant to turn the telephone operators into efficient and fast processing machines. The chapter shows how the unwanted media category was developed by Bell to encompass people and practices that interfered with the smooth functioning of New York City and the telephone system.

Chapter 4 moves to the dot-com bubble crash around the early 2000s and shows how the digital advertising industry produced the media category of spam. The main objective here was to legitimize specific unsolicited bulk communication that was constructed as essential for funding the internet in the shape of web-cookies, and to illegitimize similar practices that were constructed as harming and burdening the infrastructure, which is called 'spam'. By lobbying EU legislators and the Internet Engineering Task Force (IETF), the digital advertising industry and tech companies standardized the category of spam around any 'problematic' behavior threatening their business. This required configuring spaces and people on the internet. First, they created a false distinction between private and public spaces online; categorizing spam as unsolicited communication in private space while web-cookies were categorized as wanted communication in public space. Second, people were (re)produced as data subjects by standardizing the way their behavior was measured, giving them a feeling of control while doing the opposite, and finally educating users to maintain their safety.

Here the argument is that spam operates as a regulatory tool applied to any type of behavior that can interfere with the functioning of e-commerce. These were actions that helped to stabilize and institutionalize EU e-commerce and its associated practices—each actor had to learn its role in the newly created territory and the architecture in which they live.

Chapter 5 focuses on exploring the way Facebook, as an example of the most dominant contemporary media in the western world, (re)produces people into its own meaning of sociality through four filtering mechanisms. It shows Facebook's strategies through the last decade to define, construct and manage deviant behaviors to reduce and eliminate them from the platform. Facebook enacts its power by engineering the social through four filtering mechanisms: architecture, algorithms, hidden workers and their users—all trained to behave in the way Facebook configures as sociality. The two non-human filtering machines show how specific features of the architecture and algorithms harmonize people's behavior and notion of time and space. The two human filtering mechanisms show how both its employees and users are trained to work by doing repetitive actions meant to tune the algorithms. These filters create a database that includes all knowledge about people inside *and* outside its platform, and then renders only what it considers to be 'social' as possible options of living.

Chapter 6 weaves all the stories together and shows what they can tell us about media power. It shows that *processed listening* was conducted to produce a dynamic database, and how power is enacted in each of the stages of measuring, categorizing, recording and archiving behaviors. This is an ongoing process which occurs in multiple spaces because to monetize the database, it needs to be as large and updated as possible. At the same time, *rhythmedia* is also deployed to reconfigure anything that interferes, harms or burdens media companies' business as deviant, noise or spam. Each story tells us about stages in reordering media and communication in a way that promotes a rhythm that increases value; filtering out advertising practices that do not suit the dominant companies; producing specific temporalities that create more value; preventing political gatherings from being held by de-politicizing them; and, importantly, reproducing people into particular subjects by training their bodies with repetitious actions.

Each chapter chronologically comes one after the other and adds more listening capacities and accelerated rhythmic multi-layered communication channels. These listening capacities enable media companies to know people and their behaviors by measuring them with particular tools and standardized units that enable them to be (re)produced into monetizable data subjects that can be easily exchanged. This creates a power relation whereby people and their behavior are measured in different territories, but also in different temporalities, to produce subjects that can be commodified and sold, without their knowledge or consent.

As the three stories show, with Facebook, there is a return to the centralized monopoly model that Bell orchestrated, in terms of control over the rhythmedia, the measuring tools and the database of people. Facebook developed the digital advertising industry's metric standards, while delegating controlled listening capacities to the diversity of actors that participate in the territory. With its social plugins, which are its own cookies and pixels, it opened multi-layered communication channels that transform Facebook into the central node through which the filtered data comes to and from its territory. The evolution of the communication model is, then, more communication channels that are now centred around one company with its own rhythm.

Importantly, I show the development of Bell's telephone operators as an integral part of the communication channel that also functioned as filters, and how that evolved into the European Commission's internet education for citizens, and then Facebook's training of its users. It shows how people are produced into several data subjects that need to be taught through training programs and/or territory design. These subjects include: the sender and receiver of messages, the message itself, the communication channel and, most importantly, the filter. I also point to the differences between these training programs in each period while flagging the specific conditions that influence each unwanted media category and its manifestation. Finally, I outline how we can further develop the notions of sociality and software that I have presented. Now, as Beastie Boys say – "Make some noise if you're with me".

Notes

1. USENET is a global discussion system conducted on computers, started around the year 1980.
2. However, it is important to note that I by no means equate them. Some scholars, for example, the psychologist Robert Epstein (2016), suggest that the metaphor of information processing is inaccurate in explaining the two phenomena. I acknowledge the fact that humans process things in different ways, which include factors such as the senses and emotions, and can never be conducted as part of a computer's processes. Nevertheless, I still see this metaphor as a useful one to work with, as, with most metaphors, it does not create a symmetrical equation. In fact, precisely because,

as Epstein argues, each metaphor of the human brain represents the 'zeitgeist', it is actually a conceptual tool that epitomises contemporary thought on a particular topic.

3. I distinguish these notions and other similar approaches such as object-orientated ontology or Whitehead's process-relational philosophy as they mainly talk about object, material or not, whereas I talk about categories that can be objects but also practices, behaviors and subjects.
4. As David Beer argues, "It would seem that over the last 20 years there has been some agreement that social life has been accelerating, especially in association with the integration of new media forms" (2017: 23).

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