

Riekert Koen - 811599
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Biology and the Subject:

A re-conceptualization of the Lacanian Subject with regards to modern advances in biology and neurosciences; and its implications for political theory.

Supervisors
Professor Julian Brown
Mr Peter Hudson

Dedicated to the memory of Peter Hudson

Abstract

In political theory, and the social sciences more broadly, a fierce debate has been raging for many years, between essentialism and constructionism. This debate seems to pit two incompatible positions against one another and plays itself out in various different fields in social science. This dissertation focuses specifically on this debate being played out between Queer activists and Queer theorists who both represent examples of the essentialist and constructionist sides of the debate. By using the Lacanian subject as a starting point, this dissertation attempts to challenge this dichotomy. It does so by re-reading Lacan and showing how we can locate room for biology and scientific knowledge in his subject formation. This dissertation argues that he was neither 'anti-science' nor 'anti-biology' as is often claimed, and that a re-reading of his process of subject formation with biological influences is possible. Reading the subject in this manner, we can incorporate modern neuroscience, biology and 'neuropsychanalysis' into the Lacanian subject in such a way that it is not a victim to biological determinism or reductionism, or 'determinate' social constructionism. This modern conceptualization of the Lacanian subject has profound implications, as is illustrated by the aforementioned fissure between Queer activism and Queer theory.

Plagiarism Declaration

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Acknowledgments

Before I start my acknowledgments, I want to state that I am dedicating this dissertation to one of my supervisors Mr Peter Hudson, who unfortunately has passed before I was able to finish this work. Peter, you were an absolutely amazing lecturer, supervisor and mentor, I am forever indebted to you for all your help and support and you are sorely missed. I would like to thank my parents for all of their help and support through this time, and my entire academic career, as I would not be here if it weren't for their support and encouragement. I am so grateful for all your help and unconditional support and understanding. Thank you so much mom and dad! I would like to thank Prof. Julian Brown for all his support, help, patience, understanding and assistance he has given me. I do really appreciate his constant support, not just for this dissertation, but with every other academic endeavours I have pursued. I am truly grateful for his support in the development of my academic career and abilities and for this dissertation. Thank you very much Julian. Finally I would like to thank the departmental staff, the faculty and university, specifically I would like to thank Thandeka and Lindiwe for their support.

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Terminology

There are various technical terms with specific definition that are used in this thesis, most of which are Lacanian terms that will be explained in depth in the first chapter. Before I start I want to explain the use of various terms used through this thesis, specifically, 'Queer', 'gay', 'homosexual' and related terms. In this thesis, until the last section -specifically the last chapter- I do not deal with these terms and concepts directly in my own argument when I engage with Queer theory proper. All of the engagements with any of these terms or concepts in this thesis before then I rely completely on the terms, definitions and meanings used by the others I engage with at those places. Meaning when I use the term homosexual when discussing Freud, is because this is the term he used, thus I use the term with the meaning and definition that Freud used. In chapter seven, I frequently switch between different terms for sexual orientation, activity and gender identity as I opted to use the terms and definitions that each paper used when I discussed those papers.

The reason why I chose to rather use the meanings and terms that the different authors used instead of a universal term or meaning that I define, is to ensure that I do not misattribute any meaning or argument for any of these authors. As the terms and meanings that many of them use are those for specific reasons as they fit into their arguments and work, and thus changing the terms/meaning would mean that their arguments/data is misattributed in my work.

When I use the term 'Queer' in this dissertation -specifically prior to the last chapter', I do so in a broad and non-specific manner to merely indicate that the content I am dealing with is directly related to the last chapter. With regards to incorporating these different terms with the argument regarding the 'Queer subject' that I will be making in the last chapter, that will be explained -along with my use and definition of Queer in that chapter. I will rather explain my use of Queer there instead of here, as there it will be much more context and will make more sense when my overall argument is already clear. I will only directly engage with Queer theory and Gay and Lesbian studies in the last chapter and their relations with my work.

Introduction

In the United States, one of the most influential court decisions that have been made – in terms of Queer rights, has to be *'Hollingsworth v. Perry'*. This was a federal case, that legalized same-sex marriage in the state of California. The reason why this case is important, is because it not only created a precedent in the United States judicial system, but because of one of the key facts that the courts found. This was that "Individuals do not generally choose their sexual orientation". An individual does not, through conscious decision, therapeutic intervention or any other method, change sexual orientation"¹. The reason why this is so important, is because it highlights an important part of the essentialist and constructionist debate playing out in Queer activism and Queer theory, that the latter relies heavily on biological essentialist arguments. This is also clearly seen in rallying phrases like "Born this Way", the reason why Queer activists rely on these ideas is due to multiple reasons, but one of the most important is its political and judicial effectivity when claiming rights.

This dissertation is divided into three sections, each of which will provide and develop the different aspects of the overall argument. Before I explain the overall argument I firstly want to explain what each section aims to accomplish. This dissertation is also not structured in the traditional manner, as it does not have a section for a literature review before moving on, rather the literature that this dissertation is engaged with is incorporated throughout the dissertation where appropriate. As each chapter is focused on a specific topic and/or field, and this dissertation engages with the other literature and work in each chapter instead of in a separate literature review at the start.

Lacan has been immensely influential in the fields of poststructuralism, Critical theory and Queer theory. In these fields, authors often hold constructionist conceptualizations of the subject, which have been based on, or influenced by Lacan. I am proposing to provide an alternative -unorthodox and somewhat unpopular- reading of Lacan and his subject, that he was, in fact, not as devout a constructionist as is often claimed. In the first section I will show how we can conceptualize the Lacanian subject in a way that accounts for the role of biology. I

¹<https://web.archive.org/web/20130316191210/https://ecf.cand.uscourts.gov/cand/09cv2292/files/09cv2292-ORDER.pdf> [My emphasis]

will firstly provide a re-reading of Lacan and show how we can locate the role of biology and science in his work and how he believes they determine his subject. I will show that we can in fact read in his work (and authors such as Žižek who have developed his work further) an acknowledgement of the role of biology. I will show how Lacan conceptualizes the subject by analysing '*Lacan's Genealogy of Subject Formation*', and show where in his process of subject formation can we account for the influencing role of biology. This will show that Lacan's relationship science has been complex, and that actually he was not as 'anti-science' as he is often portrayed as.

After I have shown that Lacan's work is compatible with the incorporation of modern biology and neuroscience -as they can now provide better explanatory frameworks than was available in his time. Thus when we have conceived of the Lacanian subject as a combination of biological and social influences, it has great implications on various other fields in political studies. This is because, Lacan and his work have been enormously influential in the fields of poststructuralism, Critical theory and Queer theory. As is evident in these fields -and in most of Lacan's intellectual 'descendants'- the subject is most often conceptualized as a result of socio-cultural construction, which seems at odds with my project. That is why this project is so important, as if we can provide an alternative re-conceptualization of the Lacanian subject that is both biological and cultural, it may have significant implications for these other fields.

The reason for this is because Lacan is influential in these fields, not because he alone offers a constructionist subject -as Saussure offer an even more constructionist subject, and Derrida a deconstructed one- but because his work provides explanatory arguments for various phenomena that are important for these fields. The approach that I have taken does not undermine his explanatory power or other aspect of his work, but rather enhances them. That is why, in the second section, after I have shown that it is possible to re-read this new subject in Lacan, I will explain and develop contemporary biological arguments -specifically in neuroscience- that I will incorporate into a 'modern conceptualization' of the Lacanian subject.

This 'modern' Lacanian subject will have the explanatory power of modern science and the long practical power of psychoanalysis, that will allow for a subject that is not captured by either biological determinism or social constructionism. This

subject, is fundamentally a Lacanian subject, but relies on the modern conceptualization of neuroplasticity of the brain². This is an incredibly important development, that has enabled the re-conceptualization of the Lacanian subject that I will develop throughout this dissertation.

This reconceptualization of the subject in Lacan has various implications for other fields in political studies, as it allows us to conceptualize these various fields without the problems normally associated with -biological conceptions of the subject. After I have established and argued for this new subject in Lacan, I will then move into the third section, where I will explain its implication for -what I have called- the fissure between 'Queer theory' and 'Queer practice'. This is because, Queer theory is a highly constructionist (and deconstructionist) field that considers the 'subject' in purely social terms, such as Butler's performative approach (Butler, 1990). This is often at odds with how 'Queer practice' is implemented and conceptualized by Queer activists and the general public (in essentialist terms) in our contemporary society. As in these groups, "Queerness" is considered a biological subject identity, whereas in Queer theory, biology plays little to no role in the subject whatsoever. This fissure (which I will expand more on later in this dissertation) is essentially a debate between Queer activists -who rely on essentialist and biological arguments, most clearly seen in rallying phrases such as 'Born this way'- and Queer theorists who rely on socio-linguistic arguments from constructionism and deconstructionism.

Although many Queer activists do agree with various arguments and concepts in Queer theory, such as the performative nature of gender, their arguments and politics are still shaped by biological essentialism. The reasons for this are varied, but this occurs mostly due to the practical political advantages of these arguments, and the co-opting of biological evidence and support to strengthen their messages. The reason why I am focusing on the fissure in Queer theory/politics is not because it is somehow unique in this regards, as the debate between essentialism and constructionism also appears very frequently in feminist and cultural theories. I could have used any of these other fields to make my argument about the impact of my re-conceptualization of the Lacanian subject, but I specifically chose the fissure in Queer theory/politics as it offers a special and useful approach to this topic. This is because the focus on a 'single' subjective identity and its social or biological causes

² All of this will be explained and developed throughout this dissertation.

allows a more focused and direct approach that will showcase the usefulness of my approach. The other reason is the importance of sexuality in Lacan, which allows a more thorough evaluation of this debate as compared to the other possible fields.

Thus my aim in this dissertation will be to show how we can conceptualize and defend my proposed 'new' subject in Lacan, and what implications it can have on the essentialist versus constructionist debate -specifically here the 'Queer fissure'. That is why in various chapters in this dissertation -where logically appropriate- I will engage with the conceptualizations and contribution of Lacan, Žižek or 'biology' with regards to this broader debate. I will only actually introduce this debate at the end of this dissertation, as the aim of this project is not to answer the 'fissure', but rather shine light on it, and show how my conceptualization of a Lacanian subject can provide a new approach to it. This is because I believe that my suggested subject, which is situated in the Lacanian broader canon is a useful approach. My approach to reconceptualizing the subject offers a 'way out' of this essentialist/ constructionist debate, as it is able to incorporate both biological and social influences. This approach is not a 'centrist' or 'middle ground' approach that aims to find essentialism and constructionism half way, but rejects this dichotomy.

Section One: Understanding Lacan's Subject

Chapter One: A brief history of pre-Lacanian thought

In this chapter I will provide a short overview of the fields that I am engaging in, I will also specifically start by explaining necessary ideas and conceptions that Lacan and his descendants have based their work on. I will firstly explain Saussurean French structuralism, as it laid the foundation for most of the future work that I am engaging in. The reason why I am starting by explaining these fields, specifically Queer theory, is to situate and familiarise the reader with these fields, as it is necessary to fully understand the arguments that I will later present. That is also why in this chapter I will briefly explain some key concepts in Lacan and the field, specifically because these authors often use terms that have different technical meanings than their standard dictionary usage.

Saussure and the Sign

In order to understand the origins and foundations of poststructuralism and Queer theory you first need a thorough understanding and investigation of Saussure and his theory of the structural qualities of language. I am starting with Saussure, because structuralism developed out of his structural linguistic theories. For structuralists, society (and for Lacan the unconscious) is structured 'like a language', and thus an analysis of language can provide us with an analysis of society. (Giddens, 1986:533) Saussure's conceptualization of how language works -how it is structured- is often used by structuralists when conceptualizing the economy, ideology, the state and the entire social realm. That is why he is often referred to as the "father of structuralism". (Hudson, 2010:10)

Saussure showed us that language is not a nomenclature, but is instead structured in terms of the relationships between presences and absences. These relationships are in natural opposition with one another, as there exists no obvious or necessary relationship between words. Because there exists no inherent relationship between different words (signifiers), and their related concepts (signified), meaning can only be gained in terms of difference, in what they are not. He stated "In language there are only differences" (De Saussure, 1966:120) and "Concepts are

purely differential and defined not by their positive content but negatively by their relations with the other terms of the system.” (ibid:117)

Saussure defined a sign as the elementary linguistic unit to “designate the whole”. The signified is defined as a “concept”, and the signifier as a “sound-image”. (De Saussure, 1966:67) For him meaning (signified) can only be achieved through differentiation from other concepts that are also in that language. Meaning is internal to language. For him, each sign is determined by its location in the structure of linguistic units that make up language, thus each sign is defined by its relation to other signs. (ibid:112-113) This also means that each language produces its own set of signifiers. For Saussure, we cannot make reference or derive any meaning from some external ‘reality’ or referent that is outside of the language. (Heller, 1984:143) Thus meaning is only created within this system of differential relations, which means that there exists no universal (or transcendental) concepts.

This also means that the relationship between signifier and signified are thus arbitrary and unmotivated, as it is not a necessary but a contingent association we make between any given ‘word’ (signifier) and its related ‘concept’ (signified). (Berger, 2017:9) Given that these relationships between the signified and signifiers are arbitrary, we rely on ‘structured associations’ or ‘codes’ to find meaning of signifiers and to interpret signs. (ibid) What this means is that, for Saussure, structure presumes a concept of an ‘absent totality’. (Giddens, 1986:532)

The work of Saussure is important in this field, insofar as the construction of the subject in structuralism and poststructuralism follows “directly from the premises introduced by Saussure and accepted even by many subsequent writers who were critical of that author”. (ibid:534) Here Giddens is referring to the insertion of the subject in language in terms of the system of differential relations, by these authors who rely on Saussure’s theory of the signifiers. Saussure laid the groundwork for this field, and it is in this field that these new notions of the subject developed.

Lacan and the Signifier

After having discusses Saussure, we can now turn to Lacan, who is the most central figure in this dissertation. His work was an elaboration of Saussure's linguistic theory, albeit in a somewhat different manner. He fused both Saussure’s linguistic theory with psychoanalysis from Freud. For Lacan, it is the structural definition of language as a synchronic structure of signs that is the important part of Saussure’s

work. (Campbell, 2004:33) He diverges from Saussure by arguing that language is not a structure of signs, but instead a structure of signifiers (ibid:34), that have the property of “combining according to a closed order”. (Lacan, 1993:169) When Lacan says “closed order” he is referring to the Symbolic Order. Lacan stated that “The notion of structure and that of the signifier appear inseparable” (Lacan, 1955:184) One of the important developments is how Lacan reframes Saussure’s relationship between the signifier and the signified. As where Saussure conceived of both of these being mutually interdependent on one another, Lacan privileges the signifier over the signified. (Campbell, 2004:34)

Lacan goes further by arguing that no signification can be sustained without reference to another signification. This statement taken to its most extreme conclusion means that “there is no language (langue) in existence for which there is any questions of its inability to cover the whole field of the signified, it being an effect of its existence as a language (langue) that it necessarily answers all needs.” (Lacan, 1955:150) Thus Lacan’s relationship between the Signifier and the Signified are ‘radically barred’, where in his diagram (S/s) we have “the signifier over the signified, ‘over’ corresponding to the bar separating the two stages”. (Lacan, 1985:149)³ He further elaborates on this by relating the use of the signifier and signification to Freud’s unconscious, which is an important step forward from the more linguistic structuralism of Saussure to the psychoanalytic poststructuralism that is popular today. The bar in his formula should not be interpreted as the barrier between unconscious and preconscious (as some have done), but instead as a “real border, that is to say for leaping, between the floating signifier and the flowing signified.” (Nobus, 2003: 53)

He provides us with an inverted relationship between words and things. For him the thing (or object) does not wait for a word to represent it, instead it is the word that creates the object. For him “Language always precedes the world it represents.” (Feher-Gurewich, 2003:195) because for him words function more than merely to communicate.

³ I need to specify that all references I used for this specific text *‘Écrits’*, the page numbers do not correspond to the specific page numbers used at the top of each page, but instead the ‘page’ numbers that are indicated on the side of the page next to specific paragraphs. The reason for this is that every edition of this book (which is an English translated collection of works), those side-page numbers are universal, while the top page number differs between different editions. This means that my references should be easy to locate, irrelevant of the edition or translation of *Écrits* used.

In Lacan's 'return to Freud' we get the fusion of psychoanalysis and structuralism in his famous formula "The unconscious is structured as a language". (Lacan, 1977:149) He prioritises the role of language in the subject, as he states that "language and its structure exists prior to the moment at which each subject at a certain point in his mental development makes his entry into it." (Lacan, 1985: 148) This is because for him the subject is a 'slave of language', because they are already given a place that is inscribed at birth, "if only by virtue of his proper name". (ibid)

An important thing to mention about Freud that relates to the research topic, is his views on homosexuality. One of the most famous records of his position was a letter he wrote in response to a concerned mother asking for advice regarding her homosexual teenaged son -although we don't know how or why the mother knew or believed her son to be homosexual. He was very reassuring to the mother and stated she has nothing to worry about as homosexuality was completely natural and normal and thus there was nothing wrong with her son. (Bennett, 2014:211) Although Freud was not always as progressive as this instance, as he often contradicted himself on this topic, as he once advocated a "solution" to the problem of homosexual presence, by transporting them all overseas. (Gathorne-Hardy, 2000:159) Thus when we want to establish his position, or those of his followers, we often have to be careful.

An Overview of Queer Theory

Lacan makes way for the emergence of Queer theory, because we can trace the theoretical origins of Queer theory to Foucault, Lacan and Derrida, and we can argue that Lacan is also extremely important for the other two authors as well. This is because we can trace the formal histories of Queer theory, as having two different but intersecting origins. One of which is that Queer theory traces its *formal history* in Gay and Lesbian studies, but it's *intellectual history* in poststructuralism. Before the rise of Queer theory, we had Gay and Lesbian Studies, where they did not use the concept of "Queer", but rather "LGBT", which was a radically different subject. This field believed that it was liberating the LG(BT) subjects of history from 'homophobic erasure' and recovered previously 'silenced' voices. (Green, 2007:28) The authors in that field often engaged with identity markers of gays and lesbians among assimilationist and liberationist lines. Queer theorists criticized this field as merely a reiteration of the conditions of social control and the prevailing power structures, as

these 'liberated' voices were interpellated into the symbolic domination. (ibid)
Although this was also a point taken by certain gay and lesbian liberationists, and not only Queer theorists. (Van den Berg, 2016)

Green argues that we can find two main trends of Queer theory have emerged from the decline of 'Gay and Lesbian Studies'. He called them "radical deconstructionism" and "radical subversion". (ibid)(Green,2002) The authors in the former trend interrogate the different categories of sexual orientation, often from the standpoint of the text. They dismantle and 'Queer'⁴ previous conceptualizations of sexual orientation.(Fuss, 1991) (Warner, 1993) (Edelman, 2004) The authors in the latter trend often attempt to disrupt the normalizing tendencies of "the sexual order" by locating non-heteronormative subjects to act as resistance hallmarks. (Green, 2007:28) Although they may differ in detail, both of these trends are "deconstructive", as they attempt to "denaturalize" dominant social classification. Queer theory in its entirety isn't solely "deconstructive", as another main trend is a performative approach.

The performative approach utilizes what is called the "performative interval", it is the unit of analysis where the actor "acts toward" or is "called forth" into the symbolic formation as a specific role (as a woman for example). (Green, 2007:32) This interval in the performance designates the "distance between doing and identity whereby the doing (e.g., doing woman) represents practice and identity (e.g., female) an interior semblance of self." (ibid) Butler is the main author in this approach, and she uses her theory of performativity to explain gender and sexuality. She sees gender as the practises that produce it, rather than what we are. (Maynard and Purvis, 2003:36) She dismantles gender to its constituent practices, as she considers gender performativity as, practices produced through the operation of regulatory norms. (ibid)

For the deconstructionists, we can see that one of their most influential authors are Derrida, and contemporary performatives rely on Butler, both who are intimately related to Saussure and/or Lacan and their intellectual history, even if their relations are one of critique. As we can see in Derrida's *'Letter to a Japanese Friend'* he defines deconstruction in terms of structuralism and Saussure specifically, as "To deconstruct was also a structuralist gesture or in any case a gesture that assumed a

⁴ Here used as a verb

certain need for the structuralist problematic. But it was also an antistructuralist gesture, and its fortune rests in part on this ambiguity. Structures were to be undone, decomposed, desedimented” (Derrida, 1983:2). He, like Lacan has his starting point from Saussure, except his divergence and disagreement with Saussure is much larger than Lacan’s.

Lacan’s theory can be used for the same arguments that are often made in Queer theory. Even though he died before Queer theory came about, he had a lot in common with the future field of Queer theory. (Dean, 2003:238) Although it is often held in the field that it has its origins in Foucault, it can successfully be argued that the origins of Queer theory should be attributed to Freud, specifically his theories of the unconscious, childhood sexuality and polymorphous perversity. Thus given that Lacan provides us with the ‘return to Freud’ that basis his critique of ego psychology and social norms that are very common in modern Queer theory. (ibid) Thus Lacan can provide Queer theories with the necessary tools to make critiques against heteronormativity among others, given that his psychoanalysis already “looks rather queer” to most in the Anglo-American perspective. (ibid) This seems contradictory since this field has heavily developed from Foucault, and especially his books ‘*The History of Sexuality*’, and in this series of books he provides a critique of psychoanalysis. That is why it might seem that a psychoanalyst like Lacan might seem inherently “anti-Queer”. Also many Queer theorists have disregarded Lacan and his theories as inherently heteronormative. As Rae argues “Butler charges that Lacan’s schema is heteronormative—because it is limited to the male/female schema—and patriarchal because within that heteronormative framework it affirms the masculine perspective.” (Rae, 2020)

Even Though Lacan is not mentioned anywhere in Foucault’s book, we can see that Lacan pre-empted some of Foucault’s theories a decade before Foucault, specifically Foucault’s theory of repressive hypothesis. We can see this in Lacan’s following statement that bears an eerie resemblance to Foucault’s repressive hypothesis, “Freud finds a singular balance, a kind of co-conformity - if I may be allowed to thus double my prefixes - of Law of desire, stemming from the fact that both are born together.” (Lacan, 1963: 89) I mention this just to show that, even though Lacan is often target by Queer theorists (such as Butler), this is not necessarily the case, as one of the most influential contemporary Queer theorists - Lee Edelman- is a Lacanian Queer theorist.

Important Concepts from Lacan

Before I go into Lacan's work in the next chapter, I just want to firstly outline some of the key concepts from his work. It is important to have a grasp of these concepts before I explain *The genealogy of Subject formation in Lacan*, but I will not define all of his concepts here. Even those that I do, I will only do so briefly. This is because the meanings of these concepts will become more clear the further I explain Lacan. The following concepts are those which I believe are most important to understand before going into Lacan. The three key terms are the **imaginary**, the **symbolic** and the **real**. When we look at the body of Lacan's work, we can divide his work into three main periods, each where he focused on a different area. These periods are, the Imaginary (which was from 1936–1952), the Symbolic (which was from 1953–1962), and finally the Real (which was from 1963–1981).

With regards to the **imaginary** (which was the first of the three that Lacan properly fleshed out), is based on the 'imaginary order', which is the realm of the image, imagination and is closely related to the ego and 'identification', both of which are intimately related to the mirror-stage⁵. Lacan derived the term 'imaginary' from the term used in antiquity, namely "imago⁶" (or image), where he states that it "was because it began with their formative function in the subject, and revealed that if common images make for certain individual differences in tendencies, they do so as variations of the matrices that other specific images" (Lacan, 1985:104) Thus when we take various different images together, such as the images of 'castration' and 'emasculatation' among many other they form together as the "imagos of the fragmented body". (ibid) Thus the imaginary can be seen as the domain of consciousness, it determines how we interpret the world, the 'titles' or 'name' we assigns to things in the world and the imagery we use to experience and understand the world.

This field was the primary psychoanalytical tool of analysis for Lacan specifically in his earlier work, although he shifted his focus (and the importance) to the symbolic in his later work. Although he did also state the following about the

⁵ These terms -and their meaning- will become clear as I explore them throughout the next chapter.

⁶ A point to note is that, Lacan uses the term imago extensively in his early work -specifically on family complexes- but soon the term fell into complete disuse, as he instead opted to use the term and related concept of the 'imaginary' and image.

imaginary, the relevance of which will become more apparent later in my argument: “The imaginary is not in any sense the illusory, in my view. On the contrary, I grant it its function as real by basing it on biology—that is, as we saw earlier in the IRM, on the innate effect of the imago, which is manifest in all forms of display.” (Lacan, 1985:723)

The **symbolic** was originally a structuralist concept, and for Lacan it was almost synonymous with language, as any psychoanalytic experience that deals with linguistics is part of the symbolic order. Although the symbolic is closely related with language, the imaginary and real also relate to language, but the important part of language that the symbolic relates to is that of the signifier. This means (as in structuralist conceptions) the symbolic is constitutive of presences and absences. Given language's primary importance in Lacan, this translates to the idea that the symbolic would also have a primary importance in Lacan. Similarly to how we can identify the imaginary with the consciousness, we can identify the symbolic with the unconsciousness, Lacan states “The unconscious is constituted by the effects of speech on the subject, it is the dimension in which the subject is determined in the development of the effects of speech, consequently the unconscious is structured like a language.” (Lacan, 1977:149) Thus the subject gains access to this new order, only by being ‘symbolically castrated’, and this is when the primacy moves from the imaginary to the symbolic.

The **real**, which is also the order of the real, is notoriously difficult to explain, given that what we instinctively think of as “real” is not the same as Lacan’s real. In essence we can say that the real is what is neither imaginary, nor symbolic, thus it is what is forever unknowable for the subject, that which escapes our understanding of ‘reality’. Lacan treats it as something that is inherently alien and Othered, and we can associate this with the concept of “Das Ding” in Freud. This is because it is inherently outside of language, it is something that we can neither imagine, nor integrate into the symbolic order. The real is the “hole in the discourse”, thus it cannot be anything like “God” or “Logos”, since it is exactly what we cannot name, it has no absences and falls out of our understanding. (Smith and Ferstman, 1996:77) But we do get to experience the real, but only insofar as we experience traumatic gaps within the symbolic.

These three terms -against the background of Lacan’s engagement with Saussure and Freud- provide a key to his whole body of thought, and permit us to

begin to understand Lacan's theorising of the subject- which I will discuss in the next chapter.

Chapter Two: Lacan's Genealogy of Subject Formation

In this chapter I will outline what I will call '*The genealogy of Subject formation in Lacan*', where I will explain and track the development and process of subjectification in Lacan. In this chapter I will track what the various influences on the subject are, during the different stages of its process of 'subjectification'. I will outline the chronological order of his process of subject formation, starting at birth all the way to the completed subject. I will show the various influences on the subject, as identified by Lacan during each stage, and how the subject of Lacan moves from various dominant influences, meaning from the highly biological premature birth, to the imaginary dominated by the ego, to finally the symbolic dominated by language. In this process I will also specifically argue how and where biological influences can be accounted from Lacan's work directly.

Before I start with this genealogy, an important aspect of Lacan's work that often sets him apart from others in the field, and also why I specifically chose Lacan. Lacan was avowedly loyal to the 'subject' -even though many of his eventual 'descendants' (in Queer theory specifically) were sceptical of the idea of a distinct subject. Lacan went as far as introducing a 'fissure' between subjectivation and the subject. Žižek argues that for Lacan "the subject is prior to subjectivation", that this genealogy does not create what will become the eventual subject, but rather its associated identities. (Žižek, 1988:89) These various complexes and stages are about what makes the subject what it is, instead of the making of the subject, it is also what divides the subject (splits it). (ibid:94) This division, and not being at one with itself will be elaborated later on.

I first will comment about Lacan's writing, to give greater context as to why I am attempting this genealogy. When Lacan wrote about the various aspects of subject formation, did not present these different processes in a genealogical manner. Lacan explained and presented this argument in various scattered pieces that all dealt with mainly the singular processes or complexes, thus most of his work on this "Genealogy" comes from scattered written pieces and parts of his famous seminars. He was particularly known for the 'inconsistency' of his definitions, as at different periods of his work he used the same terms, but with different definitions/meanings. He also occasionally 'drifted off' where he continued on with other related topics, and he was not always clear on many specifics.

This was often his intention, as he was often purposely vague, to avoid making definite claims or speaking on matters that were not definitely proven at that time. He did not want to portray an hypothesis as fact, before he could assemble the necessary data and proof. He seldom gave age ranges that correlated to the different stages of subjectification, and stated on various occasions that these ages and sequences are not always the same for everyone, and that many overlapped. This is also a reason for why different subjects turned out differently. Thus this “genealogy” of mine is an attempt to provide a novel reading of the various texts in Lacan’s work in an original manner.

In this “genealogy” I will track the development of the subject from birth, up till we have the full speaking subject in Lacan. I will specifically highlight where he invoked biological processes that aid in this determination, and also places where we can infer biological influences. This specifically will be shown in the different processes of subjectification (that he argues for) between (biologically different) men and women. One of the most central concepts for Lacan, and what this dissertation will eventually end on, is desire⁷. Desire is a fundamental concept for Lacan, as it is a crucial concept in terms of being an actual speaking subject. For Lacan desire is radically different to needs or demands, and shapes identity in a substantial manner. For Lacan the primary domain of analysis is simply desire, as the goal of psychoanalysis is for the subject to accept and realize their relationship with desire. (Lacan, 2013) Desire does not have an object, it doesn’t exist *‘for’* something. This is because unlike needs or demands, desire cannot be satisfied and relies on substitution⁸. This means when the psychoanalyst is busy discovering “the truth” of desire, this will involve the process of uncovering this ‘substitution’ in the life history of the subject. (ibid) This process of subjectification has three main elements, which Lacan calls a “ternary conception of the human condition” (Lacan, 1985:496) which is nature, society and culture, although he does state that culture can be reduced to language. (ibid) I cannot explain the concept of desire or its importance, without explaining Lacan’s subject fully, that is why I will only return to desire later on after I have provided the necessary precursory knowledge

⁷ I will only really greatly expand on desire later on, as the importance of desire will only become relevant to my argument later on in Chapter 8. That is why I will only fully flesh it out there, to ensure logical coherence in my dissertation.

⁸ Basically the **substitution** of one signifier with another is in essence the same thing as a **metaphor** for Lacan.

Before I start with this genealogy it is important to differentiate between the different 'subjects' that Lacan refers to, he refers to three different types of subjects, namely the "impersonal subject", "undefined reciprocal subject" and finally the "personal subject", it is really only the last one we are interested in. (Lacan, 1985:208) The reason why we only need to care about the third subject, which is the subject that is constituted by an act of self-affirmation, is because this is the only (of the three) subject that Lacan focuses on in his work (that is why from here on I will discount the other two from my analysis). The more important distinction is not this one, but rather the distinction between the subject and the ego. As previously stated, the Ego is constitutive of the imaginary and the subject with the symbolic. He argues that the idea of a conscious agent is a result, or an illusion, or the Ego, but that the subject is in fact "the subject of the unconscious". The subject would only truly emerge (the 'real subject') when we enter the symbolic order (when we formally enter /use language). But this does not mean that the ego has no effect or importance. The relation between them will be fleshed out later on.

Premature Birth and Family Complexes

We can start the **genealogy of the subject** from the moment of the individual's birth, and here we can clearly where Lacan directly includes biology in this process of subject formation. This has to do with the fact that we are born with a certain 'biological lack'. This is a concept is one that he derived from Freud, like most of his psychoanalytic concepts. This biological lack, according to Freud, is of utmost importance to humans, and what can be seen as a defining factor that separates us from other living beings as the "initial helplessness of human beings is the primal source of all moral motives". (Freud, 1895:318) Lacan takes this concept and shows us the initial phase of development is based on diachronic effects due to "the delayed coordination of the nervous system related to man's prematurity at birth, and the formal anticipation of its resolution." (Lacan, 1985:69)

Along with the concept of **premature birth**, he also provides other conditions of birth that relate to human development and the future psyche of the subject. He called these "Interceptive discontent—the pre-natal imago [image]". These are due to the chaos and trauma experienced with birth, the first being 'anxiety', or the precursor form of future anxiety, which is caused by the asphyxia of birth. The second is the cold we experience due to the nakedness of our bodies and skin, the

third being the painful or torturous experience that corresponded to being rocked. These all are the primordial discontent that are due to, what Lacan argued “an insufficient adaptation to the breakdown of the conditions of environment and nourishment that constitute the parasitic equilibrium of intrauterine life.” (Lacan, 1938:18-9)

He takes this concept from Freud, that due to our biological conditions of being born “premature” (i.e. not being able to fend for ourselves compared to other species and developing slower compared to other species) we are born with a ‘biological’ lack, and takes it further. He uses the term lack in a deeper way, however he proposed that the function of ‘lack’ is deeper than ordinarily suggested by others in the field; “It masks the crux of a function of lack with the question of the place that this function can assume in a causal chain.” (Lacan, 1985:69) This original lack is for him the starting point for this process of subjectification as “I currently consider such a function to be the very origin of causalist noesis, which goes so far as to mistake it for its crossing into reality [*passage au réel*].” (ibid) It must be understood that lack plays an important function within Lacan’s conception of the subject as it’s cover being the gateway to the subject’s jubilation. (ibid:70) This is because lack is always related to desire, as it is lack which causes desire to arise in the subject, it is what makes possible the possibility of the subject’s jubilation.

For Lacan the next major part of this process are the various ‘family complexes’ that occur before and during the ‘mirror-stage’ (which will be elaborated on later). This phase of the general process of subjectification is inherently cultural, although he does state that there is no inherent reason why instinct [biology] cannot have a relationship with complexes at this stage. Thus he argues that it is rather that the cultural complexes provide better explanations and are the dominant explanatory force at work. (Lacan, 1938:13) He does say that, for some at least, biology can be a basis, but that eventually culture has grown to overshadow and take on the initial biological role.⁹

⁹ In his work on the ‘family complexes’ we can see -as in many other parts of Lacan’s work- that he does not inherently argue against or reject biological notions of the subject or its influences on the process of subject formation. Instead he believed that cultural, social and linguistic processes provided much stronger explanatory arguments about the subject than biology could (at the time). Thus, Lacan would not necessarily have been averse to including more modern biological arguments, only if he believed they would offer better explanations than social arguments at the time.

The first is the '**weaning complex**', which refers to the weaning or feeding relationship between the child and mother. It represents the "primordial form of the maternal imago". (ibid:14) It is thus the basis, and underlying connection that united the individual with the family, and it is, for Lacan, the most primitive complex in psychic development and "the one that must come to terms with all the complexes that will come later." (ibid:15) Although this complex can seem to be intrinsically instinctual and biological, given the biological response of new mothers to produce milk or babies to suckle, for Lacan, (in humans at least) it is a cultural regulation. The fundamental point about this complex is that it is a traumatic event, no matter at what age it first happens. It will always be traumatic as it "leaves in the human psyche the permanent trace of the biological relationship it interrupts." (ibid:16) But this traumatic event can have different outcomes on the development of the psyche, depending on whether the weaning was accepted or refused by the baby. This is because, at this stage, at best there is only a rudimentary ego unable to make conscious decisions, thus this "primary ambivalence is resolved into psychic differentiations of an increasingly higher dialectical level and of a growing irreversibility." (ibid) Given that this is very early in the development process, these decisions and outcomes of the various weaning attempts and sessions do not directly affect the consciousness. Instead they influence the mental structures that underlie future psychic experiences.

The weaning complex has another even more important component, which is the initial separation of the child from the womb. Given that Lacan argues humans are born premature, this then results in a malaise that cannot be compensated for regardless of the amount of maternal care given. (ibid:20) This initial separation is regarded as highly traumatic given the very important role that the image of the maternal womb plays in the later psychic life of the subject. (ibid:22) Lacan attributed the 'longing' for the image of the maternal womb to various psychological conditions and political ideologies, that were derived from longing for this "paradise" lost before birth and from the most obscure aspirations for death. He does not mean this is a conscious literal longing for the womb, but an unconscious one (which can be used to explain the attraction various utopian political ideologies).

The **complex of intrusion** is the next stage of the genealogy of subject formation, that the primitive subject undergoes, and it represents the experience that the child undergoes when it observes other human beings who also have

relationships with those that the child has relationships with (the parents), or more specifically when the child realizes they have siblings. (ibid:23) The nature of the complex depends on a few conditions, one of which is the order of birth of the child in relation to their siblings and their respective ages.¹⁰ But in general this complex emerges at the moment of a new birth and it is generally the older sibling who suffers. The intensity of this in turn depends on if the older sibling has completed the weaning complex or not. (ibid:34) The child can either be the one who is 'in possession' or the 'usurper', and these two different positions create a jealousy, which Lacan argues is not a 'biological rivalry', but rather a '*mental identification*'¹¹. (ibid:24) This 'mental identification' can occur from the ages of six months to two years, when you pair up two children and observe them forming a certain type of (often adversarial rival based) relationships with one another. Often this emerges as siblings see the other as a rival for the mother's milk, and the child must come to grips with the fact that they are no longer the exclusive object of their parent's desire and attention.

The paradox of these relations between the children is, whether or not one assumes a dominant role and the other a submissive, or one the instigator of seduction and the other of receiver; their roles are actually reversed. The reason for this is, each child confuses their role with that of the other, as they identify with the other, so much so that they can sustain the relationship without the other even participating a great deal. The important point here is that at this stage, the identification specific to social behaviour is based on "a sense of the other that one is bound to misunderstand without a correct conception of its totally imaginary value." (ibid) The image of the other in this relationship is bound to the structure of one's own body. Thus, according to Lacan, this show us that "the sibling is the chosen object of libidinal demands that are *homosexual* at the stage we are studying. But it also stresses the confusion in this object of two affective relationships, love and identification, whose opposition will be fundamental at later stages." (ibid:26) The *primary aggressivity* that emerges in this complex, and which is secondary to the process of mental identification, is what we can identify as the root of the death instinct (or drive) as it is fundamentally the "miseries of human weaning as the

¹⁰ This concept of Lacan relates to a future biological argument I will make in Chapter 7, also about the biological influences of birth order, and I will develop the link in Chapter 8.

¹¹ This is also known as the 'second identification', since the first happens in the Mirror-stage

source of the desire for death.” (ibid:28) This is fundamentally important, because for Lacan, all drives are death drives. What this mental identification also does is, that it establishes the image of the counterpart in the child. The child identifies with their siblings based on the identification of their bodily similarities, the effects of which depend on the differences/similarities in age, gender, body etc of the siblings.

This lead to the next important stage of subject formation, the mirror-stage. This is because the mirror-stage corresponds to the entry of the subject into the **Imaginary order**, which is one of the three registers Lacan uses to understand the subject (the others being the Symbolic and Real). Although, as will become clear later on, the primordial identification that has been developed so far is a primitive version of that which will be developed in the next phase and ‘order’ This is again an example of how these stages and phases in subject formation overlap for Lacan.

The Imaginary Order

The “**mirror-stage**”, is inextricably linked to Lacan’s notion of premature birth. This is the stage where a child is old enough to finally start to recognize themselves when looking into a mirror. (Lacan, 1985:93) Lacan describes a test conducted by Baldwin on human babies and chimpanzees of the same age to compare the difference between the two species. In the experiment the six month old human baby is jubilant and fascinated by its image, while the chimpanzee on the other hand loses interest quickly. This fascination by the human baby continues until 18 months, which Lacan believes is important to human development. (ibid:94) Lacan refers to this as the “triumphant assumption [assumption]”, of the image with the joy experienced by the infant in ‘controlling’ this identification, after they have verified that the image behind the mirror does not really exist. (ibid:185) Thus he estimates that the mirror stage corresponds to the final phase of weaning, when the “dominant psychic feeling of discontent associated with a retardation in physical growth expresses the prematurity of birth that underlies weaning in the human being.” (Lacan, 1938:29)

One of the important reasons why this mirror stage is more focused on the human baby rather than its closest relative (the chimpanzee) is due to the human baby being biologically underdeveloped compared to the chimpanzee at this age. This can be seen in the fact that the baby at this age is not yet able to walk or even stand with confidence, but is willing to overcome the difficulties in their motor skills to

enjoy their self-image in order to “fix it in his mind” (Lacan, 1985:94). Whereas the chimp, who can move and enjoy their image with ease, has no such willingness to do so.

The role of the mirror stage (apart from *identification* which I will discuss in a moment), is to establish a relationship between the organism or the ‘inner-world’ (*innenwelt*) and its reality or the ‘outer-world’ (*umwelt*). (ibid:96) And this type of relationship is only possible due to the “distance at the very heart of the organism, a primordial Discord betrayed by the signs of malaise and motor uncoordination of the neonatal months” (ibid) Thus it is only through this ‘incompleteness’ in the organism that distance or ‘lack’ can be found, on which the subject can be formed. This is what provides the ‘alienating identity’, that will always be present in the mental development of the organism. (ibid:97) This experience as a ‘fragmented body’ is realized in the infant, in that it sees its mirror image as a rival, because it is threatened by the wholeness of the image. This is what gives rise to the ‘aggressive tension¹²’ between the subject and the image. (ibid) This is only resolved with the following process.

This is the process of ‘*identification*’ as it is “the transformation that takes place in the subject when he assumes [*assume*] an image—an image that is seemingly predestined to have an effect at this phase, as witnessed by the use in analytic theory of antiquity's term, “*imago*.”” (ibid:94) This mirror image is what Lacan refers to as the “Ideal-I” (or ‘*ego-ideal*’), and this is what constitutes the ego. Thus this identification with the images, is what marks the birth of the *ego*. But before the ego can finally affirm its own identity, it first confuses itself with the image which forms it, and also subjects it to a ‘primordial alienation’. (Lacan, 1938:32) The confusion of itself with its image is a temporary function of alien intrusion that can be called the ‘*narcissistic intrusion*’. (ibid) The *I* which is formed at this *infans* stage occupies a unique place within the symbolic matrix in the universal, as this is prior to the objectification with the other and before being restored by language. This identification is so central to Lacan that he states that it is “the rootstock of secondary identifications” (Lacan, 1985:94) and it is what situates the ‘ego’, prior to its social determination, it will always be irreducible for every individual. (ibid) For Lacan this stage cannot be underestimated as it “establishes the watershed between

¹² This aggressive tension (as we will see) emerges and develops at every successive stage.

the imaginary and the symbolic in the moment of capture by an historic inertia, responsibility for which is borne by everything that alleges to be psychology, even if it is by pathways that claim to release it from that responsibility. (ibid:69) This is an important point for the later subject as this 'primary intrusion' is what helps us understand the projection of the completed ego.(Lacan, 1938:32) This is where we can see the start of the **narcissistic phase of development**.

Another important part of this development is that fact that the ego is constructed simultaneously with *the other*¹³, as the drama of jealousy is acted out. (ibid) This is because the 'small other', is in essence a reflection or projection of the ego, thus it is an object that can never be attained by the subject. The subject only circles the desire of the small other, but can never be it. The subject has a tendency to gain satisfaction from relating itself to its mirror-image, because the ego brings disharmony into this 'specular satisfaction'. Thus this brings a 'third object' into the subject, and this third object replaces the ambiguities and confusions that come with the mirror stage with the "competition of a triangular situation". (ibid) This situation can then develop into two distinct possible outcomes, due to the jealousy being an effect of the process of identification. The subject can either go back to the maternal object and becomes determined in destroying the other and refusing the real. (ibid:33) The subject's other path is discovering a different object and accepting this object "in the form characteristic of human knowledge", which, as a communicable object, can mean either an agreement or rivalry. (ibid) The ego that is constructed here is not yet constituted of all its essentials, before three years old, as it still requires 'objectivity' that is necessary for human knowledge.

Two core concepts that dominate the process of where the ego models itself on the image of the double (which occurs in the narcissistic phase), are the fantasy forms of "*the phantasy of the phallic mother*" or "*the phallic double of the neurotic woman*." (ibid:34) Where the former fantasy is applicable to both sexes and the latter only for the neurotic¹⁴ women. These can result in 'atypical' forms to develop, and Lacan gives room here for biology. And his following statement is very important to

¹³Note here that other (non-capitalised o) refers to the little or small other, as opposed to the big Other. Lacan here does refer to the small other, although in his early work he didn't yet make a distinction, as he only really fleshed out and expanded the concept of the big Other later on. I will only expand and explain the concept of the Big Other later on.

¹⁴ The study of neurotic and psychotic subjects was a large focus of Lacan, and played a large role in various of his work (specifically due to how they differ from 'normal' subjects). I will not go into this aspect of his work, due to it being not directly related to my point, and due to space constraints.

this dissertation. “Depending on whether the pressure of the sexual ***instinct*** is sufficient or not, this identification of the narcissistic phase can be observed either to generate the formal demands of homosexuality or of a sexual fetishism, or, in the system of the paranoid ego, to become objective as an external or internal persecutory agent.” (ibid)

The term ‘instinct’ for Lacan is a purely biological feature, (note, he does replace the term ‘instinct’ with ‘need’ in his later work) means that even in his early work it seems he gave considerable weight (for Lacan at least) to the idea of a biological influence on sexual orientation. To clarify what he means here, is not that some sexual instinct, or to impose a term Lacan would never have used, some sexual gene, has an *influence*. He is arguing that given a sufficient degree of pressure from ‘sexual needs’ could alter the subject’s identification with the narcissistic phase, which in turn can lead to homosexuality. Thus we cannot attribute to him a pure biological determination of sexual orientation, nor a purely social constructivism conception of sexual orientation, but a mixture between the two, although one that is biased towards social construction. This is a very important point to make in Lacan, as even in his own writing to do we see a subject that attempts to escape the dichotomy of the essentialist and constructionism.

As we move on, beyond the mirror-stage it is important to note that this also marks the end (effectively) of any biological influence or determinism on the development of the subject. This also marks the entry of the subject into the symbolic, and the start of social and cultural (language) process that further shape and determine the subject. (Lacan, 1985:98) As I have stated, he does consider the imaginary to be a realm where biology does have an impact and role, but the symbolic order is a purely social/linguistic realm. This stage in the formation of the subject, which now essentially ends as the subject enters the symbolic order, often follows biological influences that pressured and created various aspects of the subjects underlying structures. This is important, as even when the subject enters the symbolic, these structures and pressures still effect and influence the subject.

The Symbolic Order

The next stage¹⁵ which is one of the most central in Lacan is the **Oedipal complex**¹⁶, which can be seen as part of the ‘child genital drives’ that peak at about the age of four. This complex start by attaching the child, by means of sexual desire, to the nearest object that can offer them a ‘presence and an interest’, which is generally the parent of the opposite sex. These drives are the foundations of this complex and their frustrations are what forms its core. (Lacan, 1938:36) Although these frustrations are inherent to the necessary prematurity of these drives, the child links it to a ‘third object’, which also use the same conditions of ‘presence and interest’ to show the child that this object is an obstacle to their satisfaction, which is normally the parent of the opposite sex. (ibid) This parent appears to the child, through discrete scattered signs about the parents’ relationship, as an agent of an example of ‘sexual prohibition and transgression’.

The tension that is caused by these drives in the child are resolved by two important acts in the child. The first is by a repression of sexual tendencies that will remain latent until puberty, which makes possible the space for other tendencies such as knowledge acquisition. The Second by sublimation of the parental image which will preserve a “representative ideal in consciousness and thereby guarantee that at the moment of puberty psychic and physiological attitudes will coincide.” (ibid) This is fundamentally important as this is what inscribes in the psyche these following agencies, the *super-ego* and *ego-ideal*¹⁷, which represent the completion of the oedipal crisis. The former agency is the one that represses, and the latter is the one that sublimates.

Lacan outlines the Oedipal complex in three stages of moments that signal the passage from the imaginary to the symbolic. The *first moment* is where the child realizes it is not identical with their (if the child is a male) mother’s desire, and thus

¹⁵ I just want to note that these stages (Oedipal and mirror) do overlap, it is not strictly speaking one ends and the other starts.

¹⁶ I should note here that Lacan in his later writing seemed to reconceptualize and lessen the role of Oedipal complex, thus this section relies on his earlier writings. This is not an important aspect for the purposes of my argument, as in both conceptualizations of Lacan the important part is that they both mark the entry into the symbolic.

¹⁷ I would like to remind the reader that in the previous stage, Lacan shows us how the *ego-ideal* was constructed, but here he shows how it is finally fully formed.

seeks to satisfy their mother's desire. The child aims to be the object of the mother's desire, but this demand of the child cannot be fulfilled, due to the mother also having her own personal desires with which the child must compete. (Lacan, 1957:169) In essence what happens is that "it is in a way in a mirror that the subject identifies himself with what is the object of desire of the mother, and this is, what I might call, the primitive phallic stage, that in which the paternal metaphor acts of itself, insofar as, already, in the world, the primacy of the phallus is established by the existence of the symbol, of discourse and of the law." (ibid)

This essentially means that in this "primitive phallic stage" or what he also calls the "imaginary phallus", is when the child believes it has lost its position of being the 'object of the mother's desire', and (because the mother usually directs her desire to the father) believes that he took it because he possesses the 'phallus'. The actuality of this is lost on the child who cannot recognize the process, only the results. That is why the child then comes to the conclusion that, in order to please the mother, it is required to obtain the 'phallus'.

The *second moment*, which takes place on the imaginary plane, is where the father intervenes in order to deprive the mother, what is referred to here as a 'demand to the Other', as what we question about the other "always encounters in the other this other of the other". (ibid:170) What in effect happens in this moment "What comes back to the child is purely and simply the *law of the father* in so far as it is conceived imaginarily by the subject as depriving the mother." (ibid) This is a 'negative stage' that has a twofold effect on the subject; it detaches the subject from its identification, and also simultaneously attaches the subject to the first appearance of this 'law'. This law has the effect of giving an appearance of the mother depending on it and on an object, an object which is not the object of her desire anymore, but instead an object that the other either does or does not have. (ibid) What is essential to the Oedipus complex is that this relationship of the mother is not a relationship with the father, but with his word. Thus, the second moment is characterised by the imaginary intervention of the father, who imposes the law, thus he denies the mother access to the phallic object (her desire) and effectively he forbids the subject access to the mother. This is the 'castrating' role that is attributed to the father onto his child (but it is not the real castration, but in fact just privation), which then means the child maintains a position of 'a-subject (assujet)', the child is 'subjectivated (assujetti)', this is the source of the child's anxiety and phobia. (ibid)

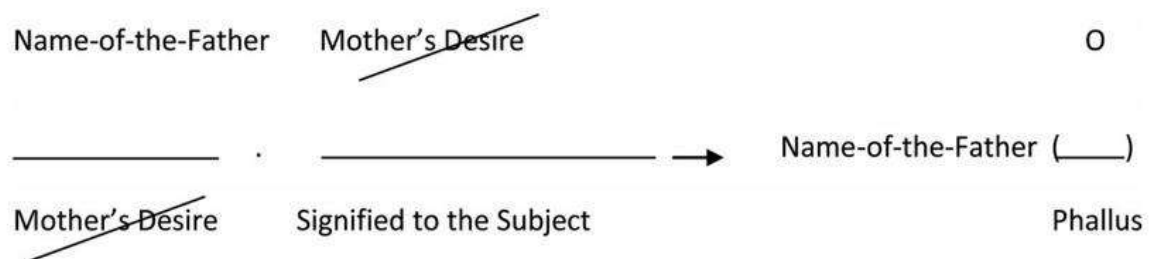
The *third moment*, which is as essential as the second moment to the outcome of the Oedipal complex depends on the following. This depends on the father testifying that he is in fact the bearer of the “law”, the paternal subject’s possession or non-possession of the phallus depends on this. In the second moment, the father may announce that he is a “supporter” of the law, but the essential part is that now the father must prove that he does in fact has the phallus. The phallus is reinstated as the object of desire of the mother, which the father can deprive her of, as he is the one who decides to deprive. The castration that was carried out was actually the privation of the mother and not the child. (ibid:171) This moment revolves around the father being able to give the mother what she wants (because ‘he has it’, because ‘he is powerful’). The relation between the father and mother is on the ‘real’ plane; it is the relation of the ‘other’. When the father reveals that he “has it”, we have the identification called the “ego-ideal”, which comes in this level of the ‘symbolic triangle’. Given that the father “has it” means that the anxiety associated with (the impossible task of) trying to be the phallus for the mother is now removed from the child, who is *symbolically castrated* by the father. This now allows the child to measure itself on the maternal pole (from which reality begins) and to identify with the paternal pole where the “superego” is constituted.(ibid)

It is important to clarify that Lacan claims that the use of the term ‘phallic’ as ‘the’ signifier is not gendered, as the relation between the ‘phallus’ and the subject forms regardless of the biological distinctions between the different biological genders. (Lacan, 1985:686) Although I do want to state that even though Lacan clearly claims to take a non-anatomical approach to his conception of desire, a close reading of his work shows that he does still take a clearly gendered approach. This can be seen in that he specifically argues that the female subject is not completely cut off from the ‘real’ drives. She is not as castrated as the male subject, thus this allows her to more greatly experience the “real” or ‘*jouissance*’. This means that she ‘can be the phallus’, but never be able to have it. This all means that, for Lacan, the female subject is not completely encased in the symbolic -compared to the male subject- and thus closer to the real. Thus although Lacan claims the ‘phallus’ is non-gendered, he does still have some clearly gendered conceptualizations of the ‘phallus’, which means we should take his -mainly in his later work- claim of it being non-gendered with a ‘pinch of salt’.

But what his conception of the 'phallus' actually implies is that, for Lacan, unlike Freud, the mother is the primary aspect of the Oedipal complex, because even though the father is the one who "has" the phallus and castrates the child, it ultimately revolves around the mother's desire. Thus it can be seen as an analysis that emphasizes the mother's desire as the foundation of desire. Thus anything can be seen as a 'phallic object', in the sense that it functions as an 'object of desire', thus when something (like money or success) "makes the subject feel complete", it can function as the phallic function. It then functions as the 'master signifier' for Lacan, which relates to the feeling of lack experienced by all subjects.

An important aspect of this complex for Lacan is 'metaphorization'¹⁸, as it underlies the naming component of this complex. He further explains this by going into more detail about the "the metaphor of the Name-of-the-Father" (Lacan, 2006:465) or the "paternal metaphor" (ibid:463), which are crucial aspects of this complex, he does this by using the following illustration.

This illustration¹⁹ below shows what I have in detail explained above, but I will briefly go into it to ensure that this important complex is clearly conveyed. This illustrated that the representation of the child is -where it first identifies with what the 'primordial other does' (i.e. the mother)- which is constantly disappearing and reappearing. This is because the child does have a signifier for the Mother, but not for the Mother's Desire; as it is unclear what her desire is. (Ribolsi et al, 2015:5) How the child reacts to this is by *believing* that; he/she is the object of the Mother's Desire, thus the child is thus the "imaginary phallus" for the Mother. The paternal metaphor -the signifier of the 'Name-of-the-Father'- substitutes that of the Mother's Desire, which then leads to the creation of a new signification. (ibid) The paternal metaphor is what expresses the erasure in this illustration, as this paternal



¹⁸ Which I will explain later on

¹⁹ The reference for this illustration is, (Lacan, 1985:557) and (Lacan, 2006:465)

substitution for maternal desire is why desire is subjected to the law (of social and cultural conventions).

The important part of the naming -where the Name-of-the-Father names maternal desire- is that it is what allows space for **symbolic identification**²⁰. This process is also what frames maternal desire in terms of various laws and roles that the mother is supposed to occupy. Lacan states that the Name-of-the-Father is also what alters the status of the Other for the subject, as he defines the Other as “the locus from which the question of his [the subject’s] existence may arise” (Lacan, 2006:459) This is the idea at -at the unconscious level- each speaking subject is confronted with questions of their own identity. Lacan states that the three most important are; a subject’s “sex”, a subject’s “contingency in being” and finally “the relational signifiers of love and procreation”. (ibid:459-461) These three questions are all important for my dissertation, although I want to give particular focus on the first of the three at this moment. This is because, this question not only concerned with the sex of the subject, but also how a subject’s sexual identity is shaped, which is an important aspect of my argument.

This illustration he uses ultimately shows that at the unconscious level, we cannot get answers the above mentioned questions. I also shows us that it is the Name-of-the-Father that what gives us a framework to attempt answer them. This is because it gives us a symbolic framework to use to attempt to answer them, through the process of symbolic identification. This is because “people answer questions of their own existence by adopting characteristics they assume make them desirable to others (phallic traits)”. (Ribolsi et al, 2015:5) This is the last aspect of the above illustration, as it is ultimately the ‘phallus’ which is the common denominator to all of the questions related to the subject at the level of the Other. (ibid)

This is important to understand, as this explanation that Lacan has provided, can be seen as one of the ways in which the subject is interpellated into their subject-positions by the symbolic (culture and language). This is important as it relates to how the subject is formed, and specifically the role that the symbolic plays in this formation.

²⁰ A type of identification that is guided by signifiers and that concerns their position toward desire

Lacan and Language

Although every person is already inscribed into **language** prior to their entry into it, as Lacan stated “The subject, while he may appear to be the slave of language, is still more the slave of a discourse in the universal movement of which his place is already inscribed at his birth, if only in the form of his proper name.” (Lacan, 1985:49) Thus we can already see that the symbolic, which is the primary process of subjectivity for Lacan (specifically in his later work), has inscribed into the subject, this is only really meaningful when the subject truly enters into it. The subject’s journey into ‘language’ or ‘the symbolic order’ starts with the mirror-stage and the process of ‘identification’ and is complete when they are finally ‘symbolically castrated’ at the end of the Oedipal stage. As stated, the unconscious is not just structured like a language, but that “The unconscious is constituted by the effects of speech on the subject, it is the dimension in which the subject is determined in the development of the effects of speech.” (Lacan, 1977:149) This also goes further, that even symbols that we observe within society are “inscribed in the radical structures that language unconsciously transmits [to the subject].” (Lacan, 1985:129) Lacan states that the moment people first begin to think about the symbolic order, is because they are already “caught in it in his [their] being” (ibid:53)

The subject was able to form this order, only because of a specific gap in their imaginary relationship with their ‘mirror-image’ that they could enter into the order as a subject. Lacan goes further to state that “But he has only been able to make this entrance by passing through the radical defile of speech, a genetic moment of which we have seen in a child’s game, but which, in its complete form, is reproduced each time the subject addresses the Other as absolute, that is, as the Other who can annul him himself, just as he can act accordingly with the Other, which is, by making himself into an object in order to deceive the Other.” (Lacan, 1985:53)

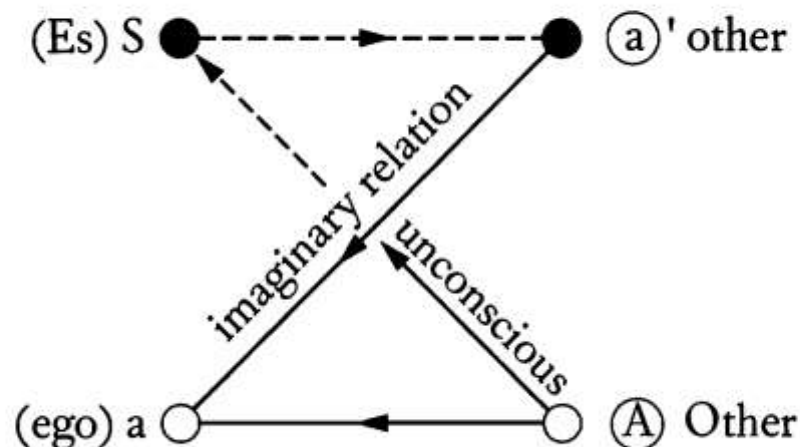
Lacan provides us with the below schema²¹ which he uses to explain the dialectic of this intersubjectivity²². This schema shows us the relationship between the terms [a] and [a’], which represents the ego and the small other (specular image) respectively, and their relationship can be seen as an imaginary relation (due to the

²¹ This schema (the L schema)’s reference is (Lacan, 1985:53)

²² I chose to use this illustration, as I believe it is extremely helpful to explain and clarify what the subject is in Lacan, and how to conceive and relate the various different aspects of intersubjectivity I have mentioned thus far.

fact that it happens on the imaginary plain). This refers to the relation between our (conscious) selves, our ego and the image or projection of our ego in the small other. This is an important relationship for the subject, as it functions to 'block' the relation between the speaking Subject [Es] (the subject *stricto sensu*) and the big Other [A]. This means that we as speaking Subjects [Es] are split into a conscious and unconscious part, where one is barred from accessing the other, due to the imaginary relation. The ego is fundamentally a result of the alienation subjects faced in early development, due to the discord between the actual being and the identification with the external images.

L SCHEMA



This schema shows that we as subjects [Es] cannot direct access our ego, we only have access to the image or projection of our ego in the small other [a']. The dotted line implies that we can only access it through the discourse of speech (or language), as it is our only way of attempting to access the Other [A]²³. The solid lines refer to 'unconscious relationships' that we see between the ego [a] and the big Other [A], and between the ego [a] and the small other [a']. Thus Lacan, when he refers to the human subject, he refers to this schema, where the subject is 'stretched' over all four corners and our relationship to ourselves are through these mentioned processes.

²³ I will not get into it here, but Lacan argues that through speech the analyst can help the subject access their unconscious and, given this schema, that's why we required psychoanalysis.

The Oedipal complex is a very important aspects of subjectification, as it is what makes possible 'desire within the subject'. And, as stated previously, desire is one of the core concepts of Lacan, which plays a significant role in my later argument.

Desire is always the 'desire of the Other', which means that is it inherently illusive and intersubjective, to the point that we can never actually satisfy desire at all. What we desire are not the objects of biological need (such as food or heat), but instead *object a*, which is actually an 'object-cause of desire'. This *object a*, is a 'lost object', it is what makes us desire other objects, as it makes us desire objects that we now believe will make us 'whole'. This desire is in fact the Other's desire -what we can relate back to the complexes I mentioned early, such as the object of the mother's desire- where we want to be the object of desire of the Other, we want to be the Other to desire us. As in those complexes, since we aim to become the desire of the Other, we attempt to determine what their want from us, so we could do it and become their desire. This *object a* is also irreducible from both the imaginary or the symbolic as he stated, "the *a* is what remains irreducible in this total operation of the advent of the subject to the locus of the Other, and it is from there that it is going to take on its function" (Lacan, 2004:189)

An example that Žižek provides comes from a story that Freud used about his daughter. She had a fantasy about sweets while she was sleeping. Freud concluded that it must have been a biological response to a hunger-need for sweet food, but Žižek claims that instead it has a deeper meaning. He estimates that she was most probably eating sweets earlier that day, and when she did so she noticed how it made her parents happy watching her enjoy it, thus her dream fantasy was in fact an example of this desire. As he states that "the fantasy of eating a strawberry cake is really about is her attempt to form an identity (of the one who fully enjoys eating a cake given by the parents) that would satisfy her parents, would make her the object of their desire" (Žižek, 1997B:9)

Thus the process of becoming a subject also includes a constant process of attempting to decipher how to desire, to learn how to 'become the object of desire' as this *object a* is always elusive. This process is highly influenced by various structures, commonly the symbolic and imaginary structures of society, such as social pressure and modern advertising. We can now compare this with the concept of drive, which is not a phenomena that attempts to reach a goal or object, but rather

is a result of the impasse that the subject faces. This impasse in the subject exists, because of what Žižek calls “the night of the world”²⁴, which is the ‘madness’ we experience in our transition from ‘biology to culture’, i.e. when we enter the symbolic. All drives are death drives, thus it is this madness and impasse that makes us sexualized animals that enjoy excess, but still bound to the death drives.

After the end of the Oedipal stage, Lacan states that there are two stages (or as Lacan has also termed them “crises”) that follow that also have significance with regard to the development of the ego and thus consequently on the subject and its identity, these are the stages of puberty and adolescence. (Lacan, 1985:141) The problem is, as far as I can tell Lacan does not provide anywhere (in the texts to which I have access to) a sufficient or detailed account either of these stages. Thus all that we can assume of them, are the general trends he mentions that are common in all ‘crises’ and in subjectification, specifically I mean the post-entry into the symbolic aspects of subjectification. As I have stated, this means that these ‘crises’ would be primarily dominated by linguistic/social influences, given its place in the larger symbolic order. Although, one important distinction between the pre-Oedipal (and Oedipal) and the post-Oedipal stages are, after the Oedipal complex most of the subjectification has already been done, as the subject has already entered the symbolic order and been inscribed by language.

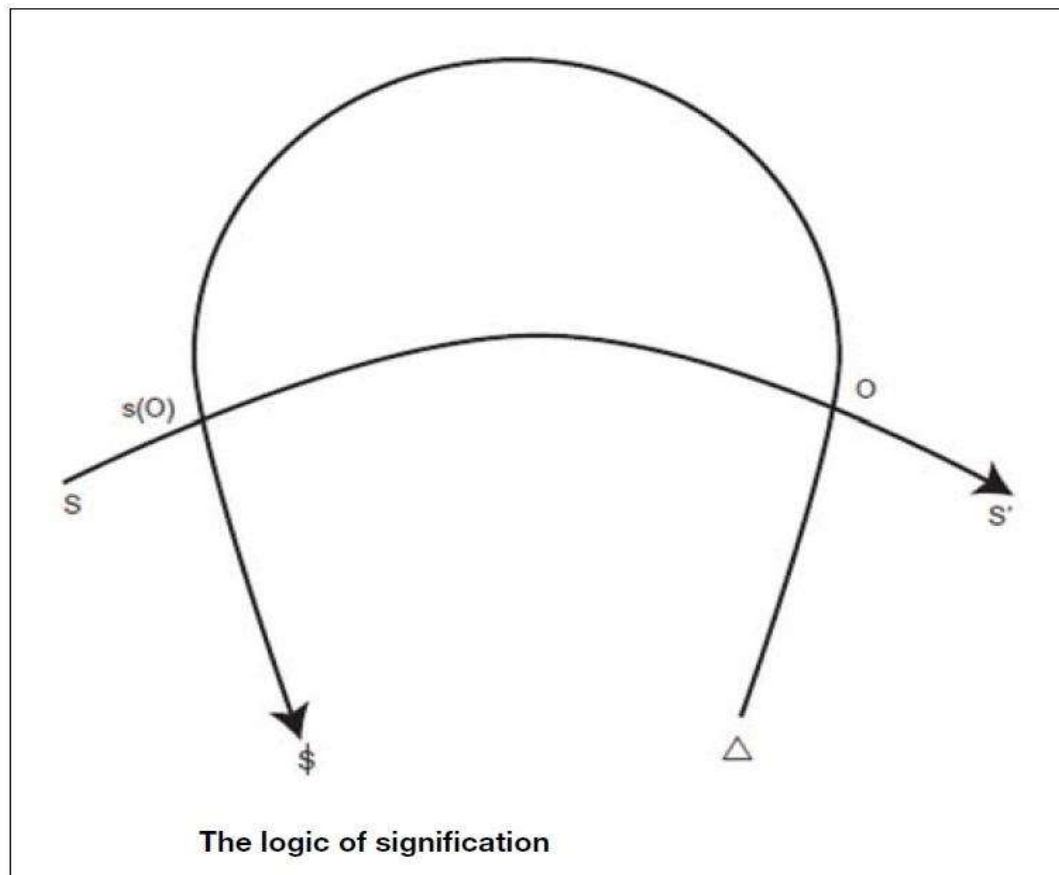
When we look back at all the successive stages in subjectification²⁵, we can see that each produces a “new synthesis of the ego system [appareils] in a form that is ever more alienating for the drives that are frustrated therein, and ever less ideal for the drives that are normalized thereby.” (Lacan, 1985:141) This is what situates the fundamental concept of ‘identification’, where each stage of ‘drive-latency’ is constantly characterized by the domination of an archetypal structure of object of desire. Each of these also add to the ‘aggressive tension’, and this rise in aggression felt by the subject cannot be solely explained by drive frustrations, thus we can say that every form of the ego in each stage contains this negativity. (ibid) “Aggressive tension thus becomes part of the drive, whenever the drive is frustrated because the “other's” noncorrespondence [to one's wishes] aborts the resolving

²⁴ Which I will explain and expand on in the next chapter.

²⁵ These are the stages of Weaning, Intrusion, Mirror-stage, Oedipus, Puberty, and Adolescence.

identification, and this produces a type of object that becomes criminogenic by interrupting the dialectical formation of one's ego.” (ibid:142)

As stated previously, at this point the subject had already moved from the imaginary to the symbolic, thus the structural (linguistic) aspects of subjectification are the final aspect of ‘*The genealogy of Subject formation in Lacan*’. This process of how we produce subjectivity in language is explained by Lacan in the following illustration²⁶.



In this illustration, the horizontal arch moving from S to S' represents how speech is the process of linking signifiers in a chain - which is “a metonymic process that temporally follows diachronic logic”. (Ribolsi et al, 2015:3) I also want to note that speech is only generated when a subject feels the need to articulate a need or intention, which is symbolized by the Δ symbol in the illustration. The line moving away from the Δ indicates the production of meaning and *subjectivity*, which is why the interaction of the two lines are essential. (ibid) The intersection at O indicates the Other or the “the locus of the treasure trove of signifiers” (Lacan, 2006:682)

²⁶ The reference for this illustration is (Lacan, 1985:805)

The part of the arch that is above the two intersection refers to the process we use to produce speech, which is when we choose from all the signifiers at our disposal. We do this by selecting aspects from all of the available signifiers - synchrony- and link them in a chain. The line that goes above the S to S' arch represent the aspect after we have done created this chain. It represents the anticipation that starts to build, this is because when we use signifiers, an idea is expected to come. This means that, for as long as the arrival of meaning is building, it is still suspended. (ibid:446) The intersection as s(O) refers to when the "intention to speak eventually crystallizes in signification; in a message". (Ribolsi et al, 2015:3) Lacan stated that at a temporal level, punctuation follows a 'retroactive logic'²⁷. This is because "it is only if a sufficient number of signifiers have been articulated that meaning can arise. Signifiers that are articulated later will thereby determine the final meaning of formerly uttered signifiers." (ibid:4)

The important aspect of this process of meaning production is -when we generate meaning we also produce subjectivity, thus through the use of language, the subject takes shape, which is represented by \$. This illustration shows how the subjectivity happens through the process of using language, and a central part of this is the central role occupied by personal pronouns. As these pronouns turn into a 'self-referential process', because as we speak, we determine who we are. (ibid) Lacan considered the subject to be an effect of this connotation, and he concludes that the subject is only half-stated. That is why the symbol for the subject -the S- has a bar through it, as the \$ is the result of 'dialectical tension'.

The speech serves the function to build images of who we are, and it is these images that make up the ego. These are selective self-representations of ourselves, as we exclude certain signifiers, and it is these "forgotten" signifiers that is scattered across the subject that the unconscious is made of. (Lacan, 2006) This is why Lacan tells us that the subject is a divided subject.

I want to mention another aspect of Lacan, that I will discuss before moving on, this concept is the *Death Drive*. Lacan does not situate his death drive in the imaginary, but rather in the symbolic. He is very clear in that he argues -contrary to what Freud argued- that this drive is not a consequence of biology, but instead rests

²⁷ I will return to the idea of 'retroactive logic' (albeit in a different manner) later on in this dissertation, in the following chapter briefly and more thoroughly in Chapter 8.

firmly within culture. (Lacan, 1985:102) The reason why this drive is so important to Lacan, and so well-known of his drives is because he states that “every drive is virtually a death drive”, and he argues this because of three different reasons. (ibid:844) The first is, because every drive is essentially in pursuit of its own extinction, and that every drive always involves the subject, and finally that every drive is an attempt to move beyond the ‘pleasure principle’ or ‘jouissance’. (ibid)

Conclusion

As I have shown, when we do a careful and thorough reading of Lacan we can clearly see how the subject is formed and the various influences that help determine the subject and its various drives and complexes. We can also see that biology does play a role in this subject formation, specifically in the early development of the subject -during the premature birth and family complexes stages and the entry into the imaginary stages. The subject is then effectively determined by socio-cultural influences when it enters the symbolic, but this does not remove or negate the previous influences or developments the subject got during the stages where biology still played a substantial role. This can most clearly be seen in the role of biology in the development of drives and complexes in the pre-symbolic stages. We can reconcile this in the symbolic stage with the idea of floating “signifiers” (developed prior to entry in the symbolic) that still remain part of the chain. Even those which do not remain, do not disappear, but end up in the unconscious where they still influence the subject.

This means that when we consider the Lacanian subject, we can see that it is ‘linguistically-overdetermined’, but that does not mean it is non-biological. What I mean here is that those drives, complexes and the development on the imaginary order (on the left side of the L Schema) have significant biological influence. These influences are then ‘overdetermined’ by the socio-cultural influences we receive through the unconscious by the big Other’s desire²⁸ (Symbolic Order), thus my re-reading of Lacan does not deny the significant influence that the language has on the subject (as Lacan did believe it was the most influential determinant). It merely reasserts the idea that, although the symbolic has the dominant (overarching) influence it still competes with biological influences on the subject (that the subject

²⁸ As I stated I will explain this in greater detail later on.

acquired in the early stages) with regards to subject identities and determinations. This is merely my re-reading of Lacan, as I believe we can substantiate this in his own work (as I have shown here) my work in this dissertation is to take this starting point of a partially biological subject in Lacan and go further with it. I will argue that we can reconceptualise and substantiate a subject in Lacan, that incorporates modern neurosciences and biology.

Chapter Three: Žižek and his developments on Lacan's Subject

In this chapter I will explain Žižek's conceptualization of the subject and his reading and developments of Lacan. Žižek has stated multiple times that he is a student of Lacan, and his work is a development of the Lacanian canon. He is generally considered to be one of the foremost contemporary interpreters of Lacan by many modern scholars²⁹. I will explain his reading of Lacan and his developments of Lacan, specifically with regards to biology. Given that he is a contemporary author who has access to modern biological knowledge that Lacan did not have, and given the modern prevalence of Queer politics and theory (which Lacan also did not have), he is able to provide a Lacanian inspired work on these various topics. I will examine his work and conceptualization of the subject with regards to biology and its role in the subject and his work on the Queer subject.

Žižek is not just a Lacanian -although his thoughts, like Lacan's are also a combination of structuralism and psychoanalysis- as his work fuses Lacan with Marx and Hegel. He provides both a more modern analysis of the Lacanian canon and an alternative approach. Thus I will not provide the same sort of genealogy of Žižek as was done to Lacan, as his work is much too scattered to achieve such a coherent genealogy, as is possible in Lacan.

Žižek is not an easy author by any means, and I think the most apt description I have read about Žižek comes from a review by Rex Butler, who wrote an article that was a response to Sean Homer who in turn wrote a response about Žižek³⁰. The important part is that Homer (although he disagreed with Žižek, agreed with him about some points) was responded to by Žižek who's response to Homer's article included "To put it with some irony, I do not even agree with Homer where Homer agrees with me." That statement is a good characterisation of Žižek, but a more apt description about Žižek was Butler's response to Žižek's article "But Homer should perhaps take comfort from the thought that Žižek also does not agree with himself when he agrees with himself." (Butler, 2016) That is also why some of his work or concepts in this chapter might seem contradictory or at odds with other work, as Žižek -like any authors- also changes and develops over time. Given his difficult and

²⁹ The adage of 'He wrote the book on it' is true for him, since he literally wrote the book called "*How to read Lacan*".

³⁰ Confusing right?

scattered writing style often makes it difficult to understand his views, and which he has disregarded or altered.

As stated, a major trend in contemporary social sciences, specifically poststructuralism and Queer theory is 'deconstruction' and the rejection of the category of the subject. Contrary to this trend we have Žižek actively addresses and names the subject, and in fact not only does he move against the current deconstructionist tide, but he tries to produce a substantiated subject. (McGowan, 2010:7) In his attempt to substantiate the subject, he does so by arguing against a biological reductionism and by trying to account for agency within his conception of structure. For this section, I will discuss how he conceptualized the subject, its relation to biology and his conceptualization of the 'Queer' subject.

Žižek and the Subject

To understand his subject, we first need to understand how Žižek links his conception of freedom in the Subject to Freud, as he links his 'negative' act of freedom with Freud's "death drive". This is because the death drive for Freud can also be read as a drive that seeks to prevent a person's natural tendency towards pleasure. The death drive is not a biological condition, but rather it is a "notion indicating that the human psychic apparatus is subordinated to a blind automatism of repetition beyond pleasure-seeking, self-preservation of life, accordance between man and his milieu." (Žižek, 1988:88) The death drive is not merely the result of social alienation or the symbolic interpellation, but it is something that is fundamental to the "human condition". There is no way to overcome this radically negative dimension of the human subject, thus this means that for all of human culture, the symbolic is in fact a reaction to this condition. (ibid) This conception is essentially the same as Lacan's concept of the subject that is not one with itself, where the subject is alienated from itself due to a 'traumatic kernel' at the heart of the subject. This trauma is due to the disconnect between the death drive inherent in the subject, and their cultural interpellation against it.

Thus when we aim to define what the subject is according to Žižek, we must first understand this above mentioned concept of 'self-alienation' and the trauma associated with it. This is because, the idea that the subject is not identical with itself is crucial to both Lacan and Žižek. As Žižek stated we must first "distinguish the experience of antagonism in its radical form, as a limit of the social, as the

impossibility around which the social field is structured, from antagonism as the relation between two antagonistic subject-positions: in Lacanian terms, we must distinguish antagonism as real from the social reality of the antagonistic fight.” (ibid:92) Thus he argues that the Lacanian process of subjectivation -that of assuming different subject-positions- is exactly what allows us to prevent this ‘traumatic experience’. This is because each identity of the subject -the subject-position- is defined by a ‘limit’, and that this limit is inherently necessary, as it is exactly what sustains the subject. (ibid) Thus for Žižek, the subject in the Lacanian sense is “the name for this internal limit, this internal impossibility of the Other, of the ‘substance’.” (ibid) Thus the subject can only exist if its full realisation is prevented, it is a paradoxical entity that only comes forth as a ‘limitation of a positive condition’. Thus for Žižek the subject is merely a correlative to the remnant which has resisted subjectivation.³¹ This means that for him the subject is not the result of the process of subjectification, but rather what parts of the subject has resisted this, meaning what resisted interpellation from the symbolic order.

Žižek also states that the Lacanian subject before subjectivation or “before subjectivation as identification” is the subject as merely a subject of a question. (ibid) He does not mean to imply that the subject is the traditional subject that exists merely as a questioning agency, but instead that this subject is not a question, but an answer. For him the Lacanian subject is “the answer of the real to the question asked by the great Other, the symbolic order” (ibid) The subject represents not a question, but the impossibility of providing any answer for the question. It represents this void. For Žižek this is very important, because he associated the mere act of questioning -irrelevant of the actual question asked- to be anxiety producing, that from a young age everyone associates questions with guilt. Even if you can provide a response that successfully vindicates you from any possible or implied accusation (even if the question was mundane and not accusatory), this is because for him guilt already has been admitted on the level of desire. (ibid)

This is because the true power of the question, what makes it inherently indecent and guilt provoking, is that it forces what should be left unspoken out into the open. For Žižek this is an integral part of the Totalitarian power relation, which can be seen in any authority relation. This is seen when the subject asks an authority

³¹ I will expand on the implications of a ‘limited’ subject on my argument in Chapter 8.

figure a question, not because they are really interested in the answer, but because they want to catch the authority figure out -prove their incompetence, their lack. He relates this with the above mentioned Lacanian concept of the subject not being at one with itself, with Lacan's divided subject. When we connect these different aspects of Lacan's work, we can state that "the subject is an answer of the real (of the object, of the traumatic kernel) to the question of the Other." (ibid:94)

This is how we should read the subject, one which is 'hysterized' by the guilt effects of being asked unanswerable questions by the big Other. The subject is constituted by the division that exists within it, from the division in the subject between itself and its "traumatic kernel" -that is due to the Freudian death drive. Thus the subject before the process of "interpellation-subjection" is an anxious subject that is hysterized by the question of the other, but this (structural) process of interpellation- which assigns the subject a 'symbolic mandate' or 'symbolic identity'- is what helps the subject to evade the "dimension of the Thing" and recognize themselves with this new identity. (ibid) This is not the only way to avoid the "hysterical deadlock", but it is the primary way, others include the process of psychoanalytic therapy.

We must note that Žižek argues that the aspect of our subjectivity that escapes our symbolic identity is not the part that is determined by our personal histories and experiences, but instead this aspect of 'self-relating' negativity. (Žižek, 1999:259) This is because the interpellation process is not completely successful, there is a "misunderstanding", when we miss recognize the call of the Big Other. He uses a very clever example to explain this phenomena, the example of a theatre show in Slovenia. One of the patrons of this theatre was very late, and halfway through the performance he started to shuffle his way through the seats past the other patrons to his seat. At the very same time that was happening, one of the actors on stage loudly articulated his line in the play of "Who is disturbing my silence?" The poor patron then misrecognized this line as directed towards him, and loudly responds that he is very sorry for his disturbance, as he was late due to car problems. (ibid) The point here is that the 'call of the Other' was misrecognized by the subject as being directed at him, whereas in fact it was not direct at him- it was a *misrecognition*.

This example he uses is effectively an alternative version of the classic Althusserian example of interpellation, of the police officer shouting "Hey, you

there!", and only when we stop and respond to the call of the police officer do we recognize and constitute ourselves as the subject of the big Other, of power. The same underlying principle is that the call was not directed towards specifically, but by stopping and turning around we recognized the call to be for us. And ideology is this exact same process that "transforms the individuals into subjects". (Žižek, 2016B) This process of hailing hardly ever missed their target, and he argues that even the fact that 'guilt feelings' are prevalent in many people can't account for the 'accuracy' of the calls. He states that "The existence of ideology and the hailing or interpellation of individuals as subjects are one and the same thing" (ibid), thus ideology is what creates subject. This is in a sense the Lacanian 'symbolic' for Žižek in contemporary political society.

The reason why the call is so 'accurate' when people respond to the hail is because of Lacan's argument that a letter "always arrives at its destination", this is because -given the timeless character of the letter- it cannot miss its addressee, as "it is only the addressee's recognition/acceptance that constitutes it as a letter". (ibid) This statement is in fact a 'double denial' of the traditional conceptualization of the interpellation process, as the first denial is of the 'guilt feeling' as an explanation of this process, and the second denial, is a denial of the 'temporality' of this process. He argues that the reason why second denial argues for a 'timeless' character of the interpellation process is, because *stricto sensu* "individuals do not "become" subjects, they "always-already" are subjects" (ibid) and thus this denial is a 'Freudian denial.

That is why he states that in this police officer example, the response by the individual is an inconsistent mixture of different elements. The first is a response of "Why me?" as the individual tries to understand why they were singled out given their innocence, and this response is always accompanied by the second element. This element is an unclear "Kafkaesque" feeling of abstract guilt, where when the individual is confronted with power they gain this feeling that they are "a priori terribly guilty of something, though it is not possible for me to know what precisely I am guilty of." (ibid) This is compounded by the fact that because the individual does not know why they are guilty in the first place, that makes them more guilty, and it is this ignorance that makes them truly guilty.

These two different elements of the response of the individual to the call is the Lacanian structure of the split subject between innocence and abstract. (ibid) It is the

indeterminate guilt when you are faced with the call from the Other, as you are also not certain what the Other actually wants from you (“Che vuoi?”). This is the process of “interpellation prior to identification”, which is “prior to the recognition in the call of the Other by means of which the individual constitutes himself as “always-already”-subject, we are obliged to acknowledge this “timeless” instant of the impasse, when innocence coincides with indeterminate guilt” (ibid) That is why, we finally assume a symbolic mandate and recognize ourselves as subjects -i.e. ideological identification- solely as a way to finally answer this impasse. This is what he argues is missing from Althusser’s concept of interpellation, is a ‘vanishing mediator’ of the uncanny subject that precedes subjectification, that becomes invisible when we finally achieve symbolic identity.

Žižek and Biology

To understand how he conceptualizes the role of biology in the subject, we first need to explain a few concepts. And Žižek, as usual, best explains concepts by relating it to popular culture. The necessary concepts to understand are the following two concepts; that the conditions of an event’s actualization are that the event must; first be ‘noticed’ or ‘being-aware-of-it’ (in the same way as quantum physics); and that there exists a delayed temporal aspect of this event. (Žižek, 2009:201) The first of the two he explains using a classic staple of (what I call) “cartoon logic”, where when one character chases another off of a cliff, but does not fall down. It is only after the character looks down, and realized that in fact there is no ground beneath them, did they actually start falling. This is a clear example of the act not actually taking effect (actualizing) until it has been registered by the subject, the character does not fall down until they look down and realize there is no ground beneath them. The second example is where a subject is busy observing an event, but does not actually realize what is happening, until it’s too late. This example is where a character sees someone driving away in their car (i.e. someone just stole their car), the character then actually waves at the thief, until they realize that it is their car, at which point it is too late to stop the event. The second example serves to explain the fact that not only can a subject fully observe the event as it is happening, but that does not mean that the subject actually registers what is happening, and when they do it is too late already. (ibid)

These two procedures have a profound effect of consciousness for Žižek, as he states “Consciousness is in itself deprived of any substantial role, merely registering a process that goes on independently of it—yet this registration is crucial if the “objective” process is to actualize itself.” (ibid) The reason why these points are of paramount importance for Žižek is because of how he conceptualizes the ‘human self’ when he introduces a biological comparison. To fully understand this, I first need to explain what Žižek calls the “problem of evolutionary cognitivism”. The problem revolves around how we account for the emergence of life, in the sense of conscious life. Meaning how do we account for the collection of non-conscious parts of the human body forming to create ‘something bigger than the sum of its parts’. This implies two things; firstly how does consciousness emerge from non-consciousness and secondly how do these different individual parts form to create a distinct self-identical organism. He uses the example given by Francisco Varela to explain the notion of *autopoiesis*, and links it to the Hegelian notion of life as a teleological self-organizing entity. (ibid:205) Before I can I explain that I first need to go into more detail, as to what and how a free act is possible for the subject, as it relates back to how the subject is formed.

Žižek explains the concept of the free act in the subject by again relating it to a popular culture reference, specifically the movie “Minority Report”. In this movie Washington DC’s police have a “PreCrime” department where they are able to predict future crimes, thus reducing the crime rate to zero, as they can stop any crime before it happens. At the end of the movie the main character -a police officer named Anderton- was predicted to shoot and kill a criminal (one of the predictions of the PreCrime department), but just before he shot (as he was predicted to) he had an ‘ethical act proper’ and went against his predicted future by not shooting the criminal. This act, which is inherently a negative act, this is ‘Libet’s “Hegelian” insight’ that the “elementary act of freedom, the manifestation of free will, is that of saying no, of stopping the execution of a decision”. (ibid:202) Thus Žižek points that the most fundamental freedom is not ‘positive liberty’ -to act without external constraints on action- but rather to not do something, to go against what you want to do, what you were ‘interpellated’ to do. (ibid)

A question anyone might rightfully ask is, how can this free act be possible? How can an agent act in such a way that is counter to their “future destiny”, or what they have been interpellated into. This is because this ‘free act’ radically alters the

coordinates of the entire situation, as he puts it “Anderton [the subject] breaks the closure of future/past possibility. The idea that the emergence of a radically New retroactively changes the past ... [the] past possibilities, or, to put it in more formal terms, the truth value of the modal propositions about the past.” (ibid:201) He is effectively saying that a current act is what enables its own possibility, retroactively. This notion of retroactively enabling the decision you are making, by making the decision is a crucial part for the following argument.

As stated previously, he uses the explanation that Varela provides with regards to the process of the emergence of cellular life, when can be described as a ‘logical bootstrap’, as : “a network produces entities that create a boundary, which contains the network that produces the boundary.” (Varela, 1996:212) The bootstrap is that a self-distinguishing entity exists, because it produces its own boundary, it creates itself and distinguishes itself as separate from its environment. One of the important aspects to draw from this is that the entity itself is what establishes the ‘boundary’ between its inside and outside, even if the content of the inside and outside are effectively the same³². Thus -when extrapolated to the realm of the subject- it can be said that the subject ‘creates its own causes’, that the subject self-distinguishes itself through retroactively setting the limits of its own emergence. This relates to the Hegelian concept that the external limitation turns into an internal one when life emerges. (Žižek, 2009:201)

The important part of the subject -as with the biological human organism- is the boundary between the ‘outside’ and ‘inside’, and what the conceptually we mean by ‘inside’. This relates to the biological question of what constitutes the human self, as he argues that there is no “substantial density” or “hard kernel” that guarantees the consistency of the self. (ibid) He argues that there is in effect no Self, as for him the self is not some inner substance or kernel that controls (and is essentially what constitutes the ‘self’ of the organism), rather it is a surface effect. He argues that when we look at the self, there is nothing behind the surface, no fundamental essence, instead it is merely a collection of ‘selfless neuronal machinery’. (ibid) This is because the subject is just an appearance that is brought about by self-reflection, as it is “something that exists only insofar as it appears to itself”.(ibid)

³² From a purely materialistic biological standpoint.

That is why Žižek argues that any real investigation into the 'kernel' or 'core' of subjectivity is inherently going to fail, as there exists nothing beneath the surface of the subject, as it itself is only the surface appearance of the self. What this means is not that he disavows the subject in itself, like some other authors, but instead this means that he argues against some 'German idealist' conception of the subject as having some inherent essence. This is again where we can see this debate of essentialism and constructionism being played out, where the false dichotomy is that denying an essence also means you have to deny the subject, which is untrue.

This is not the end of the journey for the Žižekian subject, as he not only described the subject before subjectification, but also the subject after subjectification. This is because when a subject has been interpellated into their identity by these structural processes, that seems to undermine the role of 'agency' or the possibility of 'revolutionary change'. Thus Žižek makes possible for the emergence of an agent (that is not determined by the structure) from the process of interpellation, this happens when the subject has gone through the 'two deaths', these are the symbolically dead and the 'night of the world'³³. (Žižek, 1999:125-224) His subject can only become an 'agent' of 'self-negation', when all of the social identity that it has been interpellated into it has been erased. This is because his subject is still weighted down by the 'constraints of identity' as even an undecidable identity constrictive. Thus in order to achieve a new identity, you need to self-negate meaning to 'wipe the slate clean', as his subject is a "pure void between signifier[s]". (Hudson, 2006:309) This process -according to Hudson- is "an act which explodes all symbolic co-ordinates and determinations is logically presupposed by the construction of a new objective order in which social identities have been transformed." (ibid) The subject is completely 'wiped-clean' from all identity markers it has been interpellated into, this is the only way that it can be able to act and make decisions that have not been determined by structural interpellation.

This process, which can be read as a radicalized version of Laclau's ³⁴, is a necessary process, because it is what distinguishes a subject from an object. This is because if we conceive of consciousness as the "circuits" between the present and

³³ This is the abyss of pure subjectivity.

³⁴ His conceptualization is that there is 'space for the subject' when the 'structure breaks down', as for him the subject is "nothing [but] the distance between the undecidable structure and the decision" (Laclau, 1990:30).

the past, our inputs and memory, or a retroactive route that first passes through the past then the present -as Žižek does- we will still not be free subjects. This is because there is no consciousness without self-consciousness. As Žižek states “not only does the “I” emerge as the self-relating interaction between the present and my own past; what we call “Self” is the elementary form of escaping the “control of solid earth” through self-relating.” (Žižek, 2009:213)

The important part of the ‘self-relating’ is not when the subject has stopped generating neural activities around the inputs, but instead when it “generates its own “object”, the focal point around which its activity circulates”. (ibid) This is a crucial part of the emergence of consciousness, and it does relate to the Lacanian *objet petit a*³⁵, as it is where the neural activity revolves around, and it is created by the very same processes by which it reacts to. This is analogous to the idea of a cause is determined by its own outcome, retroactively. This means that the ‘Subject’ does not exist, until the activity of ‘self-positioning’ that it itself causes. This leads to *objet petit a* as the paradoxical object which directly ‘is the subject’. (ibid)

What this means is that the subject is its own cause in a sense, a better way to explain this through an example he used in a public lecture Žižek³⁶ on how a ‘free choice’ is possible. He uses the example of love³⁷, stating that it is a choice, as obviously no one can be forced into loving someone else. The problem is, no one decides to fall in love, we just all of a sudden one day discover that we are already in love with a person. He states that the “choice always already happens”, and that it must be an unconscious choice. Thus he argues that love is neither a results of social constructionism or determinism, as he argues that it is the result of an unconscious decision, which is a “free determinism”. Using a Freudian/Lacanian idea, he states that it is not determined in your conscious ego, but at a deeper level, as it is a free choice. The idea is that we chose ‘retroactively’ that we are in-love, but at a deeper level, not on a conscious level of our ego.³⁸ I mention his conception of a

³⁵ Meaning Object-Cause of Desire, which I will explain later on.

³⁶ A Public Open Lecture for the students of the Division of Philosophy, Arts and Critical Thought, European Graduate School, Saas-Fee, Switzerland on the 3rd of August 2018. Titled ‘Disorder Under Heaven’, found at <http://zizekpodcast.com/2019/06/15/ziz236-on-the-ideology-of-happiness-13-06-2019/>

³⁷ Which seems to be based on Badiou’s work on love, although he does not mention Badiou in this lecture.

³⁸ This paragraph relies on the previously mentioned public lecture recording.

free act, as it related to his idea of the subject being its own cause retroactively, although I will explain this concept in much more detail later on in Chapter 8.

One thing that should be completely clear is that Žižek claims to be a materialist, although as Johnston argues Žižek isn't always consistent with regards to his position, or clear in his explanations. He argues that Žižek relies on "a materialism resting on Lacan's *"le grand Autre n'existe pas"*³⁹ as a central ontological principle" (Johnston, 2012:326) He also argues that between the two opposing forces of Nature and Culture, there is an un-derived third vector that Žižek has called the "night of the world", "the death drive" and the "vanishing mediator", which is the "root-source of what comes to be subjectivity proper in and for itself (\$)." (ibid:327)

The problem is that, Johnston claims that in Lacan both nature and culture are equally barred -both are inconsistent and conflicted- and this is incompatible with Žižek's mysterious third force. Johnston argues that there are "two Žižeks"⁴⁰ one that is bound "on the one side, Freud and Lacan, and, on the other side, Damasio and LeDoux." (ibid) Thus he argues that Žižek is not a true materialist as he doesn't truly account for the material side (in this case biology/nature), even though he himself claims to be a materialist. We can see Žižek's position in the following statement "simply because the opposition between nature and culture is always-already culturally overdetermined, i.e., that no particular element can be isolated as 'pure nature,' does not mean that 'everything is culture.' 'Nature' qua Real remains the unfathomable X which resists cultural 'gentrification'". (Žižek, 1993:129)

The unfathomable X for Žižek is "a pure difference that is an object in and of itself" (McMillan, 2013:83) It is what the symbolic system of absences cannot access, and what the real also cannot access. The 'Parallax View' produces "multiplicity of symbolic perspectives" around this 'unfathomable X'. (Žižek, 2009:18) As it is not able to be captured by these symbolic perspectives.

Žižek and the 'Queer' Subject

How Žižek conceptualizes of the Queer subject, and how it fits into his work has been a source of controversy, as he has been accused of being homophobic and/or transphobic in his work. His work is still useful in this regards, as it serves as

³⁹ Translated to "The Big Other does not exists"

⁴⁰ And since Žižek is a Lacanian, Johnston says he probably won't mind being described as having a split subjectivity.

an example of how a modern Lacanian poststructuralist conceives of the 'Queer' subject, outside of "Queer theory". Before I explain this, I need to provide some background, as the only real written works where Žižek actively engages with this topic (although there are various non-written public lectures and interviews, which are less detailed and descriptive) are two opinion pieces he wrote. The first of these two written pieces landed him in some controversy, which is why he wrote the second as a response/defence. That is why the second is titled -"*A Reply to My Critics (re: The Sexual is Political)*". The fact that he has faced criticism for something he wrote/said is not unique to this instance, as Žižek is often faced with public and intellectual criticism -as opposed to public/intellectual disagreement. What I mean is that his critics often misunderstand him and his argument, and thus target their criticism to some of his misleading statements. As public criticism I would argue is often focused on problematic sounding statements of his, instead of what he actually meant and the theory behind those statements.

In Žižek's first article, he makes a claim about "transgenderism", that to me also seems indicative of contemporary Queer theory. In that claim he states that "The first thing to note here is that transgenderism goes together with the general tendency in today's predominant ideology to reject any particular "belonging" and to celebrate the "fluidification" of all forms of identity." (Žižek, 2016A) I would argue that could possibly be seen as analogous to Queer theory, although he specifically refers more to modern liberal beliefs in western society. He argues against their -what he called "proto-fascist"- renunciation of grounding. (ibid) In this article -the first of the two- he argues that he believes there is a tension within transgenderism, as transgender subjects defy every prohibition, they are also simultaneously hyper-sensitive by 'forced choice', as he states "If they so proudly insist on their "trans-," beyond all classification, why do they display such an urgent demand for a proper place?" (ibid)

He does however have a point in this exercise, which I would argue definitely divulges into a slippery slope argument at various points. This point is that this anxiety and difficulty in recognizing oneself in prescribed sexual identities is not unique to transgendered people, but also in "normal" heterosexuals. (ibid) That is

also why he argues that the formula of “LGBT⁴¹” was changed into “LGBTQIA⁴²” and even further to much longer ones, that eventually ‘ended’ in LGBT+, where the plus was just a sign for all other identities and communities that were part of the LGBT group, as a sort of ‘catch-all’ symbol. (ibid) He ‘dialectically’ attempts to answer (a question he posed himself), which is, what does the + stands for? By this he means, if it is just a stand in for everything else not mentioned or alternatively if a subject can be a ‘+’? He answers that yes we can be a ‘+’. This is because, every grouping requires an “exceptional element” that does not clearly belong in it, that in effect gives it body. As he argues that the often included groups in the acronym such as “allies”, “asexuals” and “questioning” do not actually belong as they are not part of the LGBT group. This is because the first are just “honest non-LGBT individuals”, the second in fact “negate the entire field of sexuality” and the last are just “floating around, unable to adopt a determinate position”. (ibid) It is in fact these types of exemptions that give body to the concept of LGBT, as they do not clearly belong to the LGBT group, nor “normal” heterosexual discourse. That is why they are required to be placed in a separate grouping, as this is the only way to find a solution to this deadlock.

He uses the classical Lacanian formula on the sexual relationship as impossible/real, which is “1+1+a”. This means that there are two sexes and third aspect (“a”), which serves as the “bone in the throat”, which is the element that “prevents its translation into a symbolic difference”. (ibid) As this third element doesn’t stand for what is not included in the formula -such as intersex for example- but rather it is representative of “(the real of) difference as such.” (ibid) This is the same sort of “primal scene of anxiety” that transgender people face, as he claims that he faces the same anxiety. He states: “I stand in front of standard bi-gender toilets with two doors, LADIES and GENTLEMEN, and I am caught up in anxiety, not recognizing myself in any of the two choices” (ibid) He argues that this anxiety of non-recognition of sexual identities is something that is standard in the experiences of the subject, including heterosexual subjects. He argues that “In short, transgender people are not simply marginals who disturb the hegemonic heterosexual gender norm; their message is universal, it concerns us all, they bring out the anxiety that

⁴¹ Lesbian, Gay, Bisexual and Transgender.

⁴² Lesbian, Gay, Bisexual, Transgender, Questioning (or Queer), Intersex and Asexual (or Ally?).

underlies every sexual identification, its constructed/unstable character.”(Žižek, 2016B)

He argues that this anxiety is due to the anxiety associated with (symbolic) castration, as whatever choice a subject makes, they will lose something -and what you lose is not something the other sex has. (Žižek, 2016A) This is because, returning to the Lacanian formula mentioned above, both sexes don't form the whole, as there is always something lost in the division of the sexes. This is because when you make a choice, you “assume the loss of what the other sex doesn't have, i.e., I have to renounce the illusion that the Other has that X which would fill in my lack.” (ibid) That is why he argues that transgenderism is in fact an attempt to avoid ‘castration’, and its associated anxiety, as they create a space that allows for various different choices, none of which bears the marks of castration.

He does agree with the trend in “deconstructing”⁴³ the sexual positions we have in our current society, by “de-ontologizing” it, as he argues those sexual positions are contingent historical constructs that naturally are not consistent and filled with internal tensions. (ibid) He does however state that this trend that attempts to break the straightjacket of heteronormative sexual positions, will not achieve their goal. Which is the belief that when we achieve each of these sexual identities (in the broader LGBT grouping) it will remove this tensions and inconsistencies, as each of these identities have their “complete ontological consistency”. (ibid) He argues that this attempt will always fail as the “Lacanian standpoint, nonetheless, the antagonistic tension is irreducible, as it is constitutive of the sexual as such”, and that no amount of subdivisions and categorization of diverse sexual identities can protect or prevent this tension that is inherent in the sexual. (ibid) This does not imply that he means that ‘homosexual’ or Queer sexual positions are inconsistent. Rather that all sexual positions (including heterosexual ones) are inherently antagonistic and filled with tension due to how sexual relations are in general.

He also argues, that the reason why there are often violent responses to transgressive sexual identities is not because (as Butler would argue) that they make clear how sexual difference is symbolically constructed and thus represent a threat that would undermine the normative sexual identities of society. Instead it is not that they undermine sexual differences, but that they stand “for this difference as such, in

⁴³ This is not the same as deconstructionism in this context.

all its traumatic Real, irreducible to any clear symbolic opposition” (ibid) That is why he argues specifically that “Transgender people are not traumatic for heterosexuals because they pose a threat to the established binary of gender roles but because they bring out the antagonistic tension which is constitutive of sexuality.” (Žižek, 2016B)

He explains that, the same process - that I mentioned above- of interpellation of the subject is much stronger when it is sexual interpellation, as a subject’s identification as either a “man” or “woman” is always secondary to their reaction to their “castrative” anxiety of what they are. (ibid) In traditional societies, the general attempt to overcome this anxiety is to impose certain heteronormative roles and standards to the different genders. The modern attempt, by many “postgender” positions, is to attempt to overcome sexuality in general. (ibid) That is why he argues that both transgender and “postgender” are similar in that “the universal fluidification of sexual identities unavoidably reaches its apogee in the cancellation of sex as such”. (ibid) He relates this to the old Marxist idea that one can only be a royalist, if you are a republican. Thus he in effect says to be sexualized, you need to be asexual. That is why he argues that no matter how much you categorize and diversify sexual identities, no amount of progress in this project -of expanding the various possible sexual positions and identities- will overcome anxiety, which is a universal feature of human sexuality.

When we consider Žižek, we can clearly see that he considers the subject as both cultural and natural (while also more clearly showing where and how the subject related to the Real). He considered the subject -in terms of the debate between essentialism and constructionism- with a third option, as Johnston points out (Johnston, 2013)- where he offers a similar argument to the one that I will make (but his is a weaker version)- and thus his work is very useful and inspirational in my own argument. He rejects an essentialist argument -biological or even the traditional idealist conceptions- while also refusing a purely constructionist argument. He does this by arguing for the third factor, by saying “simply because the opposition between nature and culture is always-already culturally overdetermined, i.e., that no particular element can be isolated as 'pure nature,' does not mean that 'everything is culture.' 'Nature' qua Real remains the unfathomable X which resists cultural 'gentrification'”. (Žižek, 1993:129)

The reason why he is so insistent on denying both is because of the immense problems associated with both sides of this dichotomy. Although I do believe his argument (which can be seen in certain examples such as that of a free act and love) is a good progression of this debate, I still believe it does not go far enough and that this 'third-way' that rejects both essentialism and constructionism can be more developed and substantial.

Chapter Four: Lacan's Conceptualization of Science

This chapter serves to bring together the various points mentioned earlier and close out the initial argument that we can in fact locate biology and science in Lacan's work. The argument that we should incorporate biology is not only true for Lacan, but it is also true for a small number of Lacan's "descendants", specifically Žižek. When we consider how Lacan approached science, he changed his position during his work, but -just like Freud- was never anti-science as often claimed. (Aguiar, 2018:1) If we go back to Freud, he held the view that psychoanalysis' world view should be one and the same with science's. He stated "In my opinion, psychoanalysis is incapable of creating a *Weltanschauung* [worldview] of its own. Psychoanalysis does not need one; it is part of science and can adhere to the scientific *Weltanschauung*." (Freud, 1933:89) Lacan also was clearly 'pro-science' as he stated that, "To biologize in our field is to bring back into it everything that is useful to us in the science known as biology, and not simply to call upon something real that is alive." (Lacan, 1985:723) What he is referring to, as can be seen in that paper, is he advances using biology in psychoanalysis when it has 'biological meaning' on the subject and subjectivity, as he was essentially arguing against crude biological-reductionism, not biological knowledge in general.

I will explain his different conceptions, but focus more on Lacan's later -and most influential contemporary- approach to the relationship between science and psychoanalysis. When we talk about one of the three dimensions of his subject, in this I will focus on the case of the Real, he states that science is based on the "knowledge in the Real". As Aguiar explains that for Lacan "the 'laws of nature' implies that there is something like an articulated network of "signifiers" that are present in the Real, and, at least in the early part of his teaching, Lacan searched for a rapprochement between psychoanalysis and the scientific field based on this assumption that characterizes the foundation of science: that there is knowledge in the Real." (Aguiar, 2018:2)

Lacan more clearly advocated for a scientific approach to psychoanalysis in his earlier work than in his later work, and it is in this later work why he has been consider 'anti-science'. The reason why people often claim that there is an impasse between Lacan and science, however, is because later he conceptualized the real in two different ways. One was based off of a positive axiom, which is the "real of

science”, and the second on a negative which is the “real without law”. (ibid) The former is ‘knowledge in the real’ and the second is the real that resides in ‘contingency’, in the ‘absence of sexual relation’. (ibid) The famous Lacanian phrase “there is no sexual relation” refers to this notion of the absence of law. Thus that is why there seems to be an impasse between science and psychoanalysis, as psychoanalysis -which is concerned with the “real without law”- seems to be incompatible with science -which is concerned with the “knowledge in the real”. This is because the two reals seem incompatible, and why he is often claimed as ‘anti-science’. Considering the various ‘moments’ of Lacan’s work that show his relationship with science, will illustrate why these two reals are in fact compatible.

Lacan had various different relationships with science throughout his work, these different relationships with science can be seen in at least three different “logical moments” between psychoanalysis and science. (Miller, 2011) The first of these three logical moments, is where Lacan stated that psychoanalysis is not separate from science, as it depends on science. Thus this puts scientific knowledge as a condition of psychoanalysis’ emergence. In this **first moment**, he proposes a close and interrelated version of science and psychoanalysis⁴⁴. This is the Lacan that I described above, who wanted to search for ‘knowledge in the real’ and this approach to science in Lacan was heavily influenced by physics and mathematics.

In the **second moment**, he moves a bit away from the original dependence on science (although even here he still did not break from science) as he conceptualized, psychoanalysis as the place that fills the “incompleteness in the discourse of science”. (Aguilar, 2018:3) This can be seen in the *Italian Note* (Lacan, 1973), where he stated that the functioning of discourse of science tends to produce a counter reaction that he labeled “humanist”. This reaction is because he argues that ‘knowledge in the real’ doesn’t constitute everything, and that what is essential in human kind is not scientific objectivity, as it is exactly something that escapes this scientific knowledge. The “humanist protest” is what Lacan calls “docta ignorantia” (meaning learned ignorance) that goes against scientific knowledge. He argues that humanism attempts to reintroduce the subject into the discourse that science attempts to close down. As Aguilar argues “Psychoanalysis then appears as a “waste

⁴⁴ Although I will later on explain what he conceptualized as science.

product” of the discourse of science and the psychoanalyst is called to challenge the discourse of science reintroducing the dimension of the subject.” (Aguiar, 2018:3)

Miller argues that, still in the *Italian Note*, Lacan introduces the idea that ‘desire to know that characterizes psychoanalysis’ and this is then the **third moment** in his relationship to science. (Miller, 2011) In this third moment is where “psychoanalysis is not situated in the field of humanistic protest against science, but embodies the return of the science in the field of the learned ignorance.” (Aguiar, 2018:3) This is because ‘desire to know’ -which characterizes psychoanalysis- shouldn’t be conflated with ‘learned ignorance’, nor with scientific knowledge. For Lacan, psychoanalysis is what handles anything that emerges when scientific desire enters learned ignorance in humanism. Thus they argue that psychoanalysis is a paradox, as “it is an effect of science without being, however, according to the scientific desire. It is an unprecedented desire to know that has its roots in science, but should not be confused with the scientific desire either with the denial of the scientific knowledge.” (ibid)

Lacan’s conceptualization of what science is should also be thoroughly integrated, as how he considers what science is, is also important to understand why he used the arguments that he used. When Lacan was writing, modern science was dominated by physics and mathematics, thus most authors at the time wrote about those sciences, as they were seen as the true bearer of knowledge. Even authors in the social sciences, when they attempted to bridge the gap between the natural and social sciences, focused on physics and maths, and attempted to incorporate it into their work. This is also one reason why we see authors -including Lacan- who tried to almost “mathematize” their work, and why Lacan’s work is full of various formulas that seem mathematical in nature. (ibid:4) Lacan even stated the following with regards to mathematics, “There has never been any other thought than symbolic thought, and scientific thought is the kind of thought that reduces symbolism by grounding the subject in it—this is called mathematics in everyday language.” (Lacan, 1985:724)

During this time, the scientific conceptualization of the subject seemed highly deterministic, given the deterministic nature of physics, mathematics and natural laws. Thus at that time, it seems as if the natural sciences would make the Cartesian subject impossible, as a ‘subject of science’ would merely be reduced to an “object” of natural laws. This is because at the time, everything in physics and mathematics

seemed calculable and determinable by these laws and formulas. This is the reason why he often seemed particularly anti-science, as can be seen in his second moment, as part of the humanist protest against this seemingly deterministic tide of the natural sciences. Miller argues that in contemporary society, that 'physics is dead' and that we need to approach the new paradigms of science of genetics and biology. As he argues that biology is not mathematized, but rather literalized. (Aguiar, 2018:4) This is why it is important to include a modernized version of Lacan that instead of engaging with physics and mathematics, engages with biology and neuroscience. This is also why modern psychoanalysis has attempted to incorporate modern neuroscience with Lacan, in order to push his work and this field further. This can be seen in the recent proliferation of journals dedicated to "neuropsychanalysis", that aims to incorporate modern neuroscience with psychoanalysis. As even during the time of Lacan he was optimistic of this field, but chose not to rely on its findings, as at that stage the field was not as advanced as today.

We should also include what Lacan has conceptualized in his work *'The Direction of the Treatment and the Principles of Its Power'* and later again in *Seminar 24*, where he stated that the object of psychoanalysis is *'antiphysis'* or *'anti-nature'*. (Johnston, 2006:34) The reason why he used this term, and what he meant was, the goal of psychoanalysis was to explore the socio-symbolic aspects of the subject, that the subject has been *prepared* for⁴⁵ (since birth) by the big Other. The reason why this is important is, because it actually shows that Lacan did believe there was a concept such as *'human nature'*, that was biologically determined. His goal was in fact to discover how it was possible for the subject to emerge on the plane of the *'antiphysis'*. He attempted to show through his concept of the big Other -for him it was the symbolic order and for Freud it was the Oedipal family unit.

To show how the symbolic could have overridden the nature of the subject, he relied on his conceptualization of the nature of the subject. As Johnston states "It must be in the nature of this particular nature to be open to and capable of undergoing the dynamics of denaturalization involved in the process of subjectification." (ibid:35) Lacan argued that what made humans, or human nature, susceptible to being 'denaturalized' is not due to the effects of images and signs

⁴⁵ Prepared for, as opposed to 'determined by'.

from the symbolic, but rather due to a fundamental aspect of human nature -and nature more generally itself. This is because, just as the subject is not whole -as it is not at one with itself- so is nature not entirely 'natural', as it is also 'barred by the Real'. That is why he argues that human nature, will be overcome with the symbolic order during the process of subjectification.(ibid)

This returns to me the genealogy I explained earlier, as this concept of Lacan of '*antiphrasis*', we can see in this genealogy -even if he did only use this term in the few places mentioned. This is because we can see that the human being is born natural (pre-mature birth) and has various biological influences during the early stages of subject formation, until the subject enters the symbolic realm. Thus we keep returning to the fact that Lacan did allow space for biology to influence the subject -specifically in the earlier stages- but that these influences became less direct later on. The reason why these influences are not completely eliminated from the subject when it enters the symbolic order, as they persist in the subject in the form of drives -while the symbolic works through desire.

That is exactly why Žižek argues that in Lacan we can see a conflict between the pressure of nature and culture, and as I what he calls the "unfathomable X". The fact that the subject can be viewed as one that is not completely socially constructed in Lacan is of major importance. This is because, when we look the fields of poststructuralism, critical theory and specifically Queer theory (all of which rely heavily, even if indirectly, on Lacan's work) we see that the subject is often constructed (or deconstructed) in terms of the socio-cultural influences of the symbolic order. This means that, when we reconceptualize the subject in Lacan, as one that is not constructionist -nor a result of biological-reduction- this will allow us to reconceptualize how we can consider the subject in other fields and what that may mean for these fields.

This leads me to the next major section of my dissertation, where I will introduce the biological arguments that I will rely on to make my final two arguments. The reason why I am arguing to introduce biological arguments and evidence in a social sciences dissertation is because, -as I have stated previously- that when Lacan originally wrote, the science was not strong enough to provide better explanatory arguments than the social argument. I would argue that with the modern advances in biology and neuroscience, we can return to Lacan's work and incorporate these arguments as they are no longer inferior to social explanations.

Thus using the new biological and neuroscientific facts and evidence we have now, can we re-conceptualise the Lacanian subject in a manner that -I believe, or at least hope- Lacan would have approved of. This is because, as I have shown -he was not 'anti-science' and he did attempt to incorporate biology into his subject, as far as he could, given the science at the time.

Section Two: Modern Biology and the Subject

Chapter Five: The Essentialist versus the Constructionist Subject

In this chapter I will outline the debate between essentialism and constructionism, and show the arguments made on both sides of this debate. I will outline the stated account of both approaches and the debate between them. After I have outlined this debate, I will expand on the troubled dichotomy of this debate and why we are not restricted into an 'either or' solution. I will also showcase an example of an attempt -in the biological sciences- to bridge the gap between biology and the social, to showcase recent attempts to find a solution to this problem. I will also showcase various attempts that have been proposed to bridge the 'gap' between social and biological phenomena, such as the argument given by Dawkins regarding "memes" and "genes". (Dawkins, 2006) As well as other arguments from authors such as Dennett (Dennett, 1996), and various other biological arguments and concepts that will serve to introduce the broad topic of this section. This allows us to gain a better sense of how Lacan's genealogy can use helpful to refute and overcome this dichotomy.

The reason for this chapter, and this section as a whole is to show why the following argument is not necessarily true. One of the most frequent arguments that is often brought against anyone trying to incorporate the biological into social models and social explanations is the danger of biological reductionism and determinism. They normally go something like "If my behaviour and identity can be reduced to merely the physical/biological level, will this not inevitably lead to biological determinism?".

This chapter also aims to outline the starting points of the biological argument, that we can include both biology and the social together in social theories and subject formation. Afterwards I will show how the dichotomy between essentialism and constructionism should be reconsidered, and lay the groundwork for how we can do so, which I will elaborate further on in the last section of the dissertation. This chapter also introduces important aspects that I will further elaborate on in later chapter in this section, such as the environmental influences on development and the concept of 'downward causation', specifically in terms of neuroplasticity. It will lay the groundwork for showing why the notion that paradoxes arise when combining the

social and biological is not necessarily true. It also lays the groundwork for the incorporation of modern biological knowledge in the Lacanian subject, in a way that will allow us a clear conceptual framework to counter the entire notion of a dichotomy between essentialist and constructionist arguments.

Account of Essentialism

I want to state that essentialism does not necessarily mean biological or natural essentialism, although that is the dominant form of essentialism broadly. Other forms of earlier essentialism did not necessarily rely on a biological notion of essence, but normally on some spiritual-religious notions of essence or soul, or an idealist transcendental idea of human essence. Either way, whether this essentialism is biological or not, it supposes the idea that human subjects are 'essentially' determined or defined in certain respects. (DeLamater and Hyde, 1998) I will focus on biological essentialism given that it is the most dominant form of essentialism currently, and the form that most of the authors I engage with also use.

When we consider the arguments that we are biologically determined -as opposed to socially constructed- these arguments take the point that different social categories -and thus also different social identities- that appear in different groups are reflective of "inherently different natures." (Heyman and Giles, 2006:293) These types of approaches are most common often found in fields such as feminist and gender studies, as the question where gender is biologically determined or socially constructed is highly debated in the literature. Gender essentialism was a dominant and widespread view throughout Western philosophy, until the 'second-wave' of feminism where social constructionist arguments started to reshape the field. (Grosz, 2018)

Often we find that there is no exact definition of gender essentialism, specifically, but the following definition from Grosz is useful for a broad conceptualization of essentialism, "essentialism entails the belief that those characteristics defined as women's essence are shared in common by all women at all times. It implies a limit of the variations and possibilities of change—it is not possible for a subject to act in a manner contrary to her essence. Her essence underlies all the apparent variations differentiating women from each other. Essentialism thus refers to the existence of fixed characteristic, given attributes, and

ahistorical functions that limit the possibilities of change and thus of social reorganization.” (Grosz, 2018)

Before I go deeper into essentialism and gender essentialism, I want to explain one of the different directions in which this topic of debate has gone into, and that is the idea of ‘Child Essentialism’. This field is where researchers attempt to discover whether or not the future social categories and identities of children are due to how they are treated, raised and interpellated (social constructionist) or due to various biological or essentialist determinants. That is also why studies have been done on how young children view gender, if they consider it to be essentialist or not. Given our current research we can see that “there is evidence that young children often show essentialist reasoning about gender” although this is not always the case. (Heyman and Giles, 2006:293) One aspect that does seem to be very evident in young children is the tendency to see gender differences to be innately determined. (ibid)

We can also see a study conducted by Taylor (1996), where children and adults were both asked a series of questions about the innateness of gender. In both groups there were asked whether kids who were raised by a society of solely the opposite sex (for example, a boy being raised on an island occupied by only women), the responses from the participants were that children would act according to their ‘natural’ gender. The study showed that the respondents agreed that until age 9 or 10, the children would act and behave according to their ‘biological gender’. (ibid) What the study found when asking the children and adults was that, the children were not “not merely reporting stereotypical category associations”, but rather that they had an “early bias to view gender categories as predictive of essential, underlying similarities between members.” (ibid) The interesting result that the study found was that, this essentialist view does in fact change over time, as when children get older they acknowledge the role of how social mechanisms influence these categories. These findings are consistent with other the findings from other studies, which show that that young children do tend to hold more essentialist views on nature’s determining influences on “gender-stereotyped” properties, and that this view tends to decline as children start getting older -i.e. during late primary school and high school. (Smith and Russell, 1984)

As I have stated there are few definitions of essentialism, but the definitions and explanation often have certain similarities. These claims often include

arguments that certain categories are natural kinds and that they are real and not constructed (i.e. they are in the realm of the actual and not imagined constructs) and that they are discovered as opposed to being invented. (Gelman, 2003) This means that there exists some natural (as opposed to social) essence which is the cause for the differences and similarities we find between different groups. The other question about the 'essence' that different groups of people possess raises another question, what type of ontological category it is or where it is located? Although this is not a sufficient answer in the more philosophical manner the question was intended, but I will answer this question by just stating I will rely on the traditional biological essentialism, which considered this 'essence' to be the collection of biological traits different groups hold. (ibid)

The important aspect of this debate is that essentialism argues that the specific 'stereotypes' that certain groups have, are not due to contingent social arrangements and determination, but are rather a reflection of the essence of these groups. That is why these specific social arrangements and determinations (i.e. group stereotypes) exist, is because of the essence, meaning that these differentiations are not a result of social pressure or construction, but rather that the social pressure is a result of these essential differences. I also do want to state that modern biological essentialism focuses more on the specific biological and genetic determination of individuals, not groups. This means what is "essential" to certain individuals more than what is "essential" to certain groups, although group studies are still done and useful (such as studies to determine genetic determinations of homosexuality). This is why modern essentialism isn't affected by group outliers, as the group-wide essentialism is not as prevalent as focus is more on individual biological essentialism.

How modern studies often attempt to find evidence of essentialism of this type, is to find correlations between certain genes and certain identities or behaviours in groups. An example is the search for a 'gay gene' which -if found- would then be the "gay essence" that is the determining factor of the 'gay group' insofar as it reflect that aspect of their identities. That is also why this approach is considered to be 'biological reductionism', as it seemingly attempts to reduce human identities and behaviour to biological causes.

Account of Constructionism

The account of constructionism, specifically in feminism, became popular during the 20th century with arguments about the social and contingent nature of gender and gender roles. The argument has been more popular more widely in the social sciences, where social and cultural pressures are seen as the best explanatory devices for human behaviours and identities. One of the reasons why this approach has been popular is that “Any biological constraints on culture are too weak to be significant” and therefore that any of those “models of genetic evolution will be of little use in understanding variation in human behavior.” (Rogers, 1988:2)

There are various popular accounts of constructionism currently, such as the performative approach by Jackson, Plummer or McIntosh⁴⁶, or the structural approach by Saussure. The common aspect of all of these approaches are that they do not consider human/group identities, practices, roles or characteristics to be innate or essential to them, but rather a product of contingent social relations. Although this is a broad conception, it is still a narrow section of the much larger social constructionist field, which is highly diverse and multifaceted.

I mention this because there are constructionist conceptions that include biological explanation, as no constructionist would actually remove all biology, as they would include certain limited influences such as actual skin colour in cultural theory⁴⁷. We can see how certain social constructionists, such as Sally Haslanger, argue that there do exist objective types of bodies (males and females). She argues that we should not deny obvious facts such as these. (Carlson, 2010:62) She still considers gender and sex to be real- but argue that they are defined by our social practices.

Going back to the idea of ‘Child Essentialism’, the debate is whether children who are raised in completely different social environments would have developed into distinctively different subjects, which would undermine an essentialist argument greatly. This idea goes beyond the subject, to all structures we have in our society as authors in this field often argue along the lines of “This thing could not have existed had we not built it; and we need not have built it at all, at least not in its present form.

⁴⁶ (Jackson and Jones, 1998)(Plummer, 2003)(McIntosh, 1968) respectively

⁴⁷ What I mean here is the “obvious” or “common-sense” biological influences that authors in this field normally agree on, such as the example of skin colour. These authors would not deny that physical skin colour is a biological result of your parents biology, but they would state that ‘race’ on the contrary is a social construct.

Had we been a different kind of society, had we had different needs, values, or interests, we might well have built a different kind of thing, or built this one differently.” (Boghossian, 2001)

The important aspect of social construction is that many of these authors often regard the individual subject as a result of “cultural, political and historical evolution” that is highly determined by their specific historical time and location. (Galbin, 2014:85) These authors would generally argue that “Apart from the inherited and developmental aspects of humanity, social constructionism hypothesizes that all other aspects of humanity are created, maintained and destroyed in our interactions with others through time.” (ibid) Depending on the different specific theory of social construction, these authors would argue different ways in which these ‘other aspects of humanity’ are created, reproduces and destroyed through human history.

The idea of social constructionism goes further than just certain group stereotypes, as it very often critically questions the ‘objective’ and ‘immutable’ nature of science and knowledge. (Riegler, 2001) It sees them as also contingent products of their social environments. One of the reasons for this is the role that language plays in society and knowledge production for constructionists. Language is fundamentally important in human society and specifically in knowledge production. This brings up another question about the role of language in knowledge, as do we consider language to merely describe and represent the world as it is, or instead it is how we *construct* the world based on our social systems? This is because for various social constructionists language gains its meaning from the context in which it is used, thus it constructs knowledge instead of representing it. (Burr, 2003) (McNamee, 2004)

The idea is that even scientific knowledge is created by humans through language and social influences. When we consider the explanatory power of science, should consider it within the social structures from which it emerges or separate from it? This approach from constructionists not only places doubt on scientific knowledge, but this approach also means that we cannot effectively argue against social constructionism by using scientific knowledge, as it is not objective and is contingent on its circumstance. (Galbin, 2014:89)

The debate between Essentialism and Constructionism

I will not go into the debate between these two different approaches into too much detail, rather I will focus on the main criticism that both face, and why these

are important. Both of these approaches have flaws, in that they imply or state some facts which are often difficult to reconcile with general beliefs that often seem valuable. One example of this is how either approach is able to accommodate the role of 'free will' or 'agency' in the human subject.

This brings me to the criticisms that are often used against essentialism, notably that of biological reductionism. The reason for this criticism is due to the above problem of agency, as a biological essentialist view would seem to reduce the subject to the mere biological processes of the body. The problem of essentialism goes much further than this, as we can see four distinct "meanings of essentialism", which in and of itself should also show what the problems of essentialism can be. (Berg-Sørensen and Lippert-Rasmussen, 2010:41)

These are first; stereotyping, this includes statements and views held by people such as "all Africans have rhythm". Second the reification of the relevant stereo-typical properties, this includes statements like "she is deeply religious, because she is Arab". Third is homogenization, such as when people assume there exists no intra-group differences. Finally is identity policing, this means when certain members of a group are sanctioned from the group, for not conforming to certain held group stereotype properties, meaning those who do not conform to certain group stereotypes are shunned from the group. (ibid)

An example of the effect of these problems can be illustrated from the opening line of a Guardian article, "The president of Harvard University has provoked a furore by arguing that men outperform women in maths and sciences because of biological difference, and discrimination is no longer a career barrier for female academics."⁴⁸ Statements and policies based on these so-called "biological essentialist" views can reinforce the dangerous and problems of adopting an essentialist views. As when an highly ranked academic states that their gender policies needs revision because men are just simply better at STEM, could very well have social implications that further prevent women from entering STEM and further enhancing the disparity in those fields. This can discourage women from studying STEM, decreasing the total in the field and thus over representing men in the field, which would lead to the (incorrect) assumption that men are simply better at STEM. It's a sort of "self-fulfilling prophecy".

⁴⁸ <https://www.theguardian.com/science/2005/jan/18/educationsgendergap.genderissues>

This is also why essentialism is often considered a way to 'trap' people into their social positions in the hierarchy, by arguing that this hierarchy is natural and determined. It seems to make impossible the idea of large scale social change and dynamics, and social mobility. Although some very strong forms of social constructivism can be seen to have the same problem, such as the problem that Althusser faced with what we call the "revolutionary subject". Meaning how do we account for the emergence of a revolutionary subject that can break free from the structure, if it is merely a result of the structure. Other strong constructionist views can be seen in statements such as; "These qualities of separateness in men and relatedness in women persist throughout life and are a result of universal cultural experience." (DeLamater and Hyde, 1998:13)

Proponents of constructionism has defended it from biological essentialist arguments pretty well, as per their self-set 'rules of engagement'. What I am referring to here is their conceptualization of knowledge (including scientific and biological knowledge), as "Social constructionism is a theoretical movement that brings an alternative philosophical assumption regarding reality construction and knowledge production. It is concerned with the ways in which knowledge is historically situated and embedded in cultural values and practices." (Galbin, 2014:89) This is because for them meaning and knowledge is socially constructed and fluid, they depend on their circumstances. The implication of this is that any biological knowledge that would seem to counter the constructionist model, could easily be countered, by arguing that the knowledge is constructed and not neutral, thus it can't be fully trusted. This means that social constructionists may defend against biological arguments and experiments by relying on the format of the social constructionist model itself.⁴⁹

Social constructionism can be accused of many of the same arguments essentialism faces: "the term social constructivism is potentially problematic. Not because constructions are not social, but rather because the term can easily lead to an inverted form of essentialism." (Hansen, 2010:95) The key difference between the two approaches is the idea of contingency. This is because biology and nature are

⁴⁹ I am not trying to say that science is infallible, as it is clear that natural sciences experiments are just as dependent on the construction of their model as it is on their objective results. A model or experiment that is improperly designed (some with clear bias) would not produce unbiased results, even given the neutrality of science in theory.

often seen as highly determined and 'immutable', whereas the social is seen as contingent and changing. Thus if we are results of nature, we are then determined, and if we are results of culture we are contingent, which is also why these 'middle-way' approaches generally fail. As they can't reconcile the perceived divide between these fundamentally different aspects of nature and culture.

I will provide a quite lengthy quote, as it explains the problem I mentioned above in a clear and thorough manner, "This is one reason why essentialism must be rejected. If essentialism is not total, i.e. if it does not claim a completely deterministic universe, then one has to establish the dividing line between the essential and the contingent. This is impossible without producing paradoxes, and that is why we should avoid essentialism and accept that all possible being is articulated i.e. discursive and constructed. This is how constructivism is articulated within a discourse theoretical framework." (ibid:98-99)

The important point of this anti-essentialist argument is that it illustrates the problematic idea paradoxes, which are the logical results of combining two completely different systems. As how would the problem be resolved when there is a conflict between one thing that is predetermined and another that is non-determined or even with 'free-will'. One example of this is love, is it a free choice or social construction or merely a result of pheromones and brain chemistry, as it seemingly cannot be both. As it would mean that you either have no choice in the matter, if the pheromones are the deciding factor. If you can override the pheromones, then it essentially does not matter. The problem is biology is seen as highly deterministic, thus incompatible with the contingency of the social. These systems seem incompatible, thus this is the reason why deterministic and nondeterministic systems cannot be reconciled in a 'middle-way' approach that would combine nature and culture. The only solution would be to either reject the determinist nature of nature or the contingent nature of culture.

The problem is that some modern social constructionist explanations seem to almost become social determinism as opposed to a biological determinism. This is clear in systems such as structuralism, and those that have emerged out of it -which are popular fields today. As subjects in structuralism are determined by the structure they are born into, and why this field has struggled with the previously mentioned concept of the 'revolutionary subject'. The one qualifying difference between essentialism and constructionism, even social determinism, is the term contingent.

This is because “It involves the possibility that the constructed object **could** have been different” (ibid:96) This means that more than one possibility was originally open. How these alternative possibilities are possible depends on how each different conceptualization conceives of the social and the subject, from the search for the revolutionary subject to the deconstructionist approach. This is the principle focus of constructionism, it is the idea of being socially determined in a contingent manner, both of which separates it from essentialism.

The idea of contingency is a very important aspect, as it does not imply ‘free-will’ in a strong sense. This is why even a strong constructionist approach (like classical structuralism) is contingent, since it **could** have been different, whereas with essentialism, it could not have been different. Here I can return back to Lacan, and why in his genealogy we can see both the essentialist and constructionist approach, as his subject is both “contingent” and “essential” and even more importantly, neither. As natural influences are stronger on the subject during its early formation, but then the social comes to be predominant later. This brings me again to the paradox, of how do we reconcile the ‘deterministic’ nature of early subject formation with the ‘contingent’ nature of later subject formation.

An approach to this problem is to reconceptualize what the nature of biology is and how can we account for and reconcile it with the social without paradoxes. One account that attempts to explain this is from Richard Dawkins that I will now explain. The rest of this section’s focus will be on how to re-consider modern biology in a non-deterministic manner and how it can fit into and reinforce the re-reading of the Lacanian subject that I am proposing.

Biological Approach: Genes and Memes

When we consider this debate, we can see that there have been attempts from the biological sciences to offer bridges, or even just more associations between their field and the social sciences. These types of responses are normally from the biological sciences where they attempt to account for cultural transmissions -that inform and determine the habits of human subject: These cultural processes (which can be said to be the study of the social sciences) are best described in biology by

Richard Dawkins as *memes*⁵⁰. He coined the term *memes* to describe how the process of cultural traditions works in a similar way to genes.

He uses the word meme to designate a unit of cultural transmission, he arrives at the word by using the Greek word for imitation 'Mimeme' but altering it to meme; as to sound more like gene. He also states that it is also related to the French word '*même*' for memory. (Dawkins, 2006:192) He argues that culture, ideas and language transmit through society in essentially the same way as genes are transmitted through history. He states that "Just as genes propagate themselves in the gene pool by leaping from body to body via sperms or eggs, so memes propagate themselves in the memepool by leaping from brain to brain via a process which, in the broad sense, can be called imitation." (ibid) He goes even further, by relying on the work of Juan Delius as a brain scientist, to state that "memes should be regarded as living structures, not just metaphorically but technically." (ibid) This line of argumentation states that you should consider memes as analogous to parasites, where parasites infect a host cell paralyzing its biological mechanisms so that it can propagate, so do memes paralyze the brain for the sole reason of securing their propagation. (ibid)

He argues that memes, which continue to live as they are propagated depend on their 'survival value' in a similar way as genes do, and they also undergo mutations. Thus when a meme with high survival value originates (he uses the example of the 'idea of God') it will propagate through the 'meme pool' (society) through speech, writing, arts, culture and music among other 'vehicles'. The reason why certain memes are so widespread in the meme pool (social and cultural environment) is because of their survival value, in his example "The survival value of the God meme in the meme pool results from its great psychological appeal. It provides a superficially plausible answer to deep and troubling questions about existence." (ibid:193) This is but one example, all cultural and social constructs are subjected to this process meme reproduction, but for different reasons as not all will be for psychological appeal.

A similar argument can be made regarding the predominance of heteronormativity in society as the results of a successful meme. The 'advantages' of

⁵⁰ The word memes in this context should not be confused with the current use of the word memes as in humorous internet images/videos.

such a meme in a society may have led to its widespread appearance throughout western history. The 'advantages' for why this meme is so widespread might be the advantages of 'othering' a minority or to focus society on reproduction, or that it reinforced other memes that were already widespread in society.

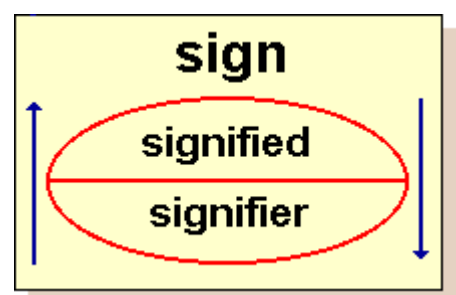
There is a reason why I mention the biological account of cultural acts, because some in this field have gone further by stating what is the biological advantage of meme replicators? They argue that these social reasons or psychological appeal aren't enough and that everything needs to be brought back to biology, as in how these memes improve genetic survival. But Dawkins makes an argument that memes are a new replicator, and that even though DNA has had a monopoly over replication, doesn't mean that they will have a monopoly forever. (ibid:194) As he states "Whenever conditions arise in which a new kind of replicator can make copies of itself, the new replicators *will* tend to take over, and start a new kind of evolution of their own. Once this new evolution begins, it will in no necessary sense be subservient to the old." (ibid) Thus he argues that when a new, faster replicator (such as memes) arise they can take over from old replicators (such as genes) to become the dominant type of evolution.

He associates three different types of qualities that memes need to possess to be successful replicators, namely longevity, fecundity, and copying-fidelity. (ibid:195) For memes the first is less important, as the melody of a song might not 'live' forever in my mind, but might live forever in future audio files, music classes or videos. The second is the most important as the quicker and easier the 'tune' or meme spreads from one person (or source) to another, the larger the population that it will 'infect'. The last refers to how much a meme 'mutates' from one copy to the next, in some cases we can see that these copies are very faithful (such as two people singing the same tune/song) but with regards to memes, as opposed to genes in this case, we can still argue that non-exact copies are 'still faithful'. This dissertation (or any academic work really) relies heavily on other authors and ideas, but I do not exactly copy and paste those ideas here (except when using quotes), instead I use the ideas they present and apply them, I am still faithful in reproducing those ideas even if not exactly.

There is an important difference between gene and meme reproduction, and one important reason for this is due to how these memes spread and reproduce. One of the examples he uses is that of suicide, where a gene that tends to produce

suicidal feeling would quickly disappear from the collective genepool. While a meme that promotes suicide could still survive after the event, especially if the death was widely publicised, it could inspire others to die. (Dawkins, 1982:110-11) The same with the idea of chastity or celibacy (which is intimately part of many religious traditions), a gene that would promote those paths would again quickly disappear from the gene pool. While these memes could easily still spread as they are reproduced not by priests and nuns to their children, but rather to their ‘cultural offspring’ who take up the cloth after them. (Dennett, 1996:367) This also means that there is absolutely no necessary connection between the ‘fitness’ and strength of the meme, and its contribution to our overall fitness as individuals or a species or society. Thus memes can be very strong and reproduce easily and widespread, while still having very negative effects on us and ours survival.

This argument from Dawkins is what Dennett calls the biological extreme explanation, an explanation of culture that tries to define it in terms of biological standards and theories. I would counter Dennett, arguing that there are other more “biologically extreme” arguments that follow much more essentialist directions that this one presented by Dawkins. Examples of these are those that leave little room for cultural explanations for identities such as the traditional essentialist and some ‘new biological essentialist’ that Ereshefsky argues about in modern science. (Ereshefsky, 2010) In general when we consider an essentialist argument, we know that on the other side of this dichotomy, social constructionist explanations argue that culture and cultural ‘evolution’ follow their own entirely different principles and theories unrelated to biology at all. I believe this is a good place to include and contrast Saussure, as his conception of “signs” in his structural conception of society. As I have stated previously, for him the “sign” is the elementary linguistic unit to “designate the whole”, and we can link his conception of the sign with Dawkins’ use of the meme. I will first go into more detail on Saussure’s model and then explain how we can relate it to Dawkins’ memes, and then I will show a more balanced approach between the biological Dawkins and social Saussure.



Saussure's model of the sign has two parts, the signifier and the signified (as illustrated in the shown model⁵¹). The signifier ('sound-image' or 'signifiant') is the form that the sign takes and the signified ('concept' or the 'signifié') which is the associated idea that it represents. (De Saussure, 1966:66) The relationship between these two concepts is the "signification", which can be seen in the associated diagram. What this signification means is that any sign, must both have a signifier (the actual word used) and a signified concept that is related to that word. This is because you cannot have a word without an associated concept, as it would be totally meaningless, not a concept without a word as it would be completely formless.

Saussure considered both the signifier and the signified to be purely 'psychological' and not material (as opposed to more modern trends which see the signifier as material, in that which can be seen, heard, tasted or felt). (ibid) This is because we can use these "sound-images" without actually using any 'material' means by merely reciting it mentally. Saussure considered language to be immutable, and that rather than us being the ones controlling, changing or deciding language, it informs us and our communities. (ibid:71) We cannot change it, because no matter how far back and what period we choose to look at language, "language always appears as a heritage of the preceding period." (ibid) He goes so far to argue that no society has ever known language as anything other than the product of inheritance from previous generations, that has to be accepted as such. (ibid)

This insights of Saussure's conception of the inherited (or if I may call it "reproductive") nature of language gives a counter balance to Dawkins, as even though we can see clear resemblances between memes and signs, both have similar characteristics, but have radical differences with regards to biology. This means both consider different methods of culture transmission and generation, although there are similarities between the two. This comparison shows that even radically different conceptions of culture can have fundamental similarities, meaning that it is not an impossible task to include biological notions in these structural conceptions. As Dawkins -although he argues that memes can take over as the primary replicator- is bases it all fundamentally on genes, whereas Saussure bases his work fundamental on language (the social). This show that the same conclusions -of cultural vehicles such as signs and memes- can come from radically different

⁵¹ Reference for this model is: <https://www.cs.princeton.edu/~chazelle/courses/BIB/semio2.htm>

starting point. This shows that it is possible to include biological knowledge in the social, and vice versa, while still using the same/similar outcome.

Dennett, on the contrary, suggests that the best explanation of our culture is by a combination of both biological and cultural conceptions, to be somewhere in between the two extremes. (Dennett, 1996:345-46) He uses the example phrase of “A scholar is just a library's way of making another library.” that explains the biological conception of meme reproduction in scholars. (ibid:346) His personal opinion on this phrase is, “I don't know about you, but I am not initially attracted by the idea of my brain as a sort of dungheap in which the larvae of other people's ideas renew themselves, before sending out copies of themselves in an informational diaspora.” (ibid) As this sort of conceptualization seems to rob any academic authors any sense of agency or originality. He still relies on the biological influenced concepts (memes), but he removes its strict adherence to the biological laws from which it originated, and to remove the major role of biology on the social (which I shall elaborate more later on).

An important aspect of memes is the role of language, which many biologists argue could have been an evolutionary extension of social learning that developed as a means of instruction, that could be transmitted in an ‘abstract symbolic way’, in such a way that could be related to memory. (Catania,1985)(Delius,1990) This is because learning, whether at an individual or a social level, involves information being stored into memory. A study of brain structures show how different memories affect the brain, and only those which are incisive will form long-term memories that don't fade soon after formation. This is because these long-term memories structurally modify the brain, I will not go into how they alter the brain -as I will discuss the neuroscientific arguments in the following chapter-, but there have been various studies that show learning not only alters the brain but also causes actual growth of certain brain structures. (Delius,1991:81) Delius argues that culture is a very persistent phenomenon that relies on these long-term memories, and that we can conceive of this process as “Any cultural trait taken over by a given individual from another individual must accordingly be thought of as the transfer of a particular pattern of activated/inactivated synapses from the associative networks of one brain to another.” (ibid:82)

Thus he argues that we can see culture or memes also have a sort of ‘replication of material structures’, instead of the body replicating these physical

structures through genes, social learning “nonetheless brings about a multiplicative transfer of equivalent structures.” (ibid:83) Memes can determine behaviour and indirect protein synthesis by modifying neurostructural patterns. Genes directly alter protein synthesis and thus indirectly behaviour. (ibid:84) Memes resides in the brain, that is instructed by genes, thus memes are very dependent on the specific genes. Memes can be seen as analogous to the ‘genes of symbionts’, as they infect the brain of the host and influences its behaviour and functioning. (ibid: 86) That is why we can in some ways see memes as analogous to parasites.⁵²

Given that memes act like genes do, we can also explain cultural evolution in terms of memes. When memes replicate, like genes, they also do so imperfectly, meaning when a meme replicates or is transmitted from one host to another it occasionally does so with flaws. These memes are slightly different in different hosts, as they ‘evolve’ and these differentiated memes also spread further developing the evolution of these memes. (ibid:92) We can see the analogues between memes and genes even further in isolated populations and regionalism. When a population is geographically isolated or originated from a small founder population, this is reflected in their biological make up, as they will be more closely related to one another genetically speaking. The same with memes, in an isolated population there often exists homogenous culture, language and social practices that have evolved there from their founding memes. (ibid:93) This is best seen in a small island population where the inhabitants are geographically isolated from other people.

This argument can be extended not just to island populations, but even subcultures and groups in our contemporary society. Such as in Gay and Lesbian studies between the segregationist and liberationist views of the gay community. A socially and culturally isolated gay community can develop its own memes that are unique to them, or similarly be excluded from memes present in the broader society. This could be argued to be a cause for certain identities and markers in the gay community, that is transmitted by memes instead of by genes. Thus this again brings up the questions of the inheritress of these identities and the biological/social natures of their identities.

⁵² I will explain and expand on this idea in the following chapter, in the form of social influences on neuroplasticity.

The core argument that the social is influenced and determined by biology, this has to do with the argument in biology that -evolutionary speaking- we possess traits due to their positive contribution to our survival fitness. The argument is that our ability to have culture, language and 'the social' is a biological trait that we have evolved, most evidently seen through 'social learning'. This is because only 'higher' (more intelligent) animals are capable of social learning, and that this ability is an evolutionary trait we -among other animals- have developed, and like other persistent traits we have evolved it due to its survival benefit.

When we consider the concept of *adaptation* in natural selection, it will help understand how we can say that culture is beneficial to the general fitness of the population only if "the capacity for culture is expected to be adaptive only if the mean fitness of a population with culture is higher than that of one without." (Rogers, 1988:3) This is necessary to explain previously mentioned examples, where certain memes (cultural traits) may be detrimental to certain individuals or genetic lines, such a suicide or celibacy respectively, but might not bring the mean fitness down enough. This implies that culture cannot be considered independently from biology, for example if culture in total ever reduced the mean fitness low enough, then we can expect natural selection to move towards humans without culture or those less susceptible to culture.

An example of this would be if we considered homosexuality to be purely a result of a meme. In this example, if only a very limited amount of people in a given population acquired this homosexuality meme, it would not decrease the mean fitness enough for culture to start becoming detrimental. Although if we take an island population, who due to some cultural or religious reason decided to undertake mass homosexuality we can easily see why evolutionary speaking this population would doom itself, as in this example there would be no more reproduction. The population would only survive if there were enough people who were less or not at all susceptible to cultural influence or memes, biologically speaking. These people would then adopt heterosexual memes and reproduce, thus producing new generations of people who are less susceptible to culture and social learning.

The other argument is that genetic influences over individual behaviour are strong enough that they can override social influences over behaviour and thus by extension also culture itself. An example of this argument can be seen in the biological and social role of sexual intercourse. In western history, sex was often

seen as only socially acceptable in marital relations, this was often widely considered to be the only social, cultural and religiously acceptable setting for sex. Even in this setting sex was often considered to only be exercised for procreation. Biologically speaking, sex is considered advantageous, as the more any individual has sex the more likely they are to have descendants to spread their genes, that is why -through natural selection- humans have evolved the trait to enjoy the act of having sex. This is why in society we can see that most people enjoy having sex, because those who enjoy having sex are more likely to have offspring who will then genetically also enjoy having sex more, thus repeating the cycle.

The social and biological side to sex is in conflict in this example, thus if sex was practiced as a solely matrilineal activity it would indicate the dominance of the social over the biological. In western history we have seen that this social rule has been broken more times than can possibly be accounted for, from pre-marital sex, to extramarital affairs, to prostitution (“the world’s oldest occupation”). No matter how harshly these social rules have been enforced and interpellated into society, they are always broken. In biology the argument would be that these rules are broken -and eventually disappear altogether- due to their direct conflict with our genetic determinism.

What I have done in this chapter is outline the starting points of the biological argument, that we can include both biology and the social together in social theories and subject formation. I have shown how the dichotomy between essentialism and constructionism should be reconsidered, and laid the groundwork for how we can do so, which I will elaborate further on. This chapter also introduces important aspects that I will further elaborate on, such as the environmental influences on development and the concept of ‘downward causation’, specifically in terms of neuroplasticity. It lays the groundwork for showing why the notion that paradoxes arise when combining the social and biological is not necessarily true. It also lays the groundwork for the incorporation of modern biological knowledge in the Lacanian subject, in a way that will allow us a clear conceptual framework to counter the entire notion of a dichotomy between essentialist and constructionist arguments.

Chapter Six: The Neuropsychanalytic Approach and modern Brain Science

This chapter will outline, explain and defend one of the most crucial premises of my argument, as the recent discoveries about the fundamental nature of the brain and neural circuitry is what makes my subject possible. In this chapter I will outline and show how contemporary authors have combined and reconciled modern neuroscience with psychoanalysis, and its implications for my subject. I will also provide general discoveries and knowledge about the brain and how and why our neural circuitry and formed the way they are formed and the effect of that on the subject. The key premise of this chapter is to show that, biology is not as deterministic as is often claimed, and that our brains are shaped by a variety of influences (biological, social, environmental among others), and that these influences are different at different stages of development. I will then briefly show what implications this has for my subject.

As I have stated in the previous chapter, one of the most frequent arguments that is often brought against anyone trying to incorporate the biological into social models and social explanations is the danger of biological reductionism and determinism. As many often seen biology as naturally deterministic, thus incorporating it into the social will lead to biological reductionism and determinism.

I mention this, as most readers will probably be familiar with an often used response to the criticisms surrounding biological determinism, namely that of “Quantum uncertainty”. (López-Corredoira, 2009) These are generally inadequate and unsatisfactory responses which normally include the fact that there is indeterminacy on the quantum level, which works its indeterminacy upwards, so that it may account for things like “free will” and choice. This is because if the lowest level is not determined, then its non-deterministic nature would work itself upwards and create a non-deterministic biological subject. This is also related to the age-old question about the mind-body problem, do we equate the mind with the brain? If we do so, is the mind then driven by the physical, determinable biological functioning of the brain? (ibid)

Neuropsychanalysis and the Subject

I will not go into the philosophical debate around the mind-body problem, as most of the contemporary writers in the fields I am relying on, are at least some type of Monist (meaning that the brain and mind are the same thing, the mind is not separate from the biological brain). The question still stands, even if we accept that the mind and brain are the same thing, psychoanalysis studies the subjective part of the mind and neuroscience studies the objective matter of the brain, how do we reconcile these two fields? How do we connect what we know about the unconscious mind and the various other insights brought to us by Freud and Lacan, with modern advances in brain science? The general technique so far has been to try and identify certain neural facts in the brain that correspond and vindicate the knowledge learnt by psychoanalysts in their research with patients. This connection between neural and psychoanalytical knowledge can also seem problematic, as often they have been claimed to lead to three different problems in the field, namely “determinism, reductionism and verificationism”, and I will show how Adrian Johnston attempts to account for these problems. (Pluth, 2013:88)

With regards to the first, the question then is, how do we avoid the problem of determinism? There is often an inclination in biology -or the social sciences reading of it at least- that things are deterministic, that we can easily calculate and predict the movements, actions and future of various different phenomena. (ibid) An other -and intimately related inclination- is to believe we can reduce all our actions, thoughts and other psychological phenomena down to our biological/physical building blocks. (ibid:89) If we acknowledge the strong version of the approach, it is difficult to refute determinism, unless you try and go down to the quantum level to account for uncertainty.⁵³

However, Johnston attempts to account for both of these problems by using the Lacanian phrase that “there is something in the organic more than the organic itself”. In other words; that there is *nonorganicity* that is central to even the most advanced organic life. (Johnston, 2013:49) In society there often exists a pattern where the more complex a system is, the more likely it is to ‘malfunction’, in the

⁵³ Note: This is because, down at the quantum level we have an observed phenomena of “quantum fluctuation” where we have ‘fluctuations’ in the amount of energy in a point of space that we cannot predict, as it seems to be innately uncertain. (Krauss, 2012) Thus it would rule out a deterministic model if we consider it to affect everything upwards to also be at least somewhat uncertain, meaning it introduces ‘randomness’ into the deterministic model.

sense that it will experience more problems, glitches and bugs. This can even be seen in popular culture, where people often believe that newer more complicated devices are more likely to break down than older one. This concept is used across different fields from cars -according to a report by AAA, newer cars (with more gadgets and features) on average spend more time in the garage being repaired than older cars⁵⁴ - to my focus of biology.

There is another reason why he argues that our brains are also susceptible to 'misfires' and that it is bound to be "riddled with kinks and conflicts". (ibid) This is not just because such complex systems will inevitable experience many small failures over its existence, but also that it is not 'well designed'. Our brains are a result of evolution, which isn't really the process of creating perfect organic systems, but rather just the continuation of any system that is just "good enough to survive long enough to reproduce". (ibid:50)

He argues that there is a relatively low bar to clear in order to survive, thus even if a system (or the brain) is plagued by these malfunctions and failures, it can still survive. In effect it is possible to renounce a hard determinism without having to go down to the quantum level, as these misfires of the imperfect system refute any hard determined path. This relates to how he links biological and psychoanalytic knowledge in a non-reducible manner. He suggests that downward causation and the idea of an imperfect system can be used to counter both problems of determinism and reductionism.

Neuroplasticity and the Self

The argument of "downward causation" comes from the biologist Denis Noble. (Noble, 2008) Noble argues that higher systems (like the environment) can have causal effects on lower systems (like our genes). He used the following example to show that the genes we have are not solely a result of pure genetic inheritance. As he argues that other environmental factors can affect genes, and thus in effect our genes are a results of environmental factors and our inherited genes, both of which can then be transferred in the same way as genes are. He stated "So any environmental or maternal effect that can influence the egg cell and/or early embryo might in principle imprint itself on the genome, or even be handed down in parallel

⁵⁴ <https://fortune.com/2016/07/20/aaa-breakdown-new-tech-study/>

with the genome.” (Noble, 2008:49) There are more examples of this, one of the most important is the discovery of neuroplasticity of our brains. Malabou argues that our brains are organized and reorganized “dialectically”, where it is constantly under fire from shifting between “malleable flexibility” and its “resistant fixity”. She states that “Our brain is plastic, and we do not know it. We are completely ignorant of this dynamic, this organization, and this structure. We continue to believe in the “stiffness” of a fully genetic brain”. (Malabou, 2008:4)

The important implication of neuroplasticity is that, because our brains are able to change and are ‘formable’, we can refute the deterministic static idea of the brain. She states that there are three main ways in which cerebral neuroplasticity works, namely how our brains are modelled during embryonic and childhood development; the modelling and modifications of neural connects due to ‘lifelong-learning’; and finally the brain's ability to repair itself after it has sustained some sort of injury. (Malabou, 2008) We do know that neuroplasticity has many more causes than these listed three including, “environmental factors, personality variables and genetic and epigenetic factors” (Ballesteros et al, 2015)

The influences that determine neuroplasticity are important, primarily because almost all of them are due to external (environmental) causes. The most important of these causes -for this dissertation specifically- are the first two of Malabou's list. Both embryonic and childhood development are crucial aspects of the process of subject formation in various authors and specifically Lacan, and the role of life-long learning can be seen as similar to the symbolic interpellation process⁵⁵. In short, we know the pre-mature birth is an important part of Lacan's subject formation, and we know that during the ‘Imaginary phase’ many of the important foundations are laid for future drives and complexes. After entry into the Symbolic -where the social takes over- we can relate that with the process of ‘life-long learning’ in the brain.

There are various problems⁵⁶ with contemporary studies on neuroplasticity - although many of these studies do acknowledge and attempt to account for them.

⁵⁵ There are other causes that are also important, such as personality factors -an example of this is the fact that depression structurally alters your brain, most often negatively affecting memory. (Patten et al, 2015) Psychoanalysis also studies these personality factors and disorders, and we can now link more closely both the effects of the brain structure on these factors and vice-versa, by combining both approaches.

⁵⁶ These problems include “(i) lack of power; (ii) sampling error; (iii) continuous variable splits; (iv) erroneous interpretations of correlated gain scores; (v) single transfer assessments; (vi) multiple comparisons; and (vii) publication bias.” (Moreau et al, 2016)

We need not discount or write-off these arguments and studies, but should recognize that more study is required to adequately understand what (if any) is the relationship between the brain and our environment. We require more studies to build on what we already have, to ensure that the idea of neuroplasticity is not mere speculation or just correlation, but causation.

The psychoanalytic community has also been very dismissive of the combination of neuroplasticity and psychoanalysis⁵⁷. Their arguments revolve around the idea that using biological knowledge in psychoanalysis would undermine the role of discourse and understanding of meaning that psychoanalysis is able to provide. (Blassand Carmeli, 2007) I will not go into this argument here, as I have addressed the questions and concerns of biology and science in Lacanian psychoanalysis specifically.

One aspect that I want to briefly mention about neuroplasticity is how far we can actually take the concept, as how much of our brain, or physical, psychological, intellectual and emotional attributes can be alter through the process. Norman Doidge argues in her book *The Brain that Changes Itself*, the fact that ‘the Brain can changes itself’. Her book is primarily a collection of various cases and ‘stories’⁵⁸ of where people have altered the physical structure of their brain to either improve their memory, increase their mental faculties, cured “afflictions” such as strokes or deafness and also clinical “retardedness”. The main part of her argument is that, through various different techniques, we can overtime alter the structure of our brains which would then lead to ‘permanent’⁵⁹ physical and psychological changes. She uses these various cases and examples to show that, when we consider the brain it is plastic enough that we can seemingly alter most of our attributes through it.

Lacan and the Brain

This returns me to Lacan’s Genealogy of Subject formation. As I have mentioned before the most important influences on the subject before it is consumed by the symbolic, takes place when the subject is still a child.⁶⁰ In Neuroscience the early childhood period is just as important for brain growth as the period from birth

⁵⁷ (Carmeli and Blass, 2013)(Blassand Carmeli, 2007)

⁵⁸ Although all are claimed to be clinical and true.

⁵⁹ Nothing is really ‘permanent’, because if you can alter your brain into another structure, in theory you could alter it back.

⁶⁰ When the subject transitions from the Imaginary to the Symbolic during the Oedipal Complex stage.

until around 2 years old is now considered an immensely important period for the establishment of cognitive abilities and behaviour that the person will have for their entire life. (Nelson et al, 2007) Many studies have observed that “Brain development after age 2 years is characterized mainly by reorganization, ‘fine-tuning’, plasticity and remodelling of the major circuits and networks that are already established.” (Gilmore et al, 2018)

Unfortunately, given that most studies on brain development have only looked at the brain from age 6 and up, and only more recently have earlier scans and studies of the brain been done, we have limited knowledge of brain development during this phase. (ibid) We do however know that this phase is of utmost importance to the development of the brain, given its rapid growth and creating of most of our brain networks and structures. We do also have knowledge of certain influences in the phase. One of which is the influence on brain development at this age depending on ‘sex differences’ at birth, as we can early see differences (in size for example) between the different biological sexes and we can even see evidence of ‘local sexual dimorphism’ at this early age. (ibid) The differences of the brain during these early stages from prenatal to early postnatal are most probably reflected by a combination of both biological and experiential mechanisms such as “prenatal and neonatal hormone production and direct sex chromosome effects” and “resulting from parental expectations and interactive behaviour, exposure to physical hazards or culturally influenced lifestyle differences” respectively. (ibid) We can also see that the brain is heavily influenced by a person’s genetic at this age -mostly through the use of twin studies. (ibid)

What these studies show us is that during this crucial development period, our brains grow mainly due to biological influences, with its development also influenced greatly by experiential and environmental factors. This aligns with Lacan’s conception of subject formation at this stage, as we know that the early stages before the Oedipal Complex are immensely important. Although we are still faced with the “verification” problem to verify the direct associations and correlation that can be made between certain brain development/structures with certain psychoanalytic concepts.

Neuroplasticity and Sexual Preference

It is important to show how we can account for sexual preference in the brain, as it is highly related to the next chapter and the final chapter where I consider the constructionist and essentialist debate in terms of Queer theory and Queer activism. With regards to the effect of neuroplasticity and neural circuits on sexual preference, a recent study has found the following results “that sexual preference is encoded by four phylogenetically old, subcortical brain structures. More specifically, sexual preference is controlled by the anterior and preoptic area of the hypothalamus, the anterior and mediodorsal thalamus, the septal area, and the perirhinal parahippocampus including the dentate gyrus. In contrast, sexual non-preference is regulated by the substantia innominata.” (Poepl et al, 2016)

In this recent study by Poepl, the surprising discovery was that these brain structures that they have found to determine sexual preference are in “phylogenetically old, subcortical brain structures”, and none are in the regions of the neocortex. (ibid) What this means is that the structures that seem to determine sexual preference are the structures that develop during the foetal, *in utero* stage of development of the brain. This also implies that, given that lack of cognitive cortical regions with regards to sexual preference, this is what could account for the “immutability of sexual preferences” based on the contemporary evidence. (ibid)⁶¹ The claim that sexual orientation is determined during foetal development is also supported by other work such as shown here, “Here, evidence is reviewed which supports the proposal that sexual orientation in humans may be laid down in neural circuitry during early foetal development. Behaviour genetic investigations provide strong evidence for a heritable component to male and female sexual orientation.” (Rahman, 2005)

Their findings do not finally put to rest the nature versus nurture debate on human sexual preference (although I will in detail explain the non-neurological parts of the debate in the next chapter). Their findings however do show that we cannot ignore the role and influence that evolution and biology has on sexual preferences in human beings. (Poepl et al, 2016) These findings, along with other neurological research on brain structures and sexual and sexual preference, do support the idea

⁶¹ This is also a very crucial point for the construction of a ‘stable’ identity position, or at least ‘semi-stable’.

that sexual preferences are strongly rooted by biology. (Grosjean et al, 2008) This can also be seen in the role of the septal region and hypothalamus in sexual behaviour. When these regions are damaged they have been shown to result in changes in both the sexual drive and preferences in test subjects. (Baird et al, 2007)

One final point on sexual preference, is why they often use the term sexual preference over sexual orientation and others. One is that these seem to be broader than just sexual orientation⁶², and more aligned to general sexual attraction, and secondly -within the neuroscientific field even- there are still debates raging over what (if anything) distinguishes sexual orientation from sexual preferences. As some in the field have tried to distinguish them as follows, where sexual orientation is “stable and enduring internal preference for same-versus opposite-sex sexual interactions and partnering” and sexual preference is “the manifestation of behavioral choices rather than a stable internal predisposition”. (Bailey and Zuk, 2009) Thus given the controversy -and the often present reluctance in these papers to consider an overly large biological role in sexual preferences other than orientation- and the implication of that on the role of psychological and sociocultural dimensions and free will. This is why the term preference is often used in these papers as a neutral approach to this controversial debate.

This chapter is has set out to do a few essential things. Firstly I provide three different ways in which we can attempt to refute the essentialist problem of determinism and reductionism, without having to go down to the level of quantum fluctuations. This is because the mis-fires, downward causation and neuroplasticity provide alternative parts to refute determinism in the strong sense. This is important, because as I showed in the previous chapter, we first need to show how nature is non-determinate before we can conceive of a system that combines nature and culture without paradoxes.

This is what allows me to develop the argument that I will make in the next section, where I will show not only do these findings provide an alternative path. I will show that these findings are related to Lacan and that they can be used not just as a ‘defence position’ against reductionism or determinism (as quantum fluxuations normally does). Instead that is it a fundamental aspect in my conceptualization of the

⁶² This means sexual attractions not specifically with regards to gender, for example if someone is sexually attracted to people based on certain characteristics..

Lacanian subject. I will show that it is possible to relate the subject and its unconscious with the development and plasticity of the structures of the brain and their possible influences and determinants. I will show how these new advances and knowledge in neurosciences can be connected and related to Lacan and his process of subject formation. And given that I have shown that the brain is due to a combination of social and biological influences, this allows me to formulate the subject in a way that escapes the essentialism and constructionism debate.

Chapter Seven: The Determinants of Sexual Identity

The role of this chapter is to develop the argument I have reached above, but with a more thorough and wide biological approach. I focus on a singular subject identity, specifically focusing on the sexual identity of 'Queerness', to show how we can consider its influences. This is because, when we consider even a singular identity more thoroughly, we can arrive at the same conclusion as my broad study in neuroscience suggests. What this chapter does is provide the various different arguments and explanation of the determinates of Queer sexual identities.

As I will show these various explanations and arguments suggest that the determinates of sexual identities are much more complicated, and that there is no complete consensus on this topic -even in the biological sciences. The studies I used in this chapter, mostly end in suggesting that the determinates is most possibly a combination of various biological, social and environmental factors. That this identity is multifaceted and reliant on a wide variety of determinates that fit into neither essentialist or constructionist conceptions. I will not "take sides" in this debate, but rather just show how these conclusions can fit into the Lacanian subject. This chapter is important, as it allows us to look narrowly at the possible determinants of singular identities, and how we could relate these finding to Lacan.

It is essentially the same as the neuroscientific chapter, as it is there to show how we could incorporate these arguments into Lacan's process of subject formation. Then on how we use that process in Lacan to address the dichotomy that exists between essentialist and constructionist arguments.

Heritability of homosexuality

This chapter is about trying to locate the role of biology in the subject, specifically in terms of sexuality, and determine the extent to which biology or the social has a determining influence on human sexuality. As stated previously, a critique that can be used against biological (and broader scientific) explanations is that they do not adequately have test groups or control groups in a population to test whether or not some attribute is biological or social⁶³. Thus one of the most common methods by which this hypothesis (of genetically determined sexual orientation) is

⁶³ This is related to the larger criticisms of experiments and tests conducted in natural sciences that I explained in the constructionism and essentialism part of chapter five. That is why I was very careful when selecting tests and results, as mentioned shortcomings where necessary.

tested is with 'twin studies'. These types of studies are very useful as they are able to test for both genetic and environmental influences on sexual orientation. The majority of studies conducted so far suggest moderate heritability of sexual orientation, and these studies also often show a consistent heritability among women and men. (Kirk et al, 2000) (Pattatucci and Hamer, 1995) (Bailey and Pillard, 1991) (Bailey et al, 2000)

One of these studies, by Bailey and Pillard, for their population used a combination of monozygotic (identical) cotwins, dizygotic (non-identical) cotwins and adoptive brothers that they 'recruited' by advertisements in various gay publications in the Midwest and Southwest of the United States. In their study they found that "52% (29/56) of monozygotic cotwins, 22% (12/54) of dizygotic cotwins, and 11% (6/57) of adoptive brothers were homosexual." (Bailey and Pillard, 1991:1089) Monozygotic cotwins are genetically almost identical, which is why they have always been vital for research into questions of nature versus nurture, although they are genetically not actually identical. (Bruder et al, 2008:763) They are still useful given that monozygotic cotwins are so closely related genetically, whereas dizygotic cotwins are genetically as related as non-twin siblings (i.e. generally they are around 50% related) and adoptive brothers are as related as two strangers (on average, depending on the type of adoption).

Given that all of these siblings share roughly the same environment when they grew up, as we can assume they grew up in similar circumstances with the same parents. Although it is impossible to completely remove the environmental variable in these studies -as even twins have different experiences and circumstances growing up (different forms of 'nurture')- using siblings (especially twins) is still the best way to try and account for the environment variable. Thus testing different levels of genetically related siblings -while trying to account for the environmental factor- we can make some claims on the heritabilities of (specifically) homosexuality. They also tested for other behaviour in youth and their correlations with adult homosexuality, such as childhood gender non-conformity or atypical behaviour.

The study found that in homosexuals, development was mostly dependent on genetic factors and shared experiences (between siblings). They found a 'nonzero heritability' of homosexual orientation, which indicates that it may well be (at least in part) genetically determined. (Bailey and Pillard, 1991:1095) They also attempt to

explain how it would be possible for such a gene(s) to exist in the genepool, given that it would quickly be counter selected in evolutionary theory. There are a few possible explanations for how homosexuality might have continued through the genepool, such as 'closeted homosexuals that still have children', bisexuals or other genetic advantages that might be associated with 'gay gene(s)' ⁶⁴. (ibid)

In another twin study in Australia conducted by Bailey, Dunne and Martin, the authors got their population from the 'Australian Twin Registry', and assess them on two traits, 'childhood gender nonconformity and continuous gender identity.' (Bailey et al, 2000:524) They found that there were hereditary influences on both male and female sociosexuality, as well as environmental influences. They found 20% concordance in identical male twins and 24% for identical female twins. They also found lower rates with non-identical twins, siblings and adoptive siblings, which leads to their conclusion that biology might have an influence on sexual orientation. (ibid)

Dawood and others in 2009 studied the results of all of the previous genetic studies (in a literature review type of work) on the topic to see what the overall results have been on genetics on sexual orientation. They also looked into the various twin studies that have thus far been conducted (at the time they wrote)⁶⁵. They found that the general results of these studies have pointed towards biological influences on sexual orientation. (Dawood et al, 2009:271) As they stated "These studies have been generally consistent in detecting moderate to large heritabilities for both male and female sexual orientation." (ibid) Although they have found various methodological problems and limitations in many of these studies. One of these problems (which by the very nature of the study is unavoidable) is that there is a population selection bias, given that these studies often recruit participants through targeted advertisements in Queer publications or other predominantly Queer locations (such as one study that got participants from an HIV clinic). (ibid) This means that the sample is recruited from a self-selected group on a volunteer basis, which could potentially lead to false positives in "twin concordances and heritability analyses" due to probably biases in these groups. (ibid)

⁶⁴ This is maybe why Sam Austin said this famous quote- "Homosexuality is God's way of insuring that the truly gifted aren't burdened with children".

⁶⁵ **[Male studies]** (Kallmann,1952) (Heston and Shields, 1968) (Bailey and Pillard, 1991) (Buhrich, Bailey, and Martin, 1991) (Bailey et al., 2000) **[Female studies]** (Bailey et al., 1993) (Bailey et al., 2000) **[Combined Male and Female studies]** (King and McDonald, 1992) (Whitam, Diamond, and Martin, 1993) (Kendler et al., 2000)

We can also see this in the largest of these twin studies (Bailey et al., 2000) which got its sample of twins from a 'twin registry' instead of publications. It reported a lower concordance in twin homosexuality than in previous studies, although it did also find moderate to large heritability in homosexuality for both genders. (Dawood et al, 2009:271) And when Dawood et al, used this data they found that "using multivariate structural equation modelling estimated heritability of the latent variable of male homosexuality around 30% and for female homosexuality around 50%" (Dawood et al, 2009:271)(Kirk et al, 2000) Thus we can see that most previous studies have suggested that homosexual behaviour is familial (i.e. biological/genetic), and that would suggest a 'gay gene(s)',(Pillard and Bailey, 1998) and that it is more likely to occur in identical than non-identical twins which would support that hypothesis. (Långström et al, 2010)

Most of these mentioned studies often relied on small samples, and most did not meet current genome-wide significant requirements often needed by modern publication standards. (Ganna et al, 2019) Ganna attempted to provide a more comprehensive answer to the question about the role of biology on same-sex behaviour, by conducting a Genome-Wide Association Study (GWAS). Their study relied on data from UK Biobank and 23andMe genetic samples, where both store genotype data of various individuals and personal data about each sample, although each sample does provide its own limitations. These are that these sample are from people who volunteered their genetic data for various reasons (a popular one being finding their 'ancestry'), and in these databanks the volunteers can also answer questionnaires and provide extra data regarding themselves. Some of the questions are about their sexuality and gender, but the point is these questions are voluntary and as the paper noted as skewed. As it seemed that heterosexuals were less likely to provide this data than other groups which might have skewed the data points.

One of these (which is the same problem with the previous twin studies) is for the 23andMe database. Its participants are customers who have consented to participate in research and to complete a survey. This is problematic as "Individuals who engage in same-sex sexual behaviour may be more likely to self-select the sexual orientation survey, which would explain the unusually high proportion of individuals who had had same-sex sexual partners in this sample" which amounted to 18.9%. (ibid) They attempted to correct for this by using the data from three smaller samples to conduct replication studies.

Their results, simply stated, implied that there exists various genes that influence sexual behaviour, thus there is no single 'gay gene', but rather very many genes that have small additive effects on sexual orientation. As they state "The discrepancy between the variance captured by the significant SNPs and all common SNPs suggests that same-sex sexual behaviour, like most complex human traits, are influenced by the small, additive effects of very many genetic variants, most of which cannot be detected at the current sample size." (ibid) I also want to note that most genes serve multiple functions, meaning that genes which determine certain traits also have effects on other traits (directly and indirectly).

I believe that this concept is best shown by an example Dawkins uses about fox taming in Russia, and the domestication of dogs. A Russian geneticist tried to tame foxes, as wild foxes were much harder to handle, he wanted to make them tamer as it would make obtaining fox fur much easier than hurting them. He bred foxes in an attempt to artificially selected much tamer and more domesticated foxes - this work by breeding the most tame and domesticated foxes to have children (over the more wild ones) and so on for generations until you have very domesticated foxes. The results of his experiment was, the more the foxes were domesticated the more they started to resemble modern dogs -floppy dog ears, dog fur as opposed to fox fur, and one report that they started barking like dogs as well. What this means is that the genes that make wolfs/dogs and even foxes more domesticated and tame are related to other 'classic' dog traits, such as those mentioned above. (Dawkins, 2009:73-74) This means that genes which determines certain attributes or traits may have "side effects) or other determining effects, such as tameness and floppy ears.

Ganna et al, they found that the two SNPs (Single Nucleotide Polymorphisms) that they found to be most related to same-sex activity was rs34730029 and rs28371400. (Ganna et al, 2019) The first (rs34730029-11q12.1) also has been positively associated in previous studies to have a substantial effect on the sensitivity to certain scents. (Jaeger et al, 2013) The second of the two, (rs28371400-15q21.3) has also previously been associated with higher rates of male pattern baldness, and baldness itself has also previously been associated as 'sex-hormone sensitive'. (Kische et al, 2017) (Ganna et al, 2019)⁶⁶ They also found same-sex activity to be

⁶⁶ A precautionary note; if you are Gay then you should probably be weary of future baldness and a career as a food/wine taster.

genetically correlated with “several personality traits (loneliness and openness to experience), risky behaviours (smoking and cannabis use) and mental health disorders, but not physical traits.” (ibid)

It should be clear that these associations are not necessarily not completely genetic, as mental disorders and personality traits like loneliness are most probably caused by social/environmental factors as opposed to genetics determinants. This social link does in and of itself not diminish the accuracy of these results, as even though we can account for these correlations due to social/environmental reasons, that does not in and of itself rule out the possibility of genetic reasons. (Which could mean these different genes are also related as the above fox example)

This study defined its parameters in a broad manner. It used the classifications of ‘heterosexual’ and ‘non-heterosexual’ (not because of exclusionary reasons, but rather technical accuracy based off of available data). They further sub-classified these groups between “those whose partners were (i) less than a third same-sex, (ii) between a third and two-thirds same-sex, (iii) more than two-thirds same-sex, and (iv) exclusively same-sex.” (ibid) The interesting point of this is that the genetic correlation of the first three groups are 0.13, 0.80 and 0.95 (respectively). This implies that the last groups, which indicate the genetic correlations, are stronger between the exclusively same-sex group and the other non-heterosexual groups (presumably bisexuals and other non-heterosexual identities). (ibid) This is compounded by the fact that they found ‘strong genetic correlations’ between same-sex sexual behaviour and same-sex attraction, identities and fantasies (among others). This is very useful as it shows there are genetic correlations not just between the act of same-sex behaviour, but also other parts of sexuality. This is because some authors (like Epprecht’s argument about homosexuality in Africa) that there are different conceptualizations of “homosexuality” that distinguish the act from the identity. (Epprecht, 2013)

Other biological influences on and effects of homosexuality

The focus in this chapter has thus far been on genetic studies, and other scientific studies that aimed to determine the heritability and genetics ‘homosexuality’. This is not actually the only ‘biological’ influences on homosexuality, as there also exists strong evidence for other biological influences on, and biological effect of homosexual sexual orientation. With regards to the former, one of the most

important influences on future sexual orientation has to do with the 'environmental conditions' inside the womb. Two examples of this type of environment influences come from the children born between 1939 until 1960, this is because during that period doctors routinely prescribed a synthetic estrogen called 'diethylstilbestrol', which they believed would prevent miscarriages⁶⁷. The side effect of this led to an increase in the amount of bisexual and lesbian women in the US, who were exposed to the drug while their mother was pregnant. (Swaab, 2014:61)

The same effect can be seen in the statistical fact that, among male siblings - from the same mother- the youngest siblings are always statistically more likely to be homosexual than their older siblings. This is because with each male baby born, the mother's immune response to male substances produced by the male babies gets stronger. (ibid) The same is also evident with highly stressed mothers, as when they are more stressed they have higher levels of stress hormone cortisol which in turn affects the production of foetal sex hormones. (ibid) This means that the more stressed a pregnant women is, the more likely it is that she will give birth to a homosexual child.

With regards to the biological effects of 'homosexuality', we can see this in the various biological differences we have observed between these different sexual orientation groups. One of the most important has to do with pheromones, as we give off scented sex hormones in our urine and sweat, which stimulated certain neural activity in the brains of other people who are (generally) of opposite sex. (ibid:62) Experiments by the Stockholm Brain Institute studies the effects of these pheromones on the neural activity in various people, they found that "a male pheromone stimulates activity in the hypothalamus of the heterosexual women and homosexual men, but doesn't provoke a response in heterosexual men." (ibid) They observed the same effect of female pheromones on heterosexual men and lesbian women, which indicates that homosexuality has a biological bases.

We can also see some other non-neurological effects of homosexuality, such as the fact that gay men are significant more likely to be left-handed or ambidextrous than the general population (Lalumiere et al, 2000), as well as having a statistically high higher rate of "counter clockwise hair whorl" than the general male population. (Klar, 2004) A study also found that gay men on average have longer and thicker

⁶⁷ It did not, which is why it is mostly no longer in use in use, except for specific cases of cancer.

penises than their heterosexual counterparts. (Bogaert and Hershberger, 1999) These are but some of the other biological differences that have been accounted for between heterosexual and homosexual populations, which all indicates that homosexuality is a biological and neurological condition, as these differences are only possible due to differences in genetics and the environment in the womb (pre-birth conditions).

The overall conclusion that can be drawn from the various different studies about homosexuality and its potential biological influence and effects, whether these studies were twin studies, genetic studies, womb studies or other biological studies, generally come to similar conclusions. The overall conclusions are that sexual orientation, meaning not only same-sex sexual behaviour, but also non-heterosexual sexual identities, fantasies and other experimentations are due to combination of influences. These studies (although to different degrees) do not claim that biology completely accounts for or determines an individual's sexual orientation, but that they have a determinable effect on it alongside other determinants such as environment and social causes. As I have shown different studies generally argue that a combination of genetics, biological environment (mostly the womb) and social conditions determine and affect a person's sexual orientation.

This is again where we can see the dichotomy of essentialism and constructionism is not sustainable when compared to contemporary advances in knowledge and science. This is because modern science generally argues that nature does not play a determining role, rather more like a 'probability' role, where biology seems to rather increase or decrease the 'odds' of certain subject identities. Science does not claim that biology is a strong determinate force, it also claims that neither are social influences or other described determinants. This is further shown by the 'undermining' effect these different influences can have on each other, as can be seen from the findings from Swaab mentioned above. Where the chronological order of seems to have a determining effect on sexual orientation, which can work against or with genetic determinant and other environment or social influences. Thus when we consider the 'nature' of the subject, as I will show, we can incorporate these finding into it. This implies that the subject cannot be considered in this simple dichotomy of essentialism and constructionism.

Section Three: The Subject Re-imagined

Chapter Eight: The Re-conceptualized Lacanian Subject

In this dissertation I have shown how it is possible to consider the Lacan's subject to allow room for biology and science. I have also shown that we can account for the role of biology in his subject. This was the culmination of my section one of this dissertation. Thus I have not just provided a re-reading Lacan's subject as also being capable of being biologically influenced, but have laid the groundwork for the re-conceptualizing his subject by incorporating modern neuroscience. That is why the second part of this dissertation was focused explaining the developments and advances of modern biology and neuroscience and the implications of that on the debate between essentialism and constructionism. In that section, I also started to show how we could incorporate and reconcile these two fields.

What I will do in this chapter is show how we can incorporate all of the various 'conclusions', points and underlying principles that I have developed so far into a single argument. I will do this by firstly elaborating on and explaining certain aspects of Lacan and his work and then linking these back to modern neuroscience. I will then provide my argument for a re-conceptualization of the "modern" Lacanian subject, which will then form the basis for my next chapter. I will show what implication this has on the dichotomy between essentialism and constructionism in the contemporary debate between Queer practice and Queer theory. I will also show how these new developments can be incorporated in such a way as to remain true to foundational elements of both Lacan and neuroscience.

To fully understand the argument, I will be returning to various concepts I have mentioned earlier and explain some new concepts. I will also provide counter arguments against my point, and against Lacan in general and attempt to show for the reconceptualized subject can overcome them. I will start this chapter by outlining Lacan's relationship with science and a few key points. Then move to how we can reconcile his work with modern neuroscience. Then finish by providing my argument, by connecting all of these previously mentioned aspects of this chapter, and dissertation. I will however give a brief overview of the argument, so that the reader may see why I am explaining and doing, what I am doing in this chapter.

Argument in Brief

The argument I will make at the end of this chapter relies on a few important aspects. First has to do with the genealogy of subject formation- in this genealogy we can see that until the subject enters into the Symbolic, the subject is influenced by biology -and these effects last throughout the subject's life. After entry into the symbolic, the socio-cultural processes and language become the determinant of the subject, specifically through the concept of 'desire' (or the 'object-cause of desire' of the big Other). We can reconcile this with neuroscience, with claims of the seeming primacy of biology during early development -and the substantial brain development that takes place in that stage- and the early stages of development in Lacan (both of which are also similar in age ranges). The second part is connecting the symbolic influences with the concept of 'neuroplasticity' and how the brain can possibly be altered by language and other social and cultural pressures.

The approach to reconcile them also allows us the opportunity to re-imagine the subject in such a way to adequately respond to criticisms that are often used against the post-structuralist subject. I will explain some of these criticisms and how this reconceptualization allows us to reconsider the subject. Specifically in terms of the essentialist and constructionist debate or in the Agency or 'Freedom' debate. I will show how this reconceptualization can be understood so that it may attempt to provide a solution to the agency debate. The possible solution to this debate can also highlight this subject's possible advantages in dealing with various sorts of criticisms. This is just a broad overview, as during this chapter, the argument will become more precise and substantiated.

Lacan Concepts and "Science"

I have shown we can draw a clear line in Lacan's genealogy of the subject, showing where his subject moves from the biological influence to social influence, and where it moves from the imaginary to the symbolic. He allows space for biology to influence and determine the subject until the end of the mirror-stage and the start of the Oedipal Complex. I would like to return to the following quote from Lacan "The imaginary is not in any sense the illusory, in my view. On the contrary, I grant it its

function as real by basing it on biology⁶⁸—that is, as we saw earlier in the IRM⁶⁹, on the innate effect of the imago, which is manifest in all forms of display.” (Lacan, 1985:723) Lacan then followed that statements with “To biologize in our field is to bring back into it everything that is useful to us in the science known as biology, and not simply to call upon something real that is alive.” (ibid)

What Lacan is referring to in these passages is firstly, that he conceptualizes biology as a function of the real -which we can see in the earlier mentioned first moment of Lacan’s relationship to science. This is an important claim, given that the real is not subjected to the same processes of the symbolic or the imaginary, and can be seen as the “hole in the discourse”. This just means that he took seriously the role and influence of biology, and didn’t consider it to be a mere social (symbolic) institution in essence at least.

When Lacan uses the term IRM, he broadly related to Konrad Lorenz's "innate releasing mechanisms", which states that animals have certain innate capacities to act in certain ways. What he mean by this is not a reductionist essentialist view, which is what the second statement implies. He is instead relating this concept to his mirror-stage (that is why he mentions the ‘imago’, as he is brining in biological notions and influences on the subject during this phase. He introduces biological effects on the subject, but not in a direct ‘determining’ manner, rather it works through the role of the image and the signifier. (Vanheule, Hook and Neill, 2018) The following quote from Vanheule, sheds light on this idea; “So there is (a) the biological, (b) the cultural, and (c) the Imaginary and its effects.” (ibid) The idea that the subject is influenced by a variety of factors, and that these factors are -in a sense- determinate through the effects of the image and the signifier. I will show how this can be reconciled with modern neuroscience further in this chapter.

In Lacan’s process of subject formation, we must account for all of the major biological influences that determine the subject before the Oedipal Complex, as it effectively marks the passage from the imaginary to the symbolic. As I have stated this does not mean that biology stops influencing the subject after entry into the symbolic order. We can still account for these influences in the form of latent drives and complexes in the unconscious and conscious subject, and those which still work

⁶⁸ My own emphasis.

⁶⁹ Which likely refers to Konrad Lorenz's "innate releasing mechanisms" (Vanheule, Hook and Neill, 2018)

on the subject through the image or signifier. One way of reconciling these is through the concepts that signifiers available to the subject do not disappear when they are 'replaced' as they remain in the unconscious. I am referring to the idea that when we use available signifiers in the process of subject formation, those signifier that were available to us, but that did not determine us do not disappear. They remain latent in us, and can still have determinable effects on us later in our lives.

Returning to what I previously discussed, Lacan's idea of science was taken primarily from physics rather than biology, given that it was the dominant science during his time. His concern was the highly deterministic nature of physics. There was still a common concern that, even though biology might seem as less deterministic than physics, when we take seriously its influence over the subject, we return to biological-reductionism where we are subjected mere biological processes.

All of the authors that I have deeply engaged with in this dissertation are materialists, thus they can't/won't bite the bullet and return to idealism. That is why many of these authors have attempted to overcome the problem of biological reductionism-although I would argue some are not very successful. One of alternative methods is "Badiou's gesture" (as Žižek calls it) where Žižek argues that in Badiou "human Reason cannot be reduced to the result of evolutionary adaptation" as art is not merely the result of an advanced production of sensual pleasures, but that it is a medium of Truth. (Žižek, 2004:169) This is a different attempt than the one I am proposing or Žižek's as it tries to account for this by reference to art. I have mentioned Žižek's account, which to overcome this reductionist problem arguing that nature is culturally overdetermined, and he used the "unfathomable X" as a way to overcome this.

This gesture that Badiou uses is also at work in psychoanalysis -or we can assume he meant it as gesture to psychoanalysis-, as it is related to the concept of "sublimation" in Lacan and Freud. Sublimation in Freud, is when a drive is redirected into a 'non-sexual' object, such as art and intellectual work, which thus functions as a socially acceptable escape for the excesses of sexual libido. In Lacan, the fundamental change is that this drive is not redirected towards a different object, but instead its position in the structure of fantasy, meaning it changes the nature of the object that it was originally directed towards. (Lacan, 1992:293) It is a "change of the object in itself", which is possible due to the fact that the drive -which is also linked to the death drive- is "already deeply marked by the articulation of the signifier". (ibid)

The 'big achievement' of psychoanalysis is its claim that "sexuality itself, sexual drives which pertain to the human animal, cannot be accounted for in evolutionary terms." (Žižek, 2004:169) This is because for Žižek, this is how we should locate the shift from biological instinct to drive, as "instinct is just part of the physics of animal *life*, while drive (*death* drive) introduces a meta-physical dimension." (ibid:255) He makes this point by using the same distinction that Marx used between the working class and the proletariat, where the former is an empirical category, the latter is a "subject-agent of revolutionary Truth", thus in Lacan we can see the same distinction, where the drive is an "*ethical* category". (ibid) The point of this distinction, is not just to accept 'evolutionary-positivist' frame, but to show how their materialism is stronger and can account for these various different concepts. We can see this same argument in Lacan's work, as I have previously explained his concept of 'denaturalization', where the goal of the symbolic is to 'denaturalize' the human nature of the subject. Which implies a sort of essentialist concept of human nature and biology, although one he attempts to override through the symbolic.

Lacan tried to reconceptualize the unconscious not as the biological construct of drives like Freud did, but he placed it within the differential system of the Symbolic. As I have also stated, the symbolic -or language- has the problem that, as Saussure stated, it is immutable and operationally closed. In the sense that it seems to have no direct relationship with the world, as it can affect us but not the other way round, and we cannot trace its original 'birth' or origin. Thus a possible criticism of Lacan is that, given that he placed subjectivity mainly within the Symbolic -as I showed it was the eventual outcome from his subject formation- the problem is how to account for subjectivity within this system. (Carew, 2014:19) Although I have shown that this is not necessarily the case, as in earlier Lacan, we can see that the early stages of subject formation do allow room for biological influences (specifically on future drives) on the subject and unconscious although even in early Lacan he favoured the Symbolic. Žižek's project was to reconcile both of these by using 'transcendental materialism' as the grounding of the subject, where it is split into the 'irreconcilable material' and the 'transcendental zones'. (ibid)

I would like to give a standard (but well-articulated) criticism why Lacan's subject is not a subject in the tradition manner, and why it is problematic in the above debate: "First, the Symbolic constitutes the possibility of the orbit of the Imaginary within phenomenological experience in such a way that it autonomously mediates *all*

contact with the outside world, thus diminishing the latter's importance; second, as a consequence, it represents the predominance of *non-natural* (= irreducible to the ebb and flow of the material-objective world) influences in the explanation of the essence of psychic life.” (Carew, 2014:73) The point being made here is that the subject, which is determined by the Symbolic (language) prevents it from being influenced by nature (biology) and given that the Symbolic is a closed structure of signifiers, the subject is essentially just a result of this web of signifiers.

It is important to understand the concept of the ‘Big Other’, as it is fundamental for the Symbolic, and thus our understanding of desire and the unconscious. Lacan conceptualized as the Big Other, as he equates it with ‘the Law’ and language itself, that is why it is inscribed in the symbolic order. It is an illusion that is so radical, we cannot assimilate it, thus it can be seen as another subject itself, as it represents the particularization of each subject in the symbolic order. This “Other as another subject” is not as fundamental as the “Other as the symbolic order”, as it is where speech is constituted. Given that speech originates from the big Other -as opposed to the subject or the ego- means that Lacan states that we are not consciously in control of language, this is also why he stated that “the unconscious is the Other’s discourse”. (Lacan, 1985:549) This conceptualization is with regards to the big Other and speech, but it is also important for other concepts in Lacan, with regards to Lack, difference and sexuality.

Žižek's famous phrase that “the big Other no longer exists”, although he does clarify that it is not that the big Other existed and now ceases to exist, but rather that “*it never existed in the first place*”. (Žižek, 1999:322) This is because the big Other is equivalent to the symbolic order, it operates at a different level than direct ‘material causality’, thus this non-existence is related to the belief of ‘symbolic trust’ of what the big Other says. (ibid) He uses a line in a film where Groucho Marx states “Whom do you believe, your eyes or my words?” to illustrate the absurdity where the symbolic-mask is more important than direct reality. This illustrates the argument that unconscious and the desire’s we derive from it, are in fact not part of material causality strictly speaking. This relates to the argument I will make about causality and agency.

I want to go back to the ‘L’ schema I provided in my chapter on Lacan, the schema showed that we as conscious subjects are split between four different corners. In that schema we can see the various aspects of the subject and how they

interact, although here I will just recall a simplified version of the schema.⁷⁰ The important aspect of the schema is that we as subjects have a symbolic relation with the big Other, but this relation is always blocked by the imaginary plain (between the ego and small other- the specular image). Thus, because our relationship has to go through the imaginary “wall of language”, we always receive the discourse of the Other -remember that “the unconscious is the Other’s discourse” (Lacan, 1985:549)- in an inverted manner.

It is true that, for Lacan, the symbolic order does pose a sort of ‘barrier’ or ‘regulator’ for our access to both our unconscious and the Real, this does not mean that it prevents or ‘censors’ them. The reason why the symbolic does not trap the subject is because, firstly the symbolic order has gaps, and in these gaps we can have the traumatic experiences with the real⁷¹ -specifically when we transition from the primordial real into the imaginary and symbolic in our early development. We also still have access to our unconscious self in an inverted manner, and another important aspect is that crucial parts of the subject are also centred in the imaginary plane.

Returning to the previously explained concept of desire. Desire is always the ‘desire of the Other’, which means that is it inherently illusive and intersubjective, to the point that we can never actually satisfy desire at all. This *object a*, is a ‘lost object’, it is what makes us desire other objects, as it makes us desire objects that we now believe will make us ‘whole’. We aim to become the desire of the Other, we attempt to determine what their want from us, so we could do it and become their desire. This *object a* is also irreducible from both the imaginary or the symbolic as he stated, “the *a* is what remains irreducible in this total operation of the advent of the subject to the locus of the Other, and it is from there that it is going to take on its function” (Lacan, 2004:189)

Thus the process of becoming a subject also includes a constant process of attempting to decipher how to desire, to learn how to ‘become the object of desire’ as this *object a* is always elusive. This process is highly influenced by various structures, commonly the symbolic and imaginary structures of society, such as

⁷⁰ I do want to state that the schema used previously was the original one Lacan use, but he later switched to a simplified one, both were still accepted by Lacan, but he switched for practical reasons.

⁷¹ Although Lacan did in his later work removed the biological connotation from the Real, but seemingly still kept its association with brute matter.

social pressure and modern advertising. We can now compare this with the concept of drive, which is not a phenomena that attempts to reach a goal or object, but rather is a result of the impasse that the subject faces. This impasse in the subject exists, because of what Žižek calls “the night of the world”, which is the ‘madness’ we experience in our transition from ‘biology to culture’, i.e. when we enter the symbolic. As stated all drives are death drives, thus it is this madness and impasse that makes us sexualized animals that enjoy excess, but still bound to the death drives.

The Reason why I wanted to re-mention these is because, before the subject enters the symbolic -as I have shown during the early stages of subject formation- some of the most important or fundamental developments occur to the subject's complexes, ego, drives and in some sense their “unconscious”. I don't want to strongly emphasize the term unconscious in this list, as the unconscious is itself structured like a language, as he stated “we only grasp the unconscious finally when it is explicated, in that part of it which is articulated by passing into words.” (Lacan, 2013:32) And it can also be argued that since it is the discourse of the Other, it is merely how the effects of language acts on the subject as he stated, “one should see in the unconscious the effects of speech on the subject.” (Lacan, 1977:126) This means the unconscious is the way in which we are ‘interpellated’ and directed by the Symbolic, how we guess what the big Other desires.

Neuroscience and Lacan's Subject

As I have mentioned previously, Lacan states that the mirror-stage starts in early development and continues until around 18 months old and the Oedipal Complex starts around the same time (they overlap somewhat) and peaks at about the age of four. The Oedipal Complex also marks the entry of the subject into the symbolic, thus the subject starts to enter the symbolic right before the age of 2 years old (although ages do vary among different people). We can relate this to the recent discoveries of brain development, that one of the most important stages of development is this early childhood, as after the age of two, brain development is “characterized mainly by reorganization” as “ the major circuits and networks that are already established”. (Gilmore et al, 2018)

The recent studies I elaborated on in the previous chapter, suggest that during this early stage of brain development, biology seems to have a predominant influence (specifically the results between the differences of development between

the different biological sexes), although during this early stage there are also other influences that have an effect. These are probably a combination of various environmental, social (social influences and pressures also include language acquisition), genetic and biological influences that shape brain development. Natural scientists often privilege biological and other non-social influences, although they do acknowledge the role of socio-cultural influences on brain development. This relates to how Lacan conceptualized the development of the subject, as he also prioritizes these early stages for the formation of various complexes, drives and aspects of the subject, before the subject enters into the symbolic order.

Recent studies on neuroscience suggest that the brain develops due to these various factors I mentioned above and that most of its major networks and circuits are established in this early period. Both of these coincide with Lacan conceptualization of the formation early complexes, drives and the ego (and its specular image in the small other). As I have shown the impact of biology in these early stages for Lacan, until entry into the symbolic. Although we can't make claims on the effects of psychoanalytical discoveries in brain development, we can claim that both **(1)** the physical structure of the human brain develops rapidly during this age due to various influences, and that **(2)** the physical structures of the brain does seem to have physical and psychological effects on the subject.

Although this might seem a bit problematic for Lacan and his subject, it is not necessarily so, as **if we consider** that the various complexes, drives and '*desire*', are all -mainly- determined by the structures of the brain, we can still completely account for the influence and mediating effect of language and the symbolic. This is because as I have shown before, we do know that we can alter our brain structures, not just ourselves but due to 'social influence' we receive, specifically during an early age. (Davidson and McEwen, 2012)

We have also seen in recent studies that "Neural and behavioral research studies show that exposure to language in the first year of life influences the brain's neural circuitry even before infants speak their first words." (Kuhl, 2010:713) The role of language on the development of the brain during early stages show that even in the initial acquisition of language, the interacting brain systems are the same as those of adults when they also process language. (Dehaene-Lambertz et al., 2006) This is what Lacan said when he claimed that we are inscribed into language, before we even enter the symbolic. We have also seen that infants have an incredible

predispositions and ability to learn once they are finally exposed to natural language. (Kuhl, 2010:713) They also have a definite ability to distinguish actual language from language-similar noises, showing the almost “precast” ability of the human brain to learn and work with language⁷².

Studies like these point to the fact that social influences and pressure, specifically language acquisition, have profound effects on the neural circuits of the brain and its development. We can now suggest that the symbolic order, can directly influence the neural circuits of the brain, and thus have physical and other effects on the subject. Thus when we consider the influences of the brain structures of the subject, we can say that those brain structures are both formed shaped by various influences, including social and cultural pressures. That is why I would propose that when we reconceptualize the Lacanian subject, we can use the following formulation provided by Žižek, but taking it further and reconciling this seeming conflict between culture and biology.

As I have shown Žižek argues that there are two opposing forces, that of Nature and that of Culture, and a third un-derives force that is his “night of the world”, which according to him is the “root-source of what comes to be subjectivity proper in and for itself (\$)”. (Johnston, 2012:327) Although in this fight between culture and nature he is firmly on the side of culture, as he does state that “simply because the opposition between nature and culture is always-already culturally overdetermined, i.e., that no particular element can be isolated as 'pure nature,' does not mean that 'everything is culture.' 'Nature' qua Real remains the unfathomable X which resists cultural 'gentrification'”. (Žižek, 1993:129)

I have shown we can consider the brain as both a product of biology, as it specifically seems more biologically determined in early stages (which coincides with the larger biological influences on early subject formation for Lacan) and as a product of culture and language (which have life-long influence on brain circuits). We can reconcile these positions by arguing that -as Žižek claims- the subject is a product of nature and culture, and a product of language itself, which acts are the ‘culturally overdetermined’ element. The reason why I am arguing this is because

⁷² I will not go into the nativist (Chomsky) vs learning (Skinner) debate around language acquisition, as I rather want to focus on the role of language in the brain. Although as modern research into infant learning mechanism have shown that “Interestingly, this mechanism does not resemble Skinner's operant conditioning and reinforcement model of learning, nor Chomsky's detailed view of parameter setting.” (Kuhl, 2010:716)

recent neuroscientific studies have shown the immense importance of language in the brain, and the various factors that we require to be able to learn language⁷³. The fact that infants are capable of learning language so easily is incredible, as we have even seen they possess an ability to distinguish between different languages and non-language sounds. As when infants do not attempt to imitate or reproduce nonspeech sounds with the exact same frequency component as speech. (Kuhl et al., 1991)

We also know that the neural system required for speech cross multiple different parts and systems of the brain, and these systems are also shared by our use of perception and action. (Liberman and Mattingly, 1985) Recent work regarding the effect of social contexts on language learning, suggest that in order to effectively learn languages, humans require other human social interaction. That is why Hari and Kujala recently used the definition of *ubuntu* from Desmond Tutu as “a person becomes a person only through other people” could be seen as a fact from a neuroscientific position, as we seem to require continuous interaction with other people for our brains to form and work normally. (Hari and Kujala, 2009)

The Re-conceptualized Subject of Lacan

Thus we can consider a re-conceptualization of the subject, where they are firstly determined and formed by these various influences (particularly biology and environment at the early stage) and then systematically be influenced by culture, society and language also. Given that fact that language is immensely important in the brain, and is spread throughout various systems in the brain (and is seemingly also highly interrelated with other people), we can consider it in the Lacanian manner of the symbolic order. Given that our neural circuitry can be altered by social influences, and that these are primarily given to use through language or the symbolic order if you will, we can consider that when it alter the brain structures in that way, they can be seen to alter our unconscious (in the Lacanian sense).

This is because it is the unconscious that is the discourse of the Other (symbolic order) when it ‘communicates’ with us and when we try and figure out its

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object of desire, *object a*. As I have shown that, we can be influenced into desiring certain objects due to the influence of *object a*, due to social pressures such as advertising. Thus further research into the effects of these specific types of social pressures on neuroplasticity would provide more possible evidence for (or against) this proposition. Although given the ambiguity in Lacan and Žižek regarding certain ‘unconscious’ ‘decisions’ (specifically Žižek who argues that fundamentally free acts can emerge from the unconscious), implies that for both of them the unconscious is not mere the ‘interpreter’ of the Other, rather that it also hosts its own drives and certain decision making powers.

What this all means is that, if we consider the subject to be a result of brain structures we can consider the Symbolic order and big Other to exist and influence the brain. As when the social influences the brain, it alters neural circuits, which will then alter the subject -and we can rely on the Lacanian concept that it alters the subject by altering the desire of the subject through the unconscious. This new developments allow us to keep the privileged space of the social for Lacan, while also introducing biology and its effects.

I do want to clarify that the alterations of brain circuitry is neither immediate nor ‘easy’. It is a long process due to continuous pressure and influences. This again seems to be related to what Žižek indicated -as I explained previously-, when he spoke of the event in Lacan. That it is possible for the event to only occur when we realise it, and that we can witness it without realising it.

The reason why culture is the dominant force is due to that fact that through cultural processes, we can alter our neural circuits. The extent of how much it can - and thus if the Lacanian concept of the supremacy of the symbolic in the subject would fit into this model, still requires further neuroscientific research. This again relates to another point I have explained earlier in this dissertation, where Žižek argues that the subject is inherently “limited”, as it is the failure of subject formation of the symbolic. I would expand and use this argument where this “limit” and failure is not due to a failure of the symbolic, but due to the failure of Lacan’s concept of ‘denaturalization’. I would argue that this “limit” of the subject for Žižek, is due to the base biological influences from the early stages of the process of subject formation. This is why I would argue that we can have ‘stable’ and persistent subject identities, this fits with the argument for certain stable and “semi-immutable” identities which is advocated for by recent biological studies as I have shown. This idea is also how we

can reconcile the symbolic's over-determination with the unfathomable X of nature, while my arguments for "free-will" will address the concerns about this approach to reductionism and the paradoxes of mixing "essentialism" and "constructionism" concepts.

One important part of this conceptualization of the Lacanian subject is how it is able to handle the idea of "freedom"- meaning can it account for agency. This is because it has to be able to counter problem of biological reductionism and determinism caused by introducing biological influences. It also has to be able to account for social determinism caused by the structuralist aspect of the overarching social and cultural influences on the subject.

This does bring me back to another important point of what makes subjectivity (or agency) possible for Žižek, I would like to bring in here two other important points. That I have explained previously in detail. First are the deterministic counter argument as proposed by Johnston in chapter six, where to provide a counter to the traditional biological determinism argument, he relies on 'misfires' and 'downward causality'. We could relate the first of these with gaps in the symbolic, i.e. when we receive faulty information from our unconsciousness in our brains, I also serves to greatly undermine the deterministic nature of biology. I want to link the second of the two propositions to Žižek's argument about what makes a "free act" possible is to make possible its own possibility retroactively.

The reason why he argues that this is what makes a "free act" possible, is because just introducing a random glitch, won't guarantee freedom, but rather just introduce randomness, which is still not freedom. Although it seems to provide us with a 'way-out' of the determinist nature of biology, it does not guarantee freedom. That is why I am relying on the second which links to Žižek, when he says that we need to make possible our act retroactively, he doesn't argue for some sci-fi solution, that we should get a DeLorean with a flux capacitor and go change the past to make a free act possible in the future, rather that we should instead just introduce "a second level reflexive causality". (Žižek, 2009:203) He describe this second level of causality as "I am determined by causes (be it direct brute natural causes or motivations), and the space of freedom is not a magic gap in this first-level causal chain but my ability retroactively to choose/determine which causes will determine me." (ibid) Although he argues that we are too limited by an ordinary historical notion of time, he does not explain how it is possible, although he does use fictional

examples to illustrate the point (the Minority Report and love example I explain previously).

I want to argue that we can locate this second level of causality in the neuroplasticity of the brain and its downward causation. This is because, as I have explained, it is not only possible to alter your neural circuits and structures of your brain through the various influences I have described, there is also one other “*internal*” influence. That is yourself, as you can (albeit by using various external influences, for example specialized exercises and diets) change your brain, thus this opens the possibility to determining which causes will determine you in the future. I use the term “*internal*” in a more philosophical manner, where it refers to your ‘inner-self’ as opposed to some external pressure. As it is fundamentally an ‘inner’ choice to alter yourself, by means of external influences.

For example we can consider this ‘free act’ in two possible ways, the more direct and the indirect way. The direct way can be seen in the example of grief, which we know has various negative effects on your brain structures. (Shulman, 2018) Thus the simple act of seeking professional help and attempting to overcome grief, loss and similar traumatic experiences, could be seen as a way to alter your brain circuitry. This act is then fundamentally a free act, as you determine what causes -through the effects that your brain structures will have on you in the future- will determine you. This is the direct solution, as it relies on the idea that, when choosing to cure your grief (to alter your future subjectivity and self), you are performing a free act outside of the constraints imposed by both nature and culture. I state this even though a good counter can be made that the act of attempting to curing grief can be seen as culturally motivated (self-help books and grief counselling awareness), or biologically motivation.

The reason why I argue that this is still fundamentally a free act, is due to the fact that when we try and ‘cope’ with grief, it is not always a clear conscious decision such as deciding to seek help. The process of overcoming grief and ‘coping’ has both conscious and unconscious aspects, and the process of ‘coping’ and overcoming grief is multifaceted. (Jacobs et al, 1994) The reason why the ‘two-fold’ approach to decision making in this example (and other, such as the love example), means that we split responsibility for the decision between the biological influences (more clearly seen in the love example with hormones), social influences (as given to us by the big Other through our unconscious) and the “free determinism” of the

unconscious as well. The reason is, large influential determining 'choices' -such as falling in love or overcoming grief- always seem like the "choice always already happens" afterwards. I mean that when we realise that we are in love or no longer grieving (or even the moment when we realise we need professional help for grief) it is a combination of these effects.

And using a Freudian/Lacanian idea, the new state of non-grief of love (or relaxation that you need help) is not determined in your conscious ego, but at a deeper level. It is in this unconscious level where we find a free choice. The idea is that we only choose or more aptly realize 'retroactively' that we are in-love or no longer grieving or have a problem that requires help. This 'retroactive' decision/realization is not on a conscious level of our ego (even if it seems like it), but due to our internal free act. My conception goes further than Žižek's idea, as I would argue that it is the 'decision' to alter to your brain structures, that physically and subjectively alters your future self is the aspect that makes its free, specifically if the decision/realization is retroactive.

I am cognizant that this seems like a general act, one that is not necessarily free, as we can just consider it just another act in the long line of determining influences on your future self⁷⁴. An argument can be made that this act is determined, as in you have been determined or influenced to change your neural circuitry by your biology, or by the symbolic, or a combination of both of them⁷⁵. That this was just another act in the long chain. Why I would argue that it is not a result of biological 'reductionist' determination, is because although we are greatly determined by biology-its direct and deterministic power is weakened by other influences such as the environment, the social and these glitches, which all of them are shown in the three points I mentioned previously in this dissertation, that of the 'glitches', 'downward causation' and 'neuroplasticity' arguments. The point is that biology and nature are 'culturally overdetermined', their influence over the subject is barred by the social, through the unconscious. The argument is that, not only is

⁷⁴ Determining in the sense of being caused or influenced by biology or social determinate, not the hard essentialist determinism or the social constructionist determinism.

⁷⁵ I will not go into the even deeper argument of a deterministic universe, thus no action is free, or even the quantum argument -as with the glitch argument- randomness does not equate freedom. This is because this distracts too much from my topic, as it raises the question of -if agency possible at all? I will focus more on the immediate questions of a free act.

biology's determining influenced diminished by these 'glitches' and 'downward causation', but that it is mediated by the social.

Although we could make the same argument, but in reverse, for why we are not socially determined, there is already provision in Lacan and Žižek for the breakdown or gaps in the symbolic. That is when we experience the real, and have gone through the "two deaths". This is the process that Hudson explained as "an act which explodes all symbolic co-ordinates and determinations is logically presupposed by the construction of a new objective order in which social identities have been transformed." (Hudson, 2006:309)

One famous study on free will is Libet's experiment, I will not go into detail about the experiment, rather just its findings. He compared the subjective "time" between when a decision took place and what happened on the cerebral level, and when there was a physical response to the decision. His results found that subjects already started with their "non-preplanned" acts before they even became aware of the intention to take action. (Libet, 1985)(Liber, 2004) Thus the conclusion of these types of experiments are that "Thus these findings seem to show that our simple actions (and therefore, potentially, also more complex ones) are triggered by unconscious neural activity and that the awareness of those actions only occurs at a later time, when we think we are willing to act." (Lavazza, 2016) I do want to mention that their use of the term unconscious is not necessarily the same technically use that Lacan assigns to it.

This all implies that intention to act is influenced by the events, *after* the actions has already been performed. This means that we only 'decide' what we want to do -and this decision is based off of a reconstruction based of off inference- after the event is already in motion. This relates back to what Žižek's argued makes a free act possible, since for him the "choice always already happens" and we only retroactively decide. A popular occurrence that can serve as an analogy, is where a person has performed a heroic act (such as jumping in front of a bus to save a child), who after the event normally says something like: "I didn't even think, I just acted". Where they directly state that their heroic act was an instinctual act, not a result of deep deliberation.

These studies all make two things clear, firstly is that the experiments -due to technical reasons- are testing with regards to small (probably reflexive) acts as opposed larger acts, but they state that this can have implications upwards. The

second, which is related to an argument I have just provided about the 'retroactiveness' for a free act. What these experiments are actually doing, is showing how we can doubt the fact that acts are a result of conscious voluntary behaviour. This is because the neural activation already starts the process of making the decision, and the conscious decision making only arrives after the 'actual decision' has already been made. (ibid)

Thus it seems like we consciously don't directly make decisions, rather just "retroactively justify" or unconscious decisions in a way, and this process is very similar to what I explained above, that it is the retroactive decision what is determining you. We can also again add to this the fact that, if the unconscious can be considered to be a primary determinate in decisions, we can "determine" our unconsciousness in a way. As it is the result of these various influences, yet it is also a cause of them, this circular motion of your unconscious both being a primary cause and effect of subjectification is where we can locate a 'free act'. Specifically when we can break through gaps in the symbolic order and have a traumatic experience with the Real, this allows us more room to determine our eventual determinants, similar to the previously mentioned "two death" where Žižek locates his free act. Although my conception goes much further than Žižek's as his only allows the possibility of a free act at that moment, mine allows for the possibility to freely determine your future self through neuroplasticity.

That is why, we can argue that a decision to alter your neural activity can be free act where the subject can determine their future determinants, although not in a strong conception of free will. This is how I argue we can account for biology successfully in Lacan, without falling victim to any of the general pitfalls of biological reductionism, symbolic reductionist or returning to some idealist conception of the subject. This subject is still faithful to Lacan and his psychoanalytic and structural model, and this subject -as I will explain in my final chapter- can provide us with a grounding for a re-conceptualization of the Queer subject and its implications for these fields.

This is how I believe we can re-conceptualize the Lacanian subject, one which addresses the concerns of essentialism and constructionism, while also being true to contemporary biological knowledge and the Lacanian canon. We can consider the biological influences in the early stages of subject formation to be this limiting factor and 'unfathomable' X which resist the interpellation of the subject. This biological

underpinning of the early subject, can be correlated with the neuroscientific knowledge of early brain development, and the later over-determinedness of the symbolic with life-long alterations and modifications of the brain from other influences. This is not a problem, in terms of determinism, due to the three factors I have explained from glitches, downward causation and neuroplasticity. I will now show how we can conceptualize and use this subject as a 'way out' of the debate between essentialism and constructionism, by using the Queer activism and theory example.

Chapter Nine: Back to the 'Queer' Future

In this, final, chapter I will incorporate the Lacanian subject that I have developed through this dissertation and specifically in the previous chapter, with what I have called the 'fissure' between Queer theory and Queer activism (practice). As I have stated, this fissure is just one example of a broader debate raging in the social sciences, that of the dichotomy between essentialism and constructionism. As I have stated, I chose this particular manifestation of the larger debate, due to its connection with Lacan and my subject, and the availability and clear clarity in distinction between the different sides. I will firstly explain my use of the term 'Queer' -which I put on hold at the very start of this dissertation- and then fully explain and elaborate on the 'fissure' between Queer theory and Queer practice. I will also show how these different sides also relate to the different sides of the constructionism and essentialism debate. I will end this chapter, and effectively my dissertation, by showing how I can insert my reconceptualized Lacanian subject into this debate to try and provide a critique of a stoic view of the dichotomy of recommendations to transgress it. .

The Deconstructed Queer "Subject"

I have already attempted to clarify my use of the term 'Queer' at the beginning of this dissertation, as I stated that I would throughout this dissertation use different conceptual terms when referring to this broad category. As I used terms such as 'homosexuality', 'LGBT' or sexual preference to match the author whose work I was relying on. I already know that anyone who is intimately familiar with Queer theory could question my approach, and might consider that I have misattributed or misconstrued Queerness with "Gayness" or broadly "LGBTness" at various stages of this dissertation. This is because Queerness, as is popularly conceptualized in Queer theory, often doesn't agree with the category of 'subject' and often would not consider Queerness a stable identity position, as it is merely a 'performance'.

The attempt of this chapter is -as stated- not to change this position held in Queer theory, but instead attempt to offer a starting place -a ground- from which to help resolve the fissure between Queer theory and Queer practice in contemporary politics, by proving a 'way-out' of this dichotomy. As the subject that I have just

defined and developed will be able to both incorporate biological influences (for Queer practice) and social-symbolic influences (for Queer theory). Before I explain the fissure I want to provide a short explanation and conception of the Queer 'subject' in Queer theory (as there is no universal Queer practice approach, rather just certain shared ideas between activists, politicians and others involved in this political field).

For my explanation of the Queer subject I will rely on Edelman's conceptualization, and also mention Butler's (1990) as they both represent the deconstructivist and performativist approach respectively. This is why I chose Edelman, as he is specifically able to provide a bridge from Lacan and Žižek to contemporary Queer theory. He is a strong proponent for a deconstructionist version of Queer theory, as he argues for the deconstruction of stable identity positions and the subject in general. Although -as I have argued above- we can read in Lacan stable and knowable identities and subjects (which also include biological determinations), Edelman obtained his deconstructivist approach from Lacan, although from a very specific reading of Lacan. That is why when we consider the reading of Edelman's 'subject' is the same as a very specific reading of the 'later' Lacan's work.

The most important identity or 'subject-position' in Edelman for my research is the Queer identity, but for Edelman, it is not actually an identity. As he states "Queerness could never constitute an authentic or substantive identity, but only a structural position determined by the im-perative of figuration; for the gap, the non-coincidence, that the order of the signifier installs both informs and inhabits queerness as it inhabits reproductive futurism." (Edelman, 2004:24) One of the fundamental concepts in his theory is the above mentioned 'reproductive futurism', Edelman argues that our political discourse is limited by a heteronormative process that centres around the idea that Queer relations cannot fully participate in this reproductive process. This is because politics itself is centred around the idea of "fighting for the children", the political project is centred around this idea of advancing the society for the good of the children. (ibid:3) I will specifically address and explain the difference and relations between the Queer "subject" and gay "subject" in Edelman specifically and in broader Queer theory.

To explain this concept fully, I first need to explain how he conceives of the current societal and cultural structures and how they create the image of the child.

He uses Lacan's description of the symbolic as a network of signifying relations to describe politics, through which we experience social reality. (Edelman, 1998:19) Although we experience that reality in the form of fantasy, that is there to assure us of "our identities as subject and the consistency of the cultural structures through which those identities are reflected back to us in recognizable form." (ibid) This is to 'save' us from directly experiencing the void that is at the heart of the order of signifiers that construct of 'symbolic reality'. Thus for him politics is what gives us this false notion of self-sufficiency, this misrecognition we have of ourselves and our imaginary relations has the effect of alienating subjects. We are only ever given a "promissory identity" by the signifier, this means that we will never be able to completely embrace this identity, this is because, since we are 'subjects of the signifier' we are signifiers ourselves. Thus like signifiers in the signifying chain, we are constantly trying to "catch up to ourselves as subject", by trying to close the gap that within us that divides us. (ibid:20)

Politics is thus what confronts our desire, and it does this by proving a 'temporalization of desire' where it abstracts from an imaginary past to direct us into a future reality. That is why he states that "Politics, in short, gives us history as the staging of a dream of self-realization through the continuous negotiation and reconstruction of reality itself; but it does so without acknowledging that the future to which it appeals marks the impossible place of an imaginary past exempt from the deferrals intrinsic to the symbolic's signifying regime." (ibid)

The central point for politics, the point that its future appeals to and its past imagines is the *image of the child*. For him our entire social order is built around the image of the child, and thus the social order -and thus by extension the political discourse of the social system- is perpetually concerned with the future of the child even if it does not directly address it. (ibid:21) The reason why the child is this crucial point in society, is because of the death drive -a concept that Edelman gains from Lacan. This brings me back to another concept in Lacan, that of "jouissance", which is related to the concept of the death drive, I will not go into detail here as to these conceptions of Lacan (as I already have previously), but what is important is how Edelman uses these concepts in his work. In short for Edelman, the death drive marks "the excess embedded within the Symbolic through the loss, the Real loss, that the advent of the signifier effects." (Edelman, 2004:10) There is a distinction between the subject of the drive, and of desire, where both are 'born' in relation to a

loss the difference is that the former's loss is real rather than symbolic. (ibid) This means that "while desire is born of and sustained by a constitutive lack, drive emerges in relation to a constitutive surplus. This surplus is what Lacan calls the subject's 'anatomical complement,' an excessive, 'unreal' remainder that produces an ever-present *jouissance*." (Barnard, 2012:173)

The two death drives that Edelman is preoccupied with are those that concern the figure of the child and the figure of the Queer. The former is "enacting the law of perpetual repetition as it fixes our identity through identification with the futurity of the social order" and the latter "localizes that order's traumatic encounter with its own inescapable failure, its encounter, that is, with the illusory status of its faith in the future as suture, as balm for the wound as which the subject of the signifier experiences its alienation in meaning." (Edelman, 1998:27-28) Thus he conceives of the figure of the Queer as the gap in the symbolic, that it is the figural signifier that the systems constantly fails to name.

The child identifies the 'perpetually of the subject', as it represents the futurity of the social order. This futurity is guaranteed through the political project of reproduction, where in order to escape the mortality embedded in and exemplified in societies death drive, the subject is represented with the illusion of continuity of the self with the social order through reproduction. The reason why the child, through which subjects *and* society can live on, is because there is the compulsion to see the present as pregnant with the child that we identify with. This child not only provides us with this inherent identification, but it also serves to close the gap in the signifying order. (ibid:23) It fills the void that precludes the society's totalization and promises its future totality.

The 'Queer' identifies what prevents this identification, but to be clear he does not argue that all Queer people are inherently opposed to 'reproduction' that is why they represent the opposition in society. This is because he argues that politics is never actually constructed on 'essential identities', but rather it is about "the figural relations in which social identities are always inscribed." It is about what society imagines or associates with the social identity of Queerness. (ibid:24) This means that even though there exists many Queer people who are incorporated into the reproductive identities of future children, Queerness in and of itself is structurally opposed to this political project of the child. It represents the obstacle that prevents the current society from totalizing, as it is what stands against the child.

The reason why homosexuals (and other “non-normative” identities) have historically and still currently (although to a much lesser extent, especially in Western societies) been considered Queer (in Edelman’s definition) is because they have been the “identities” most often associated with Queerness. This is because more and more in current society do we see that homosexuals have identified with the image of the child, as they also fall under the image of the child, by being incorporated in the institutions that “reproduce the child”. This means that we can’t just assume that all homosexuals are Queers or vice-versa there is still often considered to be a necessary link between the former identity and the latter position -politically at least.

He argues that society is inherently heteronormative, as it is built around the project of the child. This is even evident in projects that naturally seem to go against “the children” such as pro-rights activists. As even these activists frame their arguments in relation to the future children, as what sort of life would the child have if they are born in a situation where their parent(s) cannot see a good future for them, as it’s still a “fight for our children -for our daughters and our sons,”. (Edelman, 2004:3) As he quoted from Berlant, “a nation made for adult citizens has been replaced by one imagined for foetuses and children.” (Berlant, 1997:1)

This future as imagined with no structural antagonism, is in fact an empty place holder for totalization, it actively works to reassure the system that it will ‘close the gap’, but by doing so it is in fact busy denying society its current totalization while also filling this gap that is caused by the current denial with the “pledge of the yet-to-come.” (Edelman, 2017:124) The child, because it does not already have identity marks (as we universalize the child), means that any child can represent the image of the child, thus any child can make us take up our societal value and become “the guardians of its future”. (ibid) There must then be a image of the danger that refuses to protect and build on the child, which by definition also means this danger also goes against the societies future and entire viability. This danger, for Edelman is the “sinthomosexuals”, which is a combination of Lacan’s sinthome (it is that which bind all subject to the meaningless *jouissance*) and modern development in the “West” of “homosexuality as a figure for the stigmatized relation of “sexuality” to a death-driven *jouissance*.” (ibid)

He does acknowledge (as I have above) that not all Queer people have been stigmatized into the category (and that this happens less in contemporary western

liberal society), that is why Edelman uses the term Queer as anyone who is identified as the enemy of the child. (ibid:125) Whoever is designated as 'Queer' by society is then disavowed by the social order and the victim of socially destructive violence that is itself charged with libidinal enjoyment. Thus he argues that "We are all sinthomosexuals, as I put it in No Future, but those who are queered by a given social order are figures, historically contingent, for the absence that threatens its sustaining logic by materializing the void that ruptures the imagined consistency of its world." (ibid)

The Performed Queer "Subject"

Before I move on to the fissure between theory and practice, I want to briefly explain and situate Judith Butler in this debate. She conceptualized gender as socially constructed through language specifically common speech acts and nonverbal communication, thus gender is 'performative'. (Butler, 1990) These structures are what define and maintain identities, as behaviours, communication and acts are both the source of the formation of someone's identity and the result of their identity. (ibid) Thus the important concept for Butler is that gender identity, and Queerness are not fixed categories but instead a result of the performance of Queerness or straightness.

The performative approach utilizes what is called the "performative interval", it is the unit of analysis where the actor "acts toward" or is "called forth" into the symbolic formation as a specific role (as a woman for example). (Green, 2007:32) This interval in the performance designates the "distance between doing and identity whereby the doing (e.g., doing woman) represents practice and identity (e.g., female) an interior semblance of self." (ibid) Butler is the main author in this approach, and she uses her theory of performativity to explain gender and sexuality. She sees gender as the practises that produce it, rather than what we are. (Maynard and Purvis, 2003:36) She deconstructs gender to its constituent practices, as she sees gender performativity as practices produced through the operation of regulatory norms. (ibid)

As stated by Butler, "construction is neither subject not its act, but a process of reiteration by with both "subjects" and "acts" come to appear at all. There is no power that acts, but only a reiterated acting that is power in its persistence and instability." (Butler, 1993:9) The Queer subject of Butler is conceived of as the 'gap'

used to “shore up” the performative failure between the act of doing, and the identity that the act is directed towards. Thus for Butler the “subject is an ever-failing iteration in a process of signification, and the self, a hollow effect of repetition.” (Green, 2007:33) This does leave us with the difficult position, because the subject for Butler is a failure it makes it impossible for us to analyze this subject without making it into a new stable category and thus reducing the ‘uncapturableness’ of Queer identity moot. (ibid)

This also related to this idea in Queer theory that Butler explains, “If the identity we say we are cannot possibly capture us, and marks immediately an excess and opacity which falls outside the terms of identity itself, then any effort we make “to give an account of oneself” will fail in order to approach being true.” (Butler, 2005:34) This means that recognition we have towards other’s identities is based on limits, not knowledge, as no answer we will get from another will ever satisfy. (ibid)

The Fissure between Queer Theory and Practice

Returning to the fissure, between Queer theory and practice, I have already provided a picture of how Queer theory conceptualizes the Queer subject (or doesn’t) and it is clear that these conceptions are social and non-biological. That is why the fissure exists as Queer activists often invoke biological processes when ‘defending’ their sexual identity and these defences are most clearly seen in phrases such as “Born this way”. The reason why the practical implementation of Queer activism relies so heavily on biology, is because it is the best defence possible to use when fighting for equal rights, particularly in liberal countries like the United States.

I do not want to make universal judgments on Queer activists, given that this is a broad, diverse group of people and communities, specifically the diversity of these groups between the global North and South. But there is still a common belief by Queer activists, the Queer community and society in general that sexuality is biologically determined. This widespread belief is becoming more popular every year, as we can see in a yearly Gallup poll in the United States. They tracked the amount of people who believe homosexuality is either an identity someone is born with, or acquires due to social processes from 1978 until 2013, and in that timespan,

the amount of people who believed it was a biological trait increased from 13 to 47%.⁷⁶

This is due to multiple reasons, one of which had been that Queer activist have often sought allies in physicians, and tried to co-opt the support and scientific justification for their identities from this field, which has historically been more progressive than the institutions of law and religion. (Terry, 1999) And this has also led to the use of these biological essentialist phrases in our contemporary pop culture, like Lady Gaga's "Born this way".

There is a specific reason why activists have so readily embraced biological notions of sexual identity, and this is because of how rights are distributed in modern society. In our society, human rights are generally understood as natural rights, meaning that are inalienable and bestowed on all humans, simply because they are human. All people are equally entitled to human rights, regardless of any particular aspect of them, such as their ability, race or sex. This conceptualization of rights, as can be seen in most constitutional conceptions of law -such as the United States' Fourteenth Amendment's Equal Protection Clause- generally ensures the protection of the rights of different groups, but does not necessarily need to provide protection for "lifestyle" choices. (Spitko, 1996)

This often leads to legal situations, where if homosexuality is considered a condition of birth, then protection must necessarily be provided for it. This is because, if you can prove that sexual identity is a biological condition of birth, any unequal rights or treatment of sexual minorities would then by definition be discrimination. This is a tactic that has been very successful in the United States, and has often been used as a legal tactic to secure equal rights. (ibid)

Thus the most effective way of rights acquisition in contemporary Western society, is by demanding these rights as inalienable natural rights that come with your condition of birth. Thus these arguments are used as a 'defence' against mostly conservative resistance against Queer rights and equality. Thus we can see that "many gay men, lesbians, and their allies desperately want to prove that being gay is biological on the assumption that showing so will mean that intolerant people will be forced to accept them" (Bennett, 2014)

⁷⁶ <https://news.gallup.com/poll/162569/americans-gay-lesbian-orientation-birth-factor.aspx>

Lacan's Subject as a 'Way-Out'

This is the fissure we have between Queer activists and Queer theorists in short, and also why each 'side' maintains their position in this fissure. In my attempt to provide a subject that can bridge this fissure, I first want to reiterate the Lacanian and the Žižekian position, and what are the responses from biology and neuroscience. Based on the preceding discussion, I wish to conclude my discussion by emphasising the following argument from Lacan, "Depending on whether the pressure of the sexual ***instinct*** is sufficient or not, this identification of the narcissistic phase can be observed either to generate the formal demands of homosexuality or of a sexual fetishism, or, in the system of the paranoiac ego, to become objective as an external or internal persecutory agent." (Lacan, 1938:32) This is important, as it is one of the few instances where Lacan directly engages with the 'homosexual' subject and (as far as I could tell) the only example of him invoking biology with regards to this subject. He also makes a later passing remark on "homosexual drives" in relation to psychosis, but speaks of it there as a cause, not as an effect which again indicated his position of homosexuality as a 'biological' drive. (Lacan, 1985:544)

Again in this passage of Lacan, is where he allows space of biology to effect a certain subject position, although his specific wording is important. This is because he argues that if the "pressure" is "sufficient", which means that he did not conceive of the demands for homosexuality (or sexual fetishism) was determined by biology *stricto sensu*, in terms of being a "Gay Gene" that determines your sexuality. Rather he conceives of it that the biological effects on sexual orientation are due to a variety of influences, and these do not strictly determine sexuality, but rather have a determinable effect on it. The point of most of these studies, whether they are neuroscientific studies, twin studies or other tests, are that they do consistently find that sexual orientation (or sexual preferences) do have large determinable biological effects (whether genetic, foetal environment or other biological influences). That is why we cannot discount the role of biology on sexual orientation, as there is a clear link between it and biology and neural circuitries.

Returning to my proposed bridge in this fissure, when we look the subject that I have constructed, with regards to Queer activists it is able to account for biological and the neurocircuitry of the brain. This is because, biological influences (that determine the brain structures) will influence the subject through the development of

drives and thus will be able to account for the biological arguments that are required for Queer activist in contemporary political engagements. Although my insights (which are concurrent with contemporary biology) are that we are not *stricto sensu* determined by biology, it is rather just a determining influence.

This subject, does not fall under the essentialist conception that is popular in Queer activist (due to its practical advantage in contemporary politics), but would still allow the some of the aspects that Queer activists more rely on in essentialism to make their arguments. The point is that my subject still shows that this identity is not a “choice”, strictly speaking, and is a stable identity position, both of which would still allow the political arguments to prevail. On the other side, my subject also allows room for the social aspects and influences -as argued by Queer theorists- to be incorporated in the Queer community, such as the contingent nature of social norms and their influence on the subject and attractive arguments such as Butler’s performativity. Previously it was not possible to coincide these arguments -in a manner that would be politically viable for their causes- as accepting the contingent nature of social influences would then undermine the biological and stableness of sexual identity positions. My approach would allow Queer activists to maintain their politically practical (and scientific) arguments, while also including more social and symbolic aspects into a (stable identity).

With regards to the Queer theory side, which is not synonymous with ‘LGBT’ or sexual identities in general, the gap is still there. One of the aspects of this gap that seem irreconcilable is the definition of Queer itself. As even though the definition differs among different authors, the general idea is that it is not equitable to LGBT, or at least not permanently. As Edelman’s usage of the term is not so unique, as the idea of his usage is common, his specific usage is that it is the figure of the Queer as the gap in the symbolic (or a symbol of ‘Otherness’), that it is the figural signifier that the systems constantly fails to name. And this gap in the symbolic, those which are ‘othered’ can and throughout history has been synonymous with LGBT -as it has been an alienated group through many parts of history- but this is not a permanent stable equivalence.

The reason why Lacan is popular in Queer theory and with this topic, is his focus on sexual identities and sexual relations, which fit into these debates and interests. Even though I rely on a Lacanian subject, just as many Queer theorists such as Edelman, their radically different reading of Lacan makes stable identity

positions impossible. There is still various overlap, as I -and many Queer theorist- do agree on various parts of Lacan's work (those I did not attempt to re-conceptualize). Thus the only way to reconcile these different positions in the fissure, would not be to re-define Queer in either side (as neither would do so anyways), it would rather be to show that stable identity positions do exist, as opposed to only focusing on performance or deconstruction⁷⁷.

One aspect that could serve as a 'way-out' (besides the conceptualization of the term Queer, which in fact is more of a moot point in the larger debate) is the idea of the constructionist nature of Queer theory. The solution I mentioned for the Queer activists would also work here, although not as effectively, because of the inherent 'unstable' nature of the subject and subject position in Queer theory, due to contingent constructivist nature of the subject. My account would allow for various aspect and conceptions in Queer theory to remain as they are, but would inalterably undermine and undercut various other aspects of the field.

I will not attempt to stop these undermining effects, as my proposition would not consider scientific knowledge to be contingent (although it provides more healthy scepticism of scientific knowledge), nor the subject to be "unstable" or a mere hollow effect of repetition. The reason for this is, because if the subject was purely socially constructed I would be seen as Butler states as an "ever-failing iteration in a process of signification" (Green, 2007:33), but given that my subject is also 'anchored down' by biological influences (and the possibility of a free act), the signification process (even if its fails) would not reduce the subject to an effect of mere repetition. As the signification process of the Symbolic would rather later, change and "over-determine" what is already there. This does imply that my subject, and its associated identity positions are not necessarily *stricto sensu* "stable", as they can change with signification in theory. i.e. if the social effects alter your neural circuitry enough to alter your identity positions. It is also not "unstable" in the Queer theory sense, as it is not just an effect of "failed" signification, my subject is a "semi-stable" subject.

⁷⁷ Modern theorists, specifically proponents of lesbian and gay studies, whose work, according to some (e.g. Jagose, 1996), have been discredited by queer theorists, contend that there is an homogeneous identity configuration, whereas proponents of a social constructionist position (e.g. Weeks, 1996), notes the importance of diversity and fluidity within existing categories, i.e. "messiness" of homosexualities. (Plummer, 2003).

Thus this position does not appease both sides of essentialism or constructionist, as in fact it would upset both. The only reason why Queer activists can be seen to be 'appeased' is because, often it seems their essentialism is somewhat out of necessity not conviction. As I have argued that claims of biological identities are used for their political effectiveness at rights acquisition, and not necessarily due to sincere beliefs. My position instead offers an alternative, a 'way-out' of essentialism, that both incorporates modern scientific knowledge, modern social knowledge and even provides an account of 'weak' agency. This subject does not fall as easily under the problems of the other two positions, and is more in-line with contemporary knowledge (in both fields) In short, it offers a way out for both sides.

Conclusion

This dissertation has shown, firstly how we can re-read Lacan and his process of subject formation in such a way as to make possible the incorporation of biological and scientific knowledge. This was an important step, as we first needed to dispel the common view of Lacan as being ‘anti-science’ and ‘anti-biology’, which is a predominant view in the field and among many of his intellectual descendants. This re-reading of the Lacanian subject as open to modern advances in biological and neuroscientific knowledge is what allowed me to ‘re-conceptualize’ the Lacanian subject. The ‘re-conceptualization’ of the Lacanian subject was only possible due to the modern advances in neuroscience and biology, this is because of the problems of introducing a deterministic biological model into a ‘non-deterministic’ social model.

It was only with the advancement of our scientific knowledge, could we provide a response that did not fall victim to biological reductionism or determinism. These responses were the ‘mis-fires’ argument, the downward causation argument and the neuroplasticity of the brain nature that were all developed and explained in section two. This allowed conceptual room to overcome the problems that were normally associated with biological arguments in social sciences models and arguments. They also dispelled the conception of a deterministic nature of biology, which allowed us to overcome the paradoxes traditionally associated when trying to combine these two previously ‘incompatible’ systems (i.e. deterministic nature and contingent social).

The biological arguments made also provided us with various other examples and scientific “evidence” that the determinations of subject identities and behaviours were due to a combination of influences, and not solely biological or social causes. This means that when we consider the subject as a whole, any approach that aims to consider it (or reduce it) to solely social or biological causes⁷⁸ does not grasp the whole range of influences a subject is determined and shaped by throughout their lives. As I have shown in this dissertation, it is not just enough to consider the subject as both biological and social and “call it a day” and move on. This is because when we consider the nuances in Lacan’s work and modern advances in neuroscience, both can be read in very similar manners. The fundamental part of this dissertation, is how to reconcile these two different fields, in such a way as to make

⁷⁸ In terms of identity determinants.

sure that we can re-conceptualize the Lacanian subject without reducing it to one or the other or the problematic 'middle-way' solution.

I have constructed this subject by arguing that the subject (its conscious and unconscious selves) are equated with the neural circuitry of the brain. We can relate this to the concepts of Lacan that I have elaborated, specifically that of desire, drive and Symbolic order. We can connect these concepts, because it is the unconscious that is the discourse of the Other (symbolic order) when it 'communicates' with us and when we try and figure out its object of desire, *object a*. As I have shown that, we can be influenced into desiring certain objects due to the influence of *object a*, due to social pressures such as advertising. Thus further research into the effects of these specific types of social pressures on neuroplasticity would provide more possible evidence for (or against) this proposition.

What this all means is that, if we consider the subject to be a result of brain structured (which most authors do given that Cartesian dualism isn't really in fashion), we can consider the Symbolic order and big Other to exist and influence the brain. As when the social influences the brain, it alters neural circuits, which will then alter the subject -and we can rely on the Lacanian concept that it alters the subject by altering the desire of the subject through the unconscious. This new developments allow us to keep the privileged space of the social for Lacan, while also introducing biology and its effects- all through the medium of brain circuitry. Although I do want to clarify that the alterations of brain circuitry is not immediate nor 'easy' it is a long process due to continuous pressure and influences. This again relates to what Žižek indicated -as I explained previously-, when he spoke of the event in Lacan. That it is possible for the event to only occur when we realise it, and that we can witness it without realising it.

Thus we can account for a subject that is both biological and cultural -without falling into the pitfalls of either- in this model, and that can account -albeit a weak version- of free will. This new subject that I am proposing, is still firmly situated in the Lacanian canon, thus we can still rely on Lacan's explanations and arguments for other phenomena, while still addressing the various problems that were present in Lacan's subject. This will allow future research to expand and redevelop various fields in political studies in a more modern and balanced approach, that is much less susceptible to traditional forms of criticism. It also provides an account of 'weak'

agency that is so often missing in these fields, an account which is similar to Žižek's account, but much stronger and far reaching.

This subject that I have re-conceptualized, which I believe is compatible with contemporary neuroscience and biology and with the Lacanian canon, may have implications for the social sciences in general. One of these I showcased in terms of its usefulness to address the supposed dichotomy between essentialism and constructionism, in the form of the fissure between Queer practice and Queer theory. This is because this subject is most capable of offering a way of this dichotomy, as opposed to succumbing to one of the two approaches, as it can incorporate both biology and culture in a non-reductive manner that can address concerns of both fields and provide a stable and defensible subject.

The subject will not appease both sides of the essentialism and constructionism debate, as in fact its goal is precisely to not do that. My aim was to provide a coherent conceptualization of the subject (within the Lacanian canon) that incorporated modern science, which can serve as a stable and defensible alternative to both sides of this debate. It does incorporate various aspects of both sides, but it does not appease or reduce itself to either, instead it shows that there is an alternative to both. My hope is that this subject that I have developed in this dissertation, can be further built upon by more research, so that we can eventually set aside this debate between essentialism and constructionism in the social sciences. Although my subject has been substantiated with various research data and knowledge and arguments, I did state where there are gaps and places for future research (where logically appropriate), and I hope that more research will be done in those areas.

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