

# **MASTERARBEIT**

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"Making sense of Depression in the Media"
How Austrian print media construct the disease concept of Depression

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## 1. Introduction

# 1.1. Why is it important to look at Depression in the media?

As the title *Making Sense of Depression in the Media* suggests, this thesis is about how the disease concept of Depression, of which we think we know what it is, gets constructed in a public space. I argue that it is important to understand this situation because Depression is a problematic popularized disease concept of a contingent psychiatric classification. It has become ever more visible in contemporary culture. In the past decade, Depression has been successfully established on the public agenda as one of the maladies of contemporary Western societies. The question is whether or not that is justified. Therefore it is necessary to look at the historical and contingent circumstances that have made Depression such a ubiquitous phenomenon in (modern Western) societies. In this sense it is important to understand what it means that Depression appears in the media:

"Standard: Rund 200.000 Euro werden in Österreich für Psychopharmaka ausgegeben, fast die Hälfte davon für Antidepressiva. Beunruhigt Sie das?

Pezawas: Depressionen sind heute bereits die dritthäufigste Erkrankungsgruppe weltweit. Die Weltgesundheitsbehörde prognostiziert, dass sie 2015 den ersten Platz einnehmen werden." (Standard – 7.8.2006)

What does it do to our perception of Depression (and society) if we read a newspaper article in which an acknowledged expert (Lukas Pezawas) states that we are dealing with a phenomenon which is deemed one of the most frequently occurring diseases on a global scale?

What does it mean if the concept of Depression is understood as a biological entity? How does that change the way we think about it and what does it imply to do about the problem?

"Depression ist keine Allüre, keine Laune, Depression ist eine schwerwiegende Krankheit, bei der der Botenstoffhaushalt im Gehirn gestört ist. Bis zu 40 Prozent der Depressionen sind genetisch bedingt. "Dazu kommen oft auslösende Lebensereignisse wie Jobverlust, schwere Krankheit oder Tod eines geliebten Menschen. Der Altersgipfel, wo Depressionen erstmals auftreten, liegt zwischen dem 30. und 40. Lebensjahr", erwähnte Univ.-Prof. Dr. Peter Hofmann von der Grazer Universitätsklinik für Psychiatrie auf der Apothekertagung."

(Presse - 13.4.2010)

Having tried to follow the discourse about the Depression for approximately ten years, I found myself confused and insecure as to what I ought to think about it.

My aim in this thesis is to understand how something as complex as a disease classification is handled in a public arena. How does this global (scientific) concept of Depression appear in the Austrian context of quality print media and what does this say about this culture specific knowledge space?

The appearance and prominence of a (scientific) concept in the public arena, of which the media are part of, is the outcome of struggle, and not a depiction of how things are. In that sense, I also tried to look into the broader cultural, scientific, political, economic, and social environments that contributed to how and why modern Western democracies are confronted with Depression so much, while understanding the Austrian print media context as a specific space where Depression is talked about.

Why is the media an important arena to study the construction(s) of scientific knowledge?

The media can serve as a "reservoir of meaning". People get informed and judge the world around them according to the information they receive (Sorensen 2012).

One of the premises of this paper is that broader societal narratives and understandings of mental health and illness, and therefore Depression, are constructed over time in different ways.

What is nowadays commonly termed mental disorders is a rather complex and trans - disciplinary knowledge area (Boeker & Seifritz 2012). The knowledge about mental disorders is also the outcome of (sciento) political struggles and decisions.

This thesis is also talking about the possible influence the media has had in structuring how and why society, and lastly science, talk about something in a certain way. Therefore, it was intended to look at a very specific space where specific knowledge about Depression is staged.

I decided to generate a sample of two daily quality newspapers, read by a rather educated Austrian middle class (*Der Standard*, *Die Presse*), in order to get to know what stories they tell about Depression.

Among the many reasons that can be considered important to do a media discourse analysis about Depression, is to learn how to handle the many constructions of this popularized disease concept.

Why a certain scientific approach is considered legitimate is, in the vein of Science-Technology-Society Studies, not the outcome of "truth", but of contingent circumstances that let one approach be favored over another. Part of these circumstances are the media, which can turn into a useful resource for scientists to advertise for their cause.

As has been argued many times, media can be considered a place where certain scientific disciplines are more represented than others, turning them into the ones who can legitimately talk about a phenomenon. Media turns into a resource for research groups to gain attention and, in the long run, maybe support for their business.

It is always important to understand the actual dynamics behind media representation of content in order to get to know why some stories about phenomena are more visible than others (Hansen 2009; Weingart 1998; Allen 2009). Particularly the knowledge area of mental disorder is way too complex and diverse to be approached solely through one "way of knowing". It is therefore important to understand how something as

complex as the concept of Depression gets constructed in one particular space in order to understand how this influences other spaces, such as society and science in general.

Ultimately, my motivation for writing this thesis is that I want to draw attention to how Depression is handled in the newspaper sample that was chosen, and how that is problematic, as we are always dealing with certain constructions of it. Describing something as complex as the disease concept of Depression (and the problematic physical conditions it refers to) automatically means to leave out certain features the concept would have in other settings, be it handled in lay areas, policy contexts or within different expert communities. Particularly issues concerning the brain (in the case Depression is argued as an organic entity) are far from being understood, so cautionary reasoning is even more important (Dumit 2004; Jaencke 2012) I would like to suggest that it is important to engage with Depression through Science-Technology-Society approaches in order to unfold the complex networks in which it was created in and to understand the dynamics that shape its appearance in society. Ideally, this would also help to gain an understanding of the consequences of this formation. Getting to know what Depression actually is, epistemologically as well as ontologically, is difficult. But that does not mean that we should stop to figure out the many drives that let phenomena appear on science's and society's knowledge agenda.

# 1.2. A history of ideas approach - What is Depression and how does it appear in the media?

Having pointed out the sciento-political importance (understanding how and why we know about something) of approaching the media for analytical reasons, I would like to explain in more detail how this paper handles Depression and what kind of research questions have been developed.

Depression can be considered a disease concept that is located at the intersection of Western intellectual history, a growing and heterogeneous field of neuroscientific inquiry, and of public imagination. The media sample chosen can be interpreted as an illustration of this intersection of discourses.

Due to this constellation, Depression is a difficult issue. It is a classification that had undergone dramatic changes in the course of the development of the sciences that deal with the human psyche. That is where it is a concept, an intellectual creation, not a natural entity. It is a topic in many of the natural sciences, identically to the psychological sciences, that want to identify what it is, what causes it, and how to treat it. These academic disciplines take over the classifications derived from our intellectual history and think it is unproblematic to introduce them into domains of the natural sciences that are involved in brain research. And lastly, it is disease concept in the public sphere that has to a huge degree been influenced already by these scientific traditions, and, in a co- production (Jasanoff 2004) sense, feeds back into research culture. Keeping in mind this contemporary historical situation, what will Depression be in 50 years time? The appearance of Depression in the media is examined via a history of ideas approach. This shall serve to understand how this popularized mental disorder classification has undergone changes overtime (Mayes and

Horwitz 2005; Laura Hirshbein 2006; Boeker 2006) and what factors might have contributed and may will contribute to shaping its understanding in the future. Media can be, among many other factors, conceptualized as a possible player in the game over symbolical resources that let one professional group be more powerful than another one to define what Depression is.

#### 1.3. How this thesis defines Depression

For this thesis, it was deliberately decided to distinguish between the conceptual level, be it an expert or a popularized disease concept, and the ontological level the disease concept(s) of Depression refer(s) to. This can be considered an analytical decision to acknowledge the complexity of the phenomenon.

This paper primarily uses terminology that addresses the conceptual level of Depression. For that reason the phenomenon under study and its construction is referred to by the following concepts: it can simply be called the disease/illness - concept of Depression, the concept of Depression, or simply Depression (with capital letter). The term depression as such does not officially exist in any of the diagnostic manuals (DSM, ICD1) that are used by professionals. It usually has an additional name, such as "F.33.0 -  $Rezidivierende\ depressive\ Störung,\ gegenwärtig\ leichte\ Episode" (ICD – 10 , 2000).$  By using this terminology, it was intended to highlight the ambiguity and variability of the meaning of this concept, as well as to avoid any expert (medical) or lay expression (can be medical or not) that refers to it.

However, this thesis also talks about content that deals with the ontological side the disease concept of Depression refers to. For that matter, it was decided to refer to the ontologies behind Depression by the concepts of mental or psychological condition. Both of the terms refer to the physicality of what the disease concept of Depression tries to name. However, they imply slightly different point of views about that physicality.

"Psychological" can be useful because it refers to what current classification of mental disorder can make sense of, namely the symptoms of the patients that are exhibited by their behavior, emotional, and cognitive performances (Boeker 2006). This notion is useful as it does not necessarily argue Depression in regards to brain metaphors, and is likely to still be a popular concept for several lay populaces. The term "mental" already alludes to theories that our "psyche" is nothing more than a biological manifestation, composed of organic structure- processes in brain anatomy. But as the neurosciences are far from getting a clear picture of its' object of inquiry, it can still be useful to apply terms like "psyche" and "psychological". This thesis uses both terms, each of them in appropriate contexts.

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<sup>&</sup>lt;sup>1</sup>Diagnostic and Statistical Manual of Mental Disorders; International Classification of Diseases

#### 1.4. Difference between epistemology and ontology

What is also important to accentuate is the difference between epistemology, how we make sense of what Depression is, and the ontology behind it, as in what are the material incidences the disease concept refers to. This becomes even more important when Depression is discussed in the public sphere. There, different imaginations and justifications of what it is are handled. If we fail to understand the complexities behind these arguments, we will only end up confused and unwilling to engage with this important topic.

In this regard, looking at how print media speaks about Depression is necessary because, ultimately, the media is an arena where ideas and arguments that relate to them get constructed, evaluated, and negotiated. As the media are one of the primary resources of information for the public, it is important to understand what kind of content they are able to reveal to us. That is why it is so important to look at it in a critical manner. Ideas influence our perception of the world. They guide us in evaluating circumstances and how to make sense of them. We base our social actions on these ideas. So particularly in questions regarding mental health and illness, it is necessary to know how disease concepts came about, what they tell us about circumstances in the world, and most importantly, what they are not able to show. If we learn to judge knowledge approaches and situate them in their context, we will better understand what Depression can possibly be.

In contemporary knowledge societies we need to be informed about matters of mental health and illness. This area of knowledge is developing vastly and comes up with always descriptions and classifications of what mental disorder is (recently the fifth version of the DSM, the DSM- V, has been published). Therefore, we should be informed about how the concepts of mental health and illness frame mental conditions, and how this could be done differently.

What this paper handles, is how wider societal dynamics (which includes general cultural settings and the associated political, economic, social and scientific circumstances) generate an environment for certain ways of knowing. Disease concepts, created by contemporary psychiatry, are just one method of approaching mental conditions. The media, located within this network, might have played a decisive role in why we talk about conditions, referred to as Depression, in that manner.

#### 1.5. Depression in the media is embedded in a broader network

I argue that this contribution to the wider Depression debate is valuable because it tries to combine theories that have looked at psychiatric and disease classification with approaches from the field of Science-Technology- Society Studies. It was tried to open up a space for the critical assessment of the dynamics that are taking place when knowledge is produced.

In order to understand how to make sense of the disease concept of Depression, three different theoretical approaches, that can help to understand this matter, have been suggested.

Different theories from the medicalization debate were used in order to understand dynamics behind changing conceptualizations of mental health and illness (Conrad 1992; Fleck 2008; Bury 2005; White 2010). Additionally, theories about the classification of disease make the contingency of classification practices visible, and illustrate the historical and cultural circumstances under which they were crafted (Bowker and Star 2000; Mayes and Horwitz 2005). Lastly, literature from areas of public understanding of science and science- media communication approaches was included, in order to better understand the space from which the analytical material had been chosen.

These different areas help clarify what this paper is about. The theory of medicalization (Conrad 1992) and its derivations, biomedicalization, pharmaceuticalization, genetization, (Clarke 2003; Williams 2010; Rosoff 2010) show how medicine and other related sciences have expanded into societal spheres that have historically not always been under their dominion. Processes of medicalization and the like have influenced how we make sense of the concepts of mental health and illness and the classification systems that were developed accordingly.

Nowadays, Depression is one of the most prominent examples of how former "deviant behavior" became medicalized. A case study on how exactly that happened is not the focus of this thesis. But it can be assumed that dynamics of medicalization, biomedicalization, and even pharamceuticalization, have been influential in why psychiatry came up with this kind of classification of Depression.

This chapter can mainly be understood to illustrate dynamics that happen within science, society and technology and how that has influenced knowledge production, and thus, classification of mental illness. In the classification chapter more attention is payed to how classification systems work and how they are made under specific historical circumstances. Again, this can be understood to be a more detailed description of a specific dynamic that furthers certain conceptualizations of mental illness and not others. This chapter also illustrates what it means to apply labels to people and how these labels (as ideas) interact with people and society as a whole (Hacking 1995, 2002; Hirshbein 2006)

Lastly, science- media communication theories are necessary to conceptualize the media as a specific communication arena where Depression gets constructed, according to the restrictions imposed by the journalistic profession and the media as an institution with certain dynamics. It also illustrates how certain media- science- society dynamics and communication flows can be conceptualized.

#### 1.6. Research question(s)

Coming back to the actual research question, I want to show how it connects to the general framing of this thesis.

I decided to access Austrian print media in order to understand how they have constructed the disease concept of Depression. So how do the two Austrian quality newspapers, *Der Standard* and *Die Presse*, make sense of Depression? The research question was divided into many sub - questions in order to grasp as much

meaning that is communicated in the articles as possible.

One focus of analysis consisted of asking the questions of how is Depression constructed through *ontological narratives*. *Ontological narratives* concern imaginations about what is said about what Depression is. And that concerns statements of *how it is caused*, or whether there are any *descriptions of symptomatology*? This involves the question of *how Depression is conceived of*. *Is it imagined as a natural entity*? Or is it *simply considered a disease*, without referring to any metaphor for brain images, like neurotransmitter imbalance for example. So the questions that pertain to the sub - question of how Depression is imagined in the ontological sense, relate to the theories mentioned above. What causes Depression is a question that concerns aetiology, the cause of disease, and therefore is an indispensable component of the justification of disease concepts. Unfortunately, mental illness is not a clear cut issue and in most cases of classified disorders aetiology is understood to be similar in each of the categories. Therefore, aetiology cannot be made a matter of distinction. Current psychiatry classifies disease concepts according to symptomatology (Boeker 2006). Still, both issues, aetiology (because it tells about what we are and what makes us sick) and, to a lesser degree, symptomatology, are integral components of lay discourse about mental illness and are discussed in the newspaper sample also.

Questions in regards to whether there are any metaphors for brain images relate to conceptualizations of Depression that are influenced by neuroscientific research into mental illness, whose influence on making sense of mental illness is also discussed in the theory chapter about *Standardization and Classification* (Boeker and Seifritz 2012; Dumit 2004)

A further complex of sub - questions relates to the representation of (scientific) domains that are portrayed as "being in charge" of Depression. This relates to questions of *Experts* and *Expertise* and tells about what is imagined to be the rightful expert system where Depression is legitimately handled, researched and discussed (Gieryn 1999, Collins and Evans 2002).

Again, keeping in mind that it was psychiatry which (at least until now) has had the monopoly of defining what mental illness is, it also shows in the sample. For this reason, which expert appears in the article and what kind of institution is he or she affiliated with, were examined.

This analytical focus also investigates statistical statements that are made about the prevalence of Depression in modern society. This sub - question entails issues of the operationalization of disease concepts in epidemiological research, which is also discussed in the theory chapter about *Standardization and Classification* (Mayes and Horwitz 2005). With this question it was intended to draw attention to the statistical statements that are made about Depression and how uncritically the newspapers make use of some random statistical account about the prevalence of the condition.

Lastly, another focus, *Solutions for Depression*, was chosen. This is mainly about how and what the articles in the sample communicate needs to be done about the condition. This area of sub - questions most often refers to therapeutic decisions in regards to the condition.

One of the main premises of this thesis is that broader societal narratives and understandings of mental health and illness are constructed and contested over time. Print media can be considered a knowledge space, in

which the relations of mental health and illness to society are represented and negotiated. In this area of conflict, the disease concept of Depression is located and connoted with different meanings. The research questions will help to clarify how it is constructed via the narratives of *Narrations of Cause, Experts and Expertise* and *Options of Action*. These analytical foci can make visible whether there are any conflicting tendencies in the discourse, or whether there is a rather agreed imagination about what it is. The importance for this work can be argued by stressing the need in contemporary knowledge societies to engage with complex ideas and knowledge areas, such as the ones of mental health and illness. A limited understanding of how disease concepts, that are located in this conceptual space, came about is most likely to lead to confusion. And this is not necessary, nor does anybody want that. Depression is a construct that needs to be talked about in order to understand how it has come about and what circumstances in the world it can refer to.

# 2. Medicalization, Biomedicalization, Pharmaceuticalization and Genetization

This chapter is going to be about theories that are widely used in different fields of the humanities and social sciences. Primarily, they have dealt with issues of how medicine has become an ever bigger field of scientific inquiry and how that triggered several dynamics, which, among other things, influenced how we conceptualize and deal with mental health and illness. Ultimately, this tells a lot about how Depression is understood today.

This chapter will examine the broader cultural and historical environments in which scientific reasoning has happened and has influenced those very environments again. However, the focus is not so much on the mutual co- constitution of science and society, but on how a certain way of knowing has developed. The chapter starts with considerations about the medical model of disease (Bury 2005, Fleck 2008), which is followed by the prominent *medicalization* theory (Conrad 1992, White 2010). In addition to *medicalization* theory, approaches that followed this line of argument (although they have a different analytical focus and depth) are discussed, such as *biomedicalization* (Clarke 2003), *genetization* (Rosoff 2010) and *pharamceuticalization* (Williams et al 2010).

These theories can help to understand how, within this complex network of science and society, the concepts of mental health and illness and their classification systems, are constructed, changed or solidified over time.

#### 2.1. The medical model of disease - a historical overview

disease concept, was born in particular historic circumstances.

The idea of illness is a concept that we use to make sense of "human affliction" (to use a judgmental term). Along with that come certain imaginations as to what this affliction is and looks like. This is a very important consideration that also plays a role in the conceptualization of mental illness, and therefore the disease concept of Depression.

The contemporary model that we use in order to make sense of certain conditions is the medical one. Historically, the medical model, as we know it today, was mainly established in the eighteenth and nineteenth centuries. Before that development, medicine in Western countries was committed to observation and classification of symptoms (Bury: 2005, 2). Why was that so?

Due to developments made in bacteriology and pathological anatomy, it was possible to better understand underlying causes of pathology in human tissue or organs, and only finally, to the manifestation of symptoms. During that time, the idea of "specific aetiology" became more and more appreciated.

Conseuqently, physicians aimed at understanding the relation of the symptoms to their origin, which became "the model" of disease that started to be used in the late nineteenth and early twentieth centuries. The appearance of this kind of reasoning can also be connected to the incidence that the mechanisms behind infections were discovered, which was called the germ- theory of disease (Bury: 2005, 3).

Even though not all physicians accepted the model, the pathologically based and causally specific medical model became increasingly dominant. One case that can be considered to be related to this development is the description by Fleck of how Syphilis came to be understood through its specific aetiology.

Fleck's *Genesis and development of a scientific fact* (2008) contains a fascinating story of how Syphilis, as a

At a certain point in time it was discovered that those conditions, now collected under the concept of Syphilis, is caused by the bacteria *spirochaeta pallida*. Before that, physicians could only see certain symptoms because there was no technological apparatus or procedure available, which could render the spirochaeta pallida visible. Most of the symptoms of venereal diseases looked the same. That is why they were all considered to be a "carnal scourge", which was the term used to makes sense of these appearances on the skin.

The specificity about the conditions caused by the spirochaetae is that eventually they are not restricted to the private parts of the human body anymore, but to the whole organism. That is why today several stages of Syphilis are distinguished. If untreated, the organism will exhibit these symptoms eventually, which is for example to have skin problems all over the body (the second stage of syphilis; in the third stage several organs are affected by some kind of ulcers; the fourth stage can be observed when neurological degeneration starts, i.e. the brain is affected (Jung: 1998,162 - 188). Back then, nobody knew that these symptoms are related to the venereal stage, in the sense that they are also the consequence of a hitherto unknown causative agent, and to the second stage, of what will later be understood as a consequence of untreated Syphilis. However, due to the practice that skin conditions of the body could be relieved by a mercury ointment,

physicians began to form a concept around this, which was only used in order to make sense of these skin appearances all over the body. This was a therapy related disease concept. Fleck writes that during the middle of the fourteenth century, one can encounter, for the first time, a comprehensive designation of those chronic skin diseases that can be cured by the treatment with mercury (Fleck: 2008, 4).

It can take years before one stage moves on to the next. That was another reason why it was for a very long time difficult for physicians to think of these conditions as related, since they are all caused by the spirochaeta. Years pass until a patient exhibits the symptoms that are common for Syphilis (if not treated). So for a very long time the whole complex of problems regarding the syphilis concept was not solved. It was not clear how to think of its relation to tabes or progressive paralysis. This could be resolved when pathogenesis and aetiology had become sufficiently developed during the second half of the nineteenth and the early twentieth century (Fleck: 2008, 8).

At one point in time, a certain technical procedure was introduced that made the causative agent comprehensible. This new measure made it possible to detect the spirochaeta pallida and their causative relation to the symptoms in the patient. Eventually, the disease concept of Syphilis became justified via its causative agent.

What this short case description of the development of the disease concept of Syphilis shows, is how at different stages in history, different cognitive and material structures made certain things visible and others not. That is to say that the story behind Syphilis is a story of different lines of thought about "what is the case" and what can be said about it. Only at a later stage was it possible to detect the causative agent. So at first a symptoms based approach was used, followed by a therapeutic approach as the way to make sense of these different bodily afflictions, which are all, nowadays, understood to "be Syphilis" (or, to be more precise, the consequence of untreated Syphilis).

Ludwig Fleck approached the history behind the development of the Syphilis concept with his theory of the *thought style* and the *thought collective*. These concepts are very useful for understanding how whole domains of phenomena come into being and pass away as objects of scientific inquiry (Daston 2000) and in what way these phenomena are conceived.

The thought style can be anything from the ideology of a certain group, or a general cultural attitude towards certain things, to the very paradigm a group of scientists in a certain area share. The thought collective would then be the social groups that share a certain belief (a certain thought style).

Fleck argues the development of the idea of Syphilis with these concepts, namely that it could only have developed that way because of the thought styles and thought collectives, prevalent at a certain time and in a certain place, that made the articulation of each of the assumptions about the conditions possible. Fleck presents an empirical argument showing how knowledge develops its status as truth, as it moves through the social networks of scientists and researchers (White: 2010, 28).

This is not about negating the physical reality that we are confronted with in life, but how we make sense of it.

In that sense, Ian Hacking (2002) criticizes how both realists and constructionists are caught up in

metaphysical assumptions. Realists think that the world is sorted by "facts". It is the scientist's task to uncover this hidden pattern. Constructionists, on the other hand, argue against certain ideas about "reality"; "truth", "discovery", or "necessity" (dt.: Notwendigkeit) (Hacking: 2002, 97). Both theoretical traditions follow metaphysical imaginations about the world.

When Hacking talks about the construction of something, he keeps reminding the reader that it is necessary to consider the case. It does make a difference whether one talks about the construction of quarks or the construction of womanhood for example. Hacking contends that the construction of something that concerns human beings is something different than the construction of something like atoms. He calls that the "looping effect", meaning that "constructions" in the social sphere interact with humans (Hacking: 2002, 60). The chapter about *Standardization and Classifications* will deal with this topic in more detail. For now, these statements should serve as a theoretical lens for this thesis.

The reason why these broader theoretical discussions are mentioned here is because mental illness, and therefore Depression, needs to be located within it. We are used to make sense of human affliction through disease concepts, more precisely through the medical model of disease, as mentioned above. Therefore, we need to understand what the construction of something means in order to better understand it. This paper is about what we have come to know and how we do that.

Dynamics of medicalization play a crucial role in the crafting of disease concepts. The Syphilis example offered by Fleck should illustrate how cognitive (present in his argument of the thought style and thought collective) and techno- scientific (the technical procedure to render the spirochaeta visible) developments impact the ways in which disease concepts get constructed.

However, it can be argued that there are more successful constructions. Certain disease concepts may help better understand the aetiology of a condition, or in the ideal case, lead to a very successful therapeutic intervention. To put it differently, in some cases certain epistemologies may hinder or enhance the solution to an ontological problem. This assumption might be useful for applying it to the case of mental disorder. Regardless of whether mental disorder is made sense of through the medical model of "disease" or through other approaches, they all entail certain narratives about what these conditions are, how they manifest in people, what triggers them and how they can be alleviated. However, things are more complicated and likely to be misunderstood if disease concepts are constructed in a manner which conveys the impression that there is a definite story to tell about aetiology, symptomatology, pathogenesis and/ or treatment.

# 2.2. Medicalization Theories - Developments

Considering theories of medicalization means to consider the social role of medicine in Western societies and the dynamics that are initiated by it. Sociologists are interested in health and disease not as health practitioners, but as students of society. Their main interest in these areas is for example how some conditions come to be called diseases. Equally they focus their attention on the experience of being sick or

ill, along with how the medical profession is organized, in what way health policies are produced, or how hospitals work (White: 2010,40).

The term medicalization is normally used when sociologists want to describe how phenomena become "medical". A phenomenon or problem is medicalized when it is conceived to be of medical nature. In most cases this implies that it is also called disorder, illness or disease (Conrad: 1992, 209).

Medicalization has been an issue in a variety of disciplines, from sociology, anthropology, or history, and, for physicians themselves. Literally, it means "to make medical", but it has come to have wider and more subtle meanings. Mostly it has not been employed to neutrally describe a process, but to critique medicalization (or overmedicalization) (Conrad: 1992, 210).

Lupton (2006) sums up the theoretical developments in the history of medical sociology (or the sociology of health and illness) and differentiates three different areas of how thinking about the social role of medicine in Western societies has been done: functionalism, political economy perspective and social constructionism. Social constructionism has become particularly influential since the early 1980's. Theoretical traditions such as poststructuralism, postmodernism and the beginning critiques of medicine, by feminists and scholars working with Foucauldian approaches, can be regarded to have influenced this trend (Lupton: 2006, 6) Social constructionism focuses on how "social" biomedicine is. Therefore, scholars from this research area focus on how medicine, as institution in society, creates and practices knowledge. In addition to that they also focus on how people outside the medical domain can be involved in the creation and practice of (medical) knowledge. In that sense, social constructionism is not about negating the existence of biological structures and processes different people experience, but to acknowledge that bodily conditions are always made sense of through a certain perspective, a certain way of knowing (Lupton: 2006, 12).

Important concepts that relate to broader discussions of medicalization theories are "deviance" (from the norm) and "social control". Social order and harmony are preserved by people acting in certain defined roles and performing certain functions. Medicine has developed its position in the form of social control over the past 150 years. In this period there has been a change from religious, to legal, and finally, to medical institutions as the main locus of social control. Activities that were once thought of as immoral, belonged either to the domain of the Church and, also within this development, to the domain of the law. Now, they are seen as medical issues (White: 2010, 45)

From the functionalist perspective, illness is deemed a form of social "deviance", which is considered to be happening when people fail to adapt to the societal order and the norms imposed by it. Additionally, illness is understood to be "unnatural" in the sense that there exists a "natural" way of being ("the healthy body"). Illness leads to social and physical problems by which it is concluded that the ones affected should be treated immediately (Lupton, 2006, 7).

Connected to this, medicine is regarded as an institution of social control that is necessary. Instead of having the church judging on what is considered "normal" or "deviant", it is the medical profession that overtakes this task (Luption: 2006, 7).

One of the leading scholars in the application of functional theory to medicine was the American sociologist

Talcott Parsons. Particularly influential in medical sociology in the 1950's and 1960's, he used the concept of the "sick role", which can be considered as a form of legitimate deviance.

Considering someone as "being sick", enables them to excuse themselves for not being able to fulfill their role in society. Nobody can accuse them, nor do they need to to feel ashamed. However, they have the obligation to become healthy soon otherwise running the risk to be judged as not telling the truth and only simulating their condition. Finally, the sick role lets the ones who are affected to be considered as in need of medical help. As will be discussed later on, these arguments still play a crucial role in making sense of mental disorder and Depression.

The political economy perspective emerged at a later point in time, and can be seen as response to functionalism. Scholars from this school of thought, similarly to the functionalists, regard the medical profession as pursuing a moral aim. Medicine defines what is to be seen as "normal" and what not, punishing the ones who do not conform to the social order. However, political economists consider medicine as harmful instead of beneficent for society (Lupton: 2006, 9).

Zolá (1981) is a prominent scholar of this approach. Within the political economy perspective, medical knowledge itself is understood to be value neutral and "objective" but, at the same time, it is considered as being instrumentalized by the interests of doctors and the wider capitalist system. Political economists have traditionally not engaged in a philosophical analysis of the knowledge created (Lupton: 2006, 10). Authors of theories from the social constructionist thinking have a different position.

Although they have been accused of not paying enough attention to the biological conditions when they speak of the construction of disease, Lupton stresses that this is not what they have in mind.

She underscores that people adopting the social constructionist perspective do accept that diseases exist in the biological sense. However, social constructionists put the accent on how these disease experiences are interpreted via cultural and social activity. One of the great advantages and political messages of social constructionist views is certainly to expose the social bases of medicine, health care and illness states and thus, rendering these phenomena to change, negotiation and resistance (Lupton: 2006, 14).

As Conrad describes, it has often occurred that in many cases of medicalization analysis the question of the causation of the particular behavior or condition was not so important as compared to investigating about how something became understood as medical problem.

Eventually, during the development of medicalization theories, there have been many case studies on different phenomena. This includes both deviant behavior and "natural life processes".

Among the many examples that Conrad lists, madness and homosexuality are probably the most known cases of the medicalization of "deviant behavior". Examples of the medicalization of natural life processes are for instance menopause and aging (Conrad: 1992, 213).

Another important remark on the topic of medicalization is to say that it is a process that happens to different degrees. Some instances of a condition may not be medicalized. There may are competing definitions or parts of previous definitions that are still in use. It is also not easy to understand what exactly influenced the different moments of the possible processes of medicalization of a phenomenon. Conrad suggests a variety of

factors that might play a role in different medicalization dynamics. Medicalization might happen in cases where definitions are promoted by the medical system, or when treatments and interventions become available. It is also possible that insurance companies promote certain definitions by only letting those treatments for conditions be reimbursed that are framed as diseases. On the other hand, medicalization may also occur when various definitions are available or when people outside the medical community challenge its way of framing disease (Conrad: 1992, 220).

It is precisely the question of the contextualization of the processes of medicalization that connects very well with the next issue that will be discussed, *biomedicalization*.

#### 2.3. Biomedicalization

In *Biomedicalization: technoscientific transformations of health, illness and U.S. biomedicine* Clarke et al argue that techno- scientific changes in biomedicine are coalescing into, what she and her co- authors call, *biomedicalization*.

*Biomedicalization* are complex multisited and multidirectional processes of *medicalization* that are reconfigured and restated by emergent social forms and practices of a highly technoscientific biomedicine (Clarke: 2003, 162). This theoretical framework allows for a much deeper and more complex understanding of the different drives behind medicalization.

One fundamental proposition of biomedicalization is that science, technology and social configurations are created within biomedicine and its associated domains. Consequently, they are also mutually excerting influence on each other (Clarke: 2003, 163).

The focus on the co- production can be very advantageous for understanding better who or what is involved in why certain deviant behavior or natural life processes become medicalized and how that happened. In that sense biomedicalization can be understood as a much more open and dynamic conceptual and analytical framework than medicalization for interpreting developments and changes in (Western) society in the domains of health, illness or medicine, and wider society in general. Clarke distinguishes five central and overlapping processes of biomedicalization.

First, major economic and political shifts have taken place. Second, a new focus on health and risk and surveillance biomedicines has begun. Biomedicine has become more and more techno- scientific and the production, distribution and consumption of biomedical knowledges has been transformed. Lastly, also bodies and identities have been transformed by these developments. Although not explicitly dealt within the framework of biomedicalization, the crafting of disease concepts, for example in the mental health field, can be argued.

Pharmaceuticalization is another approach that could be considered another model for understanding broader dynamics within science and society. Also here the network character of the theory is obvious. It also stresses the mutual constituency of the phenomena, be they material or symbolical- cognitive, within, generally

speaking, Western society.

The biomedicalization approach is fruitful in so many ways as it draws a big picture of how recent dynamics influence concepts of (mental) health and illness in how they develop and change. Clarke considers the political sphere an important player. By this she talks of the, more than ever before, corporatized and privatized nature of research (Clarke: 2003, 167). This has an influence on how research and its related institutions are organized. Basically, she contends that these processes are furthering structures that help the already powerful to have the monopoly in the medical field, which is to say that they are the ones who can define what disease is and how it can be treated. This is for example evident in the globalization of the biomedical model.

The second issue that was raised was the increase of the use of surveillance techniques. Within this dynamic health has become an idea that is omnipresent and imagined as something that has to be worked toward. In this regard, it is argued that the idea of risk is tightly interrelated. If we are aware of becoming sick or maintaining good health, we are constantly worried about risks. The constant fear seems to make the practice of surveillance more justified. Through surveillance risks are conceptualized and standardized into ever more precise calculations and algorithms (Clarke: 2003, 172).

Topics around conceptualization and standardization will be discussed more thoroughly in the following theory chapter. But for now, it can already be mentioned how the use of surveillance techniques works with operationalized risk, and also, disease concepts (in the case of epidemiological research). This means that the concepts, which are used for scanning a population group for the risk of a certain disease, are naturally reductive and imply a certain way of understanding for the phenomena they seek to identify. A case for mental disorder that relates to this argument illustrates such a dynamic, and will be discussed in the next chapter, when the case of a paradigmatic change within the DSM system is described (Mayes & Horwitz 2005).

The third development mentioned by Clarke was that biomedicine has become more techno-scientific. Technoscientization includes three overlapping processes and infrastructures. The possibility of computerization makes it possible to store large amounts of data. This allows that more aspects of life can be scrutinized, quantified and analyzed for their relationships to health and disease (Clarke: 2003, 174). Another aspect of technoscientization is argued to be the newer approaches to health and illness offered by disciplines like molecular biology.

What has happened in this regard is that developments in science (e: appearance of new research domains) and the use of new technologies offer new ways for examining the human body. This makes it possible to see other aspects of "life" that have previously been invisible. Diseases start to be understood, for instance, by looking at the (sub) molecular levels of proteins or genes (Clarke: 2003, 175).

This trend can be observed and understood through a theoretical framework that looks at cases where claim making of a certain disease (concept) was made on the basis of a gene (or a set of genes) as triggers for a condition.

#### 2.4. Genetization

A disease is "called into being"via its (alleged) causative agent. However, as the following discussion will show, these claims are difficult to sustain. One paper used for this chapter exemplifies how research fields have the tendency to make claims even if their whole research enterprise rests on faulty premises.

A discussion about the field of behavioral genetics is done by Rosoff in the paper *In Search of the Mommy Gene-Truth and Consequences in Behavioral Genetics* (Rosoff 2010). Rosoff tells about two cases, the mommy gene and the fear gene, where it is claimed that behavior as complex as caring for the offspring and fear of something are caused by the presence or absence of a single gene.

He contends that:

"(...) in all these cases, science fiction had replaced science fact in both a perversion and subversion of what molecular genetics can say about the functions of genes. A basic misunderstanding of the relationship between genes and complex behavior has spawned an entire branch of hybrid science called behavioral genetics. How could we have moved from a simple description of behavioral changes observed in experimental animals bred to be artificially null for these two genes, to the proposition that these genes, apparently by themselves, regulated such complex behaviors."

(Rosoff: 2010, 201)

Rosoff further remarks that the original publications of the results of the study did not claim that "gene X is the cause of behavior Y" but cautiously commented on the observation that a gene is considered as having a causal connection to the change of behavior observed in the rats. Making this kind of statement will also be discussed in the classification chapter when newer developments within the neurosciences are examined. It is an important issue as it relates to the act of making a claim about the aetiology of a condition.

As demonstrated with the Syphilis case, aetiology can be a justification for the declaration of having "discovered a (new) disease".

The third aspect that Clarke identifies regards medical technology developments. This is not about branches of research, but about technologies that are used, which can coincide with a certain research domain in which these technologies originate and developed. In this vein, Clarke mentions the rapid development of visual diagnostic technologies and how they further the resolution, storage and mobility of the images, that are produced digitally, and, therefore, travel more easily.

This point is an important topic for understanding how disorder concepts are created. The Syphilis case might be considered as an example: the modern disease concept of Syphilis, which is argued on the basis of its causative agent, was made possible through a technology that rendered the spirochaeta visible. Therefore, the claim about the existence of Syphilis (as a disease concept) was made possible by a certain technology. If one considers, for example, the application of PET scans (positron emission tomography) and MRT (magnetic resonance tomography) in the field of the neurosciences, it could happen that these visualization

techniques work so well that they will make it feasible to define and understand how different areas in the brain are involved for different conditions, that are, for the moment, classified via their symptoms in contemporary psychiatry. It may bring about a change in current classification of mental disorders and create a whole new approach to its comprehension. Nevertheless, science and the current visualization technologies are far from understanding the human brain and how it functions, which will be discussed further in a following chapter.

The fourth issue Clarke is concerned with in biomedicalization is about the production, distribution and consumption of biomedical knowledges. She argues that there is an increase of biomedical issues in popular culture. Surprisingly, this does not necessarily lead to more democratic participation in reflecting about biotechnology, but to a greater monopoly of it. Clarke's example is that of companies who limit the access of internet users to the diversity of information sites available on the web. That is the case for example when companies purchase prime time and sole supplier status from search engines (Clarke: 2003, 178). The display of content is also a media issue. Although the institutional setting is different from that of the internet, print media are a space where only those will be displayed that have the material and symbolic means to be represented. This nicely connects to the overall purpose of this paper. In that sense, the analysis of how Depression in the media is depicted can also be interpreted as the display of power relations within

One of the last greater concerns Clarke has in regards to biomedicalization, are issues about the transformation of bodies and the production of new individual and collective identities.

the mental health field.

She contends that sciences and technologies, when bearing on our bodies directly, or indirectly on our histories and bodily products (this also regards images), they promote the creation of technoscientific identities. Technoscientific identities refer to the habit of how we make sense of ourselves and our conditions, and how we connect that to our understanding of what we are. In some cases, this can also happen to disease concepts. Diseases are redefined through technoscientific means. Clarke also refers to Fleck who she says was the first who alerted us of that possibility (Clarke: 2003, 183). In this context, Clarke comments upon a case that was researched by Margaret Locke (1998). This case is about the concept of the menopause that for some time in the Western world was considered a complex syndrome which was made up of a variety of different symptoms, but changed into a highly standardized "estrogen deficiency disease". This new disease of estrogen deficiency was now treatable by hormone replacement therapies (Lock: 1998, 180, cited in Clarke: 2003, 183).

In this case, the availability and application of hormone replacement therapies might have played a role in the development of newer disease concepts for symptoms that were formely not constructed as a disease entity in this manner.

The reason why a discussion of biomedicalization has been undertaken is that it offers a very useful framework for understanding major dynamics in society and medicine. It makes it more comprehensible how various infrastructures and technologies are created that have an impact on the cognitive premises through which scientific claims, such as disease concepts, are made.

#### 2.5. Pharmaceuticalization

The theory of pharamceuticalization recognizes the growing importance of the pharmaceutical industry. Williams presents six different dimensions where pharmaceuticalization occurs. Those developments are making the use of drugs more expansive and pervasive, despite limited scientific evidence and a decline in pharmaceutical innovation in regards to significant therapeutic advances (Williams: 2011, 712).

Also within this framework, the notion of co- production is accounted for. Williams introduces the concept of a pharmaceutical regime.

A pharmaceutical regime denotes a highly complex arrangement of different actors, processes and the cognitive structures that are created in this web of relations. Particular emphasis is layd on how new therapeutics are created, produced and used within this socalled pharamceutial regime (Williams: 2011, 711). At its simplest, pharmaceuticalization signifies the translation or transformation of human conditions, capabilities and capacities into opportunities for pharmaceutical intervention. Williams identifies at least six key sociological dimensions to explore concerning trends and transformations in the pharmaceuticalization of society.

The first one would be that health problems are redefined and reconstructed as having a pharmaceutical solution. In this vein it is argued that pharmaceutical companies are not just marketing drugs, but diseases. It has also been described as "disease mongering", or selling sickness.

In this process, pharameutical companies are considered to be the ones who actively engage in supporting the definition of disease. Further, they encourage both prescribers and consumers to acknowledge these constructs to be "real". Instead of naming this development "social construction of disease" one could replace that term by the "corporate construction of disease".

The case of menopause, as described by Lock (1998), can be regarded as an example for this dynamic. Additionally, the more recent case of premenstrual syndrome can also be interpreted with this framework. (Ely Lilly developed and marketed an SSRI specifically tailored for PMS <sup>2</sup>).

Among other dynamics of pharmceuticalization, Williams also discusses aspects of changes in governance, which concerns the role of regulatory agencies and how that affects pharmaceuticalization (e: role of the FDA- food and drug administration in the US).

As in biomedicalization, the media is also considered a place where pharmaceuticalization can happen. However, Williams argues that they are not so much considered creators or catalysts as they are more conveyors and amplifiers of these processes over time. But of course, the media can also be a critical witness. As already mentioned during the discussion of biomedicalization theory, the creation of new social identities is also an issue of importance.

One can also consider pharmaceuticalization as a specific dynamic within the broader field of biomedicalization, in other words a micro perspective. Clarke has pointed out that biomedicalization is a

http://www.alternet.org/story/11004/sarafem%3A the pimping of prozac for pms (abgerufen am 14.11.2013)

broader framework for understanding processes and structures within science and society in relation to (bio - ) medicine. Owing to this framework, it can be possible to see dimensions and dynamics of how (bio) medicine and society interact. In describing this framework, the focus was deliberately placed on how these dimensions and dynamics relate to the act of claim making about disease concepts. It is not about that things have exclusively occurred that way when psychiatry classified mental disorder (although in some instances it can be assumed to have developed in that manner  $\rightarrow$  e: PMS).

It is also about keeping oneself open for how classification can and could occur right now or in the future. This argument will be further dealt with when developments within the neurosciences are discussed (Jaencke 2012).

What should be of concern for us as a society is how dimensions and dynamics of (bio) medicalization build the fundamentals for our perception of ourselves and how we understand the concepts of mental health and illness. How then do we conceive of ourselves when having a certain condition and how does that trigger certain options for action? How do dimensions and dynamics of (bio -) medicalization impact the structure of our social worlds? What hierarchies do they establish? These and many more questions will be further dealt with in the next chapter, which talks about how classification works and what it does to our understanding of mental illness.

#### 3. Classification and Standardization

The reason why practices of classification, and the theories that can be related to it, were chosen to be included in this thesis, is that they can be understood to be a specific dynamic within those networks as described above. Classification and standardization practices are means to construct, and therefore argue, disease concepts. This chapter will deal with the contingency of classification practices (Bowker & Star 2000), with the two globally used mental disorder manuals, the DSM and the ICD systems, and with some of the theoretical assumptions that underlie these catalogues (Boeker 2006, Mayes and Horwitz 2005). Additionally, this chapter includes approaches from labeling theory (Hacking 1986, 1995; Hirshbein 2006), something that can be considered to be connected to classification practices as Hacking demonstrates with the dynamic of what he calls the "looping effect" (Hacking 2002). The chapter closes with considerations about the neurosciences and how they can be contextualized within the field of mental health and illness and how they impact epistemology (Seifritz and Boeker 2012, Dumit 2004, Mol 2002).

#### 3.1. Contingent Classification Practices

Matters of classification are crucial in understanding how disease concepts are constructed. That concerns on what grounds they are justified and, as I have tried to show in the previous chapter, how these claims can be

located in the broader networks of science, technology and society. In that sense genuine STS- approaches can contribute to simplify these complex networks of relations and interactions between certain stakeholders, institutions, knowledge traditions and general societal settings, and see how certain ways of knowing about a phenomenon came about (and where probably favored over other perspectives).

Classification is a matter of deciding how to understand something. In this sense Bowker and Star (2000) point to the contingency of systems of classifications and locate their place of origin within the development of the modern nation state and its attempts to screen its populations. This can also be related to the argument of the increasing use of surveillance techniques, which has been mentioned to happen within the biomedicalization framework.

Classificatory systems are fundamental to develop and execute population screening technologies, such as epidemiological studies. Geoffrey Bowker and Susan L. Star describe the development and contingencies of the alleged universally applicable disease classification tool, the *International Classification of Diseases* (ICD), which is published by the *World Health Organisation* (WHO).

This medical classification system underlies a large part of all medical bureaucracy.

One of their main concerns is about questioning the assumption of the alleged universal applicability of this system. They say that for certain social contexts the classifications work while in other settings they just appear to be imposed on people. (Bowker & Star: 2000, 131)

This statement connects well to concerns over the legitimacy of using classification systems developed in the global West to areas that pertain to the global South. Particularly the field of mental illness is an area where this enterprise is highly contested and likely to cause problems, when transferred to a different cultural setting.

Apart from the *International Classification of Disease* catalogue, psychiatry uses another manual, which is maintained and published by the *American Psychiatric Association*. The Diagnostic and Statistical Manual of Mental Disorders, now in its fifth edition (DSM- V), together with the ICD are the most used classification systems within psychiatry. Certainly, there are national differences in the use of those two manuals but they are considered "current best practice" within the field.

A paper written by Mayes and Horwitz (2005) investigates the science – technology – society setting the DSM system was created in. More precisely they talk about the case when the third version, the DSM- III, got published.

They describe how it underwent a paradigmatic change and how several factors had an influence on that. What Mayes and Horwitz do is to show a part of the history of the development of the DSM system and relate it to certain disputes within scientific communities, wider research culture in general (i.e.: operationalization of mental disorder concepts for epidemiological research) and other science- policy circumstances that forged the development of the kind of classification that were presented in the DSM- III. In other words they create an opportunity to look at the development of this system that can be understood through Fleck's concepts of the thought style and thought collective. Certain styles of reasoning what mental disorder is need to be understood in connection with certain sciento- cultural and general cultural settings,

which played a crucial role in the construction of disease concepts of the third edition of the DSM system. In 1968, with the publication of its third edition, the DSM system underwent a paradigmatic change. Since WW II up to the 1970s, mental disorders were understood through an environmental and behavioral model in American psychiatry. This practice to frame mental conditions mainly employed psychoanalytic and sociological theories.

It's ruling psycho - dynamic paradigm viewed mental disorders as conflicts of personality and intra- psychic conflict.

Within the DSM- I and the DSM- II (1968), the different symptoms were interpreted as the display of underlying conditions or as a response to stressful life events (Mayes & Horwitz: 2005, 249).

But with the DSM- III, suddenly, diagnosis became an issue in psychiatry. So the DSM- III focused on categories of illness. It was about making visible the boundaries between the abnormal and the normal, creating dichotomies rather than dimensions, and emphasizing overt symptoms rather than underlying aetiological mechanisms.

Mayes and Horwitz show how the new classification model served several interests in the field of medicine and the broader scientific and research culture of that time.

One of the basic transformations from DSM- II to DSM- III was to aknowledge the symptoms of the patients as the expression of "real" disease.

It used categorical and symptom based diagnosis. This approach had several advantages for clinicians, researchers and policy makers.

First of all, the new symptom- based model allowed psychiatry to develop a standardized system of measurement, which is suitable for research in order to measure the presence of mental illness in reliable and reproducible ways. This development can be considered to be related to the argument of the rise of surveillance medicine in the chapter about biomedicalization. Another benefit that this model brought along was that the clinicians could make the claim of treating real illnesses, and, third, having standardized disease categories allowed obtaining reimbursement from third - party insurers. Lastly, defining mental illness solely through symptoms without regard to its causes was additionally suitable for any kind of clinician, whatever their theoretical background was, because it was "theory neutral".

With this model it was possible to argue aetiology for the conditions in different ways. This case also resembles the historic situation of Syphilis when it was only possible to connect (disease -) concepts to the visibility of the symptoms of the now various classified venereal diseases. Also, the DSM- III met the needs of pharmaceutical companies to have specific diseases for their products.

People and stakeholders who were partly responsible for this paradigm shift in American psychiatry can be found at different levels of society.

Large scale clinical research was not feasible with the DSM- I and DSM- II because the manuals did not feature reliable diagnostic categories that could be used by researchers. Second, the Food and Drug Administration did not support the marketing of drugs that were not shown to work for specific conditions, framed as diseases. With the introduction of the DSM- III as the new mental health manual, scientific

research suddenly became easier, reimbursement procedures were facilitated and the importance of psychopharmacology was emphasized (Mayes & Horwitz: 2005, 263).

The psychiatric profession faced serious problems since the 1950's. The situation was that other health personnel, like clinical psychologists, social workers and lay counselors, could offer talk therapy at cheaper rates. Insurance companies and the government alike judged this situation as a decline of medical professionalism of psychiatrists and their service of talk therapy. They were under severe pressure to assure that their practice is still better than other types of therapy or else they would have to prove the superiority of psychiatry in different ways (Mayes & Horwitz: 2005, 257).

These and also some other factors led the psychiatric profession to fundamentally redefine what mental disorders were and how they should be identified, diagnosed, and treated (Mayes & Horwitz: 2005, 257). What this rather lengthy historical description shows is how different thought styles (environmental and behavioral model of mental disorders that was informed by psychoanalytic and sociological thinking) replaced each other (diagnosis centered DSM – III and its focus new focus on disease categories) and how that can be related to wider disputes within thought collectives over the right to define what mental disorder is. Other dynamics that had influenced these developments can be understood by the concept of sciento-cultural dimensions, such as the use of surveillance techniques, which needed disease concepts in order to operationalize them for epidemiological research. Also issues regarding reimbursement procedures for treatment or the Food and Drug Administration's policy of approving the marketing of medications - only if the treatment had shown effective for a specific disease (concept) - can be regarded as sciento-cultural dimensions. This case is an example of how different dynamics within science, technology and society influenced the construction of the DSM- III and therefore this specific approach towards making sense of mental illness.

### 3.2. Theoretical considerations about the DSM and ICD system

Heinz Boeker (2006), in a compendium of the history of psychoanalysis and psychiatry, describes the model that underlies the ICD- 10 and the DSM- IV. Prof. Dr. med. Heinz Boeker is head of the center for Depression, Anxiety Disorders and Psychotherapy at the clinic for psychiatry, psychotherapy and psychosomatics at the university clinic for psychiatry Zürich, in Switzerland.3 He is also the editor and writer of a variety of books and compendiums, dealing with mental disorder and the sciences that study it. The two manuals pertain to what Boeker calls the nominalistic perspective. These two systems, and the ideology that underlies them, can be considered to be classification practices exerted at a point in time when no other means to reliably "measure", and thus classify, mental disorders are available.

Another perspective, the naturalistic, can be closely related to current and ever growing research disciplines

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<sup>&</sup>lt;sup>3</sup> http://www.pukzh.ch/ueber-uns/portrait/klinikleitung/

such as neurobiology. This understanding of mental disorder does certainly have the most of medical ideology in its understanding of mental phenomena. This disease model approaches the issue at stake as a disorder of the brain. A tendency like that has been articulated throughout the history of psychiatry and was most visible with those authors who wanted to bring psychiatry closer to medicine. Psychiatry should also be a quantifying science. Emil Kraeplin is one prominent figure of this approach. One inherent risk of the naturalistic approach is that one of its premises is that it assumes a priori discernible entities for concepts that we know by the name of personality for example. Emil Kraeplin went so far as to postulate natural disease entities (Boeker: 2006, 81).

Another one, the personalistic perspective, is oriented towards the affected subject itself. In this approach it is not about discovering the existence of a disease entity in an individual, as if it were the coincidental carrier of an objective illness condition. This perspective stresses the biography of the individual and his/her personality. Through getting to know this background, it is intended to understand how this person became mentally troubled (Boeker: 2006, 81). The risk that this approach bears is that relating the aetiology to the biography and the personality of the individual lets one conclude that, by considering these factors, this is the definite causal story and that the person affected could not have turned out otherwise (like not developing a mental disorder). To my understanding, this approach is still very much used in lay reasoning of mental disorder. Many people, when trying to understand why someone they know turned out that way, resort to this kind of argument for explaining the behavior and mood of that person. On the other hand, some of the other perspectives can be found in lay reasoning about mental disorder too. As will be shown, the sample analysis can be considered a kind of demonstration of that.

Another perspective, the systematic one, does not only account for mental disorder through the biography and the personality of a single person, but integrates the social system as a whole in order to understand the aetiology of Depression. This perspective lays emphasis on the social origin. Also this way of reasoning the aetiology of mental disorder bears the risk to overestimate social factors as triggers. As a general concluding remark upon these four perspectives, it would better if they stayed flexible about reasoning the origin of a certain condition and not let it be integrated into a specific aetiological model. This could obscure the many factors that can be involved in the development of certain mental disorders.

It may also be of interest at this point to reflect upon how these causation tales came about and how they might have been established on certain cases that corresponded to this type of reasoning. However, they might not be applicable to other cases.

That is why the nominalistic approach is probably the easiest way of classification as it omits aetiology. It classifies according to symptoms, meaning standardized symptom clusters, which are made of a list of behaviors, emotional and cognitive states. It is clear and easy to comprehend for any practitioner whatever his/her theoretic orientation is and reflects current empirical knowledge about mental disorders in psychiatry. So it is settled up on a certain definition of, for example, schizophrenia and not "the schizophrenia", understood as a natural entity in its own right.

The nominalistic perspective is a way of classifying mental disorder in regards to what is visible to us, the

exhibition of behavior, mood and thought. Whether it is feeling down, or performing a certain action that is associated with a certain mood or thought, psychiatry classifies according to the presence of these symptoms. But how have these definitions been decided upon?

The next issue that is of importance is asking the questions of how did these classifications have come about, what are they, how do they interact with the social world and what do they do to our understanding of mental disorder?

#### 3.3. Prototypes in Mental Disorder Classification

Ian Hacking looked at how the category of multiple personality disorder (MPD) was created (Hacking 1986; 1995). Among other things he argues classifications as prototypes. This is an issue that regards the question of on what basis, or, on what kind of population, has a certain classification of mental disorder been created. The classifications listed in the manuals had been created on a certain group of multiples. In this sense, as Hacking contends, who would not agree that people can be different in another time and at another place. One curious thing that he talks about is how it was observed that when TV was introduced some alters of the people, who were multiples, started to imitate characters from series and so on. The different alters, he says, are in some way like the rest of us, maybe little more circumscribed in their range of emotions: they too respond to their environment, the people they meet, the stories they watch (Hacking: 1995, 32). The social systems we live in undoubtedly impact how we position ourselves to and in it (although it can be worth considering as to what degree individuals react and interact with the social worlds they live in; there might be differences as to how strongly they are influenced by their surroundings. Others may very well have a rather "hermetic" personality and therefore are less subject to outside impact). In that sense, we are likely to promote certain kinds of behaviors in ourselves that are more tolerable with the societal setting we life in. Or we, unconsciously or not, adopt social positions or certain kinds of behaviors that are quite the opposite of that in order to make oppression visible and to articulate our discontent about the current societal order. This is not to say that it is known that in any case of psychiatric classification practice this might have happened. But it should at least be considered when thinking about how classification was created. It should be worth considering because, maybe, mental conditions are "lived out" differently and in accordance with the social setting of the people.

Continuing this thought experiment, if it can be assumed that culture has an influence on the expression (one can also contend influence on experience and onset) of mental disorders, as written down in the manuals, how does that relate to classification practices in psychiatry?

Laura Hirshbein describes an interesting case about how the classifications of the DSM- III came about. In *Science, Gender, and the Emergence of Depression in American Psychiatry* (Hirshbein 2006) she critically assesses how the DSM system developed its disease categories and what that implied for the screening and

surveillance of populations. What Hirshbein did was to look at the scales that determined which symptoms were seen as belonging to the – at this point in time already existing- illness of Depression. Nobody seemed to care that these scales were developed in a hospital, with a predominantly female population. The hospital population was about two thirds of women. So the symptoms that were accounted for were likely to be typical female (what was considered typical female behavior at that time) symptoms of Depression.

In the 1980s there were several studies in the US that screened the population to estimate the prevalence of psychiatric disease. Not only did the researchers and epidemiologists assume that it was valid to use criteria that had been determined in a hospitalized population. They also did not take into account the issue of the "gendered symptoms" in this regard. So it should have come as no surprise that when the researchers used these criteria for Depression, more women than men exhibited the symptoms that were documented (Hirshbein: 2006, 214).

Classification practices happen in a certain time - space continuum, and, therefore, need to be critically assessed because they are used for several purposes, such as epidemiological research. Continuing this argument and connecting it further to the concept of the prototype, it also must be considered that people who are actually depressed do not necessarily show the symptoms as described in the manuals. The need in contemporary Western medicine to standardize and normatize the phenomena they are handling does not help to clarify this situation.

Psychiatric classification, as many other areas in our modern life, has been subject to standardization. Standards, as Bush (2011) argues, are recipes for reality, and therefore, can be considered metaphors that guide our perception about the world:

"They are means of partially ordering people and things so as to produce outcomes desired by someone. As such, they are part of the technical, political, social, economic, and ethical infrastructure that constitutes human societies. (...) But standards themselves have a history, a technics, a politics, an economics, and an ethics, parts of which can be reconstructed."

(Bush: 2011, 13)

In this vein, looking at standardization becomes a (sciento-) political project.

Among other things, Bush argues as to what purposes standards are developed and implemented.

By the concept of the "olympic standard" he means that this usage is about the "best" version of something. The "filter standard" is a mean to filter people or things. Some pass through the filter and thereby meet the standard, while others fail in this regard (Bush: 2011, 44). The "rank" concept applies to standards, that rank persons or things in order to put them in some sort of (usually) linear hierarchical order. And lastly, the concept of "division" applies to standards that are simply different categories, which are unranked (Bush: 2011, 46 ff.)

The mental disorder systems (DSM, ICD) implicitly carry these notions of the concepts suggested by Bush.

They chose a prototype, the (currently) best version of the disorder (olympic standard). They filter people in order to see whether they fit the (disorder) label applied to them or not. They imply rankings, which would be different classifications of Depression for example, defining one as more severe than another type of the condition. And they divide, making it possible for the practitioner to distinguish the bi- polar patient from the schizophrenic one. But, as is the case with all kinds of standards, they are reductive in nature and they could have been constructed otherwise.

Nevertheless, the nominalistic perspective is current best practice for diagnosis in psychiatry and the whole mental health field. It is important to know about its historical and cultural specific place of origin. This is particularly important to reflect upon for scholarly domains such as transcultural psychiatry, as it can be expected that labels, developed in the global West, do not necessarily apply to people and the social systems in the global South.

## 3.4. Labels and how they interact with the social world

Another topic of importance within classification is labeling. That has already been mentioned with one of Hacking's arguments, namely that it is necessary to differentiate between the construction of ideas, such as womanhood, and the construction of something physical, like quarks. Ideas, he contends, interact with people. There is no way that we can refrain from this mechanism. Once labeled as woman, or as teenager, we cannot stay away from the power of these ideas and the effect they have on our perception of ourselves and others.

The same mechanisms occur with disease concepts. This is what Hacking calls the "looping effect", meaning that these mental "constructs" interact with humans (Hacking: 2002, 60). Also mentioned in the chapter about medicalization, the sick role, famously introduced by Parsons into medical sociological literature, is such an argument. The sick role exempts classified people of the social obligations which they are normally expected to fulfill. The people, conceived of as being "sick", consider and perceive themselves in that role, and thus, interact with the label. This is not to say that people are passive receivers of such information. They may also show their dislike of being labeled and therefore criticize or even subvert the label they had been given. However, the use of classifications for labeling people can be considered as another (Western) social dynamic which has a profound influence on our culture and how we think of ourselves, regardless of being "sick" or not. Other cultures have other ways to reason about psychological conditions, and therefore, deal with these issues in a different way. Or they are about to be assimilated by Western classification of mental illness, which is likely to bring along trouble.

Social constructionism happens on the level of the construction of the classification, and also on the level of how these classifications then interact with people and how other, not affected, start to make sense of mental illness. Nevertheless, this thesis, in regards to relativism, does not contend that the construction also touches the actual psychological conditions. It can be argued that aspects of social constructionism do, as mentioned

already, have an influence on the experience and expression of mental disorder conditions. But that does not mean that the conditions themselves are touched by these mechanisms. Certainly, one can argue this matter in a different way. But for this thesis it should suffice to say that classifications, regardless of the circumstances they had been constructed in, refer to something that is "real", namely something that is physical and material.

## 3.5. The "Reality" of Mental Disorder

As Busfield (2000) criticizes, the branch of sociology that studies mental phenomena has largely been reluctant to engage directly with questions of the biological and the social (Busfield: 2000, 551). What has more been the concern for sociologists in Britain and the US is how psychiatric classification and diagnosis are done and have changed over time. The sociology of science has also influenced this tradition (Busfield: 2000, 545).

The "reality" that these classifications refer to can be understood via the concept of correlation or process-structure (of brain anatomy) correlation and that we can assume that a person not having any kind of mental condition, as experienced by affected subjects, very likely has a different "brain picture" than a person who is considered as having a mental disorder. Still, one should be cautious when making enthusiastic claims about the "discovery" of a mental disorder in the brain.

We are just at the beginning to see how these correlates look like. Apart from that, it is rather unlikely that existing nosological concepts, which are part of our intellectual history and constructed around behavior, mood and thought, will precisely correlate with a clearly discernible process - structure in brain anatomy. By now, not too much is known about the precise landscape of the brain and how it functions. And technological instruments are not close to provide a clear and decisive picture. For example, many studies in imaging Depression have been conducted. Nevertheless, it is a highly problematic field. Boeker and Seifritz (2012) have tried to give a preliminary and very general impression of the processes and structures in brain anatomy the concept of Depression has been associated with so far. A general overview of the research that is done in imaging Depression is very difficult, which, as the next chapter will show, involves highly problematic claims made by the scientific communities who engage in this enterprise. Depression has, so far, been associated with the succeeding process- structure correlates in brain anatomy: structural differences in depressive brains can be related to a reduction of volume in the prefrontal cortex, a decrease of concentration of gliacells in the dorsolateral prefrontal and orbifrontal cortex and in the ACC, a reduction of volume structural changes of the hippocampus and changes in volume of the amygdala. Boeker points out that more evidence is provided about brain functional changes than brain structural changes in depressive patients. In that sense the results obtained from those functional studies so far are supporting the assumption that depressive individuals have disturbed prefrontal and subcortical structures when processing emotion. Multiple studies suggest a hyperactivation in the VMPFC and ACC and a decreased activation in

the left DLPFC, and also, increased activity in the right DLPFC. These reports support the hypothesis of prefrontal asymmetry, which contends that the right prefrontal cortex can be associated with negative emotions and the left prefrontal cortex with positive ones. Further, an intersection between emotion, cognition and behavior can be considered to be the anterior cingulum cortex (ACC) whose functional characteristics are particularly suitable to control and assess medical and psycho therapeutic intervention and can also help to distinguish therapy responder from non responder (Boeker & Seifritz: 2012, 31). This short delineation, or superficial summary, of imaging Depression points to how something that has been constructed around a set of several behavioral, emotional and cognitive symptoms affects several areas, structures and processes in brain anatomy. The actual complexity and messiness of this organ that is far from being fully understood, turns Depression into a heterogeneous neurobiological entity, which also applies to most of the other contemporary classified mental disorders.

When psychiatry talks of the comorbidity of two mental disorders, like Depression and anxiety disorder for example, there are no clear cut organic images of these contemporary psychiatric classifications, but certain networks of structures and processes that are barely understood.

"Imaging Depression" and other mental disorders is a highly complex and trans - disciplinary project which is inevitably problematic. The next sub- chapter will discuss contemporary difficulties in this area.

#### 3.6. The Neurosciences and the Problem of the Brain

This chapter refers to some of the dynamics currently happening in the vast field of the neurosciences as outlined by Boeker and Seifritz, in *Psychotherapie und Neurowissenschaften – Integration, Kritik, Zukunftsaussichten* (2012), the editors of the compilation, who have collected a range of articles that deal with various scientific approaches researching the brain. These approaches are as diverse as genetics and philosophy. The book offers an overview of current best practices in the diverse areas, and tries to elaborate on the implications the results can or could have (depending on the field's current developments) for future research, practice and treatment for mental disorders.

Having a general positive overtone, Boeker does not neglect the controversy and the inconsistencies of the fields featured in this compendium. Particularly the last chapter, *Psychotherapie und Neurowissenschaften-Ein Blick in die Zukunft*, offers the reader a critical account of what these fields can actually show and how to deal with the results obtained.

One of the biggest challenges the whole area of neuroscience is facing, is the problem with transdisciplinarity. Almost like in the case of climate sciences, the field is characterized by the diversity of approaches and the difficulty to connect them. Additionally, the relatively young neuroscience domain contains a lot of competing hypothesis. Many findings have not been validated enough (Boeker, Seifritz: 2012, 632). It gets even more complicated, if one tries to combine that with claims and empirical results from the field of psychotherapy, which is very diverse and complex. Boeker calls the "Übersetzungsproblem" (engl: problem of translation) one of the biggest challenges in the future for the pluralistic field of mental health. By this, he looks into the topic of conceptual and general theoretical issues that the different domains bring along. How to overcome the conceptualizations of phenomena in each of the different disciplines (Boeker, Seifritz: 2012, 633)?

For a trans - disciplinary project it is necessary to deal with these kinds of problems. In that sense, constraints and possibilities of the neurosciences need to be reflected and understood. Boeker refers to a statement made by the critical neuroscientist Steven Kosslyn from Harvard University, namely that "If brain imaging is the answer, what is the question?" Such a question is justified as, even though modern brain research delivers results, a general theory of the brain, via which scientists could connect neuroanatomy, neurophysiology and behavior in such a way that makes it possible to predict (the other), is missing (Boeker, Seifritz: 2012, 625). Annemarie Mol's description (Mol 2002) about another health case, artheriosclerosis, may help to better understand what is at stake when a "disease" is approached by different disciplines (and technologies). What Mol does in her case study, *The Body Multiple – Ontology in Medical Practice*, is about how artheriosclerosis is constituted as a certain manifestation at different sites in the hospital. She looks at what she calls "practices of enactment", meaning that each discipline, in which artheriosclerosis is handled, approaches the "disease" in a different way. She says that an ethnographer (what she calls herself)

"(...) stubbornly takes notice of the techniques that make things visible, audible, tangible, knowable. She may talk bodies – but she never forgets microscopes." (Mol: 2002, 33)

Mol alludes to the many ways in which artheriosclerosis is known via certain disciplines and their technicalities. Consequently, only certain features of what is termed "artheriosclerosis" become visible, turning this allegedly uniform disease into a multiple:

"(...) objects come into being – and disappear – with the practices in which they are manipulated. And since the object of manipulation tends to differ from one practice to another, reality multiplies." (Mol: 2002, 5)

In their book review about Mol's case study, Jensen and Winterhereijk add the following:

"Mol argues for an empirical philosophy or praxiography, which implies that a phenomenon is never severed from the materiality through which it is enacted." (Jensen and Winthereijk 2005)

It could also be argued that what happens in medicine or in a trans - disciplinary setting is that the different disciplines, with all their technical apparatus, their practices and their ways of conceptualizing a

phenomenon, make selections. In an ontological sense, messy "reality" exists without us giving meaning to it but different approaches make selections of this "reality", and therefore, make it possible to see certain things and not others. Many accomplishments of modern science can be attributed to this process of making selections because it enables researchers to look at something in more detail, but at the expense of leaving out the complexities of the objects that are studied.

Mol's case study offers a very important story about how different scientific domains create different versions of this "disease", named artheriosclerosis. Depression is another case, in which it can be observed how it multiplies when handled in different settings. However, it should be noted that mental disorder is a different scenario. The enactment of Depression, and other mental disorders, also regards questions of aetiology, symptomatology, pathology in brain anatomy, pathogenesis or treatment, all of which in a certain combination, tell us a specific story of the disease concept. Further, sciences that study artheriosclerosis have until now formed their consensus about how to handle this problem. Given the complexities of brain anatomy and function and how to connect that to current psychiatric disorder classification, it should be recognized that the different "enactements" of Depression, and other mental disorders, are subject to continuing change, negotiation and also competition.

The problem of how difficult it is to handle the multiple realities of Depression, and other mental disorders, is particularly visible in brain imaging research. Even though it proofs successful in making out certain brain areas that are active, inactive or morphologically changed, and one can relate that to certain behavioral, emotional and cognitive functions that occur in current classification of psychiatry, it should be considered a highly problematic field of research that maybe poses more problems than offering solutions for mental disorder at the moment.

Boeker sees a great challenge in this field when he talks about how to overcome the difference between the individual level of persons and the general level of the brain (Boeker, Seifritz: 2012, 634). That is also one of the biggest differences between the general neurosciences and the field of psychotherapy: The neuro - sciences investigate (remark: what they have constructed as) the "objective" and "universal", whereas psychotherapy considers the individual with all its idiosyncrasies, in for example a psychodynamic as well as a neuronal view. Psychotherapeutic styles open up a conceptual opportunity to connect individual content, as experienced by each patient, with general structures of the (concept of the) psyche.

In this manner, important specific individual features (and content) of a person are lost. The experimental approach creates mathematical averages on the basis of individual persons (Boeker, Seifritz: 2012, 633). And second, brain imaging creates disease entities that leave out the complex aetiology that have let the individual brain become this way, naively assuming that a person is their brain. This enactment of Depression may very likely hinder an understanding of the cause, and therefore, coming back to an argument raised already, is a case when certain epistemologies are not useful to solve ontological problems, in the sense that for therapeutic success a profound understanding of the cause and development of the condition may be needed.

Coming back to the question of how do brain pictures of each individual patient look like, compared with the mean value that had been created on several cases, Joseph Dumit (2004) in *Picturing Personhood* points to the many problems that happen in the experimental setting of the PET scan research, a brain imaging technology (Positron Emission Tomography). One of the chapters in his book deals with the experimental design of PET studies and how, for example, selection of test persons is done and how conceptualizations, which are needed for research, happen.

Already when it comes to the process of subject selection and the division of those into the study group and "normal" control group, Dumit notes that *creating a baseline definition of normal is both a physiological and a social judgement* (Dumit. 2004, 61). These are issues evolving around the problem of to what extent an individual is representative of a group and to what extent is the group well- characterized? Does it influence the results if the studied sample is made of predominantly right handed- male subjects, which are usually chosen for screenings (Dumit: 2004, 62)? What about the size of the experiment sample, which in most cases is between four up to a maximum of twenty subjects?

"Because there are so many different definitions of normal, of who could be included as a normal control, and how explicitly their attributes should be noted, attempts to standardize a database have so far failed."

(Dumit: 2004, 63)

Despite all problems with standardization and normatization, PET scans rely heavily on these imperfect conceptualizations, otherwise it would be impossible to proceed.

Apart from constructing "normal" versus "pathological" study subjects, they also create "kinds of brains", such as the depressed brain, the schizophrenic brain or the normal brain. As mentioned before with Boeker, the probands' brains are heterogeneous but together they are calculated into the "one brain" that represents one group. The question is which category do I belong to (Dumit: 2004, 5)? In the introduction to his book Dumit speaks of what he calls the "objectified self", meaning that facts and classifications made in medicine is something that we adopt in order to narrate who we are. Much like the prototype of mental disorder, brain prototypes can serve as a resource for us to make sense of ourselves, by referring to these colorful images without keeping in mind how they have been crafted in imaging research. It gets even more complicated if one contends that the currently symptom based prototype (of psychiatry) is the same as the brain prototype constructed in brain imaging research, keeping in mind the different situations in which the scientific construction happened.

No matter how much researchers are aware of these kinds of issues, they proceed to use concepts that come from our intellectual history and apply it to a hitherto mostly unknown, but much debated, organ. This is also a situation when conceptualization is not derived from the experiment (the PET scan for example) its self but from somewhere else.

Dumit discusses this difficulty by reminding us that already when the experiment is set up, imaginations of human nature are built into it. He writes that when subjects are selected for the experiment they are divided

into two groups, the normal control and the disorder group. What is left out in this scenario is that both of these groups operate with highly "idealized" constructs of what can be regarded as "normal" and "diseased". Instead of trying to see what kind of brain activities can be observed in the PET scan, kinds of humans are constructed before the actual experiment starts, and become, later on, only correlated with brain activity (Dumit: 2004, 68).

If one part of the whole story about mental illness and the brain is the difficulty with transdisciplinarity, then another one is the question of how will mental disorder classification develop or change due to possible developments in imaging technology?

It could be a likely scenario that the elaboration of imaging technology renders certain things visible and it may result in new ways of mental disorder classification. Maybe in the future, mental disorder concepts are created around process - structure phenomena in brain anatomy, and not around the exhibition of certain cognitive, behavioral and emotional characteristics. Depression, along with other currently classified disorders, will vanish and morph into, what could be called, "amygdala related brain disorders".

Sure, there is a long way to go until some scientific domain(s) can make claims in brain research.

The brain is a functional network, rather than a landscape that can be clearly subdivided into different parts.

It is rather the case that these different areas communicate and are molded in such complex and various ways that until now there is no profound understanding of these processes (Jaencke 2012).

Historically, there has been a desire to relate certain psychological functions to specific areas in brain anatomy (dt.: Lokalisationsansatz) (Jaencke: 2012, 84). The science of phrenomenology can be considered a precursor to such ambitions. Although research in this domain has been done, its results are problematic. For example, the area of the frontal cortex has been associated with antisocial behavior, namely that when this area is afflicted people are likely to be antisocial. Several findings have indicated peculiarities in the frontal cortex. However, it has also been shown that the probands analyzed (mainly conspicuous persons or delinquents) showed striking peculiarities in other areas of brain anatomy, that are largely not associated with the control of social behavior (Jaencke: 2012, 92).

Maybe another indicator of the complexity around the understanding of relations between current psychiatric classification and brain functions and structures, can be seen in the practice to prescribe the same medications (from the selective reuptake inhibitor group: SSRI, SNRI and so on) for Depression and other classified disorders, like anxiety disorder, or disorders from the obsessive - compulsive spectrum and even bulimia (cf. Internet\_01 and internet\_02). That is to say that in several examples of the current classified disorders, the same neurotransmitter systems play a role and therefore need to be regulated or stimulated (with medication); not to mention that there are more transmitter systems in our head than the ones now commonly stimulated by antidepressant medication. Before SSRIs had been introduced into the mental health market, prescribed antidepressants acted on more transmitter systems. However, due to heavy side effects patients experienced while taking them, it was a relief both for patients and practitioners to use pharmaceutical products that were easier to handle on a daily basis.

Certainly, some of the classified disorders today share the same symptoms (such as anxiety related symptoms

or compulsiveness). So it should not be surprising that the same medication works for, at the moment, the different classified disorders.

Interesting in this regard - and relating back to the statements about the problems in brain imaging research - is a comment made by Jaencke that there has not yet been a breakthrough in imaging technologies in regards to diagnosing major disorders like Schizophrenia, Depression, Attention- hyperactivity disorders or variants of Dementia. As Jaencke remarks, these mental disorders are defined via noticeable psychological problems (Jaencke: 2012, 99).

However, this may only be the beginning of a connection between current classification systems and the sciences of the brain. Therefore it might be better, as Jaencke expresses, that the use of brain imaging is done in a more cautious way that does not make overzealous announcements of what they are able to show, nor that these studies are used for expansive interpretations. In Jaencke's point of view too many "frontier crossings" happen when brain imaging is transferred to other scientific domains that maybe are, for the moment, better and more efficient to explain and research about "psychological circumstances" (Jaencke: 2012, 100).

Therefore, different sciences that investigate the brain can be considered mere heuristics and ways of observing (dt.: Sichtweisen), and not an ultimate theory of the mind. However, these different conceptualizations and theoretical approaches are also, in some cases, integrated into a more general theoretization of the brain and how it works. So this could also be a sciento- historical moment when different theories mingle with or influence each other and bring about something new or they advance the claims of the other disciplines.

At this point in time, it may still be psychiatry that holds the monopoly about how to make sense of mental disorder. But maybe, in the future, certain branches of research in the neuroscience field will make such a successful contribution about "what mental disorder is", that current classification will change.

Several stakeholders are interested to establish their understanding of mental disorder as the ultimate theory. It is precisely at this point where it makes sense to introduce the topic of science – society- politics – media entanglements.

Considering media as an arena where certain content appears and is judged and having publics forming an opinion about that information, it needs to be stressed that media can serve as a resource for scientists to gather allies and, in the long run, assure public and financial support for their research. That is to say, if a certain discipline or researcher is featured in the media and can successfully place their agenda, it may result in support.

However, this is a very simplistic consideration about the actual communication processes between stakeholders of science, publics, media and politics. In the next chapter it will be considered more closely how these communication processes and entanglements can be conceptualized.

For the moment, this argument shall serve to underscore the importance of the media as a knowledge broker that has an influence on political decision making and science.

If a certain theory about mental disorder is featured more often in the media, public(s), and that includes

politics, get the impression that this is the right way to face the problem of the (alleged) increasing rates of mental disorder, in particular, Depression. Consequently, policy makers and funding organizations give more attention and support to these fields, so often represented in media reporting. Boeker observes that ambassadors of research fields not part of the domain of the neurosciences complain about the scarce, or even nonexistent, funding for other research projects in the mental health field (Boeker, Seifritz: 2012, 632). This could lead to a situation where policy makers and research funding institutions (and politics in general) think that the fields most dominant in media reporting are the ones that are most able to explain mental disorders. Therefore, they receive more capital to continue their science.

This is a very important sciento- political question in general, as different disciplines tell different stories about mental disorder. They may have different assumptions about aetiology and pathogenesis of mental conditions that afflict people. What does it mean for us if the neuroscience domain, or some areas within that, gains such an importance in how to make sense of mental disorder that other approaches are discarded? It certainly leads to an impoverishment of theories about what we are and what possible afflictions we can have and how to counter them. It also may lead, as was the case with Fleck and his study of syphilis, to different classification systems as well, or, to use a different concept, "enactments" (Mol 2002) of mental disorder.

If genetics could prove, one day, its efficiency in explaining and predicting mental disorders, then we may end up with disease concepts that are justified via their aetiology. Or imaging techniques advance to such a state that they can precisely picture what is going on in the brain when afflicted, it could result in disease classifications that refer to discernible process- structure correlates in brain anatomy. Or, if in psychopharmacology such advances and new developments are occurring, so that there are more drugs on the market that act more specifically, then classification may evolve around therapeutic measures. These are just possible scenarios in the general mental health field of which some are more likely to occur than others.

Nevertheless, it should be remembered as a scenario because it tells something about disease concepts and, therefore, how disease classifications can come about. Particularly in the general mental health field it is necessary to reflect upon the different theoretical approaches, as the human mind is so complex and far from being understood holistically (not to mention understandings of how the brain interacts with the rest of the body).

Having different approaches and understandings of mental disorder is likely to cause confusion. But it could also help to better understand why people become mentally troubled. It may be better to adapt the theory/ theories to the patient and not the other way round, trying to force each individual, with all its idiosyncrasies, into a theoretical corset. In this vein Boeker highlights the capacities of psychotherapeutic interventions, as they are methods for solving complex, cross-linked, dynamic and hitherto non-transparent processes. Given the huge variety of theoretical debate about the human psyche, in domains such as psychology or psychiatry and the neurosciences, we should remember that they all tell us slightly different stories about what it is like to be human and how life can be difficult for us. Precisely this urges us to not only reflect the

theoretical reasoning of mental conditions, but also to gain a feeling for how these scientific approaches order our world, what Jasanoff has articulated by reminding us of the uneven processes through which the production of science and technology becomes entangled with social norms and hierarchies (Jasanoff: 2004, 2). In *States of Knowledge – The Co- Production of Science and Social Order,* she points to the importance of STS methods and findings and how they are indispensable for the analysis of power, culture and social change (Jasanoff: 2004, 4).

Co-Production is the hypothesis that how we know and depict the world, in regards to both nature and society, can not be separated from how we have chosen to life in it (Jasanoff: 2004, 2). Therefore, the dynamic of co-production can be found on all levels of sience and society. Concepts, such illness, selfhood or citizenship, classify and order our social worlds. The question is about how have these concepts stabilized and become stable in accordance with specific demonstrations of knowledge, such as genetic markers or measures of human intelligence (Jasanoff: 2004, 5).

# 4. Media- science- society relations

Having had an overview of how one can locate and understand the creation of mental disorder classifications, I want to continue with the question of how the representation of Depression in the newspaper is connected to this. This thesis considers the disease concept of Depression as a possible outcome of complex communication processes. This disease concept, as mentioned in the beginning, has been influenced by several sites in modern societies. It is part of our intellectual heritage, a growing and heterogeneous field of neuroscientific inquiry and, generally, of common everyday life.

In the previous chapters, it was tried to elaborate on the historical contingencies in which the concept of Depression was born in. However, it was not intended to give a detailed account of the genesis of the disease concept, which has been done elsewhere several times.

The intention was more about to think of the possible contribution of STS approaches to the case of Depression. Therefore, it was not accomplished to examine precisely the ways and the sites of where this disease concept has been influenced, developed and nourished. It should serve as a general hypothesis though that Depression, as we understand it in daily life, is the outcome of the network processes and structures as described in the previous chapters. The media are part of this network.

At one point in time, born out of professional contexts, such as psychoanalysis and later on modern psychiatry, Depression appeared in the public sphere. Certain people start to understand their "psychological circumstances" through the terms used by these professional (scientific) domains. Eventually, various (knowledge) institutions start to employ the concept in their policies; Depression starts to appear in jurisdictional contexts. At one point in history, Depression, or issues regarding Depression, may have been picked up by print media to be a newsworthy piece of information. That could be the introduction of a newly

developed drug therapy or some kind of diagnostic measure ("New wonder drug Prozac promises to cure your Depression"). Or it could be a new legislation in the health care system, such as acknowledging psychological problems as mental disorders and promising the affected financial support for the therapy of their conditions.

It does not matter whether Depression is the main topic of an article or whether it is just mentioned marginally. Its appearance in written public discourse is a document of its visibility, which has become stronger over the time, and of course, is subject to change.

During the sampling process of this thesis, it was crucial to develop an understanding of possible factors that could have contributed to the representation of Depression in the Austrian context. Therefore, major changes in mental health jurisdiction (such as the "Österreichisches Psychotherapiegesetzt") or the introduction of the newer generation of antidepressants (SSRI, SNRI) into the Austrian market were considered. However, no definitive conclusions could be drawn from these incidents in Austrian policy to the representation of the Depression in *Der Standard* and *Die Presse*. Consequently, it can be suspected that the Depression discourse might have been around already for some time and print media started to react to this societal climate approximately from the year 2000 on. In other countries, in the US for instance, Depression may have been an issue in the media from an earlier point in time on, and for different reasons.

As alluded to in the introduction, print media can be considered a knowledge space, in which the relations of mental health and illness (and, consequently, of disease entities) to society are being constructed, contested, challenged and affirmed.

One of the premises of this paper is how broader societal narratives and understandings of mental health and illness, and therefore Depression, are constructed over time in different ways. So Austrian print media can be considered a space where a very specific understanding of the disease concept of Depression evolves and changes.

Austrian print media is a specific arena, in a certain space - time continuum, and can serve as a reservoir of available images and definitions - promoted by different agents, groups and interested parties – that compete and struggle with each other (Holliman: 2009, 117).

To conceive of the media as a public arena can also be argued with Gieryn (1999) when he poses the question of how, in what kind of setting and under what circumstances, science is represented and how its "epistemic authority" is constructed, contested and/ or solidified. Gieryn introduces the concept of "boundary" work, by which he means a rhetoric that enables (the ones who use it) to distinguish between different intellectual activities, demarcated as either scientific or not. In the following theory chapter, this approach will be discussed in more detail.

The chapter starts with considerations about what kind of institution the media is and how this influences the representation of science and (scientific) knowledge (Weingart 1998, Hansen 2009, Felt 2007, Nelkin: 1994, Nisbet (2009 a)). In addition to that, the connection of media to other spaces in society is discussed and how, within this network, the several stakeholders exert influence on each other (Nowotny et al: 2001, Jasanoff: 2005, Weingart 1998, Felt: 2007, Weingart: 2001, Maasen, Weingart: 2005). Issues surrounding scientific

expertise are discussed with Collins and Evans´ (2002) normative approach of (scientific) expertise and Gieryn´s (1999) account of how science and scientific expertise needs to distinguish from other professional areas. Conceptualizations of science – media communication models are, for instance, discussed with Bucchi (2004). This chapter closes with Oudshoorn´s (2003) case study about how the "male pill" had been tested in different kinds of media and how that impacted the content that was represented about it. Lastly, the topic of social identity (Wynne 1992) is considered and how that influences the ways in which people response to science and scientific expertise, which concludes with a statement about how scientific content represented in the media can be appropriated by several public(s) and what that means for their daily practices (Sorensen 2012).

#### 4.1. The Media - What is it?

The Media do not simply mirror reality but they make their own selections and choices of what they want to represent (Weingart: 1998, 870). The media is an institution that consists of certain structures, and operates according to certain policies that insure their survival in modern democratic and capitalist society. In that sense media are governed by format constraints and conventions that impinge on the extent and nature of science coverage (which in turn links closely to how we, as publics, make sense of or "understand" science and its role in society) (Hansen: 2009, 107). Such possible factors are for example the size of the media organization, the professional belief status (specialist or general reporter) and qualifications of journalists covering science, the professional beliefs, policies and practices of editors, the growth of information officers or media liason officers acting as middlemen between scientists/ science institutions and journalists/ media institutions, scientists' stereotypes of journalists and vice versa, or the images which media professionals have of their audiences (Hansen: 2009, 109).

Looking at media coverage of science from a constructivist perspective it becomes clear how this process is influenced by a variety of different dynamics. Different ways and reasons of how and why scientists make a claim, as well as how science and media institutions are organized will influence the media representation of scientific content. Additionally, science in the media is subject to general economic and cultural values too (Hansen: 2009, 108).

Therefore, the representation of science in the media is a problematic topic.

The representation of science in the media does not happen after scientific knowledge production. The media puts topics on the public agenda, and therefore creates a societal necessity to talk and negotiate about something. In that sense it can be considered a broker between worlds as they construct scientific topics according to their very own rules as mentioned before. The media can function as lending legitimacy or they are also a resource (for science) for competition. In that sense, they also fuel – consciously or unconsciously – expectations and hopes for what science can and will deliver (Felt: 2007, 299). The media can be considered a rightful place of the construction of narrations of science and its societal significance. Felt writes that one could consider them as a central factory in which future scenarios are developed (Felt: 2007,

300).

Agendas for reporting in science are not necessarily set by the news organizations, but often elsewhere. Studies have pointed to the significant agenda setting role of specialist science journals, press releases, press and publicity officers, of scientific meetings/ conferences and of scientists themselves in influencing the media and public agenda for science coverage.

This is even more evident when acknowledging that journalists have to cope with information that is not only conflicting but also of highly complex or technical nature, so they heavily rely on established, authoritative, and recognized sources of information, which elsewhere has been called "scientization", meaning the increasing reliance on scientists and other experts in a broad range of media coverage over the last 40 years (Hansen: 2009, 110).

But it is not only here, that agenda setting can happen or is influenced. Much of the literature on media coverage of controversial scientific and environmental issues has focused on how, for example, interest groups of various kinds have succeeded in managing or influencing the media agenda (which were particularly groups who attempted to mobilize the public against particular technologies, scientific developments/ procedures and environmental issues) (Hansen: 2009, 110).

But media attention does not always translate into success. That is particularly the case when, for a certain period, attention by the media for a specific topic has been achieved. But the actual motivation for doing that, namely that certain interest groups can claim legitimacy over a topic which ideally would result in action, has not been successful. Research has shown that this has frequently happened to animal rights groups. Or it can be that some interest groups manage to claim legitimacy over a topic in a certain type of media, but are highly criticized in another one.

The media are not only made of infrastructures and rules, but also of people. Being a journalist is a profession which has to manage the difficulties and constraints of the field.

How to handle the restriction to information, and what about issues surrounding lack of time, unpaid work or the simple fact that journalists are not experts in the various fields they report about? Additional constraints on the reporting on science in the media happen through the dependency on advertisement accounts and the existence of editorial policies (Weingart: 1998, 870).

Writing about science is a difficult issue. It is often expressed that science gets a bad press. Often journalists condemn routine science to be rather boring. It lacks drama. Scientists rightly condemn certain types of sensationalist reporting for misrepresenting the nature of scientific inquiry. In the case when certain scientific development is given due prominence, it all too frequently happens for the wrong reasons (Allan: 2009, 154). The reason why a certain kind of scientific content attains the status of being a newsworthy piece of information depends on a complex array of institutional imperatives. Journalists, together with their editors, bring to the task of making sense of the scientific world a series of "news values". It comes as no surprise that the norms of science journalism seldom align comfortably with those of the science being covered. Some of the criteria that make up a good science story would be for example the fascination value (something that will spark the reader's amazement), the size of the natural audience (the number of readers

who are already interested in a given topic), the importance (for society, as well as for the reader), reliability of the results (is it good science?), and timeliness (the newer the news, the "newsier" it is) (Allan: 2009, 155). Reporting on science means to struggle to make a story interesting, even sensational, in relation to other stories competing for the same space, while at the same time reaffirming professional ideals of truth-telling and balance. How this conflict is negotiated will have significant consequences for what gets covered. In case that science reporting is done thoroughly, it risks losing excitement, but at the same time, it may ensure that the stories avoid the kind of distortions that might encourage inappropriate behavior and unrealistic expectations (Allan: 2009, 156).

Another important issue in the reporting on and representation of science is framing. Used in various contexts of communicating science (or any other complex information), the so - called frames help the journalists to process large (and complex) amounts of information (Nelkin: 1994, 9).

The action of framing is another factor that has a profound influence on the construction of the scientific content. In a paper about communicating climate change and why frames matter for public engagement, Nisbet (2009 a) describes framing as interpretative story lines that set a specific train of thought in motion. It communicates why an issue might be a problem, who or what might be responsible for it, and what should be done about it. Further, the activity of framing is evident in all sorts of communication processes, particularly when applied to public affairs and policy. There is no such thing as unframed information. Frames are sometimes used with intention and sometimes they are used intuitively (Nisbet: 2009 a, 4) or they could be considered a mere convention of a particular communication area. In longitudinal studies, like for example the nuclear debate, it can be observed how frames changed over time. In that case it happened that the nuclear debate, which formerly appeared in risk frames, developed into a rational argument as one of the technologies that could be a reliable energy source for modern societies facing climate change (Hansen: 2009, 113 ff).

#### 4.2. Media and other stakeholders

Another central topic in discussing the media's construction of ideas is to ask whether these media representations of content do affect science and society in general. When we speak of the institutions of modern societies, such as media, politics, economics and science, we readily make the mistake, on the one hand, to think of these institutions as impervious to each other and, on the other hand, to think that these stakeholders exist side by side without exerting influence on each other. An exception may be one argument. It is often used to explain the appearance of a new medication that has been developed, namely that industry and economy driven pharma- research exert a huge influence on science. It can be contended that this argument is still very popular in media stories or lay people's perceptions in general when it comes to discuss scientific developments and how they are entangled in corporate research.

Although this is certainly happening, in many cases it leaves out the numerous other possibilities in which

science, politics, economy, the media, the publics and wider society mutually influence each other, which have been most famously articulated in the mode - 2 discussions about science and society.

In this vein, science and society are not considered as separate areas of which the latter was often considered hostile to scientific methods and values (Nowotny et al: 2001, 2). Instead it is now acknowledged that there exists a dynamic relationship between the two. Scientists engage on multiple levels with politicians, venture capitalists, journalists, the mass media, patent lawyers, the courts, and the public, which, as Jasanoff (2005) remarks.

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"[should render; d. Verf.] almost fantastic any residual notions of science's disinterestedness and detachment from society. "
(Jasanoff: 2005, 213)
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Science therefore is not only affected by this transformation in its research practices and institutions, but also in its epistemological core. Apart from the changes that have happened to science, society also changes, thus co- evolution of those two social systems is a better description of what happens.

The several types of media that we use and practice are part of this bigger network. In this sense, the media are not innocent witnesses of what is the case in the world. They are brokers, multipliers and, in some cases, even creators of topics of interest.

Also termed the *medialization* of science (Weingart 1998) it is to be acknowledged that the media set in motion a whole variety of dynamics within the scientific system and vice versa. The same mutual influence pathways can be observed in other areas of modern society. That could be for example connections between science and economy that are traceable in various cash- flows or co - operations or patenting issues. Which research gets financed? Where do collaborations happen and what about the owner- ship of scientific knowledge?

Science becomes ever more needed in the realm of politics, as experts are consulted when making decisions. At the same time, political interests feed back into scientific knowledge production without explicitly mentioning it (Felt: 2007, 298). Elsewhere this has been understood through the terms of the *politization* of science and the *scientification* of politics (Weingart 2001), again underscoring the mutual constituency of these systems; the same applies to the afore mentioned *medialization* of science, meaning that when science gets represented in the media, it does so under specific circumstances that are, in return, adopted by the scientific system and, as has been argued before, affect scientific knowledge production in its epistemological core.

However, Maasen and Weingart speak of the *scientification* of politics with a specific focus they develop in *What's new in scientific advice to politics?* In this paper they consider how the topic of "science and politics" has been a major issue for different scholarly domains and how that area of concern has undergone changes in how they have been conceptualized and how interactions between them had been imagined and what new kind of questions have become a matter of concern for this research enterprise. Early scholarly concern over the politics- science nexus was primarily about technocratization, meaning the suspicion that scientific

experts would interfere too much with the agenda of democratic institutions. On the other hand, some analysts appreciated this dynamic because they thought that the impact of scientific advice would rationalize slow democratic mechanisms. (Maasen, Weingart: 2005, 1)

However, things have changed since then and new questions and issues appeared.

The 1960's made visible how imaginations of science and scientific expertise underwent changes in public perception. One main trigger of this development can be considered public debates over nuclear energy and environmental protection. What was addressed in this new societal constellation was how scientists were drawn into the political process and, thus, leading to a decline of trust in them, as the public(s) could witness how their respective research was used by different political stakeholders. Scientific knowledge was no longer seen as neutral, objective and reliable (Maasen, Weingart: 2005, 2).

In this societal climate the nature of scientific expertise also changed. More than ever before, scientists have to legitimize and locate their research in the face of the ever growing demand of the societal utility of the knowledge produced by them. And more than ever before, has our society seen a proliferation of expertise that is not exclusively located within academia anymore. Weingart and Maasen speak about that in the sense of a *proliferation of expertise*. They say that this is one important characteristic of the new alignment between science and politics, which in academic discussion is now addressed under the frame of *What exactly is new in the arrangement of scientific expertise and political decision-making* (Maasen, Weingart: 2005, 3)? Policy-makers and CEOs in companies alike attempt to support their decisions with (scientific) expertise more often.

In this new era, expertise is not restricted to governments or academia anymore. Instead it includes newer arrangements of knowledge from various sources in society (Maasen, Weingart: 2005, 5).

As indicated above, when talking about how the media represent scientific content, the respective field of expertise, in which a certain kind of knowledge product is crafted, is also staged in the media. The people and institutions, in regards to a certain knowledge claim, make use of the media to promote their agenda. On the part of decision making, it can even be expected that expertise and how it is represented in the media has an impact on policy processes, as the paper, *Mass-Mediated Expertise as Informal Policy Advice*, by Petersen et al (2010) suggests.

## 4.3. Scientific Experts

The proliferation of knowledge production, which is not exclusive to science any more, has made questions about experts and expertise more urgent than ever before. Not surprisingly, there are many ways in which this matter can be approached and conceptualized.

Collins and Evans (2002) give an account of how science studies have handled the topic of expertise. They suggest three major trends, of which the latter is the one they develop as a normative theory of expertise, which they call *studies of expertise and experience*.

Above all, such an approach aims at fostering a new understanding of the expertise of lay people, and what kind of knowledge they have, in relation to the scientists' expertise (Collins, Evans: 2002, 251).

For that matter they suggest the term "experience based expertise", which denotes a certain kind of quality of knowledge which is no longer exclusively found in scientific institutions.

Going back to the, as they call it, the paradigm study of so - called "lay expertise", Bryan Wynne's study of the relationship between official scientists and sheep farmers in *Misunderstood misunderstanding: social identities and public uptake of science*, they illustrate of how one could understand the experience based expert. They use this account to illustrate how things could have worked out better, if one had understood the value of the expertise offered by the Cumbrian sheep farmers.

What they argue is that the knowledge from the farmers, which they gained from their long experience in the ecology of hill sheep farming, was equally valuable to the experience of "core group experts" of any given specialized scientific domain. However, this value could not be acknowledged because they had no formal training and they could not speak up against the authority of the scientific experts.

Collins and Evans suggest conceptualizing the positions of the sheep farmers and the scientists in different ways. They create the terms of *Contributory Expertise* and *Interactional Expertise* in order to give the case-scenario a new meaning. They suggest that the sheep farmers qualified for the term Contributory Expertise because they had gained valuable experience (such as is the case with core set experts, who can be considered as having more experience than other experts in this area, who are not working in the core set within a given scientific domain). Additionally, they say, that the whole case would have benefit tremendously from introducing someone with interactional expertise, like a Greenpeace activist or a Bryan Wynne so to say, who could have had enough expertise to interact interestingly with participants and carry out a sociological analysis.

This would have contributed to better understand each of the sides and locate their contribution for the case (Collins, Evans: 2002, 256). It is most valuable to consider how expertise is conceptualized and what descriptive as well as normative power it can have for analyzing the cases in which (scientific) expertise plays a role. Collins and Evans also point out that our views about what counts as a legitimate (expert) field to solve a problem is not fixed for all time.

This feeds back to what has been alluded to already in chapter two about the classification of mental disorders, namely which scientific discipline has the power over the definition and how could that possibly change. We will see epochs in which other (expert) fields will arise that are then considered legitimate (Collins, Evans: 2002, 252).

Gieryn, with the argument of "boundary work", offers an approach that can serve to better understand how science is granted epistemic authority. That is

"(...) the legitimate power to define, describe, and explain bounded domains of reality" (Gieryn: 1999, 1)

"Boundary work" is a rhetoric that is used to distinguish between different kinds of intellectual activities,

whereas some are outside the boundary of what is deemed "true science". Often science has to do boundary work against other stakeholders that challenge its privileged position of epistemic authority.

In regards to the media it needs to be asked,

"(...) how does science get represented in these credibility contests – when, where, and with what effects?"

(Gieryn: 1999, 5)

Epistemic authority is therefore also a question about expertise. Gieryn contends that epistemic authority of science is not given and always needs to be negotiated, depending on the context it is discussed in, which he calls the "cultural cartography of science" (Gieryn: 1999, 24). Media is an example for a context, an arena, in which epistemic contests and the cartography of science take place.

Such concepts can be very useful when applied to considering the epistemologies of mental disorder. What

approach is represented as "the way" to make sense of mental disorder? Thinking of another setting, the

doctor patient relationship, it is also an interesting spot to look for cultural cartographies of science. Also here, unrecognized power relations are built into the doctor – patient relationship and influence the treatment. It certainly does make a huge difference if the patient is encouraged to speak up for himself/herself and to give an account of the experience with drug and talk therapy. Also the concept of contributory expertise can be applied to this case scenario, by acknowledging the patient's ability over assessing his/her condition in a different way than through the highly standardized and normatized classifications used by professionals. As can be shown in the sample later on, the construction of Depression in this newspaper sample certainly does not satisfy the normative approach Collins and Evans write about, when speaking about (scientific) expertise, nor is there a strong contestation of psychiatry's reasoning about mental disorder. The several domains, such as politics, economy or the media can be understood to be located within the broader public(s). Without the public(s) there would be no media, which is used as an important source of information. Even scientists can be understood to pertain to the public(s). That would be the case for example when a certain scientific content is communicated - in some type of media - that belongs to a specific research community. Other scientists who are not part of this group of experts will access the media to get informed about their research (or at least what gets communicated of it). This can be particularly valuable for experts who work in similar fields and like to stay informed, but, due to restrictions of time, effort and cognitive abilities, cannot access all the content of the many peer reviewed journals.

#### **4.4.** Science- Media – Public Communication Models

The relationship between science, the media and the public(s) needs always to be understood to be a special historical and cultural arrangement. Plenty of studies have been carried out in these areas. Certainly, science needs the media to get to the public(s).

Weingart pointed out that in the case the media become increasingly important for structuring public

discourse, science needs to gain their attention. Public acceptance, needed for science to legitimize its research, is attained through attention and support of the media (Weingart: 1998, 871).

So it is a strategic move by science toward the media in order to assure public, political, and in the long run, financial support.

How can communication processes between science and the media and also wider society be imagined to happen?

This section deals with questions of scientific knowledge and how it is popularized. Again, it is necessary to consider the many ways in which this process can be conceptualized. And it is also about the question of what kind of knowledge can be expected in a print media analysis about the communication of scientific content. Science studies of scientific knowledge and its diffusion have always been very critical of simplified popularization models, such as the *deficit model*.

The decade - long used "deficit - model" guided assumptions about how publics make sense of science, purporting that there exists an abyss between expert and the public knowledge, which can only be overcome by the dispersion of simplified accounts of the scientists' knowledge. Ignorance, it was thought, is at the root of social conflict over science (Nispet, Scheufele: 2009, 1767). As a consequence it was contended that this ignorance can be countered by more education in science and a more educated public would appreciate what is handed over to them. Particularly media was considered an adequate transmission channel for that purpose. If citizens were knowledgeable about the latest scientific developments, they would judge the information in the same manner as scientists do and the controversy would stop. This also carries an inevitable optimism that scientific content can be thoroughly understood by everybody and, once one has been educated enough, one would accept the superiority of science.

This model has been largely criticized and rightfully condemned as too simplistic as to adequately describe processes of information transfer. Strong hierarchies are built into it, placing the scientists and some policy makers at the top of the ladder over deciding what is to be counted as valid and rational knowledge.

Adding to this, the model cannot be used to actually consider the many nuances of knowledge transfer in both directions, from science to the public and from the public to science. It leaves out the many other sites in society where knowledge is transferred, changed and produced. In this vein, the *deficit model* or *linear model* does not acknowledge the heterogeneity and entanglements of both the domain of the sciences and the public(s).

Particularly studies in the field of the Public Understanding of Science and general STS- approaches remind us that contexts of science communication and the way it is done vary and are way more complex.

Nevertheless, some models have been suggested, in order to conceptualize such communication processes and how they also influence research. For example, communication outside the respective peer group can already be considered a kind of simplification.

According to this linear conceptualization of science communication, scientific ideas pass through various levels, starting with the intraspecialist communication and leading through intermediate levels to broader popularizations (Bucchi: 2004, 115).

Practically, things are always different. The literature on the public communication of science is full of examples where communication processes have been not happened in a top - down fashion. Science studies have a particular interest in contributing to form some sort of resistance against the epistemological colonialism that is often implemented by science when it is communicated to a wider (lay) audience. They often stress models in which different kinds of (lay) public(s) can actually contribute their knowledge to understand certain cases and phenomena, or they even frame debates in a different way.

The reasons why scientists or whole areas of research approach the media can be different.

Certainly, it is a strategic move which needs thorough evaluation on part of the scientist(s) involved. They should consider the consequences of their research projects. Will cooperating with a journalist and his/ her media institution enhance the profile of the researcher(s) in his/ their respective field? Or will this move diminish his/ her/ their credibility, upset his/ her/ their colleagues and antagonize his/ her/ their rivals? Are there benefits to be expected turning the research into a news story? Can this move be a potential opportunity to be exploited, especially in regards to attracting potential funding? How can I handle controversial research, which entails possible risks and hazards and how can I maintain my authority when acknowledging that it is impossible to eliminate problems entirely? (Allan: 2009, 158 ff)

As Bucchi points out, it can also be the case that scientists approach the media to present their results without having it published in a peer reviewed journal first. This can be a strategy in order to publish faster as the research does not need to be approved in the tedious process of peer review. It also ensures that someone else does not publish first. Certainly, this move is likely to have repercussions in part from the colleagues in the peer community (Bucchi: 2004, 221). However, turning to the public can prove beneficial for their research. In some cases even the path to success can be found in the media, and not via internal evaluations that have been not so successful for the researcher(s) (Weingart: 1998, 876).

Bucchi relates this specific case of approaching the media without recent approval of the peers to what he calls "deviation" to the public level mode of science communication. In this model, public communication acquires even greater salience and a stronger role he says. The so called deviation to the public level occurs when scientific problems more frequently appear in the generic media settings, like the news sections of newspapers and television newscasts (Bucchi: 2004, 119).

In contrast to that, the typical popularization mode is presenting a type of science communication that is pretty straight forward. It reinforces the certainty and solidity of theories and results. Typical popularization processes happen more frequently in settings that are explicitly devoted to the communication of science, such as popular science magazines, scientific pages of the newspaper or the museum. The deviation mode is certainly the more interesting one. What can happen is that scientific facts (plus their networks of professionals and the institutional actors surrounding them) may be consolidated but they also may be deconstructed and manipulated by social groups in the public arena. If this happens, it can also be that these things expand again towards the specialist levels, in another form (Bucchi: 2004, 221).

What this short discussion on the motivation of scientists about going public shows, is how different social dynamics within science impact what gets communicated – for example in the media – and for what reason.

This can be considered special cases of a dynamic of science communication that influence what the publics get to know about science.

The media is certainly an appropriate instrument for science to diffuse its knowledge. It is part of a bigger communication network that influences what gets to the public, but also how certain mechanisms impact the very process of knowledge production. Studies in science communication are far away from simple linear cause and effect transmission models.

Ideally, studies of science communication would entail all stages of the production, the diffusion and the appropriation of scientific knowledge. But due to lack of time and money, it often can only address one or two of these moments and come up with suggestions about how communication flows might have worked. In that sense, it is difficult to derive definite answers about how, in a certain case, this has happened (Hansen: 2009, 116).

However, remembering the parallelism of communication processes, as opposed to linear conceptualizations of it, media coverage of science and public opinion about science can be understood to be parallel and interacting forums of meaning creation, rather than media coverage "influencing" public opinion or vice versa (Hansen: 2009, 116 ff).

This also takes into account the many possible sites in modern society where a certain case of scientific knowledge gets communicated. In most cases, this case of scientific content will attain very different meanings, depending on the context it appears in. One such account of the diffusion of scientific knowledge and how it was adopted by different types of media is offered by Nelly Oudshoorn (2003) in her book, *The male pill – A biography of a technology in the making*.

In one of the chapters she looks at how different stories of the development of a new male contraceptive was presented in the scientific journal, a press bulletin and some types of media in the Netherlands and the UK. Unsurprisingly, these accounts presented different stories about this rather new technology:

"Whereas the redefinition of the criterion to assess the efficacy of contraceptive methods was the major aim of testing in the clinic, the testing in the media focused almost exclusively on the acceptability of the new technology." (Oudshoorn: 2003, 201)

Oudshoorn uses the term "testing" for describing certain features about the popularization process that had happened to this technology. Scientists know that they have to advertise their research but they often cannot control how their stories will be taken up by a wider lay audience, in this case the journalists who changed the press release about the trial for male contraceptives (which also narrated about the study in a different way than the scientific journal where it was published), from an enthusiastic press release (the journal paper itself was not enthusiastic at all) into a risky and unwanted technological innovation. They did so, primarily, by including personal accounts of men who were framed as, on the one hand, too "manly" as to take responsibility over reproduction and, on the other hand, as too sensitive as to endure the agony of having a

vaccination every now and then (this contraceptive method is done by giving men injections). All in all, Oudshoorn concludes, that in this particular case the media did not play a role in enhancing the cultural feasibility of new male contraceptives (Oudshoorn: 2003, 204).

### 4.5. The publics and the context of social identity

The public(s) is (are) not a homogeneous mass of people. People from different backgrounds respond to science in a different way. A very specific kind of public, which in studies of the communication of science is considered as a particular form of expertise, is presented in Bryan Wynne's case study, in *Misunderstood misunderstanding: social identities and public uptake of science* (1992).

In this paper, Wynne demonstrates how much social identity impacts on how people respond to science. The case he looks at is about a scientific controversy over a nuclear power plant in Sellafield-Windscale in the UK. Wynne investigates how different social actors, in this case the scientists and the local hill sheep-farmers, handled knowledge communication and how they, relying on their respective (scientific) training and experience, judged the situation there.

In this particular example, the farmers had their doubts about the alleged contamination of the Sellafield grounds (where they used to graze their sheep) through the accident of the nuclear power plant in Tschernobyl. One though, could expect that the farmers do not doubt the scientists' credibility. With their expertise in their work and in their sheep, they felt that the contamination of the grounds had been there long before and that the Sellafield power plant had something to do with it. So due to their social role as sheep farmers, they had their very own expertise and, on behalf of that, judged the scientific content that was handed over to them in a different way.

Collins and Evans (2002), when explaining their approach about science - public communication and interaction, lay emphasis on the experience of these so- called "lay people" that they want to conceptualize as "experience based experts", as mentioned before (Collins and Evans: 2002, 238). According to their experience, these people qualify for this very specific understanding of expertise. In comparison to science their expertise is not institutionalized, such as pertaining to a certain institution, like universities for example. Nor do they systematically order their knowledge, or do empirical research about it. Nevertheless, they possess accumulated knowledge, derived from the fields in which they have been working for a long time. If one relates that to the question of how people handle their psychological conditions when diagnosed with a certain disorder, it could certainly be a very political question in that regard, as to how far they are able to understand and articulate themselves and their conditions outside of the respective expert field in which they have received the diagnosis.

Returning to the case of the Cumbrian sheep farmers, another issue that is negotiated is that Wynne tries to show how trust and credibility, that is usually granted to scientific experts and science in general, are not simply there, but are derived from the social relationships, the networks and the identities that form the life

world of the lay people (Wynne: 1992, 282). The Cumbrian sheep farmers, within their social world and with the knowledge they had about their sheep, they formed a very particular social identity which, among other things, impacted their trust and credibility in the scientists.

# 4.6. Daily Practices. How are Representations of Scientific Knowledge appropriated and why it matters

The more social - anthropological STS branch of research deals, among other areas of interest, with issues of "daily practices" (dt.: Alltagspraxen). Ideas or concepts can be located within this social arena and they interact with us and how we make sense of the world (see topic about "labelling").

Of particular interest to STS scholars is therefore how scientific knowledge is handled in our everyday life (Sorensen: 2012, 212); and in the wider sense appropriated, criticized and transformed. With the concept of "daily practices" researchers look at how these practices are done and how they produce norms and moral imaginations, categorizations and discriminations, and inclusion and exclusion-dynamics.

In this understanding daily practices are organized and regulated in a way that they structure our daily social actions and are often unconsciously performed. Nevertheless, the moment they become visible bears the possibility for change. That is why many of these social - anthropological analysis of daily practices intend to show the contingency of certain practices and suggest alternatives (Sorensen: 2012, 215).

This branch of STS research conceives of science as an integral component of our cultural order. Science not only exists in the respective institutions, but at many sites of modern societies. One has to analyze the complexity of scientific knowledge and how it interacts constantly with the manifold aspects of our cultural life (Sorensen: 2012, 214) and, in a co-production sense, how these aspects of our cultural life feed back into research and science. Depression can be analyzed in that respect. The use of this concept creates social orders and ways of being that do not necessarily need to be that way.

Taking this as an illustrative example, people who use print media as a source of information will also respond to the scientific content presented to them in different ways. Content presented by the media can be communicated to the public(s) without having them doubting the accuracy of the representation of knowledge there. Or it could be staged, but at the same time already critically assessed.

Sometimes, public(s) strongly contest information handed over to them by the media. And, in many cases, public(s) are not interested at all. So content that deals with scientific issues probably does not reach anybody. Generally, it is important to see society as a dynamic field. Society, and different social groups within it, is not static. They are always changing and overlapping each other. This concept of social identity is dynamic, and can be used to frame the issue of understanding lay peoples' responses to science.

So the actual questions that should be posed regarding the public understanding of science is, how is scientific knowledge handed over to the people? How do they reinterpret and rearrange it in their context of their knowledge, experience and beliefs? How do different people choose among the various kinds of knowledge offered to them? And what are their expectations toward science (Felt: 2000)? Or as Nispet and

Scheufele contend that, when talking about the role of societal conflicts over science, science literacy has only a very limited role in shaping public perceptions and decisions.

Anybody who wants to effectively communicate science to a public audience should take into account what the authentic values of this specific audience are, as well as considering their knowledge and attitudes of their life worlds. Additionally, it is necessary to understand what kind of media they use (Nispet, Scheufele: 2009, 1767). This is probably even more important, given the many information sites offered by the Internet nowadays. All this will have an influence on how people react to scientific information handed over to them by the media.

Another aspect of this social reality is that media institutions are also social institutions. They also share certain values and ideologies, which influence their vision of the world. The employees, the journalists, are likely to share these values. Consequently, the content that is published needs to comply with these ethics, and therefore influences the selection of topics and the way in which they are handled.

It is not the task of this thesis to evaluate how different publics react to the scientific content they have been exposed to. The purpose of writing this part was to understand dynamics and motivations why certain scientific content is made public and under what conditions that happens. Therefore, it is also important to imagine the possible audience for that content who are part of the general network, in which scientific claims are made.

My starting hypothesis for this thesis is that the disease concept of Depression in Austrian print media can be interpreted as the outcome of complex processes, in general cultural settings and the associated political, economic, social and scientific circumstances, which have created a certain environment in which scientific claims (constructing disease concepts) are made. Ultimately this influences how we conceive mental conditions, and consequently, Depression. This disease concept in the context of Austrian quality print media is only one cultural expression of those many meanings it can have in other places, be they in other cultures, different publics or different types of media, politics or science. However, one should be reminded that behind all these constructs lies a world that is worth exploring for the benefit of us all.

# 5. Methods and Sample

Methodologically, I chose to work with the program of the Wissensoziologische Diskursanalyse (SKAD-Sociology of Knowledge Approach to Discourse), as suggested by Reiner Keller (2008).

Keller writes that the program's tendency to constructionist thinking should not be regarded as evading reality. SKAD is not about negating the "Widerständigkeit von Wirklichkeit" nor it is about negating the existence of physical phenomena and processes, which exist without us giving meaning to them. But it is also not about a naive understanding of objectivity, disregarding any of the circumstances under which knowledge about a phenomenon came about.

The Wissensoziologische Diskursanalyse is a theoretical and analytical program that wants to analyze the

societal construction of the "order of things" ("Ordnung der Dinge") (Keller: 2008, 271). Social Science discourse analysis is not only interested in text interpretation, but in the social context of sign- use and the production of meaning as the basis of the objectification of a societal knowledge pool (dt.: "Wissensvorrat") (Keller: 2008, 95). It looks at the knowledge- politics (dt.: "Wissenspolitiken") of institutional fields of modern society; this could be for example settings in law, politics, science and other professional areas, and lastly, in mass media publics (dt.: "Massenmediale Öffentlichkeit").

One way to understand the discourse is to see it as sense- structures (dt.: "Sinnstrukturen"), which is interpretation- and action - structures (dt.: "Deutungs- und Handlungsstrukturen") of institutions and organizations, as well as general social actors and social collectives. Discourse does not refer to just one incidence of a statement (dt.: "Aussageergeignis"), but to structured relations (dt.: "strukturierte Zusammenhänge").

Lastly, the *Wissensoziologische Diskursanalyse* analyzes the societal causes and consequences of these processes (Keller: 2008, 233). Mass media is therefore one institutional field of modern society where "knowledge politics", according to Keller, is done. The program of *Wissensoziologische Diskursanalys* can help therefore to see how the concept of Depression has been staged in *Der Standard* and *Die Presse* for a time span of twelve years.

The final aim of the program is to analyze what kind of knowledge, objects, causal relations, properties and subject- positions (dt. "Subjektposition") are expressed. And what are the resources that give rise to them, such as *Deutungsschemata*, classifications, phenomenon structures (dt. "Phänomenstruktur"), story lines, attributed moral and aesthetic values. And what are the rules and resources that form the basis of such processes (Keller: 2008, 265).

These terms, introduced by Keller, help to understand how discourses can be structured. *Deutungsmuster* refers to how an issue is presented to us and what we, as citizens, ought to think of it. *Deutungsmuster* can be understood as shared meaning. It is part of a society's knowledge pool that, of course, is flexible and subject to change. Deutungsmuster organize individiual as well as collective experience (how to make sense of a certain incident), and also provide adequate models of action (Keller: 2008, 240).

By *classification* Keller means that phenomena presented in a discourse are classified in a particular way. Classifications are contingent and they structure the way of our experience of a phenomenon (Keller: 2008, 247). *Phenomenon structures* relate to how a phenomenon is presented. Like the process of framing stories in the media, these structures constitute the issue at stake in a certain way. They, for example, tell what is problematic about a phenomenon, what causal links there are or what can be done to sort things out. In these phenomenon structures, human actors can be addressed as culprits or as the ones who need to do something about it and so on (Keller: 2008, 249).

Story lines are the overall organizing structures that connect *Deutungsmuster*, classification and phenomenon structures (Keller: 2008, 251). Story Lines are performative in the sense that they constitute circumstances in the world (dt. "Weltzustände") as stories that feature actors, incidents, challenges, success and defeat, and good and bad guys (Keller: 2008, 252).

"Constituting circumstances in the world" is probably one of the most important aspects why it is useful to undertake a discourse analysis for a certain phenomenon. In that vein historical discourse analysis (Landwehr: 2004) has a strong political character as it tries to understand in which societal, political and institutional context a content is expressed. That is important because discourse analysis is also about the question of power. Who has the power to say something and who can't. Considering the context, in which a certain content appears, enables one to speculate about the connections there are between one semiological system and the surrounding social world (Landwehr: 2004, 109).

### 5.1. SKAD and the concept of Depression

This thesis uses the term discourse as suggested by Reiner Keller in several of his writings about the *Sociology of Knowledge Approach to Discourse* (SKAD). Discourse can be understood to be a genuine social - scientific construct that enables a researcher to scan a large amount of material about a certain phenomenon.

With this in mind, several Austrian newspapers were scanned and collected, which first appeared as singular expressions (dt.:"singular Ereignisse"). Retrospectively, it was tried to figure some kind of connection, rule or structure these expressions underlie (Keller: 2011, 83).

Why is SKAD suitable for understanding the creation of Depression in Austrian print media? Having a social constructionist understanding of the order of our world, SKAD allows retrospectively building a model which lets the researcher gain an understanding of possible forces and procedures via which a certain knowledge system has been established. The disease concept of Depression needs to be located within this system. Keller's definition for discourse is that it is a certain statement practice (dt. Aussagepraxis). Different criteria can be used to differentiate a discourse from other statement practices, discourses. A discourse produces meaning. And the researcher's task is to look at the mechanisms under which this meaning of something came into being. Such mechanisms are mostly institutionally stabilized structure patterns (dt.: Strukturmuster), practices, rules and resources. (Keller: 2011, 68).

In regards to the case of Depression, and as has already been indicated, one can assume that the meaning of this contemporary mass- culture disease concept has been generated, and is continuously developing and changing, within a global knowledge system. Of course, this global system has its "located connotations", that are place specific.

Within this global knowledge system there are different stakeholders and different mechanisms that each will have an impact on the generation of the meaning of Depression. Some of the stakeholders are for example the scientific domains that research about Depression, the different social strata of a community, or in general, society, politics, law, and, of course, the media. All these places are generators of meaning, they all express something, and thus, they do statement practices. These discourses are generated via stakeholder specific stabilized structure patterns, practices, rules and resources, as mentioned before. These discourses intersect with each other, sometimes creating new discourses, sometimes negating each other. Or they exist at

the same time.

The media, or print media, are one specific place in this meaning producing system that, in the words of Keller, could be referred to as discursive field, (dt.Diskursfeld, diskursives Feld) or arena, in which a range of "mediated" discourses are in competition over the right of defining a phenomenon (Keller: 2011, 68) One can say mediated because media do transport certain discourses from certain fields in society, like science, to the wider public(s), and reconstruct their meaning according to their very own rules.

Having media identified as discursive fields (dt. Diskursfelder), or arenas, that mediate statement practices, one can continue by contending that there are certain discourse regimes (dt: Diskursregime) in the media. By discourse regime Keller refers to the possible relations/intersections of several discourses and/or practical fields (dt. Praxisfelder) (Keller: 2008, 236).

The SKAD approach therefore is a suitable method for it acknowledges the complexity in meaning generation of a phenomenon, in this case the disease concept of Depression. Lastly, and typically for discourse research, SKAD offers a perspective through which one can approach the question of why a topic appears and gains in importance. What is said about it and what is left out? Why has Depression become such a ubiquitous – at least in Western societies – phenomenon? What is said about it and what is not expressed?

## **5.2.** Material – Constructing the Sample

For the empirical material I decided to approach print media. It is one of the places where social scientists can have access to, and easily collect a sample. Second, print media is a location in modern Western societies where written documents articulate meaning about Depression.

Before the sampling process was initiated, but also during the sampling process, I informed myself from a variety of sources about the phenomenon in question. That entailed popular scientific accounts and also more sophisticated literature from the neuroscientific and psychiatric field. This helped to gain an understanding of current expert understanding(s) and discussion(s) of Depression (Keller: 2011, 86), particularly in the psychiatric field.

When the sampling process was started, it was not decided yet which newspaper should be chosen to be included in the sample. Eventually though, it turned out that *Die Presse* and *Der Standard*, pertaining to one of the media sources of the educated Austrian middle class, and representing two positions (*Die Presse* more right, *Der Standard* more left) of the Austrian political media culture, had the most suitable examples of articles for doing a discourse analysis. First of all, they were, compared to other types of Austrian print media, long enough to offer adequate analysis material. And second, due to their institutional standards and work ethics, they provided articles complex enough to generate an interesting sample.

Having decided to work with *Der Standard* and *Die Presse*, a variety of items of different quality, as some articles are longer and more complex than others, were obtained. Reading through the huge amount of

articles it was important to downsize the sample tremendously. The first sampling process ("Stichwortsuche") included all pieces of writing that, at some point, mention Depression. But too many articles were obtained that, in most cases, only dealt with Depression as a "side topic". In a next step, it was tried to reduce the amount of items and to only use those examples from the search results that showed a high affinity with, broadly speaking, "psychiatric issues". "Psychiatric issues" refer to content that can be argued to lie within the domain of psychiatry, such as suicide, alcoholism or schizophrenia and anxiety. The reason why at first it was also tried to include these issues to be part of the sample was that particular in the topics of suicide, alcoholism and anxiety, Depression is a pheonomenon of interest, as it is either argued as the reason why people commit suicide or start becoming addicted to alcohol, or, in the case of anxiety, it is argued to be connected to it, or occurring at the same time.

Also appearing via "Stichwortsuche" of Depression were items that dealt with the psychiatry as an institution, most often with a critique of psychiatry and also how psychiatry relates to greater society. However, the sample was still too big, so it was decided to only collect those articles that deal with Depression or Burn- out as a main topic. The latter was dismissed too because the Burn- out discourse could be another thesis worth writing. Initially, it was considered important to integrate the Burn- out discourse because it pertains to the wider psychiatry in society debate as the label Burn- out happens to be used a lot for describing when a person does not function psychologically. Second, Burn- out is sometimes used instead of Depression (allegedly carrying less stigma) and third, Depression is sometimes considered as being part of the syndrome (as you can see in some of the articles that pertain to the sample). Often, Burn- out, as a concept, appears when it is contended that the conditions of work in contemporary society make people sick. The sample also shows this argument of the Burn- out discourse.

However, for matters of time and manageability, it was decided to only use those articles for the analysis that were obtained through the sample category of Depression.

Under the conditions just described, what can be expected of the quality of the sample and what conclusions can be drawn from it? The sample can be considered a very specific kind of media construction of Depression, and offers by no means a complete coverage of all the content that had been presented in the Austrian media landscape over the years.

The articles that had been discarded from the analysis material offered a rich account of the many possible meanings this concept could attain. Depression appeared in areas that are not dedicated to medicine or psychiatry at all, showing that the discourse about it is variable and manifold. Second, *Der Standard* and *Die Presse* are what can be considered "quality newspapers", and therefore only represent their respective point of view, which is likely to conform to "educated opinions" of the Austrian middle class (some more left ( *Der Standard*), some more right (*Die Presse*)). In addition to that, only few articles of the amount that was initially searched for – which was just too big to be part of the analytical material – were chosen to be analyzed. Thus the discourse that was constructed can be considered a rather limited selection of the many notions and characteristics the disease concept of Depression can have in the Austrian context of print media.

What is certainly most evident about the sample is that, due to the restrictions described above, it displays representations of the concept that are (bio-) medicalized. This should not confuse the reader to think that Austrian print media readily adopts the (bio-) medical model to make sense of topics like Depression. In the many pieces of writing that were left out, Depression was not displayed in a setting like this. Often it was considered rather critically, as an ambivalent topic.

However, the sample choice can be considered as displaying an already existing inclination to make sense of Depression via (bio-) medical explanatory models. The drives behind this tendency can only be assumed, and have not been the concern of this thesis.

The sample starts in the year 2000. Articles had been collected until May 2012. The year 2000 is crucial because it definitely is the year in which media discourse in Austria starts to be interested in the phenomenon. Before, having looked through all more or less known Austrian newspapers, there are only three accounts of Depression in some random articles. Only from 2000 on, Depression started to be an issue. The sudden appearance of Depression on the public agenda can be motivated by different drives.

As already mentioned, it was tried to identify key incidents in Austrian health legislation, which could have had a profound influence on the representation of the disease concept in the news. However, it was not possible to connect any of the researched incidents to the appearance of it in public discourse, which could have been used to explain its sudden rise.

The incidents that were searched for were motivated by a piece of information that was obtained from one of the articles that were excluded from the sample. This was about the Austrian law for psychotherapy (dt.: "österreichisches Psychotherapie gesetz"). Browsing through the internet, I learned that the law for psychotherapy in Austria got established already in 1990, on June 7<sup>th4</sup>.

Another thing that was deemed possible to indicate the sudden appearance of Depression in the media, was about the introduction of the newer and more effective antidepressants from the selective re - uptake inhibitor group. In the US, one of the first types of these kinds of antidepressants was approved by the food and drug administration under the name of Prozac in 1987 (Shorter: 1997, 323). Prozac can be considered as one of the biggest success stories in the history of antidepressants. It has become "the" drug that, on a global scale, became a synonym for "antidepressant medication" and sparked a whole branch of cultural activities, such as movies or books ("Prozac Nation", 2001).

Since the introduction of this medication into the market already happened in the late 80ies, it was not possible to make any significant connection of this legislation incident to the appearance of the Depression discourse in the media in the year 2000 either.

Therefore, one interpretation could be that its sudden appearance can be seen as a sign for an ever growing concern over mental health in modern democratic societies and designating Depression the position as one of the key elements – both in a critical as well as in an affirmative way - in this context and discourse.

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http://www.psychotherapie.at/psychotherapeutinnen/rechtsinformationen/psychotherapiegesetz

In regards to the quality of the articles that were chosen for the sample, it needs to be stressed that they vary profoundly in content, complexity and longevity, also depending in which rubric they were written for. For matters of manageability, these written documents were not differentiated, but treated as equal.

As can be seen in how the different narrative categories (dt.: Erzählstränge des Diskurses) were created, the quality of the material did have an influence on how categories emerged (e: the narration of "Depression as just a medical entity" in the analytical field of *Narrations of Cause* was mainly established on the many short articles about Depression that, most of the time, are not complex).

Nevertheless, the sample lets one gain an understanding of certain constructions of Depression in Austrian print media that are influenced by the underlying dynamics that are specific to print media stories about scientific discourses. Generally speaking the sample contains articles from rubrics of more general character appearing in sections called "Allgemein" (ALL) (engl: "general"). The sample also contains articles that appear in rubrics specifically devoted to science or other specified areas.

As already mentioned in the theory chapter, the media are a specific institution in society which have their own rules, practices and resources according to which they present topics and stories. One influential factor of how print media represents content about Depression can also be the rubric it appeared in. Connected to that are matters of how long the article is and how complex it had been written. Although *Die Presse* and *Der Standard* can be regarded as quality newspapers, they are also daily newspapers which contribute to a selection of topics in connection with Depression that must be "newsworthy". It is not about longer and complex debates about the issue or issues with Depression in general.

# **5.3.** Comments on how the analysis has been done

Having collected the material, the articles were scanned for information relevant to the theory chapters. The questions that were decided to scan the articles for were developed accordingly. One of the first things that was considered important to ask, was (1) "What is the main topic of the article?"

In a next step it was tried to locate how the article constructs the disease concept of Depression ontologically. As argued in the beginning of this thesis, there are several theoretical approaches in which Depression is manifested in different ways. This regards how different *ontological narratives* construct the concept. For this reason, the following questions were developed: (2) "Is Depression described (in detail)?", "Is there any description of what should be done about it (like psychotherapy, medication or social support)"?, and "Does the article mention what causes Depression?". Two other questions relate to how Depression is understood as what kind of ontological entity: (12) "Is Depression described as a condition, or a disorder, or something else? And (13) "Are there any brain/ body metaphors, through which Depression is described?". In the theory chapters it has been argued that a disease concept is justified via certain narratives that can refer either to aetiology, symptomatology, imaginations about its organic appearance (in the case of mental

disorders are argued as correlates in brain anatomy), or therapeutic measures. It can also be that several of the narratives are employed at the same time.

Another set of questions was developed in order to see in which professional field, or thought style (Fleck 2008), Depression is staged by the articles: (9) "Are there any kinds of (scientific) expert in the article?", (10) "Are there any (scientific) institutions mentioned"? And (11) Are there any kind of studies or study results presented in the articles in connection with Depression?".

Questions (5) "Who are the persons staged as being affected by the condition?", (6) "What are the potential consequences (of the problem)?", (7) "Are there any solution strategies suggested (for the problem)?" and (8) "Are persons mentioned who are staged as the ones who should do something (about the problem)"? turned out to be not so useful as the content evolved around Depression as the main problem that needs a solution and, therefore, these questions were actually answered by questions (1), (2), (3), (4), (12) and (13). Other questions were posed in order to generally see what kind of persons and professionals (other than scientific experts) are involved in the stories of the articles: (14) "Is there any staging of a patient organization?", (15) "Does the article mention a famous person"?, (16) "Does the article deal with the biography of a person (can be famous or not)?" and (17) "Are there any politicians mentioned (for example in connection with an awareness campaign)?"

These questions let one see whether Depression is also part of media stories in connection with political institutions, or, biographical accounts, both of which can be expected to construct it in a different way. Having scanned the articles according to the questions, the answers were written down on a sheet (see "table \_standard questions and answers" and "table\_ presse questions and answers"). *Phenomenon structures* (dt.:phänomenstruktur) refers to the afore mentioned term used by Keller to indicate how a phenomenon is constituted through the framing it generally appears in, through what is said to be problematic about it, through what are imagined to be the causal links, or through what is presented as what can be done to solve the problem.

After the articles had been scanned in order to see which of the questions could be answered, it could be achieved to see, in a grounded theory manner, what kind of categories emerged from this material chosen and how meaningful analytical concepts could be developed from it (Charmaz 2006).

For each of the analytical foci, different categories were developed that can be called different narratives, or narrative categories, (dt.: Erzählstränge) of the media discourse(s) about Depression. For the analytical field of *Narrations of Cause*, categories were constructed from those kinds of articles that answered questions (1), (2), (4), (12) and (13) (a more detailed explanation about the categories that were created can be found at the beginning of each of the analytical foci).

Questions (9), (10) and (11) (and sometimes (14)) were mostly used for developing categories for the analytical focus of *Experts and Expertise*. From questions (3), and sometimes (6), (7) and (8) (if Depression was not the main problem of the article) categories were created for the analytical focus of *Solutions for Depression*.

# 6. Sample Analysis

In order to do the sample analysis, it was decided to work with three analytical foci (Themenfelder): *Experts and Expertise* (Expertenwissen), *Narrations of Cause* (Begründungserzählungen), and Solutions for Depression (Lösungen für die Depression).

Why those three analytical foci? The first concentrates on how expertise is performed and, thus, how knowledge about Depression is presented, and in which (scientific) domain it is legitimately spoken about. The second lets one understand how the concept of Depression is constituted, what it is called, why does it happen and what are the suggested measures to alleviate it.

The last one of the three foci was chosen because it opens the action dimension in regards to the problem. As indicated above already, if Depression is considered as the main problem, solutions suggested to alleviate it, if they are staged at all, are therapeutic measures. However, if Depression is staged as part of another problem, other solution strategies are suggested.

Of course, these analytical foci do overlap but for matters of analytical interest it is necessary to keep them separated.

## 6.1. Description of Analytical Foci

*Narrations of Cause* is the analytical focus which represents the main structure according to which I could gain an understanding of the development of the meaning of Depression. This made it possible to construct a timeline, which helped to make major developments in the discourse about the concept visible.

As noted earlier, in the methods section, the sample contains mainly articles with a (bio-) medicalized account of Depression. This is due to the sampling process and the criteria according to which the articles were chosen, namely that the main topic be Depression. This automatically led to the collection of, broadly speaking, "scientific"/ "medical" articles about the disease concept.

It was decided to use the theoretical frames of medicalization and biomedicalization together.

On the one hand, medicalization has very often dealt with cases of "deviant behavior" that has been medicalized and that came under the dominion of psychiatry, as has been argued with Conrad (1992) in the chapter about the different varieties of the medicalization theories.

In this sense it can be argued that mental conditions are conceived through the discipline of psychiatry, and therefore have been medicalized. Second, its analytical focus is on the change of concepts through which mental conditions are made sense of, something that is also very useful for this analysis.

On the other hand, biomedicalization stresses the mutual constituency of science and society, of which the following arguments understood as processes of biomedicalization (Clarke 2003) are particularly useful to help interpreting the construction of Depression in this newspaper sample. Among other things Clarke talks

about how biomedical knowledge production has transformed. Developments in information management and changes in how knowledge is distributed and consumed can be regarded as applicable to how Depression is constructed in different scientificic domains, particularly the natural sciences, and how journalism nowadays handles scientific content. The argument about the alteration of bodies to include new properties and the appearance of new individual and technoscientific identities regards how the disease concept of Depression is involved in the creation of new social orders, in which people hold different positions, according to the identities promoted by dynamics of biomedicalization (Clarke: 2003, 163)

Interestingly, the articles of the newspaper sample have been found in a wide range of rubrics in which they have been published, and are not predominantly from the science section.

Generally, the *Die Presse* sample is bigger than the *Der Standard* sample which shows in the amount of articles collected.

*Narrations of Cause* can be considered as ontological narratives. They stage a certain understanding about Depression, and tell about the quality of the phenomenon: they say what it is that we are dealing with. So there were several aspects that the articles were scanned for in order to gain an understanding of ontological narratives about it. First of all labeling was considered. Is it presented as a disease, as a syndrome, or simply, as a condition?

Along with that, descriptions of symptomatology were investigated. Referring back to the theory chapter, Depression and other mental disorders are defined and differentiated along a list of symptoms (Boeker 2006). Another aspect that was considered, and which proved very interesting from a diachronic point of view, is what has been called "causation tales". What is regarded a proper explanation about the cause of Depression and at what point in time?

And lastly, it was investigated whether there are any metaphors that can be called brain/ body images. This is defined as any kind of image that is written about which explains, for example, brain structures, the neurotransmitter system, or (if we speak about the heritability of mental conditions) genetics (which would be a case for "body images").

*Experts and Expertise* is the analytical field which lets one see how knowledge about Depression is performed. Where is it institutionalized and who is staged to be a legitimate and trustworthy source of information?

Expertise is performed in a variety of ways. It was mainly concentrated on which kind of expert appears in the media and with which institution is he or she affiliated. What is also important, and one of the many points where the analytical foci intersect, is to see who "owns" Depression. So it could be that talking about it is a genuine act of the expert or, as it can be observed in some cases, Depression is introduced to the reader without an expert describing it.

Another very important aspect for understanding in which professional field the concept of Depression is handled, is the use of what can be called, statistical statements about the prevalence of the "disease".

Sometimes they are staged for themselves, and not linked to an institution, which is an interesting act in itself, and sometimes they are said to be the latest estimation of an institution like the WHO. Often, scenarios of a society getting sicker and sicker are expressed via these statistics, which calls attention to the urgency regarding Depression and its treatment. Sometimes, suggestions of how to tackle the problem are offered, which connects well to the last one of the three analytical foci, *Solutions for Depression*.

Solutions for Depression is the analytical focus that was chosen in order to make the possible action implications of the articles visible. Ideally, a newspaper article stages a problem, tells about the cause(s) or the culprit(s), and suggests measures that need to be taken, or persons who are able to solve the problem. Practically, articles only offer half of that story. Nevertheless, it makes sense to analyze the stories about Depression along this focus because it can help to understand who is seen to be responsible and able to solve the problem.

#### 6.2. Introduction

During the process of analysis, observations about the discursive development of *Narrations of Cause* (second analytical focus) about Depression and about the whole sample in general were noted down, and eventually made it possible to generate useful analytical tools for understanding the discourse.

The year 2003, when a "scientific breakthrough" was communicated to the public, was a decisive year for the development of a new line of argumentation in regards to the causes of Depression. In this year, it was made public, that a certain variant of a gene puts people at risk for developing the condition when being exposed to stressful life events (Standard- 19.07.2003, "Schwermut durch Erbgut"/KO Kommunikation). From this point on, a new understanding of causation got more and more dominant in the sample. Generally, the overall discourse category of the *psychiatric understanding of Depression* was developed, which is evident from the beginning on, with a few exceptions. This psychiatric quality shows either in the kind of expertise that appears in the articles or in the causation tales for example, or in how the Depression is generally conceived of as a disorder, indicating that the disease concept is conceived through the (bio-) medical paradigm.

As this kind of reasoning for Depression is so dominant it was decided to name it the main discourse of the sample as it is not challenged by any other dominant understanding of Depression (for example from alternative scientific approaches or articles that are being critical about psychiatry).

Another reason, why the psychiatric approach might appear so dominant, is due to psychiatry's trans-disciplinary approach, in which most mental health science domains are incorporated into the bigger paradigm, such as neurobiology and psychology.

In this sense the sample could, on the other hand, also be considered very heterogeneous.

Something that could be called a "minor discourse" of Depression had been created with articles that

appeared all along the years, both in *Die Presse* and *Der Standard*. This can be observed in such articles that are rather short, not very complex and mostly tell of some kind of medical study in connection with the disease concept of Depression, such as Depression and diabetes. These types of articles usually do not contain any kind of causation tale or definitions of the concept. They can be seen as a certain kind of discourse that is certainly medical in nature, but not necessarily psychiatric, as it mostly does not show any of the narratives characteristic for the main discourse (expertise, ontological narratives or solution strategies characteristic for the discourse of the *psychiatric understanding of Depression*).

As you can see in "table\_discourses", where the articles were ordered according to the main discourse and the causation tales they sometimes show, there are also articles that, according to the criteria chosen, did not qualify for any of the categories. That is due to either the format of the written document, such as "Terminankündigung" or "Leserbriefe", or the content, mostly not showing any connection to any of the narratives assembled under the psychiatric paradigm.

# 7. Experts and Expertise

This analytical field is dedicated to articulations of *Experts and Expertise*. Articulations of *Experts and Expertise* are considered as narratives that are part of the greater discourse in the newspaper sample, which let one identify through what kind of thought style(s) (Fleck 2008) the concept of Depression is understood. What was of most interest in this field was, who is the expert, where does he or she come from, and what significance does the article attribute to them? How is their expertise legitimated? That concerns with what authority they can speak and how their knowledge is judged. And it gives the scientific domain, through which the phenomenon is approached, the epistemic authority to speak about it and to say what it is, how it should be understood and with what measures it needs to be alleviated.

The analytical focus of *Narrations of Cause* will deal in more detail with how Depression as a concept is constructed and what is suggested to solve it.

Another issue that was interesting is whether there are any articles that feature less "psychiatric" expertise, like lay accounts or other fields that do not necessarily come from the mental health field in general. The sample is mainly characterized by expertise from psychiatry or sometimes neurobiology, medicine related experts or psychotherapy, something which can be interpreted to do justice to psychiatry's trans - disciplinary approach towards mental illness.

Another distinctive feature, at least in *Die Presse*, is a genuine ethical – moral approach towards Depression. Most of these articles that were grouped under the narrative category of "ethical - moral- expertise" (see table\_EaE) are written by *Die Presse*'s Claudia Richter, a journalist focusing in the area of health and medicine.

Articles that in the field of *Narrations of Cause* were assembled under the narrative category of "Depression as just a medical entity" can be found here most often under the category of "international expertise", as most of the experts mentioned in these types of reports are from international (research) institutions. Another aspect that was included in this analytical chapter is what has been called "Depression in Numbers". This can be understood to be a narrative about the disease concept of Depression that is about the presentation of statistics about the prevalence of the condition. Often, it is not said where the numbers come from. *Der Standard* though, with a few exceptions, uses the *World Health Organization* (WHO) as a "credibility lending" institution.

This was treated as an extra chapter within this analytical field because it appears all along the sample, and is not necessarily connected to any kind of *Narrations of Cause - , Experts and Expertise -* or *Solutions for Depression* category. It can actually be understood as an "argument – tool" that is so common in public and professional discourse. Statistics and numbers lend an argument more credibility and rationality. Further, these numbers are used to draft future scenarios of a society at the brink of becoming more mentally troubled than ever before in history. Remembering how psychiatric classification has come about and how disorder concepts are operationalized in this field, it should be more than alarming to tell this kind of story about Depression and society.

As you can see in table\_EaE, a divide was created to get an idea about which kind of expertise was staged before the dominant approach of understanding the aetiology of mental disorder (as mentioned in the beginning of this chapter, the year 2003 can be considered a turning point of ontological narratives about disease concept. This is the year the narrative of the "Depressions – Gene story" went public. Although it took a while to wholly adopt the psychiatric nature- nurture concept in arguing aetiology, this year can still be considered the onset of this narrative).

#### 7.1. Experts and Expertise - Legitimizing the Categories:

At this point it is necessary to mention that it was intended to develop categories that deal with questions of whether the expertise is from an international or a national setting and what kind of scientific domain appears in the articles to speak about Depression. With this in mind, it was tried to develop an understanding of which scientific expertise source – be it global or local – the newspapers represents content. Again, it was not the aim of this thesis to understand why this particular person and institution appears in the media. *Psychiatric expertise from Austria* as a narrative category was chosen because it let me collect all articles that feature an Austrian expert or institution. The same applies for the categories *psychotherapeutic expertise from Austria*, *research expertise from Austria* and *medical (general) expertise from Austria*.

The category, *International expertise*, was chosen as a term because it mostly features expertise from

International research and academic institutions, which most often occurs in the articles that are called *Depression as medical entity* in the analytical focus of *Narrations of Cause*. Lastly, it was decided to name a narrative category *ethical – moral - expertise*, because it deals with issues regarding what it means to have Depression, and how society deals with the afflicted. Most of the examples collected under this category come from *Die Presse* and are almost exclusively written by Claudia Richter.

Der Standard and Die Presse have a slightly different staging of expertise. This is also due to the "fact" that the Depression discourse started earlier in Der Standard (in the year 2000), whereas Die Presse articles about that topic started to appear in 2002. Additionally, and due to the difference of time, Der Standard featured more examples of expertise that could be interpreted as presenting different disciplines that research about Depression and that display theories that could be communicated before the "Depressions-Gene story" went public.

# 7.2. Experts and Expertise before the year 2003 – The media starts to talk about Depression

Therefore, the *Experts and Expertise* discussion starts with the *Der Standard* sample before the year 2003. The categories that are most significant in this regard are that of *international expertise* and *psychiatric expertise from Austria*. The latter features articles that discuss the disease concept of Depression not so much as a phenomenon in its own right, but as problems with the condition or they discuss certain kinds of Depression, like post partum Depression (Standard – 15.11.2000).

This can also be interpreted as the subtle appearance of the concept on the public agenda. It is not yet seen as a big deal, but society already becomes alert to it. Although not yet classically a part of the psychiatric paradigm (no classic nature - nurture causation tale because before 2003 and, second, the article is about post partum Depression), expertise is from psychiatry. ""Innerhalb der ersten Monate nach der Geburt eines Kindes ist das Risiko für eine stationäre psychiatrische Aufnahme für Frauen sechsfach erhöht", erklärt Heinz Katschnig, Vorstand der Universitätsklinik für Psychiatrie am Wiener AKH."

In another article (Standard - 26.07.2002) it is Siegfried Kasper, Leiter der Abteilung für Allgemeine Psychiatrie der Universitätsklinik Wien, who evaluates the situation with Depression in the face of the assumed increasing numbers of people affected by the condition in Austria. The reader is introduced to the argument of the article with a statement about how practitioners in Austria have more than ever before diagnosed people with Depression. This is the result of a study of the institute for medical statistics: "Wien - Die Zahl depressiver Erkrankungen in Österreich hat stark zugenommen. Hatten heimische Ärzte im Jahr 1997 noch 1,2 Millionen Mal "depressive Zustandsbilder" diagnostiziert, wurden im Vorjahr knapp zwei Millionen Mal "depressive Episoden" befundet, wie aus dem jüngsten Bericht des Instituts für medizinische Statistik (IMS Health) hervorgeht, der Donnerstag veröffentlicht wurde." Followed by a statement which stresses that these numbers should not be considered definite, the next paragraph lets

Siegfried Kasper comment on the situaiton: "Zum einen überrascht mich dieser extreme Anstieg an Diagnosen", analysiert Siegfried Kasper, Leiter der Abteilung für Allgemeine Psychiatrie der Universitätsklinik Wien, die jüngsten Daten. "Zum anderen zeigen sie aber auch ganz deutlich, dass heute viel mehr Depressionen als solche erkannt werden und somit auch adäquat behandelt werden." The whole article drafts a scenario of a society in which Depression becomes more and more common. Rhetorically, this is achieved through using different kinds of experts and statistics. The statements and arguments are presented in each paragraph.

The category of *international expertise* of this time deals with articles that feature expertise from the international research agenda. Often the domain is not psychiatry per se but other domains that published about different theories about Depression. Again, this can be interpreted that in that time in public discourse there was not yet a preliminary consent about what Depression is and how it is caused. Several different disciplines and theories are presented.

One article (Standard - 25.7.2000) is about a publication in the trade journal *Nature* that supports the claim raised: "Kinder von Müttern, die während der Schwangerschaft chronisch depressiv sind, sind laut Nature in ihrer emotionalen und intellektuellen Entwicklung stark gestört."

In another article from the year 2000 (Standard –31.10.2000) this strategy is equally used to convey authority by referring to the journal (*Science, Vol. 290. S. 258*) in which the article appeared. This article conveys the impression to be a proper description of the study as it describes with a lot of detail what the scientists presume to be happening in brain anatomy when depressed. In the analytical field of *Narrations of Cause*, this would be a paradigmatic example of the use of brain images, in order to explain Depression. Another article (Standard – 10.7.2001), pertaining to this category, deals with the question of whether the condition of Depression is connected to the status of the immune system. This can be considered an alternative approach in understanding the aetiology of the condition, and is a kind of expertise which comes from the field of molecular psychiatry:

"London - Hängen Depressionen und Immunstatus zusammen? Für gewöhnlich vermutet man bei Depressiven ein geschwächtes Immunsystem, aber Anfang der 90er-Jahre fand sich laut New Scientist (Nr. 2295, S. 34) das gerade Gegenteil: Bei Depressiven war das Immunsystem überaktiviert." The article discusses the role of an over - activated immune system that causes Depression, and concludes with a paragraph that suggests that the Borna – virus may be responsible for it. This time it is the trade journal of Molecular Psychiatry that published a study via which the claim is solidified and presented as evident: "Jetzt haben die Forscher laut Molecular Psychiatry (Vol. 6, S. 481) ihr Nachweisverfahren verfeinert und Hinweise auf das Virus in nahezu 100 Prozent der Depressiven und 30 Prozent der Gesamtbevölkerung gefunden." However, this theory is only mentioned in the beginning of the sample and after the year 2003 it does not appear anymore.

## 7. 3. Expertise from and after the decisive year

As mentioned already, the year 2003 can be considered a change of discourse about Depression insofar as it marks a point in time when the genetics of the condition start to be talked about, which influenced how causation of it was argued. Considered interesting, therefore, was to see whether expert and expertise narratives were affected by that. This was not so much the case though.

As you can see in "table \_EaE" *Der Standard* and *Die Presse* differ in what kind of expertise they stage. Whereas *Der Standard* can be considered as having the experts- and expertise groups equally distributed, a large number of *Die Presse* articles can be found in what has been termed the narrative of *ethical – moral - expertise*. Other narrative categories can be considered to be as big or small as the *Der Standard* categories, with the only difference being that *Die Presse* generally has more articles with Depression as a main topic. The category of *psychiatric expertise from Austria*, after the year 2003, assembles known Austrian psychiatrists like Siegfried Kasper and Michael Musalek.

An article from *Die Presse* (Presse – 19.8.2004) stages alcoholism and suicide as a consequence of Depression. Musalek's authority is used to give a statement about the reason why Depression happens to people: "Auf chronische Überlastung folgt Angst, dann eine Verschlechterung des Allgemeinzustandes. In so einer schlechten Ausgangssituation kann tägliche Überforderung im Job leicht in die Depression führen", schildert Michael Musalek, ärztlicher Direktor des Anton-Proksch-Institutes Kalksburg." Also the additional "fact article" (Presse – 19.8.2004) uses Musalek's authority to articulate why Depression is understood to be in the rise: "WIEN (cr). Schätzungen zufolge leidet jeder zweite Österreicher zumindest einmal im Leben an einer Depression. Dass die Zahl der Erkrankten immer mehr zunimmt, liege u. a. an den wachsende Anforderungen im Beruf, erklärt Michael Musalek, ärztlicher Direktor des Anton-Proksch-Institutes Kalksburg."

The concept of "fact article "was created in order to describe those articles in the sample that are usually smaller and accompany the main article. The "fact article" can be considered as some kind of additional information for the reader, and usually employs "neutral" language in order to convey the impression of being "objective" and "scientific" about the topic that is discussed.

In one *Der Standard* article, from the year 2006 (Standard – 9.10.2006), experts from institutions such as *Psychiatrischen Uniklinik Dresden Sozial-Psychiatrischen Abteilung am Krankenhaus Neunkirchen* or the *Psychiatrischen Uniklinik in Graz* are establishing the domain in which issues regarding bi- polar disorder are talked about.

In "Ein extrem qualvolles Leiden" (Presse – 17.9.2007) *Psychotherapeut* Prof. Alfred Pritz, *Vorstand der Sigmund-Freud-Privat-Universität in Wien*, and Univ.-Prof. Dr. Siegfried Kasper, *Wiener Universitätsklinik für Psychiatrie und Psychotherapie* give the article, in which Austrian comedian Andrea Händler discusses her experience with Depression, the necessary expertise - back up. This article can also be found in the narrative of *ethical – moral - expertise* as it fulfills the social purpose of alerting the reader about the

condition and how the affected manage it.

Another interesting field of expertise is the one of the narrative *research expertise from Austria* that almost exclusively deals with the "Depressions- Gene story". The Austrian psychiatrists and researchers who are interviewed in these articles are Siegfried Kasper and Lukas Pezawas. Both have researched in disciplines that can be connected to the effort of understanding the genetics behind Depression. As will be discussed in the analytical section of *Narrations of Cause*, these types of articles make use of a lot of brain/ body images to explain the research agenda of Pezawas and Kasper. These articles are all very specialized and very hard to follow if one is not informed about the neuroscientific domain.

If one considers the language that is used in the example (Standard -16.1.2006), it becomes obvious how enthusiastic the findings are communicated.

The following example shows how this research is presented and how any kinds of issues regarding its premises and blind spots are not mentioned: "(...) Verantwortlich dafür ist die winzige Veränderung eines Gens, das der Wiener im letzten Sommer fand. Es stellt den Bauplan für die Transporter bereit, die das Serotonin abbauen. Das allein verursacht zwar keine Depressionen. Doch sobald der Mensch starkem Stress ausgesetzt ist, fängt das System an zu kollabieren. "Die Folge sind Angstzustände und Depressionen", so Pezawas."

Another article from the same year (Standard – 6.11.2006) also frames Pezawas as the one who explains and knows about what is going on in the brain during Depression: "Wissenschafter sind den Ursachen der Erkrankung seit Langem auf der Spur. Aufsehen erregte eine Studie des österreichischen Psychiaters Lukas Pezawas, der mithilfe von Magnetresonanztomografie Gehirnregionen identifizieren konnte, in denen Emotionen gesteuert und verarbeitet werden." The whole article assembles different brain/ body - images via which simplified cause- effect relations between genetics, brain chemistry and brain anatomy are explained. All the other articles that feature Kasper and Pezawas and their research work in a similar way, putting their approach on top of the "explanation- hierarchy" which is due to the incredible authority laden expertise, such as the institutions that are mentioned, the metaphorical brain/ body images and the experts themselves.

# 7.4. Expertise from psychotherapy and medicine – challenging the psychiatric paradigm?

In the category of *psychotherapeutic expertise from Austria* different articles were grouped that entail psychotherapeutic expertise narratives. This category was created because it was deemed interesting in how visible this field is in the sample and how it is staged within the greater psychiatric paradigm. This is also important to look at because different psychotherapeutic styles have different approaches (e: causation tales and conceptualizations) about mental disorder (Boeker, Seifritz 2012), and therefore Depression. Sadly that content is lost, once psychotherapy is considered only a "supporter science" of psychiatry.

Particularly in the following examples it is interesting to look for how psychotherapeutic expertise is placed on the scientific hierarchy and what kind of rhetoric is used to achieve that.

Right at the beginning, it needs to be stressed that the amount of articles that qualified for this category is very limited. There are about only three articles in the whole sample that make use of psychotherapeutic expertise only and they are all from rather recent years (2009 - 2011).

Psychotherapeutic expertise is, in most other examples, portrayed as a "supporter science" of the greater psychiatric domain. To call it "supporter science" is justified because the concept of Depression still appears to be (bio-) medicalized and other features, typical for the greater psychiatric discourse, are visible.

There are rarely instances of genuine psychotherapeutic approaches to Depression.

One of the first examples that were grouped in this expertise category is from *Die Presse* (Presse – 15.11.2009), and was published in the newspaper along with two other articles (one of which is a "fact article") because of the recent suicide of German national goal keeper Robert Enke.

Karin Kalteis, *Psychotherapeutin und Depressionsexpertin des Berufsverbandes Österreichischer Psychologen*, and *Wiener Psychotherapeut* Gerhard Klicka are the professionals who comment on the topic of Depression. Due to the fact that Enke was a man, their arguments develop around the issue of why there is an alleged disparity between men and women affected by mental disorders.

Apart from the experts who come from the field of psychotherapy, this article makes use of the greater psychiatric paradigm in order to explain aetiology and what can be done about Depression: "Therapien sind in vielen Fällen aber notwendig: Depressionen lassen sich nur selten ausschließlich durch medikamentöse Behandlung oder Psychotherapie bekämpfen. Für eine erfolgreiche Behandlung sei eine Kombination der beiden notwendig - wie auch bei der Ursache der Krankheit psychische und physische Ursachen eine Rolle spielen." In this example, there is no evidence that the dominant psychiatry discourse is challenged. It just seems that instead of interviewing experts from psychiatry, it can be equally justified, for the journalist, to interview other people from the mental health field. However, the dominant understanding about the condition remains in the psychiatric paradigm, which can be concluded from statements such as "Die neue Volkskrankheit? Mediziner und Psychologen sehen in Depressionen eine neue Volkskrankheit. Weltweit sind nach WHO-Schätzungen 120 Millionen Menschen betroffen, das entspricht der Einwohnerzahl von Deutschland und Polen zusammen.", which classifies Depression as a disorder and handles (epidemiological) statistics about it, which can only be done on basis of theoretical concepts developed within psychiatry (see Mayes and Horwitz 2005).

Another article from *Die Presse* from this group (Presse – 9.2.2010) is about the publication of a book, written by Dutch psychotherapist, Willem van der Does. Here, the expertise of psychotherapy is only visible through the person not by the content as, for example, the following paragraph shows which talks about Depression as disorder (dt: Krankheit), and lists the prototypical symptoms: "Sicherlich, man kann nicht immer glücklich sein, Traurigkeit, vorübergehender Trübsinn sind natürliche Reaktionen auf unangenehme Ereignisse, Schicksalsschläge. Aber Depression ist eine Krankheit mit bestimmten Symptomen, die in dem Buch, als Hilfe zur Selbstdiagnose, angeführt sind. Einige davon sind besonders charakteristisch, wie Interesselosigkeit, Freudlosigkeit, Energieverlust, Schuldgefühle, Angst, Schlafstörungen, aber auch körperliche Beschwerden. Aus dieser Liste geht hervor, wie vielfältig die Krankheit und wie schwer sie

messbar ist."

Lastly, one *Der Standard* article (Standard – 9.5.2011) is probably a rare example where a specific style of psychotherapy is mentioned. The article talks about the marketing of a new DVD produced by psychotherapists of the institute of systemic therapy (dt: "Systemische Therapie"). Although it is not clearly shown what the approach of systemic psychotherapy consists of, the article makes a statement about its difference from other approaches to Depression: "Depression ist ein inflationärer Begriff und viel zu ungenau, um ein Krankheitsbild mit all seinen Facetten zu begreifen. Denn depressiv muss nicht nur Niedergeschlagenheit bedeuten, sondern kann auch mit Aggression verbunden sein. Um eine umfassende Darstellung, die auch für Laien nachvollziehbar ist, ging es den Psychotherapeuten des Instituts für Systemische Therapie, die nun eine sehr ungewöhnliche DVD produziert haben." Even though this article describes an alternative approach about Depression, it still remains in the dominant discourse, as the condition is referred to as disorder (dt: Erkrankung): "Zu Beginn wirkt dieser Zugang zwar leicht künstlich, doch wer sich auf diese Methodik einlässt, erfährt nicht nur viele typische Verhaltensmuster, sondern lernt auch, wie sich die Erkrankung in den Griff bekommen lässt." And second, as the first citation from the article shows, the approach of systemic therapy presents itself as offering an additional account of Depression, and not a description that challenges psychiatry's definition of the phenomenon. What becomes visible in the category of psychotherapeutic expertise from Austria is that it is also incorporated into the greater psychiatric paradigm. Although experts are from different fields of psychotherapy, they use the language (e: "Krankung, Erkrankung") and methods (statistical statements and ontological narratives) that pertain to the dominant psychiatric discourse.

Lastly, articles were considered that just make use of what has been conceptualized as general medical experts and expertise. For this purpose, the category of *medical (general) expertise from Austria* was created. Content - wise, the examples in this category differ enormously. However, it would not have made any sense to create a specific category for each of the articles. Therefore, they will be individually discussed. The first article (Standard – 31.1.2002) deals with whether the borna virus causes Depression.

In this article it is virologist Norbert Nowotny from the *Veterinärmedizinische Uni Wien* who talks about his research which is about the Borna virus as a suspected cause for Depression. As mentioned before, the general sample features a few articles that deal with this approach but it vanished quickly (and maybe particularly after the "Depression- Gene story" went public, which probably impacted the way in which causation of Depression was discussed publicly).

The two other *Der Standard* examples can be considered rather general evaluations by a professional outside of the psychiatric community who comment upon certain systemic situations in connection to Depression and the scientific domains that deal with it. They could be considered as policy advice experts, so to say. Their position as being a legitimate source of information on the matters discussed in the articles comes from the institutions and the positions they hold.

One article (Standard – 29.9.2004) is a comment by Sten Thelander, *ärztlicher Berater des schwedischen Instituts für Technologiebewertung im Gesundheitswesen*, about the inefficient information resources in

regards to Depression therapy on the internet.

The second example (Standard – 24.10.2011) features Michael Freissmuth, Vorstand des Instituts für Pharmakologie, who was invited by the Wiener Psychoanalytische Vereinigung (WPV) to give a talk. He discussed issues regarding the rapid rate of knowledge growth in the neurosciences, but also the problem that still not many useful pharmaceuticals are developed to treat Depression and other mental disorders. Both articles use (bio-) medical expertise to address problems that surround Depression treatment. Both expertise examples remain in the broader psychiatric paradigm. They do not discuss Depression per se, but problems with it, such as the lack of treatment advice.

The Die Presse articles differ in this narrative category.

One (Presse – 28.1.2005) is about how diabetes and Depression are connected. This article is grouped under the category of *Depression as a medical entity* in the analytical chapter of *Narrations of Cause*. It stages *Univ.-Prof.* Dr. Monika Lechleitner *von der Universitätsklinik Innsbruck* who gives a statement about what problems people have when they are depressed as well as have diabetes.

Another article can be considered to offer a somewhat alternative understanding about the disease concept of Depression (Presse – 20.2.2006). Here *Univ.-Prof.* Dr. Sepp Porta *vom Institut für Pathophysiologie der Medizinischen Universität Graz* and *Neurologe* Udo Zifko *ärztlicher Leiter des Rehabilitationszentrums Pirawarth* discuss "stress" as a trigger for Depression. Different experts explain different problems in regards to Depression and stress, while their statements are not hierarchically structured, but are presented as equally valid.

This is definitely one characteristic of the sample in general, namely when several different kinds of experts are represented in one article, they rarely compete over the definition of the phenomenon but their statements are presented alongside each other, which could, again, be interpreted as showing the trans- disciplinary approach in modern psychiatry.

On the other hand, it could also be interpreted as the journalists' attempt to offer a balanced story about Depression, making the selection of different expertise sources a somewhat more neutral presentation of content as compared to citing one expertise source only. Additionally, including several experts and professionals in one article can also be a distinctive story telling strategy, employed by journalists, in order to give a richer and less boring account about the matter of concern.

There are instances where two different kinds of expertise are competing over the right to legitimately define what Depression is (see "table\_EaEKontr"). One rare example (Standard - 7.8.2006) is an article which is about an interview between August Ruhs, who is an expert in the field of psychiatry with an affinity to psychoanalysis 5, and Lukas Pezawas.

The following citation may indicate how different their understandings about Depression are: "Pezawas: Für die Therapierbarkeit ist es völlig unerheblich, ob genetische oder soziale Bedingungen dahinterstehen. Wenn jemand depressiv ist, ist er depressiv. Natürlich muss man körperliche Ursachen ausschließen. Aber

<sup>&</sup>lt;sup>5</sup> http://www.psyalpha.net/biografien/august-ruhs

dann ist die Diagnose klar und somit eine Indikation für eine psychiatrische Behandlung gegeben.
Ruhs: Genau da gehen unsere Wege völlig auseinander. Wir gehen davon aus, dass jede psychische Störung einzigartig ist, weil es nie zwei Subjekte gibt, die man miteinander wirklich vergleichen kann. Daher kann man ein Leben nie objektivieren und verallgemeinern."

While Pezawas stresses the "objectivity" of diagnosing the condition of Depression, which leads to appropriate treatment, Ruhs stresses that patients cannot be subsumed under a label, and therefore should be understood on an individual level, which runs counter to psychiatry's attempt to apply universal disease categories to individual patients, something, which distinguishes these professionals' thought styles. The confrontation of the two experts may also be the writing style that was chosen for this article as well as how the interview was conducted, which can create a more controversial, and therefore, a more intriguing article for the reader.

Coming back to the narrative of medical (general) expertise from Austria, another very interesting article in this group (Presse – 19.10.2010) is about how Depression could be alleviated by certain types of music. The article tells about Musikwirkungsforscherin Vera Brandes, Leiterin des Forschungsprogramms Musik Medizin an der Paracelsus Medizinischen Privatuniversität Salzburg, who has developed a treatment method that can be used to alleviate the condition. Apparent in this article is the positive evaluation of music as treatment, which is deemed better than medication, as it does not have side effects: "Nebenwirkungsfrei, melodiös und zu Hause im Wohnzimmer lässt sich neuerdings etwas gegen Depressionen, Burn-out und Schlafstörungen tun. Das Zaubermittel heißt Musik, und zwar individuelle, ganz spezielle maßgeschneiderte Musik, die auf eigens entwickelten Audiotherapie-Geräten abgespielt werden kann."

Another expert appears in the article whose remark makes visible how, also in this case, the disease concept of Depression is understood to be a (bio-) medical entity. However it also talks about the additional benefit of the music therapeutic method as being a component of the common treatment for the condition:

"Medikamente und Psychotherapie allein können den bei Depressiven in der Regel gestörten Dopaminhaushalt nicht mehr regulieren, da ist die Musik äußerst wirksam", sagt die Wiener Allgemeinmedizinerin, Kinderärztin und Psychotherapeutin Dr. Charlotte Philipp, die die Audiotherapie bereits einsetzt. "Mit großem Erfolg", wie Philipp betont.

Even though the article examples discussed stage domains of psychotherapy, medicine or medicine related expertise, the general psychiatric, (bio-) medicalized understanding of Depression remains unchallenged. The following examples of expertise narratives equally approach Depression that way.

# 7.5. Ethical- Moral - Expertise or how to do politics with (bio-) medicalized Depression

One of the most interesting categories is the one of *ethical – moral - expertise*.

It was decided to create an expertise narrative out of these articles because they distinctively employ

messages to get the reader's attention about the severity of the condition of Depression for the affected. This group also features articles that formulate a genuine political agenda in regards to mental illness, such as executing an awareness campaign. Also in this category are articles that offer a critical account about the medicalized nature of psychiatric classification. It was decided to not place those examples in an additional group because there are only about two or three articles of them.

A very typical feature of the *ethical – moral - expertise* expressed in the articles is that, apart from the medicalization critical ones, (bio-) medicalized accounts of Depression are a way to alert the reader about the severity of the condition.

The construction of the *ethical – moral - expertise* narrative is justified because of the examples' obvious political messages, like "Depression is bad because...", or "we need to do something about it soon or we are ...", and "Depression is over medicalizing our society....".

What these kinds of articulations of expertise have in common is the moral imperative. Often, the expertise comes from lay persons who discuss Depression or from a professional who has a patient organization background in the mental health field. On the other hand, the "real" accredited experts who appear in the articles are often used in order to lend the arguments that are presented more authority.

Of course, some of the article examples could have been categorized in the other groups, which would have also been possible. But the content of the sample that deals with certain articulations of expertise that do not come from the typical scientific disciplines that handle Depression, would have been lost. It can be argued that this narrative of *ethical – moral - expertise* is necessary in order to see whether the sample contains special arrangements of expertise, such as lay expertise, and how these are presented and how lay opinions relate to expert opinions.

The *Die Presse* sample assembles a lot of articles that are written by Claudia Richter, chief editor of health related topics in *Die Presse*. Common to her articles are the chosen frames which almost exclusively employ the (bio-) medicalized version of Depression in order to point to the severity of the condition and to alert society to be more emphatic towards the affected.

The first paragraph of the following Richter article (Presse – 9.1.2004) makes her position towards

Depression clear: "Es gibt Krankheiten, für die geniert man sich; der Betroffene und zum Teil auch die

Angehörigen. Man redet nicht über Epilepsie, Schizophrenie, man schweigt über Harninkontinenz und Aids,
man bemüht sich, seine Depression zu verstecken."

Naming Depression along with all the other diseases that the reader knows about, convey the impression that it is a "real" disorder. Psychiatry as a scientific discipline that handles Depression is present in this article: "Was aber ist es, das Depression und Epilepsie den Stempel "aussätzig" aufdrückt? Es könnte das Nichtverständnis sein. Wer nie eine Depression hatte, kann sich darunter nichts Rechtes vorstellen. Selbst ein Psychiater, der Jahrzehnte Patienten mit Depressionen behandelt hatte, meinte, als er selbst von dieser Krankheit heimgesucht wurde: "Ich habe meine Patienten immer nach bestem Gewissen therapiert, aber niemals optimal. Denn erst jetzt weiß ich, was es heißt, an einer Depression zu erkranken."

However, this article does not interview a particular expert, but uses a statement from an unknown

psychiatrist to lend authority to the argument about the severity of the condition, which is achieved through letting the professional tell about his personal experience with it.

Another article (Presse – 8.10.2004), written by Richter, appeared in *Die Presse* because of the "European Health Forum Gastein (EHFG)", which took place from the 6<sup>th</sup> to the 9 th of October and focused on mental health (dt. "psychische Gesundheit"). Not surprisingly, experts chosen for this article are *Prof. Dr. Günther Leiner*, president of the *European Health Forum Gastein (EHFG)* and *Univ.-Doz. Dr. Werner Schöny, ärztlicher Direktor der OÖ Landesnervenklinik Wagner-Jauregg und Obmann von "pro mente Austria", dem Österreichischen Dachverband der Vereine und Gesellschaften für psychische und soziale Gesundheit.

Who else if not an acknowledged expert and chairman of the Austrian mental health patient organisation, pro mente, could criticize better, how little the condition of Depression is acknowledged as a real malady: "Wer sich ein Bein gebrochen hat, erhält einen Gips, Mitmenschen bringen ihm Verständnis entgegen. Bei Brüchen der Seele scheint das Gegenteil zu passieren. Das Leiden wird immer noch bagatellisiert, Betroffene werden gebrandmarkt".* 

Two other articles in this group, written by Richter, deserve to be mentioned as they use a specific kind of expertise: they use lay accounts of Depression in order to illustrate the condition. The heading, "Eine Depression ist wirklich unbeschreiblich schlimm" (Presse – 19.9.2005) already suggest the personal biographical approach to the topic. Austrian comedian Joesi Prokopetz is interviewed and tells about his experience with the condition. His account of what he felt like can be regarded as a vivid description of what someone with Depression experiences: "In der Früh wollte ich gar nicht mehr aufstehen, weil alles so sinnlos, so freudlos war. Nur mit größter Überwindung habe ich mich Morgen für Morgen aus dem Bett geschleppt. Wozu aber, es gab doch keinerlei Perspektiven. Alles, was mir davor großen Spaß gemacht hatte, gut essen, Sport, war bedeutungslos geworden, ich hatte zu nichts mehr Lust. Wenn sich andere Menschen freuten, war ich nur noch verzweifelter, das trieb mich nur noch tiefer in die Depression. Ich empfand das Leben als Ekel. So ein Leben ist sinnlos, ich dachte häufig an Selbstmord. Eine Depression ist wirklich etwas unbeschreiblich Schlimmes, so stelle ich mir das wahrhaft Böse vor."

But he also combines his very personal account with the (bio -) medicalized understanding of Depression which becomes visible when he talks about his condition and, finally, how he received support during that period of his life: "(...) mein Hausarzt hat dann meine Depression entdeckt, mit Medikamenten und Psychotherapie habe ich sie dann innerhalb eines Jahres bekämpft. Auch Dr. Michael Musalek, der Leiter des Anton-Proksch-Instituts, hat mir dabei geholfen."

In a similar example (Presse – 17.9.2007), Austrian comedian Andrea Händler tells about her experience with Depression. Similar to the article just mentioned, Händler also describes her case authentically. Her patient perspective is given more credibility through the authoritative expertise of psychiatry, which is visible through people mentioned from the field (*Psychotherapeut Prof. Alfred Pritz, Vorstand der Sigmund-Freud-Privat-Universität in Wien, Univ.-Prof. Dr. Siegfried Kasper, Wiener Universitätsklinik für Psychiatrie und Psychotherapie*) the statistical statements about the prevalence of the condition ("Depressionen haben seit 1950 jährlich zugenommen und werden laut Expertenprognose weiterhin drastisch zunehmen. Im Jahr 2015

sollen sie nach Herz-Kreislauf-Leiden bereits Platz zwei der weltweit am meisten verbreiteten Erkrankungen einnehmen."), causation tales or brain metaphors ("Ein biochemischer Grund ist ein objektiv feststellbares Ungleichgewicht bestimmter Nerven-Botenstoffe im Gehirn.") and the solution strategy offered.

The article closes with a remark made by Händler about the ignorance of society: ""Ich verstehe nicht, warum man über eine Depression nicht reden kann wie über jede andere Krankheit auch", wundert sich Händler und sagt abschließend: "Ich hatte vor ganz Kurzem eine zermerscherte Schulter und litt monatelang höllische Schmerzen, aber das sind Peanuts gegenüber den unsagbaren Qualen einer Depression. Ich haue mir lieber noch einmal die Schulter zusammen als noch einmal eine Depression, die möchte ich nie, nie wieder erleben müssen." "

Both articles use the description of the personal (lay -) experience with the condition in order to give an illustrative account of what it feels like to be depressed. The argument also becomes stronger through letting two well- known Austrians speak about their experience. One could even contend that, in some ways, a strong patient perspective about Depression is given, as both are given the chance to describe their experience. Nevertheless, psychiatry remains the thought style through which one can legitimately speak about the condition and call attention to its severity.

As mentioned before, articles with a genuine political agenda were also chosen to be in this group of *ethical* – *moral* - *expertise* as they also follow a moral imperative of alerting the reader about the severity and prevalence of the condition.

This article from *Der Standard* (Standard – 30.10.2004) uses a political anti stigma intervention strategy for framing the story, and lays emphasis on the financial burden for society that comes along with Depression. The last paragraph of the article posits: "*Mit einer Informationskampagne will die Regierung nun die Krankheit enttabuisieren und damit unnötige Hospitalisierungen und Ausfälle am Arbeitsplatz vermeiden - mehr Leute dazu bringen, rechtzeitig zum Arzt zu gehen. Erhebungen der WHO zufolge ist das Kostenverhältnis von Krankenständen versus verminderter Produktivität am Arbeitsplatz trotz Anwesenheit bei Depression 30:70."* 

In the following example, (bio-) medicalized Depression proves to be particularly effective in communicating political matters as the introducing paragraph of the article shows: "Wien - Trauriges Land: 400.000 Österreicher leiden an einer Form von Depression. Das seien zwei Prozent mehr als 1994, gab Gesundheitsministerin Maria Rauch-Kallat Ende der Woche in Wien bekannt. Nach Herz-Kreislauferkrankungen und Diabetes hätte damit die Depression jede Chance, zur "neuen Volkskrankheit" zu werden."

In another *Die Presse* (Presse - 25.1.2007) article the cost- argument is not used. However, also here, (bio-) medicalized Depression serves very well for quickly communicating what the problem is: "*Lebenslust statt Depression*": *Unter diesem Motto bemüht sich ein neues Projekt der Stadt Wien um die "Entstigmatisierung"* der psychischen Erkrankung, die jeden zehnten Österreicher trifft.

In another *Die Presse* article (Presse -9.10.2007) the inauguration of a new patient organisation in Austria (*Kärtner Bündnis gegen Depression*) is the reason why an article about Depression is published and the

severity of the situation is articulated. Also in these cases, the (bio-) medicalized understanding of Depression serves for quick communication about an ever - increasing problem, which is generally useful for political intervention. Like in other cases of "making politics", for example in the various "feminism" discourses, complex phenomena are operationalized for public messages in order to stimulate social action. Mental illness, as a label, is easy to handle because it identifies a problem, quickly identifies the cause(s) and offers a solution.

Some other typical examples of articles that were grouped under the narrative category of *ethical – moral - expertise* are about book publications that deal with Depression in one form or another. Also here, the patient perspective is combined with the (bio-) medical understanding of Depression:

"Buch. Ein Unternehmensberater beschreibt seinen Weg aus dem schwarzen Loch. von Christina Lechner

(Wien) Die Empathie des Arztes sowie die richtigen Medikamente sind die Voraussetzungen für eine erfolgreiche Therapie von Depressionen. Zu diesem Schluss kommt Holger Reiners, selbst ein Betroffener, in seinem Buch "Was aus der Depression hilft". Immerhin wird nur ein kleiner Teil depressiver Patienten richtig behandelt - und das, obwohl Depressionen einer der häufigsten Gründe für Arbeitsunfähigkeit sind und die Lebensqualität stark einschränken."

However, as mentioned already, this narrative category also entails articles that critically engage with the disease concept of Depression by offering a critique of the medicalization of society. These kinds of representations of the disease concept in a critical manner are sometimes done in the public and could be called "dissident expertise". Often, genuine sociology inspired approaches are most likely to offer a systematic critique of the "overmedicalization" of society.

One *Die Presse* article (Presse – 15.11.2009) tells about a new book about mental disorder written by Manfred Lütz. It raises questions about what Depression (and other mental disorders) is (are), as the following paragraph illustrates: "Zumindest die Diagnosen nehmen zu. Früher war man sicher nicht so sensibel dafür, es haben sich aber auch die Diagnoseschemata geändert. Heute wird schon manchmal eine leichte Befindlichkeitsstörung zur Depression erklärt. Das ist unsinnig. Der Psychiater Klaus Dörner hat mal hochgerechnet, wie viele Deutsche auf dieser Basis psychotherapiebedürftig krank wären. Dabei kam heraus: 210 Prozent." It clearly engages critically with the question of how psychiatry conceptualizes mental disorder.

Similar to the next example (Standard – 1.2.2010), which talks about Horwitz's approaches toward mental disorder. As discussed in the theory chapter, this article discusses problems in regards to the development of the DSM- III and what that meant for the conceptualization of mental disorder (Mayes and Horwitz 2005). Developing the argument around Depression and medicalization, with the change from DSM- II to DSM- III, the article closes with another argument very common to this way of reasoning: "Von der Medikalisierung der Traurigkeit profitieren Psychiater und Ärzte, bei denen Millionen Menschen Hilfe suchen. Depressionen sind die am häufigsten diagnostizierten Leiden bei ambulanten Patienten. Noch profitabler ist die Medikalisierung von Depressionen für Pharmaunternehmen, deren Absatz an Antidepressiva in die Höhe

geschnellt ist." Arguments about benefits for the pharma industry and doctors are often found in popular medicalization critiques.

Lastly, in an article from *Die Presse* from 2010 (Presse – 9.3.2010) the publication of a new book is talked about. Here, similar arguments are used: "Was früher als normal galt, gilt heute oft als krank. Das gilt auch für die Depression. "Jede Zeit und jede Kultur legt von Neuem fest, wo die Grenze zwischen gesund und krank ist", schreibt Mag. Wenzel Müller in seinem Buch mit dem Titel "Depressionen". "Also this article stages the money- benefit questions: "Kräftig Geld gemacht -

Das Buch gibt einen kritischen Überblick über Diagnosestellung, Abgrenzung zu anderen Krankheiten und zur Trauer und beschäftigt sich mit möglichen Ursachen einer Depression. Großen Raum schenkt der Autor auch der Tatsache, dass mit Gemütserkrankungen kräftig Geld gemacht wird. Wo Bedarf fehlt, müssten Bedürfnisse geweckt werden."

What was intended to look at in this expertise narrative, is what kind of professionals are staged in the articles and what purpose they fulfill and how (bio-) medicalized Depression is a useful concept to do "politics". Lesser attention was payed to issues of how expertise is visible and legitimized.

## 7.6. The Rise of Depression – Statistical estimations about the alleged increase in mental disorder

Another narrative category was created to better see how statements about epidemiology in connection with Depression are used. In these narratives the World Health Organisation (WHO) often appears in connection with the statistical statements. Interestingly though, *Die Presse* does not combine "Depression in numbers" with the WHO as much as *Der Standard* does.

Mentioning the WHO along with statistics seems to have a supporting function for the general argument of an article. It is almost like the right ingredient for drafting future scenarios of modern society in regards to (mental) health and illness. Remembering how Clarke (2003) describe processes of biomedicalization and how Mayes and Horwitz (2005) look at the paradigmatic change within the DSM system, this narrative can be considered as illustrating how much these dynamics have happened and how that has influenced journalism in reporting about Depression.

Clarke argues that in the biomedical era a new focus on health and risk and surveillance biomedicines has taken place (Clarke: 2003, 172). Accordingly, Mayes and Horwitz speak of how, with the development of the DSM- III manual, visible and measurable symptoms of patients were equated with the presence of disease. The categorical and symptom based diagnosis was established. A standardized system of measurement that was suitable for any kind of research, as with these categories one could reliably measure mental disorder and reproduce results.

Epidemiological research uses certain conceptualizations of mental illness which undergo specific ways of operationalization. It should be reminded, like Busfield remarks, that the measuring instruments used to assess mental illness and the definitions they embed vary considerably (Busfield: 2012, 582).

Therefore, the results are anything else than an accurate picture of the cases of Depression in a certain, or even a global, population. However, the newspaper sample can be considered as using this argument tool all over the years, with *Der Standard* employing statistical statements by the WHO more frequently than *Die Presse*.

The WHO is first mentioned in *Der Standard*, in the year 2002 (Standard- 26.07.2002 - "Ärzte stellen immer mehr Depressionen fest"/ CHR Chronik). The article generally talks about an alleged rise of Depression in the Austrian population. The statistical statement expressed via the WHO connects this argument to a general global outlook on the prevalence of the disorder: "In Hochrechnungen der Weltgesundheitsorganisation WHO wird geschätzt, dass derzeit mehr als 500 Millionen Menschen weltweit an schweren Depressionen leiden." This is followed by an estimation of Siegfied Kasper, Leiter der Abteilung für Allgemeine Psychiatrie der Universitätsklinik Wien, about how many people of the general population suffer from Depression: "Generell weisen etwa 17 Prozent der Gesamtbevölkerung im Lauf ihres Lebens mindestens einmal eine depressive Episode auf", stellt Psychiater Kasper im Standard-Gespräch fest. Damit stellt die Depression die häufigste psychische Erkrankung dar. Die Krankheit sei meist kein einmaliges Ereignis, die Wahrscheinlichkeit des Wiederauftretens liege bei etwa 75 Prozent." (Standard- 26.07.2002) What becomes visible here is the epidemiological, disease oriented understanding of the disase concept of Depression, which is evident in most of the articles, but particularly visible when showing statistics about the prevalence of the condition. Further, this kind of conceptualizing Depression allows the expert in the article, Siegfried Kasper, to make estimations about future relapses of people who have already suffered once from the condition.

When talking about "Depression in numbers" it is particularly designated as a disease.

In another example from Standard from the year 2006 the WHO future scenarios are already used to support the gravity of the problem:

"Standard: Rund 200.000 Euro werden in Österreich für Psychopharmaka ausgegeben, fast die Hälfte davon für Antidepressiva. Beunruhigt Sie das?

Pezawas: Depressionen sind heute bereits die dritthäufigste Erkrankungsgruppe weltweit. Die Weltgesundheitsbehörde prognostiziert, dass sie 2015 den ersten Platz einnehmen werden." (Standard – 7.8.2006)

In a *Die Presse* article from 2009 (Presse – 15.11.2009), which appeared because of the recent suicide of German national soccer goal keeper Robert Enke, WHO statistics are used to show the epidemic of the condition: "*Die neue Volkskrankheit? Mediziner und Psychologen sehen in Depressionen eine neue Volkskrankheit. Weltweit sind nach WHO-Schätzungen 120 Millionen Menschen betroffen, das entspricht der Einwohnerzahl von Deutschland und Polen zusammen.*"

Statistical statements of the rise of Depression are common in the articles used for the sample. Interestingly though, in *Der Standard* these are articulated in connection with the WHO as an institution, while in *Die Presse* the WHO is used only three times to show the condition of global society.

In this example (Presse – 1.12.2004) here, *Die Presse* presents an alarming development of Austrian pupils: "Werden Österreichs Schüler immer depressiver? Der Salzburger Mediziner lässt aufhorchen: "Die Zahlen steigen, gleichzeitig nimmt die Schwere der Erkrankungen zu." Statistisch gesehen würden heute in jeder Schulklasse mit dreißig Kindern drei Kinder sitzen, die unter dieser Krankheit leiden."

Another article (Presse – 21.5.2007) presents a similar scenario:

"Europaweit waren laut Schätzung der Europäischen Kommission im Jahr 2005 etwa 50 Prozent aller 18bis 65-Jährigen von einer psychischen Störung wie Burn-out, Depression oder Angsterkrankung betroffen. "Man kann davon ausgehen, dass die Anzahl der Depressionen, wahrscheinlich auch der Angststörungen in den letzten Jahrzehnten zugenommen hat", meint der Grazer Psychiater und Psychologe Univ.-Prof. DDr. Michael Lehofer."

With the headliner, "PSYCHISCHES LEID. Immer mehr Fälle von Burn-out, Angststörungen und Depressionen: Längere Arbeitszeiten und der zunehmende Stress im Job spielen dabei eine Rolle", this article chooses the rising number of mental conditioins as a central theme. The overall theory is more related to stress and that the modern world puts more pressure on people and that is why they become mentally troubled.

In an example from 2010 (Presse – 13.4.2010) Claudia Richter writes an article and uses an argument about how unnatural our society is and that these fast times we are living – in particular mentioning the IT communication tools such as mobile phones, Internet, E-Mail or iPod – are not good for us. The title and headliner use the argument of the alleged Rise of Depression: "Depression durch globale Hetzerei? SCHWERWIEGENDE KRANKHEIT. Depressionen nehmen zu - für viele Experten ist die zunehmende Beschleunigung ein Auslöser. Am Therapiesektor tut sich nicht viel Neues"; Richter continues in describing why we are facing such an epidemic and what can be done to face the threat.

Now, what is most striking about these arguments about the rise of Depression is that these statements are not explained, or, like in most examples of *Der Standard*, they are attached to statistics of the WHO. In that sense, as these statements cannot be located in any context of epidemiological research, it turns them into mere phrases that are used to construct a certain image of a society: a society that becomes sicker.

#### 8. Narrations of Cause

#### 8.1. Narrations of Cause - Defining/Legitimizing the Categories:

This analytical chapter deals with ontological narratives about Depression. Ontological narratives are statements about what it is that we are dealing with. This can include narratives about aetiology, pathology (the neurobiological correlate) or treatment, all of which frame the disease concept in a certain way, and convey a specific understanding of what Depression is. Further, it matters whether it is considered a

psychological problem, a biological one, a disorder or a condition. The sample shows very different ontological narratives from which it has been tried to build analytical categories for.

As indicated in the beginning of the analysis, the main discourse, *Psychiatric understanding of Depression*, as a name was chosen because it was suitable as all the examples dealt with the institution of psychiatry in one way or the other. This chapter lays particular emphasis on ontological narratives. Therefore, it was looked at how Depression is conceived of and how it is argued that it is caused.

The articles were scanned for popularized accounts of *causation tales*. Psychiatry is trans - disciplinary, therefore, its assumptions about what triggers mental disorders are trans - disciplinary as well.

This sample, as it is argued, mostly displays several popularized versions of this general psychiatric understanding of causation because throughout the time it represents particular kinds of reasoning about the aetiology of Depression. Interestingly, it frequently alludes to biological and experience related triggers and does not include the concept of the "psyche" anymore. There can be several reasons for that.

It can be suspected that, although psyche and psychological are terms still often used in lay perceptions about mental disorders and mental phenomena in general, it is not part of the sample that mostly deals with (bio-) medicalized accounts of Depression. The "psyche", in this way of dealing with Depression, may not seem to have such an appeal as it tends to reproduce popular mind- body dualisms and makes it difficult therefore to integrate imaginations of physical processes and structures of brain anatomy. However, it is likely that "Psyche" as a concept can still be found in everyday lay accounts of certain people if it had not already been replaced (partly) by (bio-) medical narratives.

Coming back to how the sample displays the narrative of the cause of Depression, the causation tale of this psychiatric approach, as expressed in the articles collected under this narrative, is composed of different varieties of what can be superficially understood as the "nature- nurture" argument.

Being already a simplified and dichotomous scheme of different arguments in several scientific disciplines, as well as in the publics, "nature- nurture"can be considered as approaches that define the human being as a biological organism, and as being subject to the environment (which could refer to any kinds of experience related circumstances or general broader social settings (e: family, school environment, or society)).

In this same manner mental disorders are accounted for. Modern psychiatric theory partly blames the biological make- up of a person and partly it blames the experiences a person has had in their life. Often the articles stage experience related triggers as very severe and sudden life events, such as the death of a relative or loosing ones job. In that regard, they also tell a certain story about what can be considered an adequate "severe experience" to develop Depression, and what not.

"Nature"comes in many guises. Some articles understand Depression simply as an entity, like "imbalance of neurotransmitters in brain anatomy", or Depression being caused by a certain variant of a gene.

But often the articles do not stage any kind of causation tale at all. The psychiatric quality of the articles is that they present certain experts that appear in the media or in how these articles talk about solutions for Depression (medication and later on both medication and psycho-therapy).

But, as mentioned before, some articles in the sample do offer a rather different causation tale about Depression. They locate its origin in the structure of society. As pointed out in *Experts and Expertise*, public discourse resorts to sociology inspired arguments when the "overmedicalization" of society is criticized (see *ethical – moral - expertise* in *Experts and Expertise*) or, in this case, when the aetiology of Depression is concerned.

It can also be seen to be closely related to an argument brought forward by sociologists when discussing possible societal factors that can put people at risk for illness. They also stress that certain incidents of illness (like women being diagnosed sick more frequently than men, or why people from lower classes are sick more often and die earlier, or why people pertaining to another ethnicity do not receive appropriate health services) can only be explained through sociological analysis (White: 2010,5).

When describing the sociological approaches to health and illness White distinguishes four tendencies, of which the first one, the *Political Economy and Marxist Approaches*, seems to support this argument:

"Common to these approaches is that they emphasize the determining role of economic interests in both producing disease and in shaping the way it is dealt with." (White: 2010, 8)

Although the sociological research in medicine and society is much more than that (as described in the first theory chapter), this can also be part of the argument.

However, Busfield (2012) discusses the many difficulties measuring rates of mental illness across a longer span of time. By doing this, she also expounds the problem of how these data on mental health and illness are readily used to support criticism of certain features of present - day society (Busfield: 2012, 586). In a much earlier paper (1988) she criticizes how feminists readily consider studies that link women's mental illness to stressful features of their lives as evidence of their oppression. Or some scholars from a Marxist orientation, for example, consider all studies that link stress and illness as evidence of the alienation and exploitation of the capitalist order. The claims may be justified but they need to be argued and demonstrated, and not simply assumed (Busfield: 1988, 524). In that sense, researchers should also be more careful not to mistake correlation for causation.

Additionally, Busfield (2012) stresses several other factors that need to be accounted for when making claims about the aetiology of mental illness in regards to social systems. She acknowledges that those claims may be justified and that such adversities (that put people at risk) can increase or decrease in particular societies over time as a result of major social changes.

On the other hand, she also stresses that the several factors interact in such a complex way that it is more likely that the levels of mental health and illness in a population do not change as a consequence of major social developments. She states that negative changes are balanced by more positive ones that maintain mental health. Additionally, the gene pool of populations transforms relatively slowly, wich means

that this also provides stability (Busfield: 2012, 582).

Still, arguing the aetiology of Depression sociologically is part of how public discourse explains the onset of the phenomenon, which can be observed in this newspaper sample.

Therefore, the term *Sociological Understandings of Depression* was considered appropriate. Certain social constellations put people at risk for developing the condition of Depression and, therefore, locate the aetiology of mental disorder in society. Often, the exploiting standards of the labor market are talked about in this kind of reasoning, which certainly is most evident in the Burn- out discourse, which has not been included in this analysis. Also, sociological causation tales appear together with psychiatric causation tales, which implies that Depression can have different origins.

A smaller discourse, not belonging to the greater psychiatric one, was also identified. It has been named *Depression as just a medical entity* and it appears in both daily newspapers. There are about 12 *Die Presse* articles and about 6 *Der Standard* articles that were grouped under this category.

Die Presse features more articles in this group because, as mentioned earlier, the sample is about one third bigger than the *Der Standard* sample. *Depression as just a medical entity* as a name was chosen for this category of articles because Depression is mainly presented as a medical concept. Depression appears in a medical setting, often in connection to a study that has been done of which the results are presented in the article, such as the connection of Depression and diabetes. The articles are mostly rather short and not very complex. There are no causation tales and descriptions of the concept per se, or any suggestions for therapy measures. The articles understand Depression in a "taken for granted way".

These articles often present a newsworthy result of a study, which can conceptually be subsumed under "performance of facts". Results are presented and unquestioningly communicated in the media as the latest facts about Depression. Of course, the longer more complex articles do the same, however, in a more elaborate manner. Still, these examples can also be interpreted as the media representation of how Depression (and probably other mental disorder classifications as well) has become an operationalized disease concept in medicine and medical research, regardless of all the difficulties this brings along.

Having created a list of narratives of causation tales of the sample, it was possible to distinguish them according the how they justify the cause of Depression (see "table\_NoC") In terms of how and at what point in time a certain causation tales is presented does not follow a particular pattern. As you can see in "table\_NoC", the narratives are evenly distributed so that no particular pattern on the time line emerged. The first and most comprehensible causation tale, what has already been mentioned in the introduction to this chapter, are certain arguments based on the "nature- nurture" concept. Mental disorders can be understood to be triggered by biology and by the life experiences of people. For clarification and simplification, these types of causation tales are called "biology and experience related triggers".

#### 8.2. Biology and Experience related triggers

The approach in a popular understanding of psychiatric causation of Depression started to appear in the sample roughly around the year 2003. Before that, there is only one example (Standard -26.07.2002) that already alludes to this kind of reasoning for the origin of Depression.

Nevertheless, the year 2003 is the year when a groundbreaking discovery about genetics in relation to the condition of Depression (and also other mental disorders) is made public. It is about how genetics are involved in the aetiology of the condition. The first article that mentions this is from *Der Standard*. On the 19.07.2003 *Der Standard* published an article that introduces Austrian society to a new discovery: a gene for Depression has been found (*Gen für den Serotonin-Transporter (5-HTT)*) (Standard- 19.07.2003). Apart from being a possible case for sensationalist coverage of scientific topics, it is the beginning of a public dialogue about the disease concept that emphazises the genetic origin of the condition. It is also, more or less, the beginning of the communication of a particular causation tale. This article presents a new "causal story" about the condition. It says that people with the shorter variant of the 5- HTT- gene are put at risk of developing the condition when experiencing a difficult life event, like death of a family member, divorce or being fired. This is the result of a study published in the US trade journal Science by an international research team.

"Das Gen für den Serotonin- Transporter (5-HTT) spielt eine Rolle bei der Signalvermittlung zwischen den Nervenzellen im Hirn. Depressionen wie wahrscheinlich auch andere mentale Krankheiten resultieren aus einer Kombination von Erbanlagen und Umweltfaktoren, schließen die Forscher."

The introducing paragraph of the article stages how environmental triggers, understood as sudden, difficult life events, like death of a family member, divorce or loosing ones job, contribute to put people at risk: "Washington - Wie ein Mensch die schweren Zeiten in seinem Leben meistert, hängt offenbar entscheidend von einem neu identifizierten Gen ab. Nach dem Tod eines Familienmitglieds, nach Scheidung oder Kündigung fallen Menschen mit der Kurzversion des Gens wesentlich eher in depressive Zustände als Menschen mit der längeren Version des Gens. Das berichtet ein internationales Forscherteam im US-Fachjournal Science."

This is the article that establishes the story about what can be called the "Depression- Gene story". This name for the story was chosen because, in some ways, it illustrates the scientific attempts of finding a definite gene as being the culprit for something as ambiguous as the psychiatric classification of Depression and the problematic organic conditions it refers to. This also relates to the argument made in the theory chapter of genetization (Rosoff 2010), namely that a single gene (in this case a gene variant is discussed) is so powerful to cause a psychiatric condition, that, for the moment, can only be defined around a set of different behavioral, emotional and cognitive symptoms. As it was intended to show in the theory chapter about classification and standardization, this is a tricky sciento- historical situation, when different scientific domains start to mingle with each other, and do not reflect upon the others' premises and theoretical backgrounds. As such, the erroneous assumption of Depression being a well- defined disease entity in the

organic sense (Dumit 2004, Jaencke 2012) is not discussed.

Quednow and Pintsov (2012) discuss the contribution of the concept of the "endophenotype" (dt.: Endophänotyp) in researching the genetic cause of mental disorders. Originally the concept was developed for researching about Schizophrenia, but has been adopted for all other mental disorders that are suspected to have a strong genetic trigger. Although the concept proved successful for a few contemporary classified disorders (not mental disorders!), it has not been shown that there is a definite endophenotype for Schizophrenia. If the current definition would not be complex enough already, it can be assumed that Schizophrenia also pertains to the, genetically speaking, more complex disorders, in which a variety of genetic developments are involved (Quednow and Pintsov: 2012, 217). In this vein, another huge problem can be considered issues with specificity and sensitivity (dt.: problem der spezifität und sensitivität), when acknowledging that until now there has been no endophenotype that is characteristic for a single classified disorder or that this endophenotype is not strongly prevalent in the healthy population also (Quednow and Pintsov: 2012, 226).

In the concluding remark of the article the authors underscore that until now it has not been achieved to show whether the concept of the endophenotype is of any use for the research of the genetic causes of mental disorders. For now, there remain both arguments for and against this research enterprise (Quednow and Pintsov: 2012, 228). Maybe, the eagerness to find the genetic cause for a variety of mental disorders can be interpreted as an inclination to employ the medical model of disease and its idea about specific aetiology (Bury: 2005, 3) to the domain of mental health and illness.

Although the articles that discuss the "Depressions- Gene story" support a complex "risk- based" view of the genetic component of the cause of Depression, they still embrace a causal model that purports that a certain mental disorder is caused, in part, by a certain variant of a gene. Therefore the name "Depressions- Gene" story" was considered appropriate to refer to this discourse.

Genetics are the biological cause, whereas difficult life events are the environmental factors that put people at risk for developing the condition. The causation tale, the imagination of genetic processes and the staging of the symptoms, convey the impression that we are dealing with an entity that is visible through a certain kind of behavior and caused by a certain gene variant and certain difficult life events. It stages a prototypical process that tells about why we become depressed.

Further, as is argued in one of the last paragraphs, the result of the study, namely that about 17 % of the test persons had two copies of the risky gene variant (it should be noted that the article explains that genes come in couples, one inherited from the father and one from the mother. The study says that people who have two copies of the short variant of the 5-HTT-Gene and who were abused in their childhood where the ones most susceptible for developing Depression) are to be seen as representative for a white, Caucasian, population. Following this logic, beliefs are established that the prevalence of Depression can be understood through this new finding and on the basis of the probands who had participated in the study, who are considered representative for the global population. The whole sample contains more articles that can be, more or less closely, related to the "Depressions- Gene story".

Over the years, *Die Presse* published four articles that can be related to this topic and most articles feature the research of top Austrian experts, like Siegfred Kasper and Lukas Pezawas. *Der Standard* published six articles.

The great majority of those articles is about these Austrian psychiatrists/ researchers. Considering those examples, the "Depression- Gene story" develops and changes. Some articles are very complex and deal with processes of brain structures and complex genetic procedures that, for someone not educated in this area, are difficult to follow.

What is most interesting about some of these articles is that the initial causation tale is not so straight forward

anymore. It turns out that there are a lot more genetic and biological factors that seem to play a role in the development of the condition of Depression. What becomes apparent in those causation tales that were grouped under the category of biology and experience related triggers, is that their way of reasoning the causation differs many times. In this example from Der Standard (Standard – 30.10.2004) expert Hans-Peter Kapfhammer, Vorstand der Universitätsklinik für Psychiatrie in Graz, explains the aetiology of Depression: "Zudem "gibt es keine eindeutige Ursache. Es handelt sich nicht nur um eine Störung der Botenstoffe im Gehirn." Die Krankheit sei das Resultat von Biologie und Umwelt. Bei bestimmten "genetischen Faktoren" können bestimmte Lebensereignisse Depression auslösen. Danach aber "schafft auch die genetische Realität eine Umwelt": Wer einmal eine schwere Depression gehabt hat, könne rückfällig werden."" What is interesting about this argument is that a divide is made between the two lines of talking about "nature", namely the transmitter imbalance, and genetics. Kapfhammer says that the cause is not only a disturbance (dt: "Störung") of the transmitters in the brain. The disease is the result of biology and environment as well, namely that certain genetic constellations and certain life events can trigger Depression. Additionally, he explains that people who had already suffered from severe Depression could relapse. The transmitter imbalance and the genetics and experience related trigger model are not combined but rather seen as something different. It is not said, for example, that when certain genetic constellations and certain life events act together, people develop certain transmitter imbalances (that can be equated with Depression). In the following example from *Die Presse* (Presse – 25.10.2003) causation is again argued in a different way. Certainly being aware about the "Depression- Gene story" at this point in time, Univ.-Prof. Dr. Siegfried Kasper, Leiter der Klinischen Abteilung für Allgemeine Psychiatrie der Wiener Universitätsklinik für Psychiatrie, does not mention genetics in his explanation about the cause for Depression: "Wegen einer Hirnstoffwechselstörung reagieren manche Menschen auf gewisse Stressoren mit einer Depression. Die Kinder ziehen aus dem elterlichen Haus aus, eine berufliche Veränderung steht ins Haus manche Menschen stecken derlei Lebensereignisse weg, andere bekommen eine Depression oder

(...)

Angsterkrankung. Warum?"

"Wir haben den Serotonin-Stoffwechsel bei depressiven Patienten untersucht und entdeckt, dass bei ihnen in bestimmten Kernen des Hirnstammbereichs eine reduzierte Aktivität von Serotonin vorhanden ist", berichtet Kasper. Das bedeute, dass diese Menschen verletzlicher auf Stressoren wie Auszug der Kinder reagieren und

krank werden, so der Experte."

The reasoning in this example can do without the genetic story for explaining the cause of the condition of Depression. The biological component is understood to be a transmitter imbalance of brain anatomy ("hirnstoffwechsel störung") that, as the article portrays, is not Depression. Only when connected to stressful life events people become depressive.

The reason why this incidence of seeing the transmitter imbalance as a trigger, and not as the condition itself, is that at some points in the sample precisely this transmitter imbalance is equated with Depression, which makes it a different explanation of causal relations.

This example from the year 2009 from *Die Presse* (Presse – 15.11.2009) shows how Depression is equated with transmitter imbalance. Here they call it "disease of (brain) metabolism". Further the article explains that it is not sure whether this condition is due to genetics or traumatic life experiences.

"Depressionen sind eine Stoffwechselerkrankung, die auf einen Mangel des Botenstoffes Serotonin im Gehirn zurückgeht. Ob das vor allem genetisch bedingt ist oder auch traumatische Ereignisse Depressionen zur Folge haben können, ist umstritten."

This article is an accompanying "fact article" to another one published on the same day. The "fact- articles" appear together with longer articles, and provide "the facts" about the phenomena in question. They are a lot shorter, and use deliberately "neutral" language in order to maintain the impression that what is talked about is "scientific". This short fact article appeared along with an article that does not feature any kind of causation tale. Therefore, it is presented in the shorter accompanying one.

Another example from the year 2008 from *Die Presse* (Presse – 22.3.2008) relates to the "Depression-Gene story" and talks about the achievements of Austrian psychiatrist - researcher Lukas Pezawas (*Biologische Psychiatrie, Med-Uni Wien*). This article is very complex and deals with how other genetic products can trigger Depression. Its title and heading present a simple causation tale, "*Genwechselspiel der Depression*", which alludes to the hypothesis that there are several genes and "gene- processes" involved in the aetiology of the condition. The headliner presents a simplified account of that version, which is basically biology (genetic factors) and experience related triggers (like losing one's job or partner) "*Depression, die häufigste psychische Krankheit, wird meist von Umweltfaktoren - z. B. Verlust des Partners oder des Berufs - ausgelöst. Aber die Neigung, an ihr zu erkranken, wird von genetischen Faktoren bestimmt, das weiß man seit langem, z. B. aus Zwillingsstudien."* 

At least in this simple causation tale, the aetiology of Depression is presented as a mixture of genetics and triggers acting together in causing the condition. Another example that can be described under the heading of biology and experience related triggers is from *Der Standard*.

This article is from the year 2006 and is long and very complex, accompanied by a shorter fact article. Again, it is the research of Pezawas that is discussed. It presents what he "discovered" about the genetic complexities and how they affect brain processes and therefore susceptibility for the condition of Depression. Just like in the example from *Die Presse* from 2008.

The long article is complex and, in fact, a causation tale itself (like many of the other examples that deal with

research in this area). For illustrating how this example stages causation one can look at the shorter fact article instead: "Bei Depressionen handelt es sich dabei um mehr oder weniger schwere Veränderungen des Neurotransmitterstoffwechsels. Genetische Disposition sowie äußere Einflüsse sind an der Entstehung beteiligt. Serotonin ist ein Neurotransmitter und wesentlich für Stimmung,

Antrieb, Schlafrhythmus, Sexualtrieb, Körpertemperatur und Appetit verantwortlich.

Zu welchem Zeitpunkt eine Erkrankung ausbricht, wird ebenfalls von verschiedenen Faktoren bestimmt, extreme psychische Belastungen und Stress begünstigen sie." (Standard – 6.11.2006)

Changes in neurotransmitter metabolism are considered equal to the condition of Depression. The cause for this change is seen to be a combination of genetic predisposition and external influences.

Something that can be mentioned at this point relates back to the theory chapter of medicalization and also to the chapter about standardization and classification. The question that can be asked about the representation of these kinds of causation tales, as it is done in the narratives of biology and experience related triggers (and also in the other narrative categories), is what conditions led Depression appear to be a "disease" that is so strongly connected to serotonin. Or posing the question in a different way: why is serotonin perceived to be the one transmitter that is involved in Depression? Is this the outcome of messy science communication processes that have changed uncertainty and complexity of original research results about the cause of Depression into something that is presented as a serotonin related condition? Or could it also be that the (market) success of modern antidepressants, Selective Serotonin Reuptake Inhibitors (SSRI), let research agendas focus too much on the role of this transmitter?

This habit could be explained with the frame offered by theories of pharmaceutalization, namely that the drugs that dominate the market influence the focus of the research agenda on serotonin as the main culprit for Depression. Co-production is another approach through which one could explain this case scenario. Serotonin is certainly one of the most visible neurotransmitter in these descriptions (see comments in table "table NoCZit"), which must not necessarily be connected to its actual involvement in Depression. Other transmitter systems are also known to be involved in the problematic organic conditions the disease concept of Depression refers to, as should be noted when remembering that for example other medications are on the market (e: Noradrenalin- Serotonin Reuptake Inhibitors, or Noradrenalin- Dopamin Reuptake Inhibitors) and that older antidepressants affected several of the transmitter systems in brain anatomy, but they had more side- effects than the newer ones (Ehrenberg: 2008, 188 ff). Scientific communities, practitioners and the patients themselves certainly welcomed the development of more handy, practical and effective medication when serotonin only related antidepressants came on the market. However, this might have had an influence on the focus on serotonin in research. Or it could just be that arguing Depression as a serotonin related "disease" is the outcome of complex science communication processes. Whatever might have happened, the brain/body images staged in this media sample give us a clue about the contingent moments that made Depression appear this way.

#### 8.3. Only biological causation tales

This relates to a smaller number of articles that were published in *Der Standard* and that argue the origin of Depression in a purely "biological" way. This is predominantly due to the not yet presented main causation tale of Depression, biology and experience related triggers, which gained in importance since the communication of the "discovery" of the "Depression-Gene".

As the articles from *Der Standard* start already with the Depression discourse in 2000, the following examples are from *Der Standard* before 2003.

One particularly interesting article concerns the hypothesis that Depression could be caused by the so called borna - virus. Three articles about this topic appeared in the years from 2001 to 2002. The causal tales presented in these examples are about a virus which is known to cause visible changes in behavior in animals and that researchers were curious whether the same can occur in humans. "Bristol - Eine englische Untersuchung könnte die Sicht depressiver Erkrankungen entscheidend verändern. Ein Team von medizinischen Mikrobiologen der Universitäten Bristol und Northumbria fahndet bei depressiven Patienten nach dem Borna-Virus, von dem man weiß, dass es bei Tieren Verhaltensstörungen auslöst. Schon länger ist bekannt, dass das Borna-Virus bei depressiven und auch bei Patienten, die an anderen Verhaltensstörungen, wie etwa Waschzwang, leiden, erheblich häufiger nachgewiesen werden kann als im Bevölkerungsdurchschnitt. Jetzt wird nach einem Zusammenhang gesucht." (Standard – 10.4.2001) In this article the cause of Depression is argued to have a connection with the virus. What is common to this and the other examples (Standard – 10.7.2001; Standard – 31.1.2002) is that the state of research and the evidence about the connection of borna to Depression is not presented as something very definite. Only one article ("Depression: Verdacht gegen Immunsystem und Viren") speaks of a recent study that has found the virus in 100 percent of depressive people. The last article dedicated to this issue is more cautious, and articulates the uncertainties that are involved with borna and Depression: "Hierin ähneln sich die Bilder bei Tier und Mensch, auch Pferde "lassen den Kopf hängen". Aber dann verläuft das Leiden bei Tieren über eine massive Hirnhautentzündung zum Tod. Bei Menschen kommt es zu einem subtileren Angriff auf Nervenzellen. So ist nach wie vor unklar, ob Borna eine Zoonose ist oder ob in Tieren und Menschen unterschiedliche Virusstämme zirkulieren." (Standard – 31.1.2002)

After this example, there is no more content related to this topic. Probably due to the dominant argument of relating Depression to genetics, the borna - virus as a cause for the condition vanishes from the media discourse in this sample.

Apart from relating the condition of Depression to borna, there are other only biological causation tales appearing in *Der Standard*, all before the biology and experience related trigger model becomes more dominant.

One particularly interesting incident is an example from 2000 (Standard – 31.10.2000) where the effects of antidepressants on the depressive brain are discussed. "Washington - Depressionen lassen sich zwar durch

Medikamente mildern, aber ihre Ursachen liegen nach wie vor im Dunkeln. Bisher vermutete man, dass die Balance der Botenstoffe im Gehirn ("Neurotransmitter") irgendwie durcheinander gerät. Nun kommt eine neue Hypothese - ihr zufolge hängen Depressionen mit mangelndem Wachstum neuer Hirnzellen zusammen -, die zwar noch spekulativ ist, aber erste Bestätigung in Tier- und Menschenversuchen hat. Und: Bekannte Antidepressiva wie Fluotexin ("Prozac") fördern das Wachstum neuer Zellen." (Standard – 31.10.2000) This article discusses possible rationales of the cause of Depression. At this point in time it seems that no dominant approach in the understanding of aetiology is communicated, or even talked of in the respective scientific communities. Nevertheless, what this paragraph from the article points out is that the condition of Depression is seen to occur when the balance of the neurotransmitters of the brain is disordered. However, a new hypothesis is presented that posits that Depression is connected with brain cells that do not grow as fast as they should. Known antidepressants, such as Fluoxetin (Prozac), promote the growth of new cells. Apart from being an interesting case of an early causation tale of Depression, this example also communicates something that, later on in the sample, becomes talked of when speaking about processes and structures in brain anatomy (brain images): it is contended that structurally, depressive brains do not show enough growth in certain areas, and, considering processes, depressive brains have a somewhat disordered balance of neurotransmitters (see for example: Presse - 24.10.2005 - "Tief im Hirn: Die Mechanismen der Angst" / FEU Feuilleton).

There are some more causation tales that approach the aetiology of Depression through biological causation only. However, due to constraints of time and length of a Master's thesis I want to continue with examples from another field, that were named *mixed causation tales* (biology + experience related trigger model and the sociological approach). As mentioned in the beginning, some articles do see the cause of Depression in the social system of society. Most often, theses causation tales go along with a critique of contemporary societal patterns, in particular the labor market situation. Now, sometimes, these sociological causation tales appear together with causation tales from the *biology* + *experience related trigger* model.

#### 8.4. Mixed causation tales

These types of reasoning the aetiology of the condition of Depression appear all along the sample. "Die Lebensumstände, der wachsende Druck und Stress in der modernen Lebens- und Arbeitswelt dürften dabei eine nicht zu unterschätzende Rolle spielen", adds Grazer Psychiater und Psychologe Univ.-Prof. DDr. Michael Lehofer to a statement of the alleged Rise in Depression and anxiety disorders (Presse – 21.5.2007). Although he also says that Depression is not an inevitable consequence of our modern world, as positive stress is actually good for the brain (Lehofer refers to this as Eustress). Nevertheless, in the following paragraph it says that it is known that genetic predisposition and life events can lead to the development of depressive symptoms. Particularly in this example a connection between environmental factors – mainly from society – and the development of Depression is drawn. This is even directly addressed in one of the

following paragraphs where *Psychotherapeutin und Vizepräsidentin von Mental Health Europe, Elisabeth Muschik* says that "*Psychische Gesundheit ist nicht von sozialer Gesundheit zu trennen*". Additionally, it is said that she wants to assure that the promotion of mental health (dt: psychische Gesundheit) also happens on a wider political scale.

This is one of the few examples where the sociological causation tale of Depression is connected to the other causation tales.

There is only one other example where this happens in a similar fashion. Interestingly, this article is from the year 2002 (Standard – 26.07.2002).

"Wir dürfen uns nichts vormachen", sagt Kasper: "Die Zahl depressiver Erkrankungen wird in den nächsten Jahren weiter steigen." Als Gründe nennt der Wissenschafter "eine immer schnelllebigere Welt, erhöhte Mobilität und zunehmende Vereinsamung". Dies alles würde zu biochemischen Reaktionen im Zentralnervensystem führen, zu Beeinträchtigungen der Nervenbotenstoffe - ein Mangel an Serotonin wird als Auslöser von Depression angenommen."

Siegfried Kasper, *Leiter der Abteilung für Allgemeine Psychiatrie der Universitätsklinik Wien*, explains the cause of Depression first with the sociological approach, namely that we live in an ever faster moving world which forces us to be more flexible and allows people to become more isolated. This would lead to biochemical reactions in the central nervous system, to disturbances of the transmitters. A lack of serotonin supposedly triggers Depression.

Other examples that were grouped under this category of mixed causation tales do not explicitly connect the different approaches. In Die Presse in the year 2007 (Presse – 17.9.2007) reasons for the apparent increase in the prevalence of Depression are discussed. Again it is Siegfried Kasper who gives statements about the cause of this increase. He blames modern society for the rise in depressive disorders. The following paragraph introduces another causation tale that it does not rhetorically connected to what Kasper said: "Ein biochemischer Grund ist ein objektiv feststellbares Ungleichgewicht bestimmter Nerven-Botenstoffe im Gehirn. "Betroffene sind dann verletzbarer und können etwa Trennungen und andere Konfliktsituationen nicht so gut verarbeiten wie andere", says psychotherapist, Prof. Alfred Pritz, Vorstand der Sigmund-Freud-Privat-Universität in Wien, who gives a statement about the biochemistry involved with the condition of Depression. Additionally, it is stated that there is an objectively verifiable imbalance of certain transmitters in brain anatomy which makes people more vulnerable and they cannot process certain incidents, such as ending a relationship or conflictual situations in their life. So here, the two approaches are rhetorically not connected. Instead, they are argued separately. Second, another interesting aspect of this article is that it is stated that Depression is a biochemically verifiable objective imbalance of certain neurotransmitters in brain anatomy, conveying the impression that brain imaging research has formed consensus already in regards to how this mental disorder appears in brain anatomy.

The last article I want to comment on in this section here is also from *Die Presse* from the year 2010 (Presse – 13.4.2010). Similar to the example before, the two approaches are not connected.

<sup>&</sup>quot;Artgerecht wird der Mensch schon länger nicht mehr "gehalten": Immer schneller soll er sein, immer

rascher reagieren, ständig durchstarten. Im Zeitalter von Handy, Internet, E-Mail und iPod darf es keinen Verzug geben, Motto: Frage heute, Antwort am besten gestern. Macht diese globalisierte Beschleunigung krank? Für etliche Experten ist sie zumindest ein Mitauslöser für die steigende Zahl an Depressionen.

(...)

"Depression ist keine Allüre, keine Laune, Depression ist eine schwerwiegende Krankheit, bei der der Botenstoffhaushalt im Gehirn gestört ist. Bis zu 40 Prozent der Depressionen sind genetisch bedingt. "Dazu kommen oft auslösende Lebensereignisse wie Jobverlust, schwere Krankheit oder Tod eines geliebten Menschen. Der Altersgipfel, wo Depressionen erstmals auftreten, liegt zwischen dem 30. und 40. Lebensjahr", erwähnte Univ.-Prof. Dr. Peter Hofmann von der Grazer Universitätsklinik für Psychiatrie auf der Apothekertagung."

The introducing paragraph relates the rise of Depression to an "unnatural" and fast developing modern world. While in a paragraph further down in the article, the concept is understood through a combination of, genetic and experience related trigger models, which are rhetorically connected.

At this point it is necessary to point out that, relatively often in the sample, the sociology approach is not connected to brain/ body images of Depression or biological causation tales. Social systems related causation is rarely argued to be acting upon the neurbiology of the brain. Possibly this is – at least during the time span of the sample - not a contemporary imagination of causality, namely that a symbolical and immaterial system ("culture") could impact the individual on an organic and material level. Despite this habit, the examples that discuss only sociology related causation clearly understand Depression as a (bio-) medical entity.

#### 8.5. Sociology related causation tales

In this category, articles were grouped that only made use of sociological approaches to explain the cause of the condition. Particularly the year 2004 marks a point in time when *Die Presse* published a lot of articles that explain the cause of Depression in connection with societal structures. But that is not surprising as these articles were written by science- health- medicine writer from *Die Presse*, Claudia Richter.

Claudia Richter's main concerns are issues of how society actually treats the affected.

In the analysis section of *Options of Action* these types of articles were called "solutions in regards to how society deals with Depression and the people affected by it". So it is no surprise that her articles often feature sociological causation tales as this is also a way to criticize current economic, social, political and cultural structures of modern society; as Busfield (2012) indicated this type of reasoning the origin of Depression is often used as a critique of certain dynamics of modern societies.

Interestingly, *Der Standard* makes use of these causation narratives rather late and often it is mentioned in connection with the disease concept of Burn- Out as well. This is not surprising as the concept of Burn- Out appears exclusively in connection with a critique of modern life. "*Die Zunahme ist auch auf stetig* wachsende Anforderungen im Beruf zurückzuführen. "Auf chronische Überlastung folgt Angst, dann eine

Verschlechterung des Allgemeinzustandes. In so einer schlechten Ausgangssituation kann tägliche Überforderung im Job leicht in die Depression führen", schildert Michael Musalek, ärztlicher Direktor des Anton-Proksch-Institutes Kalksburg. Chronische Überforderung stellen freilich auch nicht funktionierende Partnerschaften dar."

(Presse – 19.8.2004)

This article from *Die Presse* from the year 2004 articulates the causation in connection with the rise of Depression in Austria. The continuous growing demands of the labor market are considered the main triggers. Additionally, dysfunctional relationships can also pose a threat. Characteristic for this line of argument is not mentioning any kind of brain images. Also the following examples are argued in the same manner: "Der Grund für die starke Zunahme psychischer Leiden? Schöny: "Der soziale Druck auf den Einzelnen ist sehr hoch. Die Welt wird immer schneller, das ist einer der Risikofaktoren. Viele kommen mit dem bestehenden Informations-Überfluss nicht zurecht." Zudem werden auch die Anforderungen im Beruf immer höher und höher, die Angst vor Jobverlust steigt."

(Presse - 8.10.2004)

"Die Leitphänomene der schnelllebigen Gesellschaft, Hast, Druck, Leistungsorientierung, führen schnell in die Krankheit. Die Stressforschung zeigt, dass es nicht in erster Linie die großen Krisen, sondern besonders die Alltagsbelastungen wie zwischenmenschliche Probleme, Zeitdruck und Überforderung sind, die psychische Erkrankungen fördern."

(Presse - 8.10.2004)

The first article stresses the point about a society that is facing severe troubles when being confronted with too much information, while the latter refers to results from what is presented as "stress research" which lists a few scenarios of modern life that can be particularly stressful.

Two later examples from *Die Presse* appeared in 2011. One of the articles is dedicated to a topic that is probably not a mainstream topic in general in the Austrian media.

It is about the question whether one of the 9-11 suicide bombers could in fact have suffered from Depression. Relating to this hypothesis, the article stages a sociological causation tale of his alleged condition: "War der Mann, der am 11. September 2001 ein Flugzeug in den Nordturm des World Trade Center lenkte, krankhaft depressiv? "Wenn ich ihm , Auf Wiedersehen' sagte, war ich traurig", sagte ein Freund über Mohammed Atta. Mitbewohner erinnern sich an den ägyptischen Studenten, wie er am Tisch sitzt und seufzt: "Das ist langweilig. Essen ist langweilig." Er habe keine Karriere vorweisen können, sei in Deutschland sozial isoliert gewesen, ohne Familie, ohne Frau, das alles habe ihn niedergedrückt, erzählte ein Freund nach Attas Tod. Es sei nicht leicht, mit 24 als Muslim noch keine Frau zu haben, sagte er einmal - mit 33 hatte er immer noch keine." (Presse – 7.1.2011)

In comparison to the other examples, this article stages a sociological causation tale that locates the origin of Atta's condition in the cultural system he comes from and that he could not escape from.

The last example from *Die Presse*, which is similar to this kind of causation tale, is about the film festival in Cannes and the screening of Jodie Foster's new movie "The Beaver". It is about a man and father in his 40s

who has become depressive. When being asked by the interviewer why she (Foster) thinks about the issue of Depression she answers: "Ich bin oft schon damit konfrontiert gewesen. Depressionen gibt es in jeder Familie. Die bringt das Leben so mit sich, würde ich sagen. Das Leben ist hart, und je älter man wird, desto mehr Schwierigkeiten häufen sich an: Deine Eltern werden alt, deine Kinder erfüllen deine Erwartungen nicht, das Leben entwickelt sich anders, als du es dir gedacht hast." (Jodie Foster)

(Presse – 15.5.2011) This line of arguing the cause of the condition is also unique in this category because Foster does not relate the origin within modern society and how unbearable it is. She relates it to life in general and to the many difficulties it brings along.

Articles from *Der Standard* that deal with sociology related causation about the concept of Depression are rather recent examples. The first that can be presented here is from the year 2010 (Standard – 20.12.2010), and its topic is the publication of a new book, "Seelenriss" by Ines Seipel. As the article suggests, she chooses a genuine sociological approach to understand Depression, : "Spitzenleistungen durch Chemie - nicht nur im Sport, auch in der Arbeit - und das Streben nach mehr Leistungsfähigkeit zeigen, dass Depression längst ein soziologisches Problem ist."

Two articles from the year 2011 stage the problem of the condition together with the topic of Burn- out. Reasons for their appearance are the recent incidents of suicide and attempted suicide of known people from the professional field of sports. In the first example (Standard - 31.10.2011) Ulrike Puhr, a sports psychologist, is interviewed. She contends that people in sports, and particularly the ones in managing or coordinating positions, are very prone to Burn- out. Depression is mentioned, in this article, as a symptom of Burn -out. In the second example (Standard - 01.12.2011) it is a study by a sports scientist who calls attention to the inhumane demands of the field.

And lastly, a short article stages the cause of Depression in relation to extra working hours: "Viele Überstunden können zu Depressionen führen

London - Mehrere Überstunden täglich über längere Zeit erhöhen das Risiko, an einer schweren Depression zu erkranken. Dies ergab eine Langzeitstudie mit mehr als 2000 Mitarbeitern britischer Behörden. Bei Menschen mit drei bis vier Überstunden täglich war demnach die Wahrscheinlichkeit für eine schwere Depression deutlich höher als bei Angestellten ohne Mehrarbeit, berichten Forscher um Marianna Virtanen (University College London) im Fachmedium PLoS One . (APA, red)" (Standard – 26.01.2012)

#### 8.6. Unusual causation tales

The title of *unusual causation tales* for this chapter was chosen because the examples that follow can be considered as singular incidences of certain kinds of imagining the cause of Depression.

This group of articles also includes, sometimes, the term "psychological" which can have different meanings. Some of the very early examples from *Der Standard* (Standard – 15.11.2000; Standard – 17.1.2002) tell

about the cause of Depression before the more dominant *biology and experience related trigger* model became more popular.

The first example is about Post Partum Depression (women who become depressive after giving birth) and it is considered to be triggered by various factors, such as hormonal changes, incriminatory experiences, a traumatic birth experience, an unexpected caesarian section, other social issues, and lastly economic troubles. The second example argues that hitting the head can cause the condition.

An article from *Die Presse* from the year 2004 (Presse – 1.12.2004) is about the situation with Depression in school and how pupils can be affected: "Das Problem laut dem Wiener Kinderpsychologen Max Friedrich: "Eine Depression tritt bei Kindern maskiert auf." Sprich: Eltern und Lehrer schieben das Verhalten einfach auf die Pubertät - auch wenn die Depression durch das Umfeld (Mitschüler) entsteht: Durch Mobbing, Schläge und massives Hänseln erleiden ein Drittel der Betroffenen schwere psychische Schäden wie Depressionen oder Angstzustände. Das hat eine heuer veröffentlichte Studie nachgewiesen."

(Presse – 1.12.2004) This article makes explicit mention of severe psychological damages, such as Depression or anxiety conditions, when pupils are bullied at school. The condition of Depression is equated with "psychological damage." This causation tale focuses on behavior of people and how that can affect other people negatively so they may end up developing it. The causal relation remains on the surface of human action and does not allude to changes in brain chemistry as a result of being bullied at school.

This "psychological" way of reasoning and understanding Depression, as mentioned in the introduction of the analysis, is not very prevalent in the sample. Again, this is probably due to the sampling choices made and the resulting (bio-) medicalized contents that were the consequence of this choice. And second, it can be assumed that everyday culture has, to a certain extent, already been influenced by (bio-) medical narratives about mental conditions so that the "psychological" narrative has lost its appeal. Also, measures that are taken in order to alleviate depressive and other mental conditions are medication and psychotherapy (see also chapter of *Solutions for Depression*), which seem to become more accepted in the wider population. It can be suspected that this situation also has led to changes in speaking about mental conditions.

An article from *Die Presse* from 2006 (Presse – 3.10.2006) combines different biological causation tales with psychotherapeutic explanations of triggers: "Zeigen biologische Untersuchungen, dass Depressionen Ursachen in einer Änderung des Hirnstoffwechsels haben und es auch eine Art genetischer Disposition gibt, so vermittelt die Psychotherapie einen weiteren Blickwinkel: Ungelöste Trauer, zwischenmenschliche Konflikte oder soziale Isolation werden etwa von der interpersonellen Psychotherapie als Anknüpfungspunkt für die Behandlung gesehen."

One cause is said to be changes in brain metabolism, while another cause is considered as being genetic. An additional causal tale is introduced when saying that psychotherapy, and in this particular example it is interpersonal psychotherapy, understands triggers as "unsolved mourning", interpersonal conflicts or social isolation for example.

In 2007 another interesting article appeared in *Der Standard* (Standard - 7.3.2007). In this article a different causation tale about why people become depressive is presented. It is one of the few examples where a

gender difference is defined as the trigger. The headliner of the article was chosen as a citation: (headliner) "Hoch emotionale Szenen, Bilder oder Worte aktivieren bestimmte Gehirnregionen bei Frauen wesentlich stärker als bei Männern. Das könnte auch der Grund dafür sein, dass Depressionen bei Frauen häufiger sind, wie Forscher von der Medizinischen Universität Innsbruck vermuten."

This particular case of presenting the cause of Depression is done in the professional setting of the Klinischen Abteilung für Biologische Psychiatrie, die der Universitätsklinik für Psychiatrie angehört, in Kooperation mit der Universitätsklinik für Radiologie II. It is a research project, financed by the FWF, and is called ""Funktionelle MRT-Untersuchung zur Lokalisation geschlechtsspezifischer Unterschiede in der cerebralen Verarbeitung emotionaler Stimuli". The overall argument, as presented in this article, is that women are more prone to develop the condition than men. And that is due to how the feminine brain processes emotional stimuli in a different way than the male brain does.

A different causation appears in *Die Presse* in 2009 (Presse – 15.11.2009):

"Therapien sind in vielen Fällen aber notwendig: Depressionen lassen sich nur selten ausschließlich durch medikamentöse Behandlung oder Psychotherapie bekämpfen. Für eine erfolgreiche Behandlung sei eine Kombination der beiden notwendig - wie auch bei der Ursache der Krankheit psychische und physische Ursachen eine Rolle spielen."

The cause of the "disease" is seen to lie in the psychological and the physiological. Adding to the debate on how Depression can best be treated, namely with medication and psychotherapy, the article equates this solution staging with its causes. Therefore, psychological can be interpreted as pertaining to the domain of psychotherapy, which is a discipline that uses social interaction, talking, to intervene. Also here, there seems to be no connection made to how, in a physiological sense, social interaction, talk therapy, influences structures and processes of brain anatomy. This could be due to a still very popular distinction between the natural sciences and their respective research domains and the psychological sciences.

One last example that can be discussed is from 2011 from *Die Presse* (Presse – 24.5.2011) and it is about the publication of a new book. This book is an autobiography, written by Thomas Klein, a "society persona" who describes his experience with the condition: "*Und hier schließt sich der Kreis zwischen Autobiografie und Darstellung der Depressionserkrankung. Das Buch lässt sehr gut erkennen, wie stark Lebensumstände für den Ausbruch einer Depression verantwortlich sind. Unerfüllte Sehnsüchte, Überforderung, ein Job, dem man sich nicht gewachsen fühlt, und zu allem Überfluss ein privates Taumeln in Form sexueller <i>Identitätsprobleme.*"

This example combines a certain variant of the sociological causation and a "psychological" explanation type, meaning that if focuses on specific individual characteristics and experiences of Thomas Klein that explain why he became depressive. The very individual part for explaining the onset of Depression has been largely not articulated in the sample. It was either biological or a combination of biological and experience related triggers or sociological explanations or a combination of them all. The individual "life story" of a person has been not so much an issue. That is what makes this article even more interesting.

Another important issue to consider are, like in the case of causation tales for instance (although with some different implications), narratives about symptomatology, which can be considered an "argument tool" to make sense of Depression.

First, it needs to be said that descriptions of symptomatology is not a narrative that can be found in all of the articles. It appears throughout the time – in *Die Presse* only starting in 2004 – in which the sample was collected. One difference that can be argued in the staging of symptomatology between *Die Presse* and *Der Standard* is that the latter clearly embraces a model of a description of symptomatology, which was called *prototypical description of depressive symptoms*. The name given refers back to the theory chapter and to Hacking's argument of the prototype, namely that depressive patients all share the same symptoms. Another narrative that became apparent, and this is more evident in *Die Presse*, are what can be called *narrative description of depressive symptoms*. The distinction between those two is that the first usually lists a variety of prototypical symptoms related to a popular understanding of depressive symptomatology. Whereas the second tells about these symptoms in a narrative way, meaning that they are not simply listed, but told and described in simple phrases. The following section is a short description of those two groups.

#### 8.7. Prototypical description of depressive symptoms

The following example (Standard -28.3.2001) is from the year 2001:

"Depressive Störungen sind relativ häufige psychiatrische Krankheitsbilder (...) berichten Experten von (...)

"Gekennzeichnet sind sie durch ausgeprägte depressive Verstimmung, Antriebsverminderung,
kognitive Beeinträchtigung und zusätzliche körperliche Symptome."

Another symptom description is done this way in an article appearing three years later, in 2004 (Standard – 30.10.2004), in *Der Standard*:

"Depression ist ein klinisches Zustandsbild mit affektiven, kognitiven und körperlichen Symptomen - von bedrückt sein und existenzieller Angst über Selbstzweifel und Suizidalität bis hin zu Antriebsverlust, Verlust der Libido, Schlafstörungen und einem Drücken in der Brust. Depressive Verstimmungen können nach Wochen verfliegen, eine schwere Depression hingegen kann wiederkehren und Jahre dauern."

And two years later, in 2006 (Standard – 6.11.2006), another description is presented:

"Die Symptome sind mannigfach: Interesse- und Antriebslosigkeit über einen Zeitraum von mehr als zwei Wochen, motorische Unruhe, Angst, Schlaflosigkeit oder reduziertes Selbstwertgefühl bis hin zu Suizidgedanken unterscheiden Depressionen von normalen Stimmungsschwankungen. Wissenschafter sind den Ursachen der Erkrankung seit Langem auf der Spur."

The first example is interesting insofar as it features "depressive Verstimmung" (engl: depressive mood) as a symptom itself. Second, "kognitive Beeinträchtigung" and "zusätzliche körperliche Symptome" are rather general concepts. They can be anything, from difficulties of concentrating to being tired. The second

example is already more articulated in terms of symptomatology. It stages some of the popularized prototypical symptoms associated with Depression, like *Antriebsverlust*, *Verlust der Libido* or *Schlafstörungen*. But the third example from 2006 is certainly the most prominent presentation of symptomatology in terms of prototypical understanding of Depression.

Also notable, is the distinction made between Depression and other "normal" changes of mood. By saying this, it is thought that suffering from Depression can be clearly visible when people show these symptoms for more than two weeks. All other changes in mood are not Depression for they do not fit the description presented here.

An example from *Die Presse* (Presse – 9.2.2010) that pertains to this category of symptomatology description also makes use of most of the prototypical symptoms. Nevertheless, it is a little more cautious on generalizing the description:

"Sicherlich, man kann nicht immer glücklich sein, Traurigkeit, vorübergehender Trübsinn sind natürliche Reaktionen auf unangenehme Ereignisse, Schicksalsschläge. Aber Depression ist eine Krankheit mit bestimmten Symptomen, die in dem Buch, als Hilfe zur Selbstdiagnose, angeführt sind. Einige davon sind besonders charakteristisch, wie Interesselosigkeit, Freudlosigkeit, Energieverlust, Schuldgefühle, Angst, Schlafstörungen, aber auch körperliche Beschwerden. Aus dieser Liste geht hervor, wie vielfältig die Krankheit und wie schwer sie messbar ist."

At the end of this citation it is articulated that the disorder is multifaceted and difficult to measure. Maybe this is a good point to continue with the other category of symptom description, which mostly became visible in *Die Presse*, namely the *narrative description of depressive symptoms*.

#### 8.8. Narrative description of depressive symptoms

The first example from this category is from the year 2004 (Presse -8.10.2004). Maybe it is no coincidence that this type of presentation of symptomatology appears in an article that was written by Claudia Richter who mostly deals with issues of stigma related to Depression.

"Ein Mensch mit einer Depression ist weder willensschwach noch ein Tachinierer, er ist auch nicht arbeitsunwillig oder faul, er ist krank. Er leidet, Hoffnungslosigkeit und Schwermut machen sich breit. Die Tage eines Depressiven sind grau, er kann keine Freude mehr empfinden, Angst frisst seine Seele auf. Ein Patient mit Depression hat keinen Antrieb, mitunter wird das Zähneputzen zur Schwerarbeit, weil alles so sinnlos, so aussichtslos scheint. Er kann sich nicht zusammenreißen, wie auch ein Mensch mit Beinbruch seinem Knochen nicht befehlen kann, auf der Stelle wieder zusammen zu wachsen."

This article emphasizes the role of responsibility for behavior, and clearly states that depressive people are not weak in character and motivation but it is their disease that lets them behave that way.

After that, a description of emotions, from somebody suffering from Depression, is presented.

Another example from 2005, also written by Richter (Presse – 19.9.2005), has a lay and affected person

talking about his condition. Commedian Joesi Prokopetz says the following:

"In der Früh wollte ich gar nicht mehr aufstehen, weil alles so sinnlos, so freudlos war. Nur mit größter Überwindung habe ich mich Morgen für Morgen aus dem Bett geschleppt. Wozu aber, es gab doch keinerlei Perspektiven. Alles, was mir davor großen Spaß gemacht hatte, gut essen, Sport, war bedeutungslos geworden, ich hatte zu nichts mehr Lust. Wenn sich andere Menschen freuten, war ich nur noch verzweifelter, das trieb mich nur noch tiefer in die Depression. Ich empfand das Leben als Ekel. So ein Leben ist sinnlos, ich dachte häufig an Selbstmord. Eine Depression ist wirklich etwas unbeschreiblich Schlimmes, so stelle ich mir das wahrhaft Böse vor."

This example also lays emphasis on the emotional experience of the condition.

Another lay perspective of symptomatology appeared in *Die Presse* in the year 2007, again written by Richter (Presse – 17.9.2007). This time it is Austrian comedian Andrea Händler who is asked about her experience with the condition. This article presents descriptions of symptomatology partly through the words of Andrea Händler:

"Händler hatte an einer Depression gelitten. Mehr als 800.000 Österreichern geht es in diesem Moment ebenso oder ähnlich. Ihre Welt ist grau und schwarz, sinn- und freudlos, ihre Tage sind geprägt von einem Klima der Ohnmacht und Verzweiflung, sie fühlen sich wertlos und sehen keine Zukunft mehr. Dazu kommen unendliche Leere, Apathie, dauernde Müdigkeit - nicht jeder Depressive weist dieselben Symptome auf."

""Depressive haben ganz stark das Gefühl, dass sie gar nichts mehr schaffen", weiß Pritz."
(...)

""Ich konnte in der Früh nicht einmal mehr mein Kaffeehäferl wegräumen", erzählt Händler. Das ist keinesfalls Willensschwäche, weder bei ihr noch bei einem anderen Depressiven - es ist ein Symptom der Depression. Und wer Kranke mit der lapidaren Aufforderung "reiß dich zusammen" abspeist, schadet den Betroffenen, verletzt, kränkt, drängt sie noch mehr in die Isolation."

The first citation is a rather "objectified" *narrative description of symptoms*, which is followed by a short remark of an expert. And lastly, Händlers account of being depressive is presented. Here it also carries a call for attention and how to behave more correctly towards the affected.

Although these accounts of symptomatology can also be seen as an attempt to make a general statement of what Depression is, they are still more personal and less standardized than those examples mentioned under the heading of *prototypical description of depressive symptoms*.

So generally, the rhetoric used in describing the symptoms of Depression attempt to say what the condition is and how it shows through behavior, emotion and cognition.

Both approaches, the *prototypical description of depressive symptoms* and the *narrative description of depressive symptoms*, show tendencies of "reificating" Depression. It can be argued that both understandings of symptomatology describe the behavioral phenomena as if the underlying condition would be the same in

every person, namely the (organic) disease - entity of Depression. However, *narrative description of depressive symptoms* still offer a less normative approach to Depression symptomatology as they are descriptions by the people themselves, and do not have psychiatry classifications framing their statements.

#### 8.9. Depression as a Medical Entity

As contended in the introduction to this chapter, *Depression as just a medical entity* usually appears in articles that are rather short and not complex. And second, unlike the longer articles, have no causation tale about the disease concept.

In these examples, probably more than in any other, Depression seems to be taken for granted and particularly here, it appears in its most reified manner.

In 2003, *Die Presse* published a short article discussing the concept and levels of Vitamin B (Presse – 5.12.2003).

"Depressive Patienten, die hohe Vitamin B 12-Werte aufwiesen, reagierten besser auf eine Behandlung. Das konnte eine finnische Studie des Kuopio University Hospitals erstmals nachweisen"

The article explains further how the researchers monitored about 115 patients with Depression through a time span of six months. Participants were categorized by their response to the treatment. Those having the best response had the highest concentrations of vitamin 12 in their blood. Depression is a condition they say the patients have. It is taken for granted because it is communicated as if there is no need to provide further explanation. As Depression is such a ubiquitous concept in society in general that it seems that everybody knows what it is. This example may also shows how the disease concept has become operationalized in medicine and medical research, in which its problematic genesis is not considered.

Another example is from *Der Standard*, from the year 2001 (Standard- 30.5.2001). This article addressed the topic of the appearance of Depression and diabetes together. "Patienten mit Zuckerkrankheit, so zeigten in der aktuellen Ausgabe von Diabetes Care vorgestellte Studienergebnisse der Washington University School of Medicine in St. Luis, Missouri, leiden doppelt so oft unter Depressionen wie Nichtdiabetiker. Und umgekehrt gebe es deutliche Hinweise darauf, dass Diabetes häufig durch Depressionen ausgelöst oder verstärkt wird."

A clearly (bio-) medical understanding is evident in this example. Although it is not described what that consists of. It is expressed in the short comment that diabetes is often caused by Depression or made worse, which apparently suggests that we are dealing with a biological phenomenon. The next example is from 2005 from *Die Presse* (Presse – 28.1.2005). In this example it is even clearly stated that there is a biological connection between Diabetes and Depression: "*Zuckerkranke leiden weit häufiger an depressiven Symptomen als Gesunde*.

Irrtum: Depressive Verstimmung ist keine Reaktion auf die Diagnose Diabetes. Diese Fehlmeinung aber ist weit verbreitet, teils auch unter Ärzten. Aktuelle wissenschaftliche Erkenntnisse legen einen

biologischen Zusammenhang zwischen Diabetes und Zuckerkrankheit nahe. Dabei spielt chronische Stressbelastung für das Entstehen beider Erkrankungen eine nicht zu unterschätzende Rolle, heißt es in einer Aussendung von Universimed."

In the following example the biological understanding of the disease concept may be not so explicit. Here it is simply staged that people showing depressive symptoms have a higher risk of developing Diabetes: "US-Forscher haben einen Zusammenhang zwischen der Depression und Zuckerkrankheit gefunden. Menschen, die mehrere Symptome einer Depression aufweisen, haben ein um bis zu 60 Prozent höheres Risiko, an Diabetes zu erkranken. Das haben US-Forscher in Studien an 4681 Probanden über 65 herausgefunden." (Presse – 18.6.2007)

Another example that can be discussed is from 2012 (Standard -26.01.2012), and speaks about how extra working hours can make people depressive, is the following one:

"Viele Überstunden können zu Depressionen führen London - Mehrere Überstunden täglich über längere Zeit erhöhen das Risiko, an einer schweren Depression zu erkranken. Dies ergab eine Langzeitstudie mit mehr als 2000 Mitarbeitern britischer Behörden. Bei Menschen mit drei bis vier Überstunden täglich war demnach die Wahrscheinlichkeit für eine schwere Depression deutlich höher als bei Angestellten ohne Mehrarbeit, berichten Forscher um Marianna Virtanen (University College London) im Fachmedium PLoS One . (APA, red)"

Here a short description of causation is presented. Also in this article, Depression is as self- evident as in the other examples that were staged in a more medical context.

### 9. Solutions for Depression

This is a very important chapter as solutions are presented to tackle a problem. This does not only place certain kinds of *Solutions for Depression* on the societal agenda and others not, it also says something about the problem, namely what it is. So this kind of analytical focus can lay open, to some extent, how Austrian quality print media, *Der Standard* and *Die Presse*, define Depression and how to deal with it, and therefore is an addition to the former analytical chapter *Narrations of Cause*. This is important to think about because the media place certain strategies, areas or institutions as offering solutions to a problem and others not. Or media just stages a problem and/ or says who is responsible for it, giving the impression that there is no solution yet. Or the media just puts an issue on the societal agenda and, thus, creates a "necessity" to talk about something.

The interesting thing about the sample, and this has also been noticed in the other analytical foci, is that there are not very distinctive narratives of *Solutions for Depression*, but tendencies that can be recognized.

Nevertheless, the most apparent one can be related to what have been termed "psychiatric approaches" to Depression, when staged as a problem. This particular problem solving orientation becomes visible when, in general, the typical causation tale of the psychiatric understanding of Depression, as argued in *Narrations of Cause*, becomes visible. The psychiatric approach to the disease concept of Depression consists of saying that the problem can be countered with medication and psychotherapy. This double strategy is not there from the beginning, as just mentioned. In *Der Standard* it can be observed to appear approximately since 2004, whereas *Die Presse* adopts this solution narrative from 2005 on (see table\_SfDepr).

Examining the articles, a few categories were developed through which it was intended to capture their action implications. Now, it is important to mention that pretty early on in the sample Depression itsself was already conceived to be a problem (but this is also due to sampling choices made). Some of the early articles from *Der Standard* though do stage the concept not as a problem, but articulate problems with treatment structures for the condition. These types of *Options of Action* were called "solutions in regards to the medical or political system".

#### 9.1. Solutions for Depression - Legitimizing categories

The categories for the narratives of the discourse of the disease concept of Depression, that imply solutions, were constructed according to, broadly speaking, whether Depression was considered a problem itself or whether problems with it are presented.

Classic psychiatric solutions was chosen as a name as these kind of articles stage the "double strategy", antidepressants and talk therapy, as the measures to alleviate Depression, which is contemporary treatment for the condition and other mental disorders in psychiatry. Those articles that presented disease concept as part of a bigger problem received a variety of different labels.

Another one is called *solutions in regards to the medical or political system*, which is mostly about structures, be they political or medical, which are considered as "not operating very well" in connection with Depression. *Problem Staging* was chosen as a name for a narrative because these kinds of articles do not stage any solutions for Depression and, thus, only present the disease concept as a problem in the media agenda. *Solutions in regards to how society deals with Depression and the people affected by it* address issues with the stigma about Depression or how society treats the affected. Common to those articles grouped under this narrative category is that most of them carry an implicit plea to the reader to critically assess how they conceive of the condition and the people affected by it. So these articles do convey a genuine "social" message. *Staging of guilt* was initially chosen as a name for articles that seek to find a culprit for the Depression rates. Not too many articles qualified for this category that is why this narrative category is not included in this analytical focus. Instead, these articles can be understood to pertain to the narrative of sociological causation tales in *Narrations of Cause* as their content evolves mainly around blaming societal circumstances for why people become depressive.

#### 9.2. Solutions in regards to the medical or political system

These kinds of articles do not present the concept of Depression as the main problem, but structures, be they political or medical that are considered as "not operating very well". Only about five articles, most of them from the earlier years (with one exception from 2007), qualified to be included in this narrative category. This example from the year 2000 from *Der Standard* (Standard - 17.5.2000) is about a problem with depressive patients, namely that they stop their medication too early. A possible solution is suggested when saying that "Austrian Depression Experts" are currently working on measures to tackle this issue with compliance. One solution suggested is the use of a diary, where patients document their symptoms. If - but that is not the topic of the article – one simply looks at how to solve the problem of Depression, then the article presents and assumes that the medication is the remedy.

There are some more articles in *Der Standard* that write about issues with Depression but do not argue that it is a problem. This could be interpreted as the starting point of a discourse about a phenomenon that appears on the agenda of society through the media. So the discourse does not start with an actual focus on the phenomenon. It is introduced into the arena of the media as a component of another problem.

In *Die Presse*, this is not so evident. But the articles that were collected from this newspaper start at a later point in time with the topic of Depression, in 2002.

Nevertheless, for the majority of the examples in the sample, Depression is considered a problem that calls for a solution. Particularly when scenarios about a mentally ill society are talked of, this phenomenon calls for an urgent solution.

As shown in the analytical focus of *Experts and Expertise* and *Narrations of Caus*e, the disease concept of Depression is almost exclusively (bio -) medicalized, which shows in the professionals, institutions or in how Depression is understood theoretically (which comprises issues of aetiology, symptomatology or treatment) that appear in the articles. The problem solving issues can also be observed to develop over the time. Particularly in the first years of the discourse, solely antidepressants as solutions are talked of. Only later, in *Der Standard* starting approximately in 2004 and in *Die Presse* in 2005, does the double- strategy appear. So the double- strategy to tackle Depression is apparent since the second half of the decade.

#### 9.3. Classic psychiatric solutions

As described above, the solutions for the condition of Depression that are staged in the early years of the newspaper sample are only about medication. Eventually though, since the second half of the decade, the double strategy appears.

This example (Presse – 13.9.2003) talks about an apparatus, something that can give signals about certain processes in brain anatomy that the researcher/ practitioner uses for estimating which kind of antidepressant is most likely to be effective in a certain patient. The solution in this setting is therefore just medical: "Vor allem dürfte die Verringerung von Serotonin und Noradrenalin typische Symptome wie Antriebslosigkeit, Traurigkeit oder Schuldgefühle hervorrufen. Die meisten der modernen Antidepressiva setzen auch an einem dieser beiden Systeme an - allerdings wirkt nicht jede Substanz bei jedem Patienten." This next example from Die Presse (Presse - 1.8.2005) marks the point in time when the double strategy starts to appear: "Wie sehr Psyche und Biologie in der Entstehung, aber auch in der Behandlung seelischer Störungen zusammenwirken, wird letztendlich daran ersichtlich, dass mit der Kombination aus medikamentöser und psychotherapeutischer Behandlung bei Depressionen genauso wie bei Angststörungen die größten Behandlungserfolge erzielt werden."

Der Standard has a slightly different development of solution strategies for Depression. An example from 2000 (Standard- 17.5.2000) shows how the condition itself is not conceived to be the problem but the incident that some patients quit their treatment too early: "Graz/Wien - Bis zu sechzig Prozent aller Depressions-Patienten setzen ihre Medikamente zu früh ab, heißt es in einer aktuellen Studie der Grazer Universitätsklinik für Psychiatrie." Nevertheless, medication is mentioned to be a proper treatment for the condition: "Depressionen gehören zu den häufigsten psychischen Erkrankungen. Bis zu zwanzig Prozent der Bevölkerung erkranken zumindest einmal im Laufe ihres Lebens an einer klinisch relevanten Depression. Es gebe heute eine neue Generation von Anti-Depressiva, sagt der Psychiater Christian Simhandl von der "Gesellschaft für Depressions- und Angstforschung", die über eine längere Halbwertszeit verfügen und sich daher besonders für die Langzeitbehandlung eignen."

Noteworthy about this example is the need to explain about the use of antidepressants. It is not yet a self-evident issue in the discourse.

Another interesting article from *Der Standard* (Standard - 31.1.2002), before the double strategy became accepted, is about how the borna- virus may be responsible for the condition of Depression and other mental disorders. Naturally, the solution here is only medical and still to be negotiated as the whole research agenda about borna virus in connection with Depression is not so established and has not progressed to a level that yields definite results: "Schließlich ist auch unklar, ob die psychischen Krankheiten mit antiviralen Medikamenten therapiert werden können, es gibt widersprüchliche Befunde. Dies wie das ganze komplexe Fragenbündel rund um Borna soll nun eine weltweite Zusammenarbeit von Labors klären, an der Nowotny beteiligt ist."

The first articulation of the double strategy for Depression appeared in 2004 in *Der Standa*rd (Standard - 30.10.2004). "Fest steht: "Mit differenzierteren Psychotherapien und verträglicheren Antidepressiva ist die Krankheit gut behandelbar. Sie kann sich aber unterschiedlich bemerkbar machen: Bei einer Störung des Bewegungsapparats denkt der Hausarzt vielleicht nicht sofort an Depression", sagt Hans-Peter Kapfhammer, Vorstand der Universitätsklinik für Psychiatrie in Graz, zum Standard."

Although the years 2004 and 2005 mark a point in time when the antidepressants – psychotherapy solution

strategy becomes visible, and from that point on is shown continuously, there are also few exceptions (Standard – 6.11.2006): "Es bleibt die Frage, wie Depressionen behandelt werden können.

Psychopharmaka, Psychotherapie oder beides? "Für die neuen Medikamente", so Psychiater Hofmann, "gibt es im Gegensatz zu vielen Psychotherapieformen, deren Wirkung wissenschaftlich auch schwer nachzuweisen ist, stichhaltige Belege, dass sie etwas bringen." Dass Lichttherapie bei leichten Erkrankungen wie Herbst-Winter-Depressionen hilft, kann auch Pezawas bestätigen."

But maybe it is not surprising that in this example the efficacy of psychotherapy is doubted because it is set in a purely biological psychiatric setting and deals primarily with brain issues and genetics ("Depressiongene story").

Nevertheless, solution framing at this point in time has already adopted the talk therapy and medication model. Here is an example from *Die Presse* from the year 2007 (Presse – 23.5.2007) which clearly stages the double- strategy as a successful solution as the introduction says:

"Die Behandlung einer Depression erfolgt üblicherweise durch die Kombination von Psychopharmako- und Psychotherapie. Handelt es sich nur um eine leichte depressive Episode, kann auch eine Psychotherapie oder aber Pharmakotherapie als alleinige Maßnahme sinnvoll sein. Psychotherapie in welcher Form auch immer – setzt jedoch eine aktive Mitarbeit des Patienten voraus." Note that this introduction to the article differentiates between Depression and "less severe depressive episode" (dt. leichte depressive episode) with which it argues that this "classification" only needs one component of common Depression treatment, namely either talk therapy or medication.

The remaining content of the article is about the topic of therapeutic methods and also discusses problems that can occur (e: side effects of antidepressants). As you can see in "table\_SfDepr" the psychiatric solution strategy can be found all along the sample from the years 2004 and 2005 on.

### 9.4. Problem Staging

As mentioned in the introduction to this chapter, another narrative category that was created for the analytical field of *Options of Action* was given the name *Problem Staging*.

The main criterion for pertaining to this group was that the articles must not present any kind of solution strategy for Depression. A variety of shorter and longer examples were found that qualify for this narrative. One very interesting example was published in *Die Presse* in the year 2002 (Presse – 9.3.2002), just at the point in time when *Die Presse* adopted discourse. The article actually talks about the publication of a novel about bi- polar disorder, which has an additional section that features scientific explanations about that condition. Interestingly, when staging the causation tale, the article points out that there is no definite explanation about bi- polar disorder so far: "*Manisch-depressiv: Wechselbad von Freude und Gedrücktheit ohne sichtbaren Anlaß. Begriff für ein schwer begreifliches Leiden. Genetische Vorbelastung. Veränderungen in der Hirnchemie. Viele Erklärungsversuche, keine Antwort. Niemand weiß genau, wodurch dieser Zustand entsteht." Adding to this insecurity in regards to the cause for the condition, there is also no solution offered.* 

Some other examples from this group (Presse – 24.10.2005; Presse – 22.3.2008; Presse – 4.1.2011; Standard – 19.07.2003) are from articles that show some sort of connection to the "Depression- Gene story". As many of those articles deal with content about not yet solidified theories about Depression, in the realms of genetics and the neurosciences, they stage what these fields currently say about it. They do deal with issues of aetiology, but most of them do not offer any solution for the condition. They can be considered brain-sciences that, as shown in the theory chapter, are part of all the scientific disciplines that research about Depression, but do not compete in regards to treatment with the psychiatric double strategy, which is itself a strategy that comes from the fields of psycho - pharmacology and psychotherapy.

The *Der Standard* examples, that were collected under this category, are short articles about the discovery of the Depression- Gene (Standard – 19.12.2003; standard – 31.12.2003) and naturally do not contain a solution as they are "celebratory announcements", meaning that they appeared in columns in the newspaper that deal with new scientific discoveries that were made in the year 2003: "*Die Nummer zwei auf der Liste der Top-Ten-Erkenntnisse des Jahres 2003 geht an die Genforschung.*" (Standard- 19.12.2003).

In a similar fashion, there are a few articles, like the ones that were collected in *Narrations of Cause* in the category of *Depression as a medical entity*, that stage some random research result about the disease concept or issues connected to it, such as the following example shows (Presse – 28.4.2010): "*Eine Studie der US-Uni in San Diego belegt einen Zusammenhang zwischen Schweregrad von Depression und Schokoladekonsum: Die Schwerstdepressiven kamen jeweils auf etwa zwölf Tafeln monatlich. Die Kontrollgruppe der Nichtdepressiven aβ nur je fünf Tafeln, leicht Depressive aβen acht."

As this is just one of those "fact- performance" articles, it neither engages with questions of aetiology,* 

Another narrative that could be created was about articles that talk about society related issues with the condition.

symptomatology or treatment for Depression.

# 9.5 . Solutions in regards to how society deals with Depression and the people affected by it

As mentioned in the introduction, this group mostly contains articles that try to address issues about the stigma with the condition of Depression or how society treats the affected. Those are not the examples where the condition is considered as a problem itself, but issues in regards with Depression are the problem. Common to those articles grouped under this heading is that most of them carry an implicit plea to the reader to critically assess how they conceive of Depression and the people affected by it. So these kinds of articles do transport a genuine "social" message.

Articles written by Claudia Richter are noticable examples for this kind of solution staging. Also, this narrative category equals other narrative categories used in *Narrations of Cause* and *Experts and Expertise* in so far as it, in the first case, integrates causation tales that route its cause in society (*sociological* 

understanding of Depression) and, in the case of the latter, it equals the category of *ethical – moral - expertise* in *Experts and Expertise*, where (bio-) medicalized Depression is employed in order to alert the reader about the severity of the condition.

What is articulated in most of Richter's articles is that we as a society have a problem with it, and other mental disorders, as we do not acknowledge it as a real malady or we do not pay enough attention (and the right kind of attention) to the ones affected by the condition.

Interestingly, the year 2004 marks a period in *Die Presse* when these kinds of problems are strongly communicated. When asking the question of why these conditions are so stigmatized ("Was aber ist es, das Depression und Epilepsie den Stempel "aussätzig" aufdrückt?") Richter writes the following: "Es könnte auch Bequemlichkeit sein. Denn freilich ist es viel einfacher, mit dem Strom der Mehrheit zu schwimmen und gewisse Krankheiten einfach zu stigmatisieren als sich intensiv damit zu beschäftigen. Dass den Kranken dann meist der Mut fehlt, sich zu diesem oder jenem Leiden zu bekennen, ist zwar verständlich, aber traurig. Und dass Krankheiten überhaupt versteckt werden müssen, ist irgendwie auch ein Armutszeugnis für unsere Gesellschaft." (Presse – 9.1.2004) In this paragraph she urges the reader to rethink possible held assumptions about Depression and other mental disorders.

In another example from 2004 (Presse – 6.2.2004) Richter portrays once more how society conceives of Depression: "Die Depression ist leider auch heute noch stark stigmatisiert. Die Krankheit wird nicht ernst genommen oder geringschätzig als "Laune" oder "Lebensunlust" abgetan. Für viele Mitmenschen, Angehörige von Depressiven, ja mitunter sogar für Ärzte, beruht eine Depression auf Selbstverschulden." This is followed by a plea to rethink current stigmatization of depressive people in our society: "Im dritten Jahrtausend - wir fliegen zum Mond und transplantieren Herzen und Lungen – sollte es doch möglich sein, dass das Bild vom "geachteten Herzinfarkt-Patienten" und "geächteten Depressiven" verschwindet. Beide sind krank, beide bedürfen einer Behandlung, beide sind gleich viel wert."

Evident in Richter's articles is that she stresses the medical nature of the problem, which helps to support the argument that the condition should be destignatized and evaluated as not a person's own fault. The (bio-) medical understanding also makes it possible for Richter to call attention to the stignatization that depressive individuals suffer from.

Another example that makes use of the (bio-) medicalized account of Depression is the following article (Standard - 30.10.2004), which calls attention to the "fact" that more and more people of the Austrian population become depressive. "Mit einer Informationskampagne will die Regierung nun die Krankheit enttabuisieren und damit unnötige Hospitalisierungen und Ausfälle am Arbeitsplatz vermeiden - mehr Leute dazu bringen, rechtzeitig zum Arzt zu gehen." Once people are medically educated about it, they are more likely to see a specialist for their condition, and thus the number of affected will decrease. Second, the article also stages the double strategy as the treatment for the condition.

Another similar article can be found in *Die Presse* (Presse – 25.1.2007) when it is communicated that the Austrian government wants to counter the stigma related to the disorder: "Wien (APA). - "Lebenslust statt Depression": Unter diesem Motto bemüht sich ein neues Projekt der Stadt Wien um die "Entstigmatisierung"

der psychischen Erkrankung, die jeden zehnten Österreicher trifft."

Certainly, what becomes evident in these examples is that for political intervention the (bio-) medicalized understanding of Depression is the most useful as it is easy to communicate and to justify why it is an important issue that needs more attention. More complex understandings of mental disorder would certainly not fulfill this purpose so well.

Another article (standard -18.12.2010) of this group talks about the development of a game that is intended to educate people about the condition:

"Das Thema Depression klingt nicht nach Spiel. Im Bereich der "serious games", also Spielen, die nicht nur auf Unterhaltung abzielen, sondern "ernste" Absichten verfolgen, kann sich der

Gegensatz aber auflösen. Nämlich dann, wenn man versucht, der Krankheit auf metaphorischer Ebene näherzukommen, um damit Aufklärungsarbeit zu leisten." Also in this context the (bio-) medicalized account of the concept of Depression serves to underscore the importance of the issue and the necessity to educated people about it.

#### 10. Discussion

I now want to try to sum up what has been collected from the analysis and discuss the most striking features of each of the analytical foci. Consequently, I want to develop an argument about how this Austrian quality print media sample handles the discourse of Depression.

In the analytical focus of *Narrations of Cause* it could be achieved to gain a better understanding of how, in general, Depression was constructed through ontological narratives. Evident from the beginning on is what has been called the psychiatric approach (main discourse), which has undergone changes eventually. It was argued that the main discourse can be called the psychiatric approach because it is characterized through several narratives that can all be, in one way or the other, connected to the greater psychiatric paradigm and let the disease concept appear to be (bio-) medicalized.

In this sense, the type of media chosen for the sample can be considered a conveyor and amplifier of (bio-) medicalization, such as Williams (2011) has suggested about the role of the media in processes of pharmaceuticalization (see page 21), and rarely a critical witness.

However, those narratives are not consistent over time and some articles just makes use of expertise that is from the psychiatric field, while others just use what had been called typical psychiatric causation tales (e: different articulations of the nature- nurture causation tale, particularly since 2003, when the "Depression-Gene story" went public).

Rarely has this discourse been challenged in the sample, meaning that rarely overt psychiatry opposing constructions of Depression appeared. In the end, the sample that was constructed for this thesis has an undeniable affinity with psychiatry and it is justified to say that (bio -) medicalization of Depression can be

observed.

Due to the heterogeneity of arguing the causation concept of nature – nurture, distinctions were made, which you could observe in the analytical focus of *Narrations of Cause* (e: "only biological causation tales"). What has been very visible is that the argument about aetiology varied to a great degree and was not stable throughout the discourse.

What has also been tried to show with these distinctions is that when different causations are argued together, such as what was called "mixed causation tales", there is hardly an effort visible to combine these different approaches, in a sense that one could say that Depression is caused by an imbalance of neurotransmitters and also by the social system we life in. It can be assumed that both can be possible and it would need to be argued on a case by case basis as to what degrees these two different triggers might have played a role in the pathogenesis in a certain patient. Or how causal links between them could be argued.

However, I could not observe much effort in trying to argue these approaches together, which can have various reasons. For example, the length and quality of the articles do not allow for more complex consideration about a phenomenon like Depression, which could be more happening in newspapers that only appear once a week or month. And second, one can contribute this hesitance to combine different approaches about the aetiology of Depression to a not yet happening public- and general lay discourse to see mental issues placed within a field of inter- and trans - disciplinary reasoning, even though the main discourse that had been created usually displays expertise from the broader mental health field and, therefore, is trans - disciplinary (see *Experts and Expertise*).

Starting from the observation of the heterogeneity in arguing the cause of Depression in this sample, it can be suggested that it is quite an unstable entity, when at the same time it is presented as being something self-evident and reificated. Although the (bio-) medicalization of the concept is certainly visible in the newspapers chosen, Depression does not appear to be the same over the time and is mostly constructed through a variety of different narratives belonging to different categories in each of the analytical foci. Another narrative category, which were looked at in *Narrations of Cause* and which were argued to be another argument tool to makes sense of Depression, are stagings of symptomatology. Not being visible too often in the sample, two different narratives of symptomatology were constructed, which were argued with Hacking's concept of the prototype, as discussed in the theory chapter about *Classification and Standardization*. The narratives about symptomatology are more consistent than the narratives about causation. Also, when discussing symptomatology, Depression is understood to be self- evident and reificated. Both understandings of symptomatology describe the behavioral phenomena as if the underlying condition would be the same in every person, namely the disease - entity of Depression.

By self- evident I intend to point to how Depression, as disease concept, is in most of the cases communicated as something that does not need to be explained any more. This public idea, and probably also in many of the sciences that study it, Depression is taken for granted. It is talked about as if this concept is a "real" disease, although references to brain/- body images are not made consistently. That is why it can be interpreted as reificated (Anm: The word creation of "reificated" does not exist in the English language. It

can either be used in as a verb (to reify) or as a noun (reification). For this thesis it was chosen to use an adjective in order to be able to connect it with the meaning of entity). Particularly the shorter articles - that can be considered a side discourse - in *Depression as a medical entity* perform the disease concept in its most self- evident and reificated form, as it is staged without any further explanations about what it is, as can be observed when aetiology, symptomatology or brain/ body images are talked about in other articles. These examples can be interpreted as the media representation of how Depression has become an operationalized disease concept in medicine and medical research, in which its problematic genesis as a psychiatric classification is not considered.

Although only happening sometimes, the sample can be considered as evidence of the growing visibility and popularity of neurobiology and related domains in the public, and therefore, of the (bio-) medicalization of "mental conditions". In these cases we are tempted to consider Depression a definite process- structure correlation in human brain anatomy, so to say an organic reification. The Depression- Gene story is certainly one of the most visible representations of this approach, which needs to be understood in a critical manner in order to understand what genetics can say about mental disorder and what not (see Pintosv and Quednow (2012) in *Narrations of Cause*). Additionally, the brain metaphors that are used in the different causation tales vary to a great extent. At the same time they convey the impression as if science has already "found out" (agreed upon) what the depressed brain looks like and how to differentiate it from the healthy, which seems somewhat enthusiastic remembering the concerns raised by Dumit (2004) about the obstacles in brain imaging research.

As alluded to in the theory chapters, this is an interesting situation as it is pretended that something that has had a long and still continuing history of conceptualization and classification can be equaled with something that newer and emerging disciplines in the domain of brain research postulate to be Depression. It is interesting insofar as something that pertains to our intellectual history is equated with newer empirical findings in the natural sciences. As mentioned in the theory chapter, this is a cultural situation where something that we still cannot access and understand on a satisfying level meets discourses (un- scientific and scientific ones) that deal with ideas and concepts that we have been using for decades to make sense of the exhibition of deviant or unpleasant behavior, emotions and cognition (something that is accessible for us). However, it might be more likely that these concepts correlate with process – structures in brain anatomy, which are not possible to be transferred and maybe, when time has come, change into different classifications.

In the analytical focus of *Experts and Expertise*, the sources from which expertise came from in the sample and how it is staged in the articles (see for example narrative category of "*international expertise*") was investigated. It was also considered whether there are any articulations of, so to say, lay expertise. That was the actual reason why the narrative category of *ethical – moral - expertise* was created, for which articles that stage Depression in the context of issues regarding what it means to have Depression and how society

deals with the afflicted were chosen. In this kind of expertise narrative it was particularly interesting to see what kinds of professionals are presented in the articles and what purpose they serve. Therefore, lesser attention was paid to issues of how expertise is visible and legitimized.

Often in the sample, Depression is staged mainly within (bio-) medical contexts, with psychiatry being very visible as a scientific domain (see "table\_EaEKom02"). Psychotherapy, if staged at all, can be considered as what had been called "supporter science" as the psychiatric approach is still dominant in areas of arguing aetiology, symptomatology or treatment and Depression is always understood as a (bio-) medical entity. So maybe, for the journalist it can be equally justified to approach and interview experts from the field of psychotherapy or psychiatry, but that does not challenge (bio-) medicalized Depression. It may also be a choice deliberately made in order to convey the impression of a balanced report on the topic, which lets the journalist interview a variety of different experts from the general mental health field. Additionally, citing several experts and professionals can also be a distinctive story telling strategy and rhetoric in order to make the article more vivid and interesting to read.

The narrative of *research expertise from Austria*, in many cases, deals with the "Depressions- Gene story", and therefore handles the genetics and the neurobiology behind Depression. The experts involved (Pezawas, Kasper) are from psychiatry (see "table EaEKom02").

Having mentioned this already in the comments about *Narrations of Cause*, Depression is certainly an unstable object in this media discourse chosen, which also shows in the disciplinary fields it is located in, which are often appearing together in one article.

As it was interesting to see whether certain kinds of expertise are represented as being in conflict with each other, it needs to be stressed that this rarely happens (see "table\_EaEKontr"). In some cases there is an expertise conflict present, but those examples are unusual. Mostly, when several kinds of professionals and their related fields appear in one article, their statements are not hierarchically structured but are presented as equally valid for commenting on the topic.

Another lesson learned from *Experts and Expertise* was that before the "Depression- Gene story" was communicated as a "breakthrough" there were some other research areas presented that engaged with Depression. This can be interpreted that after 2003 the psychiatric approach in aetiology (nature - nurture) got so dominant that no other explanations about the triggers for the condition could be communicated anymore.

Something that became visible in the group of *ethical – moral - expertise* was that the articles assembled in this group want to draw the reader's attention to the severity of the condition of Depression. Very few examples stage patient related expertise. If they do (as for example in Presse – 19.9.2005, Presse – 17.9.2007) they use authentic lay description about the experience with the condition but they also draw on (bio -) medicalized narratives and on psychiatry as the professional field, in order to speak about it. It can be argued whether such instances would qualify for Collins and Evans concepts for contributory expertise (Collins and Evans 2002) as the "patients" do offer valuable experience about their condition. However, they are not able to negotiate the label, the psychiatric classification that is given to them, which does not let them

appear equal to the experts.

Other types of articles include examples that deal with Depression as an issue on the political agenda, like doing an awareness campaign about it. Common to those examples is that the (bio-) medicalized account of Depression offers a good opportunity to do "politics" in the sense that it serves as a concept for "daily practices" (Sorensen: 2012, 215). The (bio -) medicalized account of Depression certainly makes it easy to articulate why it is important to talk about, and therefore, do something about it. Making it an illness conveys the impression of urgency and of being a real malady. As seen in the politically motivated articles, (bio-) medicalized Depression is a useful concept for intervention, like awareness campaigns, because as a disease it is easy to communicate (for example using statistics that indicate the number of the one affected by the condition). Further, health and illness concepts are common argument patterns in our society which we draw upon to make sense of the world. Placing the concept of Depression within this continuum is way easier than dealing with people's condition on a case to case basis. Further, daily practices of disease arguing produces inclusion and exclusion practices, which guide our judgement about who counts (and on what justification) as having Depression and who does not.

What has also been possible to see in the narrative of *ethical – moral - expertise* was that medicalization critique, understood as "*dissident expertise*", in the public, is done via sociology inspired approaches, in which the argument about the financial benefits for the pharmaindustry and doctors is often found to pertain to the argument of the overmedicalization of society.

Additionally, in the analytical focus of *Experts and Expertise* statistical reasoning in connection with the alleged Rise in Depression rates in Austrian or generally global society was examined. Statistical reasoning about the prevalence of Depression could be identified as an argument that could be found all along the sample. Particularly the WHO served (in the *Der Standard* sample) as an additional credibility back up. Statistical statements based on certain epidemiological studies are another proof of how (bio-) medicalized (Clarke et al 2003; Mayes and Horwitz 2005) Depression is in this sample. Journalists readily employ these arguments in order to construct a certain image of a society: a society that becomes sicker and sicker and more mentally troubled than ever before in history. Particularly in this regard, a critique of (bio-) medicalization and the research endeavors it has created should be considered, as the problematic classification and standardization practices of psychiatry render a picture of global society that does not need to be that way.

What the analytical focus of *Experts and Expertise* certainly can show is how heterogeneous the field in which Depression takes place is. Even though psychiatry could be identified as one of the main professional protagonists, other fields were also visible. However, that does not change the general (bio-) medical discourse of Depression. Also, as discussed in the theory chapters, psychiatry is itself a trans - disciplinary field, which tries to accommodate a variety of theories and disciplines under its paradigm.

It could also lead to greater confusion for public(s) seeing Depression approached from so many different professional domains. Particularly, when it is communicated as something that we all ought to know what it is (self- evident, reificated). Maybe Depression could be seen as a focal point of an ever growing concern in

Western societies about mental health: "Schwer Depressive können oft nicht mehr arbeiten, der Alltag wird zur Herausforderung. Mindestens 400.000 Betroffene werden österreichweit derzeit geschätzt. Bis 2020 soll das Seelenleiden laut WHO-Prognosen nach Herz-Kreislauf-Erkrankungen weltweit die zweithäufigste Krankheit sein." (Standard- 5.11.2007).

In the analytical field of *Solutions for Depression* it was investigated what measures are suggested to alleviate Depression. It turned out that the "double strategy" became more and more communicated as the measure to help the affected since the second half of the decade.

Due to the length and quality of the articles, *Solutions for Depression* are definitely not articulated in a very elaborate manner. In case the double strategy is staged, there is no effort visible to negotiate therapeutic measures. Instead the solutions to Depression, talk therapy and medication, are staged as "the" answer, while a more distinguished look at how in different situations therapy measures could be administered are missing. Apart from this tendency, there were articles that handled problems where Depression was only one aspect of the issue, and not staged as the main problem. Most of these articles were collected under the category of solutions in regards to how society deals with Depression and the people affected by it, which overlap a lot with the narrative category of ethical – moral - expertise from the analytical focus of Experts and Expertise. What these groups show is the tendency of this sample to alert society about the condition, so many of them carry an implicit plea to the reader to critically assess how they conceive of Depression and the people affected by it. And as mentioned before, the (bio-) medicalized account of Depression certainly makes it easy to articulate why it is important to talk about and, therefore, do something about it.

This sample has its limitations, as for matters of time and manageability various articles that did not feature Depression as a main topic were discarded. Therefore, the discourse that had been constructed can be considered a rather limited selection of the many notions and characteristics the concept of Depression can have in the Austrian context of print media.

However, what the sample that I obtained shows is that, generally speaking, Depression is through and through (bio-) medicalized and owned by experts. Even those examples that can be considered as an articulation of some kind of lay expertise do make use of the (bio-) medical understanding of the disease concept (supposedly because it has more political power than not describing it in medical terms, as became visible in some of the categories of *Experts and Expertise* and *Options of Action*).

Connecting observations from the sample to the theory chapters, it can be argued that what had been superficially referred to as (bio-) medicalization, can entail different tendencies of genetization or biomedicalization (and maybe even pharmaceuticalization), namely that either aetiologically or the disease concept as a whole is framed by these tendencies described in the theory chapters.

Medicalization conceptualizes a phenomenon as a medical problem that calls for a medical solution. The argument of biomedicalization just enlarges the analytical scope and looks at moments of co-production of

science, technology and society. In this network, disease concepts get constructed, negotiated and changed. Some articles showed tendencies of genetization, of which those examples that deal with the "Depressions – Gene story" are the most typical. However, these and some other articles already stage Depression within the realms of neurobiology and conceptualize it as a definite process- structure in brain anatomy, something, which was criticized with Dumit (2003) and Boeker (2012). Biomedicalization can be a proper term to describe this tendency, as it is a theoretical frame that makes it possible to see how new technologies make things, that have been hitherto invisible, visible (e: PET scans) and render them open to scientific scrutiny, interpretation and construction. Nevertheless, these tendencies are insecure as was tried to indicate with Rosoff (2010) and Pintsov and Quednow (2012) in the case of an alleged Depression- Gene.

Pharmaceuticalization or Co- production might be also an issue in the representation of some of the popularized causation tales or brain/- body images when Depression is argued to be, or is caused by, a certain neurotransmitter imbalance, in which serotonin is contended to be playing a major role. The visibility of serotonin as the main culprit for the condition might be the outcome of complex science communication processes and/ or the use of SSRI antidepressants that dominate the mental health market.

However, imaginations of Depression as a certain "something" (e: being an organic entity) are not stable throughout the sample.

Therefore, in this public discourse, Depression is epistemologically ambiguous and imagined in very different ways. What remains stable though is an undeniable impression of the visibility of a (bio-) medicalized disease concept.

As mentioned elsewhere, the strong connection to (bio-) medicalized accounts of Depression in this sample represent the choices made during the collection of the sample and what kind of articles were chosen to be included. Additionally, journalists rely heavily on expertise accounts about the topics they discuss. Mental health is certainly a knowledge area in which the scientifization of media (Hansen: 2009, 110) has become visible.

#### 11. Conclusion

#### Depression in numbers

"Depression in numbers", as a term, is intended to address articulations of making Depression countable. It was also indicated how much biomedicalization (Clarke 2003) has taken place and has influenced journalism in reporting about Depression.

Throughout the sample statistical statements of the prevalence (or future prevalence) of Depression were presented.

Most interesting in this regard have been scenarios of a society threatened to get sicker and sicker. Particularly in the *Der Standard* sample the WHO as an institution has served as credibility support, as it is considered a prestigious institution exclusively dealing with matters of health and illness on a global scale. *Die Presse*, in comparison to *Der Standard*, stages some random numbers that are used to illustrate the gravity of the problem. It is very common in contemporary knowledge society to handle "evidence of statistical nature". Sadly though, the premises on which these numbers were created are never mentioned. This is certainly also a huge drawback of daily newspapers that usually do not feature articles that are more complex, longer, and thus, allow for a deeper understanding of where these numbers come from. However, what is most alarming about this use of statistics is that, particularly in epidemiological research about mental disorder, getting even close to the actual numbers of the affected needs to be handled very cautiously. Due to dynamics that have been tried to argue in the theory chapters it can be suggested that particularly epidemiology in the field of mental health is causing more problems than offering solutions. The operationalization of the disease concepts in epidemiological research and the very epistemology behind the different concepts for mental disorders is rarely a matter of concern for those doing the research and the ones using the numbers for supporting their arguments.

It is a different case, for example, when one wants to measure the occurrence of tuberculosis in a given population. People go through a test procedure and it can therefore be said more precisely who is affected and who is not. Of course, also in this case, there are several moments that influence the outcome. But it is not the same kind of complexity that is involved in measuring rates of mental disorder.

Unfortunately, it is so common to use this kind of reasoning and it has such a great appeal that it is not considered how manipulative these numbers are.

This, combined with common media dynamics of catastrophe discourse, conveys the impression that our society is getting sicker and sicker. Rightfully, many people doubt these developments portrayed by different kinds of media. On the other hand, it could also result in increased attention by politics, which may ensure more financial support for mental health research, infrastructures and services.

#### Rethinking the prototype

Another challenge that we as a society face is how to deal with the (bio-) medicalized disease concept of Depression.

The sample shows how much (bio-) medicalization has already taken place. That does not mean that its meaning is not contested, sometimes even highly criticized (see articles that critically engage with Depression by offering a critique of the medicalization of society in analytical focus of *Experts and Expertise* in the narrative of *ethical – moral - expertise*).

However, neither wholly buying into the argument of (bio-) medicalized Depression nor overtly rejecting it does contribute to a better understanding about what is at stake. Therefore, it can be suggested that STS should contribute to better understand the genesis of "facts", in this case psychiatric disorder classification, and with this, to better locate psychiatry's contribution to make sense of mental disorder. And in this sense, contribute to a better understanding of all the different sciences that offer explanations about mental disorder.

Knowledge offered by science experts has an undeniable influence on social order. Particularly (bio-) medicalizing human behavior is a powerful moment of creating new social orders.

Conceiving of someone as being "mentally ill", the responsibility for behavior and action of that person is attached to their illness. Often that leads one to think that mentally affected individuals have no capacity to reason and evaluate their condition, therefore they cannot pass as an individual in full capacity of his/ her rationality. Apart from exempting them from many duties of modern life, which should be considered a very positive development, it unfortunately negates the complexities that are involved with this concept of "responsibility". Also here, a more nuanced understanding of the emotions and cognitive capabilities of the individual that lies behind the label of mental illness needs to be considered.

As shown in the theory chapter, labeling people as a certain something attaches features and qualities to them they do not necessarily have, and thus, can lead to moments of confusion if an affected person shows behavior that they are not supposed to have according to the label they have been given (by a society that is already used to deal with (bio-) medicalized accounts of mental disorder). That can lead to confusion for the affected themselves and the ones who surround them.

Thinking of a situation in law: having someone accused of a crime and at the same time labeled with a certain form of mental illness, makes them immune to accusation. In fact though, the accused may very well have the capacity to reason about what they have done, thus making them different from the prototype they have been associated with. It is not to say that all individuals labeled with this mental illness are in possession of this quality. But the argument should be that in law, and all the other situations in life, the labeling distracts us from seeing what is actually going on with the person. Mental disorder labeling becomes an explanatory pattern which has many resemblances, for example, in statements that are used to underscore gender differences and how they are responsible for why people behave this or that way. It obscures "reality" by offering ready- made schemes by which we can make sense of the messy world that surrounds us. Unfortunately, it makes us blind for the actual situation, or case, which is complex and made up of many different components.

However, labels, derived from (popularized) psychiatric classification of mental illness, are easy to handle in everyday social practices, in clinical and jurisdictional settings. They are also useful to apply in political settings, as has been indicated in the analysis. But one should be aware of how reductive they are and how they are making it impossible to gain a more profound understanding of why people become psychologically troubled.

#### Conceptualizations of mental illness – how they are beneficial and where they are restrictive

If one is able to widen their understanding of the prototypical images of Depression, and people with Depression, one might start to be more open in terms of how we approach and handle intervention for the affected or themselves, whatever their condition might be. It could be achieved to gain a better understanding of the circumstances a person is in. Thus therapeutic intervention could be understood in different ways.

Depending on the understanding of what Depression is, is the conceptualization of the measures that are suggested to alleviate it. Depending on whether one conceives of Depression as an organic problem, a temporary malady, "being in a bad mood" or "having problems with life". All these different ways, in which Depression is publicly imagined, say something about it, regardless of whether it is (bio-) medicalized or seen as a psychological problem. These different imaginations also influence how therapeutic measures are conceived and chosen.

A (bio-) medicalized understanding may too fast suggest psychiatric intervention, while the second may be too weak, if a case of a serious depressive condition is the matter. If it could be achieved to consider mental disorders as conditions on a continuum of possible mental states, as it used to be before psychiatry took over classification (Mayes and Horwitz 2005), it could be possible to be more open conceptually in regards to how to handle treatment measures in different ways.

Taking medication certainly provokes imaginations of treating a real disease entity. It may also lead to a less flexible attitude in regards to how drug therapy should be administered, such as patients being afraid to change medication or slowly getting off from them.

The rather psychologically motivated understanding of Depression may find it hard to suggest any kind of drug therapy to a person because they consider it as interference with their personality and as being dependent on pharmaceutical intervention, instead of a preliminary (or longer) support for someone who really needs medication. It can be argued that substances known to be effective in milder depressive conditions, such as St. John's Wort, are not considered to interfere with the concept of personality because it is a plant based herbal intervention and not so much associated with chemically altering ones state of mind. However, also the (bio-) medicalized understanding of Depression may restrict intervention to antidepressant and psychotherapy as these are considered the only valid and scientifically accredited measures to take. So if our society learns to conceptually better accommodate different understandings of mental disorder, and to locate them within the field they are argued, we may be able to select from a variety of explanatory fields, or to combine them, and then one could offer more thoughtful support and advice for themselves and for others. This could lead to a more profound evaluation of the current situation of the patient and a more precise understanding of their current need: for example if someone is reluctant to take medication, they might be helped by psychotherapy only (or at least for the moment) and some other substances, that are commonly and conceptually not classified as being of medical nature, but that may also help (e: tobacco, caffeine, meditation) and can have an influence on the neurochemistry of the brain.

### Issues of trans- and interdisciplinarity

It should be considered very important to not disqualify different approaches to understand the conditions behind the disease concept of Depression. Psychiatry has a very important story to tell about mental disorder (even with all its faults). But so do other disciplines in the mental health field. The actual challenge that our society faces is how to make sense of these different approaches.

Therefore, it could be achieved to appreciate other approaches and to gain a profound understanding of the possible benefits of each of the different lines of thought that are currently available in the general mental health field.

Being open to complexity is better than opting out several of the currently available scientific domains that deal with mental disorder. Given the complexity of brain anatomy and – function, one should be open and creative when it comes to figuring out how mental illness works, and not let one of the several available epistemologies cloud the picture of the ontological possibilities. Depression may very well be "enacted" (Mol 2002) in many different ways, which is something that should be appreciated. It does not matter whether the disease concept is constructed around symptoms (as it is done now) or whether it is constructed around aetiology (which has failed so far) or whether it changes its name and becomes something else (change of classification).

In a practical sense, this could mean that it is advisable not to express general claims about what precisely mental illness is, and why it happens, but to be open and let several different explanatory schemes work and to be attentive regarding their respective conceptualizations.

In cases of mental disorder in particular (but probably for many other currently classified diseases), the application of the "causally specific model", which can be assumed to often guide both expert and lay reasoning about aetiology, is problematic and leads to superficial conceptions about cause and effect relations.

This could mean that one should look for how different people may become mentally ill for different reasons. Maybe that is not only the case for different people diagnosed with one disorder, maybe this is also the case that the different classifications may very well have different trigger moments than other classified disorders, such as for example schizophrenia maybe has a stronger genetic trigger moment than Depression (although, as indicated, there are more difficulties with genetics and aetiology in mental disorder than positive results (see Rosoff (2010) and Pintsov and Quednow (2012)).

However, subsuming all kinds of mental conditions under the label of one classification, or the concept of mental disorder in general could impede a more differentiated consideration about the aetiology for each case. This refers back to the argument that if one kind of reasoning, and consequently conceptualization, of mental disorder is done so indiscriminately, it may not be achieved to see the actual reasons why someone has developed a condition.

In that respect we should be curious to widen our understanding of cause - effect relations to be less general and more specific. Consequently, different models could be combined to best capture the triggers for Depression and other mental disorders, and the different triggers within a group of classified disorders and certain cases.

## 12. Bibliography

Allan, Stuart, (2009), Science, Communication and media, In: Holliman, R.; Whitelegg, E.; Scanlon, E.; Smidt, S.; Thomas J. (Hg.),: Investigating Science Communication in the Information Age: Implications for public engagement and popular media. Milton Keynes: Oxford University Press and The Open University., 149 – 165

American Psychiatric Association (2000), *Diagnostic and Statistical Manual of Mental disorders*. *DSM-IV-TR*. 4th Edition, Text Revision. American Psychiatric Association: Washington DC

Boeker, Heinz (ed.) (2006), Psychoanalyse und Psychiatrie – Geschichte, Krankheitsmodelle und Therapiepraxis, Heidelberg: Springer Medizin Verlag

Boeker, Heinz, Seifritz, Erich (eds.) (2012), Psychotherapie und Neurowissenschaften. Integration – Kritik – Zukunftsaussichten, Bern: Hans Huber Verlag

Bowker, Geoffrey C. (2000), Sorting things out: classification and its consequences, Cambridge, Mass. [u.a.]: MIT Press

Charmaz, Kathy (2006), Constructing Grounded Theory – A Practical Guide Through Qualitative Analysis, London: Sage Publications

Bucchi, Massimiano (2004), Science in Society- an introduction to social studies of science, New York: Routledge

Bury, Micheal (2005), Health and Illness, Cambridge [u.a.]: Polity Press

Bush, Lawrence (2011), *Standards – Recipes for Reality*, Cambridge, Massachusetts: MIT Press

Busfield, Joan (1988), Mental illness as a social product or a social construct: a contradiction in feminists' arguments?, Sociology of Health and Illness 10 (4): 521–542

Busfield, Joan (2000), *Rethinking the Sociology of Mental Health*, Sociology of Health and Illness 22 (5): 543-558

Busfield, Joan (2012), Challenging claims that mental illness has been increasing and mental well-being declining, Social Science & Medicine, 75: 581-588

Clarke, Adele, Shim, Janet K., Mamo, Laura, Fosket, Ruth, Jennifer, Fishman, Jennifer R.(2003), *Biomedicalization: technoscientific transformations of health, illness and U.S. biomedicine*, American Sociological Review 68 (2): 161-194

Collins, H.M., Evans, R. (2002), The Third Wave of Science Studies: Studies of Expertise and Experience, Social Studies of Science: 32-235

Conrad, Peter (1992), Medicalization and Social Control, Annu. Rev. Sociol., 18: 209-32

Daston, Lorraine (2000), *The Coming into Being of Scientific Objects*, in. Daston, Lorraine, Biographies of Scientific Objects, Chicage, Ill. (u.a.): Univ. of Chicago Press, 1-15

Dumit, Joseph (2004), *Picturing Personhood- Brain Scans and Biomedical Identity*, Princeton New Jersey: University Press

Ehrenberg, Alain (2008), Das erschöpfte Selbst. Depression und Gesellschaft in der Gegenwart, Frankfurt am Main: Suhrkamp

Felt, Ulrike (2000), Why should the public understand science? A Historical perspective on aspects of the public understanding of science, IN: Meinholf, Dierkes/ Grote, Claudia von Hrsg: Between understanding and trust. The public, science and technology. Amsterdam: Harwood Academic Publishers, 4-26

Felt, Ulrike (2007), Zukunftsszenarien als wissenschaftliche Ressource: Begegnungen zwischen Wissenschaft, Politik und Medien. In: Egloff, R.; Folkers, G.; Michel M.: Archäologie der Zukunft. Zürich: Chronos, 287-302

Fleck, Ludwig (2008), Genesis and Development of a scientific fact, Chicago, Ill.: Univ. of Chicago Press

Gieryn, Thomas (1999), Cultural Boundaries of Science. Credibility on the Line, Chicago: University of Chicago Press

Hacking, Ian, *Making up people* (1986), In: Heller, Thomas C., Sosna, Morton, and Wellbery, David E., (eds.), *Reconstructing Individualism. Autonomy, Individuality, and the Self in Western Thought*, California: Stanford University Press, 222-236

Hacking, Ian (2002), Was heißt "soziale Konstruktion"?, : zur Konjunktur einer Kampfvokabel in den Wissenschaften, (Gekürzte dt. Erstausg., 3. Aufl. . - ) Frankfurt am Main: Fischer Taschenbuch Verlag

Hacking, Ian (1995), Rewriting the Soul. Multiple Personality Disorder and the Sciences of Memory, Princeton, New Jersey. Princeton University Press

Hansen, Anders, (2009), Science, Communication and media, In: Holliman, R.; Whitelegg, E.; Scanlon, E.; Smidt, S.; Thomas J. (Hg.),: Investigating Science Communication in the Information Age: Implications for public engagement and popular media. Milton Keynes: Oxford University Press and The Open University, 105 – 127

Hilgartner, Stephen (1990), *The Dominant View of Popularization: Conceptual Problems*, *Political Uses*. Social Studies of Science, An International Review of Research in the Social Dimensions of Science and Technology 20 (3): 519-539

Hirshbein, Laura D. (2006), Science, Gender, and the Emergence of Depression in American Psychiatry, 1952–1980, Journal of the History of Medicine 61: 187-216

Internationale statistische Klassifikation der Krankheiten und verwandter Gesundheitsprobleme, 10. Revision, München, Jena: Urban & Fischer Verlag, 2000 (1. Auflage)

Jasanoff, Sheila (2004), States of Knowledge – The Co-Production of Science and Social Order, New York: Routledge

Jasanoff, Sheila (2005), Judgement under siege – the three body problem of expert legitimacy, In: Maasen, Sabine, Weingart, Peter, Democratization of Expertise? Exploring Novel Forms of Scientific Advice in Political Decision Making, Dordrecht: Springer, 209 – 224

Jäncke, Lutz (2012), Möglichkeiten und Grenzen neurowissenschaftlicher Ansätze in der Psychiatrie – Eine neuropsychologische Perspektive. In: Boeker, Heinz, Seifritz, Erich (eds.),

Psychotherapie und Neurowissenschaften. Integration – Kritik – Zukunftsaussichten, Bern: Hans Huber Verlag, 82 - 102

Jensen, Torben Elgaard, Winthereik, Brit Ross (2005), *Book Review: The Body Multiple: Ontology in Medical Practice*, Acta Sociologic, (48): 266 - 268

Jung, Ernst G. (ed.) (1998), Duale Reihe Dermatologie, Stuttgart: Hippokrates Verlag

Keller, Reiner (2011), Diskursforschung- Eine Einführung für SozialwissenschaftlerInnen. 4. Auflage, Wiesbaden: VS Verlag für Sozialwissenschaften

Keller, Reiner (2008), Wissenssoziologische Diskursanalyse: Grundlegung eines Forschungsprogramms, 2. Aufl. . - Wiesbaden: VS, Verl. für Sozialwissenschaften

Landwehr, Achim (2004), Geschichte des Sagbaren- Einführung in die historische Diskursanalyse, 2., unveränd. Aufl. . - Tübingen: Ed. Diskord

Lock, Margaret (1998), Situating Women in the Politics of Health, In: The Politics of Women's Health: Exploring Agency and Autonomy, edited by S. Sherwin. Philadelphia, PA: Temple University Press, 178-204

Lupton, Deborah (2006), Medicine as Culture. Illness, disease and the body in western societies, London [u.a.]: Sage Publ.

Maasen, Sabine, Weingart, Peter (2005) What's new in scientific advice to politics, In: Democratization of Expertise, Exploring Novel Forms of Scientific Advice in Political Decision Making, Dordrecht: Springer, 1-20

Mayes, Rick, Horwitz, V. Allan (2005), DSM-III and the Revolution in the Classification of Mental Illness, Journal of the History of the Behavioral Sciences 41(3): 249–267

Mol, Annemarie (2002), *The Body Multiple: ontology in medical practice*, Durham and London: Duke University Press

Nisbet, M.C. (2009a): Communicating Climate Change: Why Frames Matter for Public Engagement, Environment. Available at: <a href="http://www.environmentmagazine.org/Archives/Back%20Issues/March-April%202009/Nisbetfull">http://www.environmentmagazine.org/Archives/Back%20Issues/March-April%202009/Nisbetfull</a>. Html.

Nispet, Mathew C., Scheufele, Dietram A. (2009 b), What next for Science Communication? Promising Directions and Lingering Directions, American Journal of Botany 96(10): 1767–1778

Oudshoorn, Nelly (2003), *The Male Pill – A Biography of Technology in the Making*, Dunham, NC: Duke Univ. Press

Petersen, Imme, Heinrichs, Harald, Peters, Hans Peter (2010), Mass-Mediated Expertise as Informal Policy Advice, Science, Technology, & Human Values, 865-887

Quednow, Boris B., Pintsov, Oliver (2012), Endophänotypen in der psychiatrischen Forschung – Brückenschlag zwischen Genetik und Psychopathologie?, In: Boeker, Heinz, Seifritz, Erich (eds.), Psychotherapie und Neurowissenschaften. Integration – Kritik – Zukunftsaussichten, Bern: Hans Huber Verlag, 216 – 233

Rosoff, Philip M. (2010), In Search of the Mommy Gene-Truth and Consequences in Behavioral Genetics, Science Technology Human Values, 35 (2): 200 – 243

Shorter, Edward (1997), A History of Psychiatry – From the Era of the Asylum to the Age of Prozac, New York: Wiley

Sorensen, Estrid (2012), STS und Politik in: Beck, Stefan, Niewöhner, Jörg, Sorensen Estrid, Science and Technology Studies – Eine sozialanthropologische Einführung, Bielefeld: Transscript Verlag, 191 – 120

Weingart, Peter (1998), Science and the Media, Research Policy 27:869 – 879

Weingart, Peter (2001), Die Stunde der Wahrheit? Zum Verhältnis der Wissenschaft zu Politik, Wirtschaft und Medien der Wissensgesellschaft, Weilerswist: Velbrück Wiss.

Williams, Simon J., Martin, Paul, Gabe, Jonathan (2011), *The Pharmaceuticalization of society? A framework for analysis*, Sociology of Health & Illness 33 (5):710–725

Wynne, Brian (1992), Misunderstood misunderstanding: social identities and public uptake of science, Public understanding of science, 1: 281-304

## **Internetquellen**

Internet\_01

 $\underline{http://www.apotheken-umschau.de/do/extern/medfinder/medikament-arzneimittel-information-Cipralex-20mg-Filmtabletten-A89381.html}$ 

(abgerufen am 14.11.2013)

Internet\_02

http://www.gl-pharma.at/gebrauchsinfo/1263406665.pdf

(abgerufen am 14.11.2013)

Internet\_03

 $\underline{\text{http://www.alternet.org/story/}11004/sarafem\%3A\_\text{the\_pimping\_of\_prozac\_for\_pms}} \\ \text{(abgerufen am 14.11.2013)}$ 

Internet\_04

http://www.psyalpha.net/biografien/august-ruhs

(abgerufen am 27.6.2014)

Internet\_05

http://www.pukzh.ch/ueber-uns/portrait/klinikleitung/

(abgerufen am 16.7.2014)

Internet\_06

http://www.psychotherapie.at/psychotherapeutinnen/rechtsinformationen/psychotherapiegesetz (abgerufen am 9.11.2013)

# **Appendix I: Overview Newspaper Sample**

#### Die Presse

#### <u>2011</u>

Die Presse vom 2011-05-24, Seite: 9 / ALL g – "Hautnaher Einblick in das Leben eines Depressiven"

Die Presse vom 2011-05-15, Seite: 40 / ALL so: "Depression ist ganz normal"

Die Presse vom 2011-02-08, Seite: 8 / ALL g: Was gegen die Depression hilft – Ehrlichkeit, Empathie und die richitgen Medikamente

Die Presse vom 2011-01-07, Seite: 23 / FEU Feuilleton: Mohammed Atta kämpfte mit der Depression/ Feuilleton 899

Die Presse vom 2011-01-04, Seite: 24 / FEU Feuilleton: "Das Depressionsgen ist wieder da, aber nur partiell"

#### 2010

Die Presse vom 2010-10-19, Seite: 11 / ALL g "Individuelle Musik gegen Depression und Schlafstörungen"

Die Presse vom 2010-09-11, Seite: 34 / ALL na "Depressive Eltern"

Die Presse vom 2010-06-15, Seite: 6 / IPO Inland "tipps&termine"

Die Presse vom 2010-05-25, Seite: 9 / ALL g "Tipps&Termine"

Die Presse vom 2010-04-28, Seite: 32 / 24Stunden "Depressive naschen mehr"

Die Presse vom 2010-04-13, Seite: 13 / ALL g "Johanniskraut & Depression"

Die Presse vom 2010-04-13, Seite: 13 / ALL g "Depression durch globale Hetzerei?"

Die Presse vom 2010-03-09, Seite: 11 / ALL g

AUFGEBLÄTTERT "Depression: "Stehen am Abgrund"

Die Presse vom 2010-02-09, Seite: 11 / ALL g

AUFGEBLÄTTERT "Ratschläge für depressive Menschen"

#### 2009

Die Presse vom 2009-11-20, Seite: 30 / ALL me "leserbriefe Menschenverachtend,

Die Presse vom 2009-11-15, Seite: 38 / LES Leserbriefe; "Ich kenne keine Normalen"

Die Presse vom 2009-11-15, Seite: 37 / LES Leserbriefe

Auf einen blick

Die Presse vom 2009-11-15, Seite: 37 / LES Leserbriefe, "Der weiche Kern"

Die Presse vom 2009-10-29, Seite: 27 / FEU Feuilleton, "Laotse, Instrument der Evolution?"

#### 2008

Die Presse vom 2008-03-22, Seite: 36 / ALL wf

Biologische Psychiatrie, "Genwechselspiel der Depression"

#### 2007

Die Presse vom 2007-10-09, Seite: 16 / CHR Chronik

GESUNDHEIT, "Depression: Kärnten will die Zahl der Suizide senken"

Die Presse vom 2007-09-17, Seite: 13 / ALL g, "Ein extrem qualvolles Leiden"

Die Presse vom 2007-06-18, Seite: 12 / ALL g STUDIE, "Depression kann Diabetes fördern"

Die Presse vom 2007-05-31, Seite: 12 / CHR Chronik

Gesundheit, "Experten fordern Aktionsplan gegen Depression"

Die Presse vom 2007-05-23, Seite: 10, "Das grundlegende "Behandlungs-Duo"

Die Presse vom 2007-05-21, Seite: 13 / ALL g, "Arbeitsdruck schafft Depressionen"

Die Presse vom 2007-04-16, Seite: 11 / KUL Veranstaltungen; "Hilfe bei Depressionen"

Die Presse vom 2007-01-29, Seite: 13 / APO Ausland, "In Kürze- Vögel gegen Depressionen"

Die Presse vom 2007-01-25, Seite: 10 / CHR Chronik Gesundheit, "Rot-grünes Projekt gegen Depression"

#### 2006

Die Presse vom 2006-12-07, Seite: 44 / FEU Feuilleton, "elemente -

Depression macht Essen fad.,

Die Presse vom 2006-10-03, Seite: 20 / ALL g, "Heilende Angebote bei Depressionen"

Die Presse vom 2006-07-10, Seite: 32 / ALL na

Hirnkongress in wien; "Abtreibungspille wirkt gegen Depressionen"

Die Presse vom 2006-04-18, Seite: 13 / ALL g

Gesunde Tipps, "Medikamente und Milch vertragen sich nicht"

Die Presse vom 2006-02-20, Seite: 13 / ALL g, "Stress führt häufig zu Depressionen"

#### 2005

Die Presse vom 2005-10-24, Seite: 28 / FEU Feuilleton, "Tief im Hirn: Die Mechanismen der Angst"

Die Presse vom 2005-09-19, Seite: 13 / ALL g

interview, "Eine Depression ist wirklich unbeschreiblich schlimm"

Die Presse vom 2005-08-01, Seite: 11 / ALL g, "Die Seele leidet nicht nur psychisch"

Die Presse vom 2005-06-07, Seite: 13 / CHR Chronik Sucht, "Alkohol-Gefahr durch Depression, Angst"

Die Presse vom 2005-01-28, Seite: 27 / ALL g, "Diabetes und Depression"

#### 2004

Die Presse vom 2004-12-01, Seite: 11 / CHR Chronik, "Dunkle Gedanken in der Schule"

Die Presse vom 2004-10-15, Seite: 25 / ALL g, "Termine-

künstler gegen depression"

Die Presse vom 2004-10-08, Seite: 25 / ALL g,

MEINUNG, "Menschen verachtend"

Die Presse vom 2004-10-08, Seite: 25 / ALL g, "Sozialer Druck macht krank,

Die Presse vom 2004-08-20, Seite: 20 / ALL g, "In Kürze

verschwiegen, unerkannt"

Die Presse vom 2004-08-19, Seite: 12 / CHR Chronik, "Alkohol fördert Depressionen"

Die Presse vom 2004-08-19, Seite: 12 / CHR Chronik, "Depression: Alkohol fördert den Ausbruch"

Die Presse vom 2004-02-06, Seite: 25 / ALL g, "Depressionen, Hauptursache für Selbstmorde und seit der Antike…"

Die Presse vom 2004-02-06, Seite: 25 / ALL g, "Der geächtete Patient"

Die Presse vom 2004-01-09, Seite: 25 / ALL g

MEINUNG, "Armutszeugnis"

#### 2003

Die Presse vom 2003-12-05, Seite: 25 / ALL g FORSCHUNG, "Vitamin B hilft bei Depression" Die Presse vom 2003-10-25, Seite: W3 / WEL Wellness psychiatrie, "Der Depression auf der Spur"

Die Presse vom 2003-09-27, Seite: R9 / ALL bi "Frauen stürzen eher in eine Depression, sie suchen aber auch..."

Die Presse vom 2003-09-13, Seite: W3 / WEL Wellness depression, "Die Wahl des richtigen Mittels erleichtern"

#### 2002

Die Presse vom 2002-08-21, Seite: 9 / GES Gesundheit VERANSTALTUNGEN, "Zum Tag der offenen Tür lädt das Martha-Frühwirt-Zentrum für..."

Die Presse vom 2002-06-25, Seite: 9 / ALL wf, "Vernachlässigte Psyche junger Mütter"

Die Presse vom 2002-03-09, Seite: 3 / SPE Spectrum:201:SPE, "Beinahe hätte er es vergessen. Das blaugrüne Wasser eines…"

Die Presse vom 2002-02-19, Seite: 28 / KUL Kultur, "Depression als schreiende Stummheit"

Die Presse vom 2002-02-04, Seite: 22 / KU, "Sarah Kane oder: Romantik unterspült Moderne"

#### Der Standard:

#### 2012

"Der Standard" vom 07.03.2012 Seite: 11 / ALL Forschung Spezial: "Schlechte Stimmung im Labor"/ ALL Forschung Spezial 700

"Der Standard" vom 26.01.2012 Seite: 24 Ressort: NETB./WISS / ALL NETB./WISS "Labor" / ALL. NETb/ Wissenschaft 166

"Der Standard" vom 17.01.2012 Seite: 13 Ressort: Sport / SPO Sport: "Die neuen Volkskrankheiten Burn- out und Depression bleiben ein Fussballthema"

#### 2011

"Der Standard" vom 01.12.2011 Seite: 15 Ressort: Sport / SPO Sport: "Über den Kampf im Rampenlicht Laut Studie treten Burnout und Depression im Spitzensport häufiger auf als erwartet"

"Der Standard" vom 31.10.2011 Seite: 15 Ressort: Sport / SPO Sport "Wie ein Auto ohne Öl und ohne Wartung"

"Der Standard" vom 24.10.2011 Seite: 19 Ressort: MED / ALL MED "Was gegen Depressionen hilft Michael Freissmuth erklärte, warum es bei Psychopharmaka kaum Innovationen gibt"

# "Der Standard" vom 09.05.2011 Seite: 19 Ressort: MED / ALL MED: DIE AKTUELLE MEDIZIN-DVD

#### 2010

20.12.2010- Depression bekommt Gesichter/ ALL med (117) Kommentar über ein Buch "Seelenriss. Depression und Leistungsdruck" v. Ines Geipel

18.12.2010- Spielplatz/ALLnet Business (282)

"Hoffnungslos im Seelenwald"

1.2.2010- Wo Traurigkeit endet und Depression beginnt

#### 2007

5.11.2007- WISSEN/ ALL MED (149)

5.11.2007- Die gequälte Seele/ ALL MED (547)

19.7.2007- Es braucht viel bessere Medikamente/ ALL KOMM/ WISS (305)

25.6.2007- Trinken bagatellisiert/ ALL MED (374)

24.4.2007- Altersdepression wird selten erkannt/ LAN Länder (332)

10.4.2007- Den Neuronen auf die Sprünge helfen/ ALL MED (626)

7.3.2007- Sensible Hirnlappen/ ALL Forschung Spezial (979)

#### 2006

21.11.2006- Verzweifelte Hilferufe im Cyberspace/ ALL Schüler (488)

6.11.2006- Ein Kind von Traurigkeit/ ALL MED (560)

6.11.2006- WISSEN/ ALL MED (151)

9.10.2006- Zu Tode jauchzend/ ALL MED (560)

7.8.2006- Der Neurosengarten ist artenreich/ ALL MED (1124)

16.1.2006- Edda Grabar / ALL AKTDIV (674)

#### 2005

"Der Standard" vom 07.04.2005 Seite: 10 Ressort: Chronik / CHR Chronik

#### 2004

"Der Standard" vom 30.10.2004 Seite: 33 Ressort: Wissenschaft / WIS Wissenschaft, "400.000 Österreicher leiden an Depressionen"

Der Standard" vom 29.09.2004 Seite: 26 Ressort: Wissenschaft / WIS Wissenschaft, "Depressionstherapien im Datennebel"

Der Standard" vom 31.03.2004 Seite: 27 Ressort: Wissenschaft / WIS Wissenschaft, "Diäten senken Spiegel von Glückshormonen"

#### <u>2003</u>

"Der Standard" vom 31.12.2003 Seite: 28 Ressort: Wissenschaft / WIS Wissenschaft, "Dunkle Energie und Wundermolekül RNS"

"Der Standard" vom 19.12.2003 Seite: 27 Ressort: Wissenschaft / WIS Wissenschaft, "Größte Sensation: Bilder aus des Weltalls Kindheit"

"Der Standard" vom 22.11.2003 Seite: 20 Ressort: Sport / SPO Sport, "Bayerns Deisler leidet unter Depressionen"

"Der Standard" vom 19.07.2003 Seite: 30 Ressort: Kommunikation / KO Kommunikation, "Schwermut durch Erbgut"

"Der Standard" vom 28.01.2003 Seite: 23 Ressort: Aktuell / AKT Aktuell, "Tetanus-Genom entziffert"

#### 2002

"Der Standard" vom 13.08.2002 Seite: 23 Ressort: Wissenschaft / WIS Wissenschaft, "Gleevec-Resistenz vor Klärung"

"Der Standard" vom 26.07.2002 Seite: 27 Ressort: Chronik / CHR Chronik, "Ärzte stellen immer mehr Depressionen fest"

"Der Standard" vom 31.1.2002 Seite: 34 Ressort: Wissenschaft / WIS Wissenschaft, "Depression durch Viren"

"Der Standard" vom 17.1.2002 Seite: 34 Ressort: Wissenschaft / WIS Wissenschaft, "Depression: 50 Jahre alte Wurzel"

#### 2001

"Der Standard" vom 29.9.2001 Seite: 4 Ressort: Sonntag / SON Sonntag, "Zug um Zug gegen die Depression"

"Der Standard" vom 10.7.2001 Seite: 32 Ressort: Wissenschaft / WIS Wissenschaft, "Depression: Verdacht gegen Immunsystem und Viren"

"Der Standard" vom 30.5.2001 Seite: 1 Ressort: AKTDIV / ALL AKTDIV, "Diabetiker haben oft

Depressionen"

"Der Standard" vom 10.4.2001 Seite: 36 Ressort: AKTDIV / ALL AKTDIV, "Ein Virus geht aufs Gemüt"

"Der Standard" vom 28.3.2001 Seite: 1 Ressort: AKTDIV / ALL AKTDIV, "Schatten auf der Kinderseele"

#### 2000

"Der Standard" vom 15.11.2000 Seite: 71 Ressort: AKTDIV / ALL AKTDIV, "Krise nach dem ersten Schrei"

"Der Standard" vom 31.10.2000 Seite: 16 Ressort: Wissenschaft / WIS Wissenschaft, "Depressions-Ursache: Mangel an Zellen"

"Der Standard" vom 20.9.2000 Seite: 12 Ressort: AKTDIV / ALL AKTDIV, "Hormone als Marker für Depressionen"

"Der Standard" vom 25.7.2000 Seite: 12 Ressort: Wissenschaft / WIS Wissenschaft, "Traurige Babys"

# **Appendix II: Abstracts**

#### **English**:

I chose a "history of ideas" approach in order to understand how Depression appears in one space of the modern publics, the media. Depression is an ambiguous disease concept used in various contexts (from public to expert cultures), where it is connoted with different meanings.

The problem with this concept is that it is a contingent psychiatric classification, but handled as if that were not so. Depression has become ever more visible in contemporary culture. In the past decade, it has been successfully established on the public agenda as one of the maladies of contemporary Western societies. The question is whether that is justified or not. In this thesis, I use the sociology of knowledge approach to discourse (SKAD) in order to better understand how the disease concept of Depression is constructed in an Austrian quality print media (Der Standard, Die Presse) sample from the year 2000 to 2012. In this context, Depression is interpreted to be located at the intersection of Western intellectual history, a growing and heterogeneous field of neuroscientific inquiry and of public imagination. In this area of conflict, the media sample tells a very specific story about Depression.

Western intellectual history is regarded to be all the endeavors, from philosophy to psychiatry, to give name to mental conditions. This also includes the many attempts of psychiatry to reliably classify mental disorders. The neurosciences and other natural sciences, while researching the human brain, think that is not problematic to adopt classifications from medical psychiatry ( disease concepts that are only defined around behavioral symptoms) and transfer them to another professional domain.

The chosen media sample shows how Depression appears almost exclusively as a (bio-) medicalized phenomenon, which mostly appears in a psychiatric and neuroscientific expertise setting.

#### German:

Für diese Masterarbeit habe ich mich entschieden einen ideengeschichtlichen Ansatz zu verfolgen, um besser verstehen zu können, wie das Krankheitskonzept der Depression an einem bestimmten Ort der modernen Öffentlichkeit, den Medien, dargestellt wird. Das, was heutzutage als Depression bezeichnet wird, ist ein ambivalentes Krankheitskonzept, das in verschiedensten Bereichen (in professionellen, wie auch in öffentlichen Kontexten) gebraucht wird und dort mit unterschiedlichen Bedeutungen konnotiert ist. Das Problem daran ist, dass die Depression eine kontingente psychiatrische Krankheitsklassifikation ist und immer so getan wird, als ob das nicht so wäre. In unserer modernen Kultur ist die Depression immer mehr sichtbar. In den letzten zehn Jahren hat sie sich erfolgreich als eine der schlimmsten Leiden der westlichen Welt etabliert. Die Frage ist nur, ob das auch wirklich so ist. In dieser Arbeit wird die Wissenssoziologische Diskursanalyse verwendet, um besser verstehen zu können, wie das Krankheitskonzept der Depression in einem Printmedien- Sample (Der Standard, Die Presse) über einen Zeitraum von ungefähr zwölf Jahren konstruiert worden ist. In diesem Kontext wird Depression als ein Konzept verstanden, das sich an dem Schnittpunkt von unserer westlichen intellektuellen Geschichte, einem heterogenen neurowissenschaftlichen Forschungsunterfangen und der öffentlichen Vorstellungswelt befindet. Als westliche intellektuelle Geschichte werden alle jene Wissenstraditionen, von der Philosophie bis hin zur Psychiatrie, bezeichnet, die versucht haben mentalen Zuständen Namen zu geben. Damit sind auch all jene Unterfangen der modernen Psychiatrie gemeint, psychische Störungen zuverlässig zu klassifizieren. Die Neurowissenschaften und andere Naturwissenschaften, die sich mit der Erforschung des menschlichen Gehirns beschäftigen, adaptieren die Klassifikationen der Psychiatrie, ohne dabei an die Probleme zu denken, die dabei entstehen, wenn Theorien und Konzepte einer wissenschaftlichen Disziplin in eine andere übernommen werden.

Die Auswahl der Zeitungsartikel für die vorliegende Untersuchung zeigt, wie Depression als ein fast ausschließliches (bio-) medikalisiertes Phänomen konstruiert wird, das in den meisten Fällen in einem psychiatrischen oder neurowissenschaftlichen professionellen Kontext dargestellt ist.

# **Appendix III: Curriculum Vitae**

#### Melanie Frank

#### **Education:**

10/2009 – 2014	Master Program Science- Technology- Society Studies at the University of Vienna, Department of Sociology
10/2004 – 7/2009	Bachelor Program Roman Filology (Focus: Spanish) and Cultural Studies
1994 – 2003	Realgymnasium BGRG VIII Albertgasse 18-22

#### **Professional Experience:**

06/2014-	support at welcome desk at BMC- Software and Österreichischer Wirtschaftsverlag
01/2014 - 08/2014	member of PR team of an NGO (Nyéléni Austria 2014)
03/2013 - 07/2013	Inex Sustainability Challenge; Coordinating Service Learning Project
01/2009 —	support at welcome desk at medical practice (Ordination Dr. Frank und Dr. Binder)
11/2008 - 05/2009	member of PR team of an NGO (Fm5)
07/2000 - 08/2008	different work experiences