ISMAEL BERNARDO PEREIRA

CONNECTIONS BETWEEN THE GOTHIC AND SCIENCE FICTION IN *FRANKENSTEIN*, *STRANGE CASE OF DR. JEKYLL AND MR. HYDE* AND *THE ISLAND OF DR. MOREAU*

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AUTOR: Ismael Bernardo Pereira

ORIENTADORA: Sandra Sirangelo Maggio

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I have love in me the likes of which you can scarcely imagine and rage the likes of which you would not believe. If I cannot satisfy the one, I will indulge the other.

Mary Wollstonecraft Shelley, *Frankenstein.*

I learned to recognise the thorough and primitive duality of man; I saw that, of the two natures that contended in the field of my consciousness, even if I could rightly be said to be either, it was only because I was radically both.

Robert Louis Stevenson, *Strange Case of Dr. Jekyll and Mr. Hyde.*

There it must be, I think, in the vast and eternal laws of matter, and not in the daily cares and sins and troubles of men, that whatever is more than animal within us must find its solace and its hope. I hope, or I could not live.

Herbert George Wells, *The Island of Dr. Moreau.*

RESUMO

A presente dissertação tem como objetivo estabelecer um diálogo entre três obras da literatura britânica do século XIX: o romance *Frankenstein* (1818), da autora Mary W. Shelley; a novela *O Médico e o Monstro* (1886), de autoria de Robert Louis Stevenson; e o romance *A Ilha do Dr. Moreau* (1896), de H. G. Wells. Tal comparação será feita com base nas convenções advindas dos gêneros Gótico e Ficção científica, presentes nas obras. Como principal alicerce teórico para a definição de gêneros entendem-se as considerações de Tzvetan Todorov, que defende que os gêneros são inevitáveis como horizonte de interpretação, além de serem entidades em constante mudança numa cadeia de influências através da qual novos gêneros são criados a partir de outros pré-existentes. O presente trabalho parte desse pressuposto para determinar de que maneira os gêneros Gótico e Ficção científica estão presentes nas obras, observando como os traços do Gótico, ao se adaptarem através do tempo, deram lugar a convenções ainda semelhantes, mas que já apontavam para o que posteriormente seria considerado um novo gênero literário. Primeiramente, são feitas considerações sobre conceitos de gênero textual/literário através do tempo, as quais mostram o quanto seu estudo permaneceu constante. A seguir são definidas certas convenções dos dois gêneros, assim como o modo como dialogam entre si. A segunda parte do trabalho analisa as duas primeiras obras em ordem cronológica, *Frankenstein* e *O Médico e* o *Monstro*, de maneira a perceber a predominância de convenções do Gótico – especialmente relacionadas ao conflito interior dos personagens, como o "duplo" – ao mesmo tempo que a emergência de temas da ciência, como os de criador/criatura e ambição científica. O último capítulo verifica como a primeira fase da Ficção científica de H. G. Wells em geral e *A Ilha do Dr. Moreau* em particular resgatam convenções dos dois gêneros supracitados, ao mesmo tempo servindo como consolidador das convenções do último. Conclui-se, portanto, que houve uma evolução que possibilitou a emergência de um novo gênero ligado ao contexto histórico das obras, o que legitima a consideração dos gêneros como entidades mais livres e não restritivas, que podem estar presentes em diversas obras ao mesmo tempo e ampliar seu horizonte de interpretação.

Palavras-chave: 1. Literatura britânica. 2. Mary Shelley. 3. R. L. Stevenson. 4. H. G. Wells. 5. Gótico. 6. Ficção científica.

ABSTRACT

This thesis establishes a dialogue among three books from 19th century British literature: the novel *Frankenstein* (1818), by M. W. Shelley; the novella *Strange Case of Dr. Jekyll and Mr. Hyde* (1886), by Robert Louis Stevenson; and the novel *The Island of Dr. Moreau* (1896), by H. G. Wells. This comparison is made based on the specific Gothic and Science fiction conventions present in the books. The main theoretical support for the definition of genres employed here comes from Tzvetan Todorov. The author argues that genres are inevitable as horizons of interpretation, entities in constant change which tend to create new genres from pre-existent ones, in a chain of influences. This thesis considers this supposition to determine how Gothic and Science fiction make themselves present in the works analyzed, in a way that Gothic traits, being adapted through time, give way to similar but yet innovative conventions, which subsequently would be considered a new literary genre. Primarily, considerations concerning the concept of genres through history are made, all of which show how this study was kept constant. Hereafter, certain conventions regarding both genres are defined, as well as the manner they dialogue amongst themselves. The second part of the thesis is dedicated to the analysis of *Frankenstein* and *Strange Case of Dr. Jekyll and Mr. Hyde*, and establishes the predominance of Gothic conventions – especially the ones related to the inner conflict of the characters, such as the "double" –, while considering the emergence of scientific themes, such as the creator/creature relationship and scientific ambition. The last section verifies how the first cycle of H. G. Wells' Science fiction in a broad sense, and *The Island of Dr. Moreau* in a strict sense, reemploy conventions of both genres, serving to consolidate the latter. Therefore, it is concluded that there was an evolution which enabled the emergence of a new genre, considering the historical contexts and the books analyzed. This consideration justifies genres as wide-ranging, non-restrictive entities, which may be present in various works simultaneously and broaden their horizon of interpretation.

Key-words: 1. British literature. 2. Mary Shelley. 3. R. L. Stevenson. 4. H. G. Wells. 5. Gothic. 6. Science fiction.

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INTRODUCTION

Literature is a product of the society it originates from. As this study will make relevant, this characteristic of the questioning of a certain time is also intrinsically present in the history of Gothic fiction and extended itself to the Science fiction genre, which absorbed some fundamental traits of the former genre. Considering The United Kingdom[1] as a pioneer of The Industrial Revolution in its first phase, which led the way to the imperialist practices of the end of the 19th century (HOBSBAWM, 1968), we observe that, not by coincidence, it is from there that most of the literary questionings about the industrial and scientific evolution came to arise. Those often presented themselves with disturbed narratives that portrayed those strange new facts with pessimism, using science as a device to extrapolate old, Gothic, fears. In this context, the present thesis will analyze three British novels, which reflect in some way this fervent epoch of transition: Mary Shelley's *Frankenstein* (1818), Robert Louis Stevenson's *Strange Case of Dr. Jekyll and Mr. Hyde* (1886), and H. G. Wells' *The Island of Dr. Moreau* (1896).

The choice of those works is justified to the extent that they reflect an evolution of the treatment of certain Gothic conventions alongside the appropriation of scientific exposure and speculation. This presence of scientific matter in the books occurs gradually, being subtly present in Shelley – where romantic patterns still prevail –, and on the other hand, extremely specific in Wells, an author more akin to the Science fiction as a genre, as it would be recognized later on. This perception of Gothic as a " 'mixed' genre, assembled, like Frankenstein's monster, out of other discourses" (HOGLE, 2012, p. 85-86), is thus recognized through the constant changes Gothic literature suffered since its origins in the mid- 18th century until the end of the 19th century. Focusing on the dialogue between Gothic and Science fiction patterns, the present work considers Mary Shelley's novel as a particular important pioneer in the treatment of this new Gothic/Sci-fi branch of literature, due to, for example: 1) the presence of the scientist – or mad scientist – as the protagonist of the novel; 2) the monster creation through scientific means; 3) the pessimism related to

1 The corpus here analyzed will consist of books published in the UK during the 19th century.

those practices, in which the creator has to be punished for his excessive ambition, etc. Those, among other patterns, are particularly observable in Stevenson and Wells, where new important aspects are added to the formula, which contributes to this sense of the evolution of the genre since Shelley.

The present research thus intends to analyze which are some of the most striking Gothic features, especially in Shelley and Stevenson, and how they evolved into this new similar and yet fundamentally diverse representation in Wells. In other words: how Science fiction came to be in retrospect with the Gothic genre, considering Wells as its "turning-point", as Darko Suvin argues (1979). The central objective is, therefore, to make a connection between the Gothic and Science fiction genre – as they were represented in the 19th century considering the books analyzed – analyzing some elements common to them, in order to argue that Sci-fi – at least as it is represented in Wells, one of its founders – is a natural development of the Gothic genre. In relation to this, a discussion will be carried out concerning the presence of multiple genres within the same work, according to Todorov's analysis of genres and the relation they manifest among themselves (1976). The results expected include a solid resemblance between the science-questioning themes treated in both genres, pointing for a natural continuity through the 19th century, which culminates in the scientific romances of H. G. Wells; as well as the identification of scientific evolution during the century as the main motive for the development of Gothic genre into Science fiction.

When analyzing and researching about such processes, we invariably may reflect about our own society, since the UK of the 19th century came to influence all modern society. Likewise, it is inevitable to compare what the fears of evolution were like in the time of the foundation of modernity, and how they came to be nowadays, in a post-modern society which witnessed the fall of most of the beliefs held before. Even if such comparison is not the key point of this study, such reflections invariably appear along the way in a process of one's justification for their own place in time. It also became evident, when searching for this project, that there is, nowadays, a solid field of academic research regarding both Gothic and Science fiction works, written in the English language. The books which will be here analyzed, considered classics of both genres, also are frequently written about in the academic circle. However, there are few pieces of researches dealing specifically with the relation of both genres, in any level (researches in the Portuguese

language are still more sparse in this sense). There are, of course, instances in which such relations may be made, but just in a form of brief comments inside texts that have other main intentions. Thus, it is evident that there is a prolific field to be explored, the specific case in which this research intends to be placed on the evolution of the Gothic genre of the nineteenth century into a more solid field later to be called Science fiction, from H. G. Wells on. Thus, this study intends to explore in a broad sense a point which is often just referred on related contributions to academic Gothic and Science fiction research and contribute to the further development on this area of genre studies.

The first part of the thesis will deal specifically with the questions of genres with a starting point: the classification of literature under literary genres is an inevitable process. Although criticism has constantly criticized the assumption of the validity of genres in determining classes to which books should belong, the present work considers a broader approach to textual genres in which "each member alters the genre by adding, contradicting, or changing constituents (COHEN, 1986, p. 203-04). The inevitability of genres also arises from the fact that, according to Todorov, "genres, like any other institution, reveal the constitutive traits of the society to which they belong" (1976, p. 163). Therefore, even unconsciously, books follow the path of other books in a web of intertextuality, according to Kristeva (2005), which ends up defining genres or sub-genres.[2] Still according to Todorov, the formation of genres from other pre-existent ones (1976) is fundamental in the dialogue between Gothic and Science fiction which this research intends to justify. This first chapter will end with a brief history of those genres, with some literary examples which may help better understand the grasp of Gothic and Sci-fi. This will determine that the genres can show similar patterns, as well as different ones.

The second part of this research aims to focus on the first two books chosen as representations of the Gothic/Sci-fi genre in the 19th century, in chronological order: *Frankenstein* and *Strange Case of Dr. Jekyll and Mr. Hyde*. The analysis of Mary Shelley's novel will take a closer look at her life, especially regarding the fateful night that gave conception to her work. This reading is justified as a means of scrutinizing the often discussed position of *Frankenstein* as the first Science fiction book – the question of "why *Frankenstein*" is unavoidable and thus an analysis upon the influences Mary Shelley received, both scientific and literary, must follow. Alongside, the reading of the book will

2 That is the relation supposed in the present work among Shelley, Stevenson, and Wells: not one of a direct contact with the author's work, but based on a general mood present through 19th century English fiction.

try to establish certain Gothic conventions, following, primarily, Eve Kosofsky Sedgwick's *The Coherence of Gothic Conventions* (1986), among other sources. These supposedly Gothic conventions will be constantly compared with Sci-fi ones, so to establish a relation of continuity between the genres. A final main source of analysis will be Freud's work on Metapsychology, particularly “The Ego and the Id” (FREUD, 1984). This part is carried out since much of the Gothic conventions have to do with “repression of sexual energy” (Sedgwick, 1986, p. 7), a subject akin to Freud's psychoanalytic studies, which are, by their turn, a product of that same society which created the books here observed. Concerning *Dr. Jekyll and Mr. Hyde*, a similar approach will follow, but this time a comparison to Shelley's novel will take place, especially regarding the extent in which certain themes have evolved, such as the treatment of science and the double-figure – here even more explicit. Stevenson's novella also anticipates new themes, related to the *fin-de-siècle*, such as the presence of the city, now the scenery of Gothic, and the stronger scientific anxiety, reflected by the atavism, a response to Darwin's theory of evolution.

The third and final part will continue the discussion relative to the treatment of science at the end of the 19th century. Closer to Stevenson's work in time and general subject, H. G. Wells' *The Island of Dr. Moreau* is yet another example of a book that utilizes Darwinism as a tool to create a pessimistic narrative towards the advancement of science. More than that, Wells' “scientific romance”, as he would call them, is an heir to both Stevenson and Shelley, not only due to its monster-creation plot but fundamentally because it updates old fears to the more industrialized and scientifically evolved reality of the transition between the 19th and 20th centuries. Here, as it was in Shelley, the analysis of the author's background is also important to determine the grasp of his fiction. The scientific discourse is much more specialized due to Wells' scientific knowledge as a student, which resulted in a much more convincing explanation for the evolutive regression presented, in relation to the previous authors. This signalizes, among other aspects, a fundamental change between the Gothic and Sci-fi through the three books. Although each of them possesses enough aspects to be considered part of both genres, in Wells the evolution of the genre points more for a primarily Sci-fi fiction, in relation to the more romantic horror of Shelley, for example. Apart from *The Island of Dr. Moreau*, this part will also comprise a brief discussion on other first-cycle books from Wells' Sci-fi, since they all showcase the same attitude of scientific pessimism in a particular way.

The analysis held in this thesis will follow, therefore, the treatment conventions from Gothic fiction in the corpus, as a means of comparison, with the objective of establishing the birth of new a branch within the 19th century Gothic, which would further originate the concept of Science fiction. The results expected include a resemblance of themes and approaches in all of the three books analyzed, followed by particular innovations recurrent of the context each work is situated in. Sci-fi and Gothic tropes, ultimately, can be established as fundamental in 19th century English fiction. The status of Science fiction as a genre after the period analyzed will not be narrowed, but it serves as a further reminder of the ever-evolving aspect of literary genres, according to Todorov. The final objective of this thesis is, besides connecting two frequently separate genres in research, determining the point in which Sci-fi emerged, through a natural variation of the Gothic genre, which does not deny the presence of literary texts as belonging to both of these genres in this time of transition.

1 CONCERNING GENRES

This introductory discussion focuses on the theoretical background regarding textual and literary genres to be adopted in the present thesis. Throughout the other chapters, the concepts here discussed will be periodically revisited whenever they seem fit when analyzing the literary corpus – hence the reason for leaving this discussion for the first part of this work.

In the first section, a literature review will be carried out, concerning the adoption of genres according to some important literary critics in the field. The objective is to analyze those views, considering the pros and cons of adopting genres and their classification of literary works. Here the question of "belonging" to a genre is a very important and difficult one since it determines to which extent a work of literature should be deemed exemplary of a certain genre, or more than one. The conclusion, already evident by the title, is that the use of genres in literary criticism seems to be inevitable: either a book tries to approximate to a genre, justifying it; or to deviate from it, then creating a new genre. Tzvetan Todorov's argument (1976) in considering the formation of genres as a transformation from old, pre-established ones is also very important to the subsequent discussion concerning the relationship between the Gothic and the Science fiction genres which this thesis ultimately proposes to investigate.

The next section will focus on Gothic and Sci-fi properly, presenting important works in the history of both genres and how they relate to their evolution. Through this presentation, the wide-ranging scope of the genres will become evident, as well as their possible different thematics and approaches to literature. This diversity, which is intimately related to social and cultural aspects along the years – according to Bakhtin (1986) –, ultimately converges to the idea of a natural modification of tropes in Gothic fiction through the 18th and 19th centuries which led to the creation of a new, though pre-established, genre, mostly evident in H. G. Wells. Simultaneously, the development of Science fiction itself after its emergence – here just hinted at through the works analyzed, due to its not being the focus of this work – serves to show that this is an ongoing

transformation, which helped Sci-fi to become such a distinct genre when one analyzes the great number of books (and movies) which can in some way be related to it. Thereby, this part is going to introduce the discussion present through this thesis in a general manner, so thereafter it can be applied more specifically to the literary corpus of Shelley, Stevenson, and Wells.

1.1 THE INEVITABILITY OF GENRES

The use of genres in the division of literary tendencies and schools seems today a surpassed topic or at least one that is not given much credit. Much of their functions have been questioned for a number of reasons, such as, as Ralph Cohen (1986) points out, (1) the notion that texts can actually be divided into those different classes, (2) the validity of the common traits that supposedly tie texts together, and (3) the use of genre as a form of insight into the interpretation of a certain work. The process of attaching a text to a specific label may, therefore, seem problematic, due to the variety in the nature of such literary works as pieces with their own message. However, this chapter – and the thesis as a whole – intends to consider genres as more open categories, which influence the perception of literary texts in order to broaden the horizon of interpretation used, rather than narrowing to the resources of a single genre. Moreover, the process of dividing texts are here considered as inevitable, since we are constantly searching for different approaches to understanding a work of art, and, therefore, looking at specific aspects that may be repeat in other texts.

If we look through history, we can easily visualize that a number of authors have pursued this tendency of establishing rules for the division of literature. They created different theories to justify the importance of observed distinctions, or even of a literary evolution, observable through a history of changes in literature. Some of these tendencies of connecting different genres are going to be presented in order to argue about the inevitability, not only of genre division, but of a genre dialogue, in the evolution of literature, which is going to set the background for the dialogue between Gothic and Science fiction conventions on the latter part of the thesis.

Beginning with Aristotle, in what may be called "classical genre theory" – although

the concept of genre did not yet exist at the time –, literature is understood as "an imitation and emulation of ideal models that were based on stable rules abstracted from exemplary texts" (HERMAN, 2007, p. 110). This resulted in a descriptive theory that established the criteria a work should follow in order to be included in one of the classic forms of poetry, Epic, Tragedy, and Comedy. In his *Poetics*, Aristotle used several lines of comparison among classical poetry, especially regarding Tragedy and Epic, both recognizing similarities – Tragic and Epic poems (1) may be simple or complex, (2) have all the parts, except Scenery and Song, and (3) require Reversal of Intention, Recognition and Tragic Incidents – and establishing differences – Tragedy is adressed to an inferior public, since the actors have to make the Plot explicit, whereas the Epic poem is "adressed to a cultivated audience, who do not need gesture" (ARISTOTLE, 1902, p. 107-09). This early description and prescription can be said to have influenced to a certain extent all subsequent ones. And if the rigorous criteria pointed out to a universe of stable genres, that may have given genre theory its ever-questionable aspect, the similarities of traits present in Aristotle, still in a nascent form, were deepened in later approaches to genres, far into the romantic period.

Romantic genre theory developed the notion of three main genres, Lyric, Epic, and Drama. Only now there was a view that marked a radical divergence from the classical approach – the notion of the "author's individual feeling and sensibility" that claimed that "every poem is a genre unto itself" (HERMAN, 2007, P. 112). This departure did not entirely abolish the tendency of the creation of genres and analysis of their aspects, but it surely gave way to new, more open approaches that considered a sense of dialogue in pre-established genres.

In this sense, the concept of a literary evolution can be observed in certain authors from Russian Formalism. J. Tynianov (1976), while discussing the form of a literary work, argues that it should be felt as dynamic. This dynamicity is reflected not only within the text itself but in correlation to an entire system of texts. Going deeper, the correct analysis of the construction of a literary work, according to Tynianov, intrinsically depends on the analysis of the entire system of other works to which it belongs. Within this logic is the novel, the most popular literary genre of modernity, which would come to encompass a number of different genres. Different from the classical triad, the novel establishes itself as a constant, ever-evolving genre, highly influenced by “extra-literary material”, most

importantly the sphere of social life. The literary evolution, according to the Russian author, would be translated in the substitution of systems which involve this whole relation of influences among texts and external elements. These concepts regarding both an internal and external evolution – in the sense of change – of texts, was very important to a future analysis of the topic. Although belonging to the Formalism, such descriptions, despite being very specific in their structure, point to a broad view concerning a possible net of influences concerning the social aspect of the process of creating and analyzing literary genres, pointing to the nature of subsequent studies.

This preoccupation on considering the social aspect was particularly helpful to the studies of another Russian author, Mikhail Bakhtin, now involved in the background of Structuralism. Here, the concept of genres is expanded – it does not only comprehend literary texts but all forms of verbal practices, which are, therefore, denominated "speech genres", "*relatively stable types* of these utterances" (BAKHTIN, 1986, p. 60). The speech genres are thus divided into primary (simple) and secondary (complex). The literary genres are located inside the sphere of the secondary genres, in which language is treated with more expertise; primary genres can be found in situations of social interaction, but may also appear within secondary genres: for example, a letter can compose the chapter of a novel or even its entirety. The author also considers as an important aspect the style and individuality in a text. This can be related to the evolution of a text inside a certain point in time, as well as its own relation to other texts:

> This imprint of individuality marking the work also creates special internal boundaries that distinguish this work from other works connected with it in the overall processes of speech communication in that particular cultural sphere: from the works of predecessors on whom the author relies, from other works of the same school, from the works of opposite schools with which the author is contending, and so on. (BAKHTIN, 1986, p. 75)

By calling attention to the individuality, the author's presence in a text, a trait that was so highly valued by the Romantics, Bakhtin defends that the existence of genres is fundamental considering this logic. It does not follow, therefore, according to the author, that the particular aspects of certain texts should deny a system of classification, of genres, since this same system works through a constant dialogue in which texts are influenced, answer to, and contradict that which is being produced by other authors. This relationship

of utterances is related to Bakhtin's concept of “dialogism”, which takes into account several aspects, especially to describe the presence of different autonomous voices inside the same text, which are in constant dialogue (BAKHTIN, 1990). French author Julia Kristeva's reading of Bakhtin's studies resulted in the notion of “intertextuality”, which focuses more on the relationship among different texts, expanding the notions of the Russian author in this regard. According to Kristeva:

> (…) each word (text) is an intersection of words (texts) where at least one other word (text) can be read (…) any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another. The notion of *intertextuality replaces* that of intersubjectivity, and poetic language is read as at *least double.* (KRISTEVA, 1980, p. 66).

Expanding on Bakhtin's work, Kristeva broadens the act of intertextuality to the whole spectrum of texts, rather than focusing on the novel due to its internal complexity. All of these notions progressively open a conception of genres and texts as interconnected entities, that can be analyzed together in order to better understand the individual texts and the whole “mosaic of quotations”.

The question of belonging, however, is still problematic if we consider an individual text in relation to a certain genre. French critic Jacques Derrida, for example, does not deny the participation of texts within certain genres, only he does not consider this an act of belonging, in the sense that a text would deny its own identity in trying to identify with others of similar traits. This is never a complete act of belonging since no text could show all traits of a given class. In creating the opposition participation/belonging, Derrida accepts and denies the function of genres in grouping texts: “Every text participates in one or several genres, there is no genreless text; there is always a genre and genres, yet such participation never amounts to belonging” (DERRIDA, 1980, p. 65). The inevitable presence of genres within texts is here understood as “participation”, whereas “belonging” would imply, to Derrida, a limitation to the analysis of texts. Nevertheless, in both denying and accepting genres, the author recognizes the numerous contributions that considering genres as active and important concepts can bring, focusing on the – not exclusive – similarities of theme that attaches a text to a genre:

> Can one identify a work of art, of whatever sort, but especially a work of discursive art, if it does not bear the mark of a genre, if it does not mark or mention it or make it remarkable in any way? (...) First, it is possible to have several genres, an intermixing of genres (...). Second, this remark can take on a great number of forms and can itself pertain to highly diverse types. (...) Finally, this remarking-trait need be neither a theme nor a thematic component of the work—although of course this instance of belonging to one or several genres, not to mention all the traits that mark this belonging, often have been treated as theme (...). (DERRIDA, 1980, p. 64)

The "instance of belonging and not belonging" is also present in another Post-Structuralist author, Tzvetan Todorov.[3] In "The Origins of Genres" (1980), he argues about the existence of genres, even when there is no belonging – a genre is made visible when there is an association as well as a negation of the said genre:

> The fact that a book "disobeys" its genre does not make the latter nonexistent; it is tempting to say that quite the contrary is true. And for a twofold reason. First, because transgression, in order to exist as such, requires a law that will, of course, be transgressed. One could go further: the norm becomes visible—lives—only by its transgressions." (TODOROV, 1980, p. 159-60)

Existing both as "'horizons of expectation' for readers, and as 'models of writing' for authors" (TODOROV, 1980, p. 163), their functionality cannot possibly be neglected. Even the authors who represent a vanguard, creating something completely new in relation to what existed previously, did so only because what came before needed, for some reason, to be contradicted. To deny this relation is the same as to ignore the mosaic of influences that exists in literature. If certain genres disappeared, it was the genres of the past that were substituted by other, new genres. This is related to Todorov's understanding regarding the transformation of genres:

> From where do genres come? Why, quite simply, from other genres. A new genre is always a transformation of one or several old genres: by inversion, by displacement, by combination. (...) There has never been a literature without genres; it is a system of continual transformation, and the question of origins cannot be disassociated, historically, from the field of the genres themselves. (TODOROV, 1980, p. 163)

3 Due to the closeness of his studies to the theme of this thesis and his proposition concerning the evolution and behavior of genres, Todorov is the author that is going to be referred to mostly throughout this work.

This notion is very important and will be summarized in the next section, in order to be applied to the relation between the Gothic and Science fiction. For now, we can observe that the author sets the relationship among genres themselves as the primary cause for transformation. At, first, this may seem a disregard for the social aspect and the influence it may have on literature. However, as well as Bakhtin, Todorov also considers society's role in the making of genres. His division of “speech acts” and “genres” is similar to Bakhtin's “primary” and “secondary genres”, insofar the first represents a social activity and the second one a more specialized construction: “(...) recounting a story is a speech act; and the novel is a genre in which something is certainly recounted; however, the distance between the two is great” (TODOROV, 1980, p. 164). The author, therefore, does not ignore the influence of the whole verbal activity upon genres. As for Bakhtin, genres are here understood beyond the literary spectrum, in a set of transformations which differentiates them at the same time that puts them in the same level of inter-relations. Moreover, the origin of genres, according to Todorov, becomes twofold. They derive from other genres as well as from speech acts, which are less complex constructions of verbal use. Creating a hypothesis rather than establishing a specific conclusion, the author supposes that “one goes from a simple act to a complex act”, “via a certain number of transformations, or amplifications” (TODOROV, 1980, p. 164-65). Although the thesis focuses on the relation among pre-established genres, setting Todorov as the main background criticism, it is worth mentioning a possible connection, considering the author's concepts of speech acts and genres, of the scientific discourse of the 19th century and the novel, especially in H. G. Wells, at the end of the century. Even considering the scientific discourse as a complex genre, rather than a speech act, though not literary, would not interfere in the connection that made the Sci-fi genre possible during the time studied here.

As a final important contribution from Todorov's criticism, we come back to the question of belonging to a more definite position. In another important text, *Introduction à la Littérature Fantastique* (1970), a previous book in which the author establishes the classical divisions of the fantastic, there is also a discussion concerning the origins and workings of textual genres. Here we see a more open approach to the question of belonging, in a sense that a book may have multiple possible associations:

> *On devrait dire qu'une œuvre manifeste tel genre, non qu'il existe dans cette œuvre. (...) il n'y a aucune nécessité qu'une œuvre incarne fidèlement son genre, il n'y en a qu'une probabilité. (...) une œuvre peut, par exemple, manifester plus d'une catégorie, plus d'un genre.* (TODOROV, 1970, p. 26).

On adopting Todorov's understanding of the belonging of texts to certain genres – which is, consequently, a reflection of a number of theories which came before, as it was shown –, we can freely elaborate on those points posed at the beginning by Ralph Cohen:

(1) The notion that texts can actually be divided into those different classes → If we consider that the classes in which a text may fall into can be numerous, this does not seem a matter of restriction, but rather of expansion concerning the horizon of possible interpretations. This is ultimately the point of the thesis: analyzing Shelley, Stevenson, and Wells through both Gothic and Science fiction conventions is far more enriching than narrowing each of the books to only one class, only one genre. Thus, both genres can be applied to the books in order to establish how they intersect, how they differ from one another and how an evolution of themes can be observed considering the books and the way they treat the conventions, within the established time period.

(2) The validity of the common traits that supposedly tie texts together → Again, considering the presence of several genres in a book, the traits that tie the work to the genres do not need to be as complete and profound as if it was related to a single genre. This is shown in regards to the presence of scientific descriptions in the books analyzed: this is a trait that progressively turns complex as we approach the end of the 19th century, however, the lack of scientific jargon in *Frankenstein* does not make it less Sci-fi than *The Island of Dr. Moreau*. The trait is there, which is enough since there is a wide number of other traits to make the connections between the books and the genres, due to the acceptance of more than class.

(3) The use of genre as a form of insight into the interpretation of a certain work → Finally, the insight is forcibly broader and more enriching if we consider more than one genre as a channel of interpretation into a work's themes and strategies.

Ralph Cohen himself, referring to some authors of genre theory, ultimately shares a similar view, not considering the “common traits” but understanding that multiple

possibilities are created through the dialogue genre/text:

> Genres are open systems; they are groupings of texts by critics to fulfill certain ends. And each genre is related to and defined by others to which it is related. Such relations change based on internal contraction, expansion, interweaving. Members of a genre need not have a single trait in common since to do so would presuppose that the trait has the same function for each of the member texts. Rather the members of a generic classification have multiple relational possibilities with each other, relationships that are discovered only in the process of adding members to a class. (COHEN, 1986, p. 210)

Genres are open categories. Through all genre theory, alongside the rules of restriction, there were also considerations concerning the possibilities of their evolution and connection. A literary analysis, therefore, becomes more productive if we accept the presence of multiple genres in a book, as well as a natural evolution of genres from other genres, which arise from this same connection.

In the next section, we are left to apply these principles to the convoluted history of Gothic and Science fiction works, trying to establish how they may relate to each other in history.

1.2 GOTHIC AND SCIENCE FICTION

1.2.1 The Evolution of Gothic

From its first conception – arguably Horace Walpole's *Castle of Otranto* 'Gothic story' –, the Gothic genre in English literature is marked by having emerged in different moments of historical and social disruption, expressing fear regarding an uncertain future. From the middle of the 18th to the beginning of the 19th century, these extraordinary stories used elements of the supernatural and the barbaric in order to retrieve the imagination of a lost medieval past, thus reflecting the moment of tension in which the Industrial and French Revolutions announced drastic changes to the governmental and social practices of the time (PUNTER, 2001). In a general sense, however, the term dates even further back in time, having been first associated to the Goths, one of the Germanic peoples whose

invasion contributed to the fall of the Roman Empire. The parallel was first drawn in relation to the type of architecture that date this period until the beginning of Renaissance, “being monstrous and barbarous; a confused and disordered style” (PUNTER, 2001, p. 33). This comparison was mistakenly made, however, insofar as it could be associated to any other German people, or simply called “barbarian”, in a broad sense; but the term was accepted, and soon adopted by literature, with the same undertone as it was in medieval architecture.

Thus, the Gothic genre in literature is marked by "an emphasis on portraying the terrifying, a common insistence on archaic settings, a prominent use of the supernatural (...) and the attempt to deploy and perfect techniques of literary suspense" (PUNTER, 2013, p.1). In the 18th century, Gothic sceneries predominate, such as castles and abbeys in Ann Radcliffe's *The Mysteries of Udolpho* and Jane Austen's *Northanger Abbey*[4]; during the 19th century, the fears which the Gothic brings to view are now located in the city, a space ever more present to the readers, and, therefore, more terrifying. When the style is thus appropriated once again in this modern setting, people's anxieties now expressed a feeling of estrangement towards fast scientific advancement, especially due to the Darwinist theories, which created a shocking impression in the Victorian anthropocentric view maintained theretofore (HOGLE, 2002). This new “scientific” appropriation, however, may be said to have originated at the beginning of the century, with Mary Shelley's *Frankenstein* as its most evident example of the emergence of a new branch of Gothic fiction.

One of the main features of Gothic narratives, since their first appearance in the late 18th century, is their intimate relation to the elements present in the society that produces them. Horace Walpole's *The Castle of Otranto*, widely considered the progenitor of the genre (HOGLE, 2002), opposed the prevailing form in literature at his time, the realistic novel, with its neoclassical industrial setting, and created an imaginative, medieval story (PUNTER, 2001): an urge for a new kind of literature that valued past elements, which were forgotten or thought of as of low value at the time. This characteristic of questioning its own surroundings permeated the genre through its many developments through the 19th century. For example, the Female Gothic – through Ann Radcliffe, the Brontë sisters, etc. – critiques against patriarchal figures and female repression; and the anxieties felt by the

4 Austen's book, although working as a parody of Gothic tropes, can be figured as an example of how the conventions of the genre were received at the time.

Victorians due to fast scientific development, which in some instances would be opposed to religious traditional values. This last aspect, reinforced by the Darwinist theory of evolution, was responsible for the creation of narratives—the most famous of them being *Strange Case of Dr. Jekyll and Mr. Hyde*—that dealt with the figure of the scientist trying to transcend the natural laws and ultimately creating abominations. Important Gothic features were still there: the suspense, the horror, as well as the ever-present questioning regarding society and its evolution. This tendency continued in H. G. Wells at the end of the century through his social criticizing and scientific treatment, only now the accuracy given by the author to the science involved, turning it a main element of the plot, was sufficient to grant Wells with the label of (or one of) the important figures to develop new emerging genre (SUVIN, 1979).

Thus, the Gothic motivations of the late 19th century follow the deepening in the characters' psychology observed so far, while also renewing themselves as a reflex of the events which marked England, such as the identity crisis from the rigid moral codes of Victorian society and the uncertainty as to the ever-growing scientific evolution witnessed through the last decades. The moral rigidity has as a natural consequence, once again, the emergence of the repressed “double”, which reflects the primitive and reprehensible side of the characters from the literature of this time. Resuming the epigraphs of this thesis, this can be reflected through the “love” and “rage” felt by the Creature before his master Frankenstein, who selfishly had him neglected; or the duality between primitive impulses that Jekyll always felt, and where ultimately born in the figure of Mr. Hyde. Science, mostly through Darwin's theory of evolution, complements this idea by establishing a connection between men and their ancestors – not only apes but all animals – which represents a call to people's consciousness as to which extent those past primitive traits are entirely extinguished in the modern men (PUNTER, 2001). Scientific development is thus seen through pessimistic lens, in the sense that it tends to worsen, rather than improving, the contexts to which it is applied; in the tradition of *Frankenstein*, the archetype of the “mad scientist” is developed through Dr. Jekyll in Stevenson and Dr. Moreau in H. G. Wells. The repressed, born through the norms of Victorian society, merges with the new primitive repressed brought to light, perhaps not with this intention, by scientific development.

1.2.2 Science and Science Fiction

When we dive into the realm of Science fiction, two possibilities often arise: either the work of art deviates in a great extent from what could be real science, although still bearing this name, or, on the contrary, the scientific descriptions given seem so convincing that the reader/viewer is persuaded to consider that as science itself. In both cases, we can observe that the meaning which science may have in everyday life is changed when it is transposed into fiction: it may be daring and be closest to a fantasy or a dystopia, or it can create strategies to seem like something real, although unpractical in reality.[5] The several manners through which this transposition occurs depends on the approach that the author wants or is able to provide. In the case of this thesis, the analysis on how science became specified through 19th century English fiction focuses on the scientific knowledge of the authors chosen in order to argue about the description of science in their books, being this knowledge ever more specified towards the *fin-de-siècle*. But what is this science prior to the creation of the fiction it is inspired upon? How did it change over the years?

David Lindberg (2007), in his book *The Beginnings of Western Science*, concludes that science has several meanings, accepted by different communities who consider them as legitimate, in a way that we must determine what the term "science" means in any specific occasion. Following this logic, he argues that many ingredients which are now regarded as aspects of science can be found in the past (the antiquity and the Middle Ages) such as the describing and investigating of nature. In this sense, the "science" or "natural science" of those times can be considered the ancestor of modern science. There is also the "too general" dictionary definition, "according to which 'science' is organized systematic knowledge of the material world"; the idea that science is defined through its methodology, "specifically, the experimental method, according to which a theory, if it is to be truly scientific, must be built on and tested against the results of observation and experiment"; and finally, perhaps the most common perception of science, the idea that it is defined by its content, "the current teaching of physics, chemistry, biology, geology, anthropology, psychology and so forth" (LINDBERG, 2007, p. 1).

Whatever its understanding nowadays, be it more specific or general, one has also to perceive how this perception evolved through time and how the so-called "modern science" came to be. As Lindberg argues, the analysis of nature is longlasting and predates

5 This last method is used by H.G. Wells and will be discussed in Chapter 3.

the modern age. However, there is a turning-point when what was then called "natural philosophy" began to suffer considerable changes. According to A. F. Chalmers, a common claim is that "modern science was born the early seventeenth century when the strategy of taking the facts of observation seriously as the basis for science was first seriously adopted" (CHALMERS, 1999, p. 2), contrary to the authority of the classic Greek philosophers or the Bible. Although, considering this to be a problematic view, from there on the author performs a deep analysis on the basis of the science that came to be developed: the observation of nature, experimentation, and the deriving of theories through induction and deduction, following a logic in which the evidence seeks to justify the theory. (This kind of thinking is particularly important to the future Science fiction, since "by proceeding as they do from statements about *some* to statements about *all* events of a particular kind, [inductive arguments] go beyond what is contained in the premises" (CHALMERS, 1999, pp. 45), antecipating the characteristic of Sci-fi of showcasing, often dystopic, future conclusions from present observations of how society operates.)

The scientific revolution that ensued is, therefore, the name given by historians to this period – which began in the 17th and was consolidated in the 18th century – when the scientific method was institutionalized (HENRY, 1998). The fervent period of scientific advancement thus predates the famous Industrial Revolution, which began at the end of the 18th and extended itself to the entire 19th century in its second phase. Both “revolutions”, however, had a period of intersection which benefited the production of their respective areas. If not, for the recent scientific applications that came to be in parallel with the industrial practices, much of the industrial world that came to be would not be possible. Eric J. Hobsbawm comments, in *Industry and Empire*:

> The major technical advances of the second half of the nineteenth century were therefore essentially scientific; that is to say they required at the very least some knowledge of recent developments in pure science for original inventions, a far more consistent process of scientific experiment and testing for their development and an increasingly close and continuous link between industrialists, technologists and professional scientist and scientific institutions. (HOBSBAWN, 1968, p. 145)

Likewise, David Cahan also refers that:

> Developments in the sciences during this period arguably equaled or exceeded those in natural philosophy during the Scientific Revolution of the sixteenth and seventeenth, and in virtually every aspect, be it intellectual range, theory formation, empirical results, or instrumentation. Moreover, the sciences underwent unprecedented institutional growth and had a large role in reshaping society—just as society helped reshape them. (CAHAN, 2003, p. 3)

This period also marked the change of the name “natural philosophy” – used to designate an understanding of the physical world (HENRY, 1998). – to “science”, the now common name that was kept thereon. Previously, in the English language, a more general synonym to “knowledge”, “science”, as well as “scientists” acquired modern connotations through the 19th century, due to the prestige now given to those branches of knowledge. As Sydney Ross observes,

> The period of synonymity lasted about fifty years, approximately 1800-1850; allocation of *philosophy* [was then done] to the theological and metaphysical, and *science* to the experimental and physical branches of knowledge” (ROSS, 1962, p. 69).

This shift is observable in the books further analyzed, since Mary Shelley's famous novel encompasses the “natural philosophy” period, while Stevenson and Wells are located in the “science” period per se. The specification of this ever more distinctive science follows along, from the more artistic and abstract descriptions of *Frankenstein* to the explanation of scientific methods of *The Island of Dr. Moreau*.

Still following the same timeline towards the 20th century, we now shift from the realm of history to the realm of fiction, although both remain somewhat connected. By the end of the 19th century, the expression "scientific romances" was already popular, especially through H. G. Wells. Science fiction, or rather, the "Scientifiction" concept was first devised by editor Hugo Gernsback in the first edition of the *Amazing Stories* magazine in 1926. The publication was the first magazine to publish only such works described with this label, "the Jules Verne, H. G. Wells, and Edgar Allan Poe type of story—a charming romance intermingled with scientific fact and prophetic vision" (GERNSBACK, 1926, p. 3). The first issues helped to create a tradition of Sci-fi republishing famous 19th-century authors as the above mentioned, while also influencing people to write new twentieth-

century versions with certain innovations (JAMES; MENDLESOHN, 2003). Several other concepts for the genre, by authors and critics alike, were followed. Perhaps the most often quoted definition, either to be accepted or refuted, is Darko Suvin's "cognitive estrangement":

> SF is, then a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment. The estrangement differentiates it from the "realistic" literary mainstream of 18th to 20th century. The cognition differentiates it not only from myth, but also from the fairy tale and the fantasy. (1972, p. 375)

Gernsback's concise statement "scientific fact and prophetic vision" fits well within the structure of *Frankenstein*, a work that opens the way into numberless discussions that range from the realm of fiction into that of reality. Suvin's concept, because it is so broad, tends to exclude Shelley's novel from some of its intrinsic aspects, as the status of a modern myth, besides the fact that the "cognition" there is still subtle. This happens to be no exception, but the general rule. Science fiction grew to be so much varied, due to diverse interpretations of what the genre could grasp, that an indefinite number of books, sometimes apparently alien to one another, ended up sharing the same label, such as extraordinary voyages, utopias/dystopias, hard-Sci-fi, etc. In this sense, the establishment of a single concept of the genre, which could comprehend the entirety of its manifestations, has been proven a difficult task, that however is often done. Brazilian critic Raul Fiker, for example, tries to encompass Sci-fi's numerous archetypes, in a list of fifteen items that include "interstellar space travel", "utopias and dystopias", "lost or parallel worlds", "time-travel", "robots and androids", etc. (FIKER, 1985, pp. 46-70, my translation). Such listing can be useful in identifying common tropes that could be associated to Sci-fi, but a straight classification into subgenres would forcibly just confuse the readers and compromise the unity that the genre may possess as a whole.

John Rieder, in his article "On Defining SF, or Not: Genre Theory, SF, and History" (2010), has a more open view concerning genres, as multitudinous products, "fluid and tenuous constructions made by the interaction of various claims and practices by writers, producers, distributors, marketers, readers, fans, critics and other discursive agents"

(RIEDER, 2010, p. 191). The author also highlights the importance of those relations, and, therefore, of genre division, since "when 'we' point to a story and say it is SF, therefore, that means not only that it ought to be read using the protocols associated with sf but also that it can and should be read in conversation with other sf texts and readers" (RIEDER, 2010, p. 201). According to the author, the traits or archetypes are created and reproduced and repeated by all persons involved in the process. A genre, not only Sci-fi, is always recreating itself through a complex dialogue.

Paul Kinkaid's approach to Science fiction, and in a sense to genres as a whole, proves to be a good alternative for the definition of the genre, which is articulated to Rieder's understanding of the genre as an entity formed through several connections. The author argues that there's no specific starting point for Science fiction, since "there is no ancestral text that could possibly contain, even in nascent form, all that we have come to identify as science fiction" (2008, p. 13). If *Frankenstein*, for example, was identified as such founder work – as it often is – every other work of fiction which intended to belong to the genre would have to conform to its predetermined laws. In order to avoid such limitations, Kinkaid treats the Sci-fi genre as "a web of resemblances":

> And any number of those resemblances might constitute what we would call science fiction. By thinking of science fiction as a network of such family resemblances, it is easier to see that science fiction is not one thing. Rather, it is any number of things – a future setting, a marvellous device, an ideal society, an alien creature, a twist in time, an interstellar journey, a satirical perspective, a particular approach to the matter of story, whatever we may be looking for when we look for science fiction, here more overt, here more subtle – which are braided together in an endless variety of combinations. (2008, p. 20-21)

Following this logic, if one work of fiction has one trait, one resemblance, which at some moment was attributed to Sci-fi, then this work is surely Sci-fi. This approach is very broad but manages to comprehend the whole body of Science fiction without committing any injustice. At the same time, acknowledging that fictional works are complex entities, formed by extensive particular traits, Kinkaid's thinking also gives way to the multiplicity of genres in the same work, which may concern different, although sometimes related, genres. That's again the already mentioned key point by Tzvetan Todorov, who argues that it is better to say that a genre, or genres, is manifested in a given work, and not the contrary

(1975). In the same way, considering genres as such tightly related structures, the question of their origins, according to the author, is also dependable: "A new genre is always a transformation of one or several old genres: by inversion, by displacement, by combination" (1976, p. 161).

Following Kinkaid's argument, we could relate a number of books previous to the period here analyzed – often referred as Proto-Sci-fi (FIKER, 1985) – as members of the Science fiction genre, since they conform with resemblances found in other recognized Sci-fi books. This is possible despite the common understanding that most Sci-fi that was written with the genre in mind, after 1926, is the "true" Sci-fi, what can be observed registered in some encyclopedias or companions encompassing works of the genre, such as the *Encyclopedia of Science Fiction*, by Don D'ammassa (2005), which rarely ventures into the 19th century. Therefore, on searching previous to Mary Shelley or even around her time, there is a tendency of finding an immense network of influences that once more prove the evolution and constant creation of genres from others. Only to mention a few, perhaps the most constant theme in the Sci-fi previous to the 19th century is the speculative fiction of the extraordinary voyages, possibly influenced by the age of discoveries. Brian Stableford, in his article "Science Fiction Before the Genre"[6] – describes a more extensive list of such works of "of utopian fantasy, whose usual narrative form was the imaginary voyage" (JAMES; MENDLESOHN, 2003, p. 15). This Sci-fi often does not treat the scientific world directly, but showed very detailed descriptions of extraordinary societies, for the better or for the worse. This branch arguably began with Thomas More's *Utopia* (1516) – the book that created the term for an ideal and unreachable place –, although Plato's *Republic* (380 BC) can also be considered an ancestor, the farthest one in time. Following More, *New Atlantis* (1624) by Francis Bacon, although not a finished work, is often mentioned as an exponent of the utopian branch of Sci-fi. And perhaps the most known English novel from the 18th century by Jonathan Swift, *Gulliver's Travels* (1726), continues the theme of the voyages with a satirical tone, which was often misunderstood or ignored through history.

There are many other known examples, not only from this branch of Science fiction but many diverse experiments which involve science of speculation, which can be found at different points through literary evolution. Edgar Allan Poe himself, an author often related

6 A title that is contradictory in the least, but reveals something about the understanding of genres as entities with a defined name and purpose.

to themes of horror fiction, experimented with the genre in some short stories; and Herman Melville wrote a short story, "The Bell Tower", which is a direct influence from the themes developed in Frankenstein – the creation revolting against the creator. This thesis does not cover all possible themes of Science fiction – that would be an overwhelming and virtually impossible task. Considering the evolution of genres, the intertextuality present through the history of literature, the number of works that can, for some reason, some particular trait, be related to something which was chosen to be called Science fiction, is so immense and so rich that a complete study of the genre becomes unadvised. That is why this work intends to narrow down the study to a small selection of books, which are believed to have influenced the creation of the genre with the name “science” inscribed. Utopian/dystopian fiction was already very popular, not only before the 19th century but especially in the 20th century. Many other dystopias which did not involve scientific jargon became famous when the genre had already established itself with its name, such as Ray Bradbury's *Fahrenheit 451* and George Orwell's *1984*, which only reveals a continuation of tendencies from the past and an act of establishing works such as *Gulliver's Travels* within the genre, despite their always being there, in a sense. The name of the genre could be simply defined “utopia”, if this tendency had followed. However, the particular development of science in 19th century society, as well as the influence that it manifested in fiction, was enough for the interest in its extrapolation to be considered important.

1.2.3 A Dialogue

The scholar discourse on the dialogue between Gothic and Science fiction is scarce, though not inexistent. Patrick Brantlinger, in his article "The Gothic Origins of Science Fiction", argues that "the conventions of science fiction derive from the conventions of fantasy and romance, and especially from those of the Gothic romance. Science fiction grows out of literary forms that are antithetical to realism (...)" (BRANTLINGER, 1980, p. 30). This defense of both genres as deviations from the "real" – the sort of romance which aims to portray the real-life interactions – can be stated as one evident resemblance, although another important difference also arises. Gothic is content enough with its fantastic elements – in fact they contribute to the feeling of uneasiness and terror, for they represent the unknown –, whereas Sci-fi, although dealing with the same uncanny elements, transmits the illusion that those facts – the creation of a live being in

Frankenstein, the manipulation of animals in *Moreau* – can by some possibility be "real", should the advancement of science permit it. This illusion became ever more possible as soon as writers who had scientific knowledge began venturing into the realm of fiction, being Wells one of the first most significant one in this regard. Nevertheless, "the power of the irrational over the rational" (BRANTLINGER, 1980, p. 31) is still present in both genres, sometimes through different, sometimes similar manners.

The most important point that Brantlinger refers to – not only because it fits perfectly in the aims of this work, but because it traces a dialogue of themes through the genres – is the establishment of Mary Shelley's famous novel as a reference point of Science fiction, without losing its Gothic roots:

> If we regard *Frankenstein* as at least a clear, early example of cross-fertilization between the Gothic romance and science fiction, two facts about it are worth stressing. (...) While the very phrase Gothic romance suggests a reaction against things modern and rationalized, there is also an important sense in which the whole development of science fiction from *Frankenstein* forward has been characterized by an anti-Promethean, anti-utopian, anti-scientific pessimism.
> And the second fact worth stressing is that Mary Shelley's story contains many of the patterns that show up in modern science fiction. Most obviously, there is the incarnation of reason, Victor Frankenstein himself, the progenitor not only of his monster but also of a long line of mad scientists, through Stevenson's Dr. Jekyll and Wells's Dr. Moreau down to the Dr. Strangeloves of the present. (BRANTLINGER, 1980, p. 32)

Setting Frankenstein as a turning-point where both genres began emerging as two different entities conform with the general anti-scientific feeling which permeates most of further Sci-fi. Victor Frankenstein began influencing a tradition of mad scientists who always ended up failing with their experiments, the creations, which, by their turn, revolted against their masters. It is possible to argue, therefore, that this early critique against the fast and scientific advancements of the 19th century contributed to the idea that science only produces monsters, and that "Science fiction is thus really anti-science fiction" (BRANTLINGER, 1980, p. 32).

One final observation worth mentioning, which is observable from Shelley to Wells, is the consequences of the actions in the stories. According to Brantlinger:

> (...) the nightmare of reason has expanded and turned outward in the evolution from Gothic to science fiction. Again, the scale of disaster is individual and inward in the earlier form, but social and often cosmic in the later one. This fact might suggest that science fiction makes more rational connections with the real world than does the Gothic romance. (BRANTLINGER, 1980, p. 40)

In Shelley, the consequences of the Monster's revolt are intimately related to Frankensntein's actions and reflect his misjudgment regarding scientific creation – although the Monster's own responsibility and self-consciousness may reflect also his own responsibility. The same is true with Stevenson's Dr. Jekyll, who desired to take advantage in his state of duplicity which had been repressed by some time. In Wells' fiction the scope is wider and does not reflect much of the individuality of the characters[7] but rather the state of scientific advancement as a whole. All three works reflect the same point of intersection among the genres, though with a distinct progressive approach to the central character's individuality and the consequences of the scientific discoveries, reaching a far broader level of extrapolation in Wells, at the turn of the 19th century.

Therefore, it is possible to determine where the barriers lay and whether the apparent continuous system of Gothic tendencies can be broken, so a new genre with distinct, and yet similar, features can emerge. If one considers David Punter's suggestion of treatment of the gothic as "a historically delimited genre or as a more wide-ranging and persistent tendency within fiction as a whole" (PUNTER apud HOGLE, 2002, p. 193), it is possible to argue that the "persistent tendency" made its way into Wells and other further writers, through a natural dialogue between genres, changing itself into what was later to be called Science fiction. In a similar sense, John Rieder, researcher of Sci-fi, defends a system which permeates the works of fiction:

> If Shelley's *Frankenstein* was not sf when it was written (see Rieder, Colonialism 19), neither, a fortiori, were Swift's *Gulliver's Travels* (1726) or Lucian's *True History*. The important point is that the emergence of sf has to do, not with the first appearance of a certain formal type, nor with when the term "science fiction" was first used or by whom, but rather with the appearance of a system of generic identities that articulates the various terms that cluster around sf. (2010, p. 200)

7 The focus of his fiction seems to be the scientific possibilities created, while the characters do not have the same individual depth as Shelley's and Stevenson's.

A natural dialogue through this "system of generic identities" seems the most interesting option when treating those genres which intersect. This thesis does not state such definite assumptions about the origin of the Sci-fi genre, though. On the contrary, the objective is to establish genres as constantly evolving structures, which are simply born from other genres, as well as consider the presence of multiple genres in the same text, as stated by Tzvetan Todorov. Thus, the representation of both genres, Gothic and Science fiction, will be analyzed, according to their conventions. In the case of Science fiction, there the way in which science is specified in the fiction of the present authors will be a key to determine how the genre came to be something ever more detached from the older Gothic.

2 BUILDING CONNECTIONS BETWEEN GOTHIC AND SCIENCE FICTION

A classic Gothic tale, with a structure based on several accounts, Mary Shelley's *Frankenstein* is also a forerunner of themes which would only be approached at the end of the century. The Creature as a reflection of its creator, Frankenstein, is an anticipation of the "double" figure, with its uncertainty regarding the character's identity, a device which would be most notoriously recovered in *Strange Case of Dr. Jekyll and Mr. Hyde.* Moreover, the use of science as a crucial point in *Frankenstein*'s narrative, as well as the discussion concerning the consequences of its mishandling, defines the book not only as a prelude to the *fin-de-siècle* Gothic present in Robert Louis Stevenson, but also an early example of what would later be called the genre of Science fiction.

In this sense, this chapter is going to apply a psychoanalytical approach to *Frankenstein* and *Strange Case of Dr. Jekyll and Mr. Hyde* in order to unveil the relations of meaning which represent the Gothic genre to which both of them are inevitably bound. It is believed that Sigmund Freud's works on Metapsychology are useful to interpret the struggle portrayed in those works, not only because of the time proximity – in a way Freud's studies follow a scientific logic which is a product of the scientific development present in Shelley and Stevenson – but also because they try to work out the repressed desires which end up shaping the character's actions through their respective stories. Thus, Freudian concepts of the "repression", the "unconscious", as well as the "uncanny", will be considered in the analysis of how Frankenstein and Dr. Jekyll deal with their counterparts, in which context they appear and what they may represent. Another convenient concept to the analysis is the "double", most broadly developed by Otto Rank, which will be brought as a complement to Freud's theories, due to their close psychological proximity.

Likewise, from the Gothic aspects present in the works of fiction, an analysis will be carried on in order to identify how they evolved into Science fiction tropes, as they would be later recognized. Here the mood of a modern, scientific world, is observed, as the

characters in both the novel and the novella find themselves deeply connected to their work, which, by its turn, reflects strongly on their personal lives. The approach to science itself and its jargon is still very simple in its details, without any specification, fictional as it may be, regarding the processes through which the “monster-creation” may take place. Nevertheless, the scientific discussion present here is very important and follows the same logic of a pessimistic tone in criticizing a scientific practice without moral limits, as Frankenstein's and Jekyll's. Ultimately, the question of morality is placed upon the characters themselves, in a sense revealing that science, a specific knowledge, is just the means through which their inner desires may materialize.

Through this dialogue, it is possible to say that the Gothic and the Science fiction traits present in Mary Shelley and Robert Louis Stevenson are two separate genres, but they are also one and the same thing.

2.1 *FRANKENSTEIN*: “A HIDEOUS PROGENY”

One of the core works in 19th century English fiction, *Frankenstein* has gained the status of a modern myth (BALDICK, 1987). The constant adaptations of its main formula to other books, movies, among other media, justifies this label of an ever-changing narrative. And although each new appropriation tends to add something new to the scientist-creature dialogue and the pessimistic view of science—or its mishandling by men, depending on the interpretation— Mary Shelley's work tends to be identified as the starting point behind an entire tradition. *Frankenstein* ends up not only finding its roots in Gothic fiction, with its suspenseful structure of multiple narrators and an apparently supernatural being; it is also often considered the first book of what would later be called Science fiction (KINKAID, 2008) since it deals with scientific principles within a scientific world.

A special care will be given to the genesis of the novel since it reveals much about the context of its creation and its intentions. Afterward, Mary Shelley's book will be related to posterior important appropriations of its formula, in order to visualize the progression of the genres mentioned previously within the *Frankenstein* tradition. Finally, a brief discussion will intend to place the novel within a convergence of genres, which would

influence the future of a literary perception. Looking for how the book anticipates a single genre, it is expected that an analysis of the contribution of Gothic will bring more light to the discussion of *Frankenstein*'s place and influence in literature, a place perhaps not even conceived by its author. Her "hideous progeny" (SHELLEY, 2005, p. 358), prospered to a level of creating perhaps the most recognizable figure – be it the Monster, or "Frankenstein", as it is often mistakenly called – in fiction as a whole.

2.1.1 Mary Shelley's Life and Her Masterpiece

Frankenstein was first published in 1818, two years after the fateful summer of its first conception. Based on the diaries of the parties involved, several other authors, among them Radu Florescu (1998), have reconstructed the stormy day of 1816, in which Mary Shelley, her stepsister Claire Clairmont, her husband and poet Percy Shelley, the poet Lord Byron and the doctor and aspiring writer John Polidori gathered in Vila Diodati, a house in Lake Geneva rented by Byron, to discuss science and ghost stories. In this rendering of the genesis of the book, the duplicity of genres is already visible—the union of Science to Gothic in the creation of the ghost patterns, But, for now, it is important to examine the Gothic traits surrounding the environment which contributed to form the tone of the book.

As the stormy weather prevented them from going out, Byron proposed to read to the group a story from the book *Fantasmagoriana, or a Collection of the Histories of Apparitions, Spectres, Ghosts, etc.*, in which a husband discovers that his wife turned into a corpse (FLORESCU, 1998). After a discussion pertaining to the scientific probabilities of animation, Byron proposes a challenge in which everyone there should write a ghost story, which is accepted, since, besides Percy Shelley and Byron – the great poets of the group – the other members also had the habit of writing. In her Preface to the third edition of *Frankenstein*, Mary Shelley reveals her feelings in face of the task of writing which would have turned out to be the most successful book to spring from that Summer:

> I busied myself *to think of a story*, – a story to rival those which had excited us to this task. One which would speak to the mysterious fears of our nature, and awaken thrilling horror – one to make the reader dread to look round, to curdle the blood, and quicken the beatings of the heart. If I did not accomplish these things, my ghost story would be unworthy of its name. (SHELLEY, 2005, p. 355-56)

We can imagine with what enthusiasm and motivation Mary Shelley plunged into the task of creating a piece of Gothic fiction capable of meeting the standards of Byron and Shelley. According to her statement above, she looked up to the classics of the genre available in her time as models, among which it is certain that she had read at least Horace Walpole's *The Castle of Otranto*, Ann Radcliffe's *The Mysteries of Udolpho*, and Matthew Lewis' *The Monk* in previous years (Florescu, 1998); besides, of course, having read plenty of Percy Shelley's and Lord Byron's poetry, always entwined in Gothic themes.

According to Eve Kosofsky Sedgwick, the aim of a good classic Gothic story, as they were understood at that time, was to "point somehow toward an aesthetic based on pleasurable fear" (1986, p. 11). Ultimately, this is the major element present in all great Gothic stories of all time. If the genre has been changing and adapting constantly, it is in order to keep serving the same goal. The puzzle about why people feel such intense aesthetic pleasure in stories related to horror, terror and fear provoked Sigmund Freud into carrying out his own research, which culminated in the seminal essay about the double, "The Uncanny" (1919).

Mary Shelley's personal anxiety must have contributed to the themes of life and creation presented in her book. There she was, in the presence of the two most famous Romantic poets of all time; she had eloped with Shelley (by then a married man) and was a guest in Byron's house. She had recently been pregnant and had lost her first child. Now she was prey to nightmares. Her deceased baby, Mary Jane, kept returning to her in a recurring dream. In this sense, the rounds of talks about reanimation were in tune with the author's preoccupations in life, reflected in the Gothic theme of her work. Victor Frankenstein's project intends to "give birth" to a being independently from the natural forms of conception. Mary Shelley's negative association with the concepts of life, birth, and death precedes the present loss of her baby and remounts to her own birth, which was followed by the death of Mary Wollstonecraft, her mother. Such traumatic train of experiences, associated with the fact that she had eloped with a married man (whose wife would commit suicide) can be translated into nightmares about the repression of sexual desire. This sexual repression can be perceived in Victor Frankenstein's refusal to creating a female counterpart to his Creature, as well as in the his, the Creature's, revenge toward Elizabeth, who is never sexually fulfilled in her wedding night.

2.1.2 A Psychoanalytical Reading of The Gothic in the Novel

Considering Sigmund's Freud work on psychoanalysis, repression is one of the possible destinies of an instinct (1984). The repression occurs because the satisfaction of certain instincts, though possible, "would be irreconcilable with other claims and intentions. It would, therefore, cause pleasure in one place and unpleasure in another" (FREUD, 1984, p. 146). The repressed instinct, thus, is located in an unconscious level, because it is opposed to the regulatory desires of the conscious Ego. There, however, the repressed desire is only in a latent state, "continuing to exist in the unconscious, (...) organizing itself further, putting out derivatives and establishing connections" (FREUD, 1984, p. 148). The common distinction of the levels of consciousness and unconsciousness is made between the Ego, "the *surface* of the mental apparatus" (FREUD, 1984, p. 357), closely related to the outside world, and the Id, the channel through which the Ego dialogues with the repressed instincts.

The formula "Frankenstein = Ego ↔ the Monster = Id" is simplistic but gives us a direct notion of the levels of consciousness present in the novel. As a metaphor of Frankenstein's repression, the creature naturally shows a destructive behavior, akin to the Id, "which contains the passions" (FREUD, 1984, p. 364). Following this psychoanalytical interpretation, the creature's revolt against his creator would be inevitable, and not only a product of Victor's lack of care regarding him. Nevertheless, the abandonment by the young natural philosopher certainly influenced the embroilment of his relationship with the creature, as it is noticeable through the creature's discourse of rebellion throughout the novel. "Do your duty towards me," says the creature, "and I will do mine towards you and the rest of mankind" (SHELLEY, 2005, p. 125).

The reason for the repression of Frankenstein's sexual instincts in relation to Elizabeth may be read to the extent of their kinship. Although adopted by Victor's family, she is described by the narrator as his "more than sister" (SHELLEY, 2005, p. 323), a simultaneous reminder of a) her familial relation to him and b) the overvaluing of this same relation as something of more importance. Their wedding would be incompatible due to this supposed sister-brother relationship, which is not real but is reassured in the text. The taboo of an incestuous connection is indeed a fitting theme to the Gothic novel, but here the common gender logic is reversed, as it was already pointed out by Anne Mellor:

> (...) the female-authored Gothic novel, most notably in the works of Ann Radcliffe, Charlotte Dacre, Sophia Lee, and Emily Brontë, explores the cultural repression of all female sexual desire in the name of the chaste, modest, proper lady – a lady confined within a patriarchal bourgeois domesticity and often menaced by a looming threat of incest. (SCHOR, 2003, 12).

Mary Shelley subverts not only the tradition of the Female Gothic, choosing a male figure as her protagonist rather than the helpless heroine, but also of the Male Gothic, since both approaches concern the "female" through different angles, as Anne Williams (1995) argues in her *Art of Darkness*. Although not oppressed by patriarchal society, Victor may still be read as a sufferer of sexual repression through a more subtle interpretation of the relations found in the novel, as well as the acknowledgment of Elizabeth as an important character for all the conflicts which ensue, despite her not being the protagonist. Since Frankenstein cannot have Elizabeth, unconsciously, he is forced to spend his desire elsewhere, through "substutive formation" (FREUD, 1984, p. 154), another Freudian concept. The successful creation of the Monster is Victor's proof that he indeed does not need a woman "to give life"; the "incestuous" sexual instinct[8] is channeled to his scientific experimentations. This realm of science, furthermore, is the masculine environment Victor is most used to, a natural repository for him to repress his sexual energy from. However, his practices are not fulfilled due to the Monster's subsequent aggressivity against his own creator – partly justified due to Frankenstein's abandonment of him –, which is extended to his loved ones, including Elizabeth. The process of repression was a failure, because it only managed "to remove and replace the idea; it has failed altogether in sparing unpleasure" (1984, p. 155), as Freud comments in one of his cases, similar to this, in which a patient channels the fear of his father to a fear of wolves. The Monster's abhorrent appearance is a reminder of the protagonist's lack of care regarding the entire enterprise of the creation of life; Victor's obsession resided only in the act of creation itself, following the anguish of dealing with his repression regarding Elizabeth, rather than its consequences.

His persistence in going on with his marriage plans, albeit the Monster's constant threats – *"I will be with you on your wedding-night"* (SHELLEY, 2005, p. 93) – may still

8 In Freud's studies, the incest taboo – of the child in relation to his mother – is born and overcame in the Oedipus complex, a central term for the understanding of all of his Metapsychology.

be read as a certainty on Victor's part that his marriage with Elizabeth would never materialize. In this sense, her death would be an unconsciously expected event for Victor, rather than a surprising and tragic one. When one remembers that the Monster can yet be interpreted as an extension of his creator, the young natural philosopher's guilt is still more marked. This finally raises the common question when regarding Shelley's novel: where does guilt reside, in the creator or in the creature? A psychoanalytical approach seems to be more useful in analyzing Frankenstein's motivations, inside the logic of repression desires, as it was proposed.

The question of Frankenstein and his Monster being interpreted as extensions of each other leads up to the concept of the "double". George Levine, in analyzing the elements of Frankenstein's metaphor, notes this aspect: "Frankenstein's obsession with science is echoed in the Monster's obsession with destruction. The two characters haunt and hunt each other through the novel, each evoking from us sympathy for their sufferings, revulsion from their cruelties" (LEVINE, 1982, p. 15). Complementing this, Otto Rank[9], a writer who perhaps most extensively developed the term, states that this impulse of destruction makes the double's life intimately related to that of the other person (1971). That is noticeable throughout the narrative in both of the characters' speech, but especially in the Monster's final realization of his destiny once Frankenstein is finally dead: "'That is also my victim!' he exclaimed: 'in his murder my crimes are consummated; the miserable series of my being is wound to its close!'" (SHELLEY, 2005, p. 240). The killing of the double becomes inevitably the killing of the self: a suicide. Still following Rank's psychoanalytical analysis, this death of the double "appears closely related to its narcissistic meaning" (RANK, 1971, p. 69). In the case of Frankenstein, this could be primarily observed in his ambition upon his project – his will to "play-God" and create life, repressing his sexual feelings for Elizabeth.

The feeling of impotence is analyzed through a different and yet complementary scope by Thomas Vargish. The author claims that the authority brought to the doctor via technology leads to a level of individualism and unforeseen freedom which ends up subverting his own being:

> Radical self-determination can lead us out of the realm of the human, at

9Rank considers mostly the identical double, based on the tradition of Edgar A. Poe and Dostoievsky, as well as the imagery of the mirror and the shadow, but there are still other important aspects to be applied here.

> least out of the traditionally human. Paradoxically, the consequent psychological crisis can be expressed in terms of impotence; the power lures us to a social, ethical, emotional desert, to death rather than life. (VARGISH, 2009, p. 336)

Whether this impotence could be extended to the sexual sphere is a hypothesis that would deviate from Vargish's proposal, who analyzes the loss of human ethics in terms of unlimited access for one to exercise his own individualism, which forcibly, in the case of Frankenstein, comes from scientific and technological advancement. However on the more general analysis this thesis presents, it is interesting to once more add the influence of science to the psychoanalytical realm, and the impotence of a beaten Dr. Frankenstein in face of his deserted creation in parallel to his impossibility of uniting with Elizabeth.

Once the Monster is born and represents only a threat, in Frankenstein's view, however, the only object of satisfaction to the self is his death, the Monster's and his own, since his life loses purpose without his loved ones, being reduced to a quest of vengeance:

> “Oh! when will my guiding spirit, in conducting me to the daemon, allow me the rest I so much desire; or must I die, and he yet live? If I do, swear to me, Walton, that he shall not escape; that you will seek him, and satisfy my vengeance in his death.” (SHELLEY, 2005, p. 230)

Related to this notion of the double is Freud's *unheimlich*, or "uncanny", which refers to "that class of the frightening which leads back to what is known of old and long familiar" (FREUD, 1994, p. 220). This element which is known was primarily forgotten, once again, through the process of repression. The Monster himself is not familiar to Frankenstein through his appearance; he is actually an unprecedented creature in the realms of science and life. But the uncanny can still be grasped if one remembers that the repressed instinct that the Monster represents is resumed in Victor's desires towards his "more than sister". When the Monster emerges, he does so as a reminder that his creator's intentions of channeling his desires are a failure, as is the process of repression. The uncanny thus composes Freud's notions of consciousness and unconsciousness, establishing the context in which elements of this latter level may appear to the conscious, i. e., when the process of repression cannot avoid displeasure. This final sensation is caused by the Monster's actions, by their turn a product of Victor, closing the Freudian

circle in which all influences depart from the self only to find their way back to it (FREUD, 1984).

Ultimately, a psychoanalytical approach allows for an inner analysis of Frankenstein's motivations beyond the point of considering his scientific ambition – his will to play-God, though not clearly referred as so – as the sole reason for his creation and further misfortune. Undoubtedly a narcissistic force, still in Freud's terms, is at stake here, but the acknowledgment of other repressed elements additionally helps the overall analysis of the book, especially regarding the whole of Elizabeth in the novel.

2.1.3 Other Gothic Conventions

Following Sedgwick's treatment of the Gothic in her *The Coherence of Gothic Conventions*, it is possible to find many other Gothic traits in *Frankenstein.* The author explains, for example, the relation between the self and something that should belong to it, but is ultimately separated by some kind of barrier (1986). This can be perceived in Victor's separation from his ambitions by the norms and morals of society, as well as, as it was already analyzed, his separation from Elizabeth due to her kinship with him. Sedgwick also points the aspect of the unspeakable as an important feature of the Gothic. The clearer example of this aspect is the moment in which Victor beholds his finished creation and, speechless, abandons him:

> “How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form? (...) I had desired it with an ardour that far exceeded moderation; but now that I had finished it, the beauty of the dream had vanished, and breathless horror and disgust filled my heart.” (SHELLEY, 2005, p. 85)

The unspeakable, the surprise of beholding the Monster coming to life is the action which triggers all further conflicts in the narrative. Had Victor Frankenstein remained by his creature to support it, in spite of all wretchedness, the double figures might have harmonized so as to avoid further conflict. The unspeakable horror of abandoning his own progeny is described by Sedgwick as the heart of this "story within a story within a story." (1986, p. 19).

The three narrators in *Frankenstein,* therefore, correspond to three levels of narrative information, or experience. The Monster's account, the climax, told in the middle of the book, is the inner story which reflects Captain Walton's perception of Victor Frankenstein's perception of what he heard the Monster say, in the same way that Frankenstein's narrative is subject to Walton's perception. This sort of structure not only filters and reinforces the Unspeakable in the narrative, as no character gets to master the complete story, but also contributes to the suspense that marks the narrative. The reader is kept constantly expecting for something to happen: Walton's narrative gives a glimpse of the pursuit between Frankenstein and the Monster, which would only unfold at the very end.

Based on the elements discussed, we can see the ways in which Mary Shelley's novel is inserted into the Gothic tradition. However, besides representing Gothic structures, *Frankenstein* also carries a number of innovations which enable the creation of a new genre, later to be called Science fiction. The relation between the two genres is very close, as one represents the development of some of the characteristics of the other. Stevenson's novella *Strange Case of Dr. Jekyll and Mr. Hyde* carries on this legacy of the scientific discussion, also following the inner Gothic approaches to characters as seen in Shelley's novel. Let us now consider the innovations it brings and its relation with the creation of the new genre that would later be known as Science Fiction.

2.1.4 Gothic and Sci-Fi in the Novel: A Negotiation

This comment on *Frankenstein* is being written two hundred years after the story was created. We can rely on the comfortable critical expertise granted by a very competent historicizing of the genre that did not exist in the times when Gothic fiction was dismissed as a secondary class of entertainment. Now we can, for instance, analyze the development of the genre in stages and, looking backward, examine the ways in which *Frankenstein* both fits into this tradition, and changes it.

The classical texts by Walpole, Radcliffe, and Lewis that Mary Shelley used as support to create *Frankenstein* are indeed quite different from her masterpiece.. We are far from that original formula, in many ways. whose conventions are perhaps too naïve to account for the complex treatment of evil, horror, and terror that is demanded in our time. Still, the psychological aspect has the power to be always renewed and somehow managed to remain as efficient as ever. Professor Julio França identifies a triad of elements that

apply to all stages of Gothic fiction, and that is very evident in *Frankenstein*. The first is the *locus horribilis*, represented in the ancestral homes, reshaped into Victor Frankenstein's laboratory. The second element is *the return of the past as a haunting force*: Frankenstein shuns his creature and factually flees to the end of the world (i.e., the North Pole) in his attempt to escape from his past. The third element in the triad is *The Monster,* or "the ways to deal with evil within". (França, 2015). The nominal treatment given to the corpse reanimated by Frankenstein says much not only about the different stages in the development of Gothic or Sci-Fi, but mainly about the social developments that provoked those aesthetic changes. At the beginning of the critical fortune of Mary Shelley's novel, the tendency for the reader was to think of a disturbing "Monster" and to identify with Victor Frankenstein's predicament. But the most interesting phenomenon is that brought about in the movie personification by Boris Karloff, when the double is reunited, and both creature and creator are referred to by the same name, "Frankenstein".

There are critics who refuse to constrain the genre to a fixed set of rules. James Watt, in his book *Contesting the Gothic*, acknowledges that the genre is a modern construct whose categorization does not do justice to its diversity:

> Though the genre of the Gothic romance clearly owes its name to the subtitle of *The Castle of Otranto*'s second edition, 'A Gothic Story', the elevation of Walpole's work to the status of an origin has served to grant an illusory stability to a body of fiction which is distinctly heterogeneous. (...) any categorization of the Gothic as a continuous tradition, with a generic significance, is unable to do justice to the diversity of the romances which are now accommodated under the 'Gothic' label, and liable to overlook the often antagonistic relations that existed between different works or writers. (2004, p. 1)

David Punter also offers two possibilities of approach to the development of the Gothic, as mentioned at the end of the previous chapter. Both authors stress the ways in which the Gothic adapts to the passing of time and to the new ways of expressing tension. *Frankenstein* occupies an important space in this road of changes. On the one hand, it partakes many of the characteristics of the Old School; on the other, it clearly opens the doors to several new perspectives. As an example, we refer to the fact that *Frankenstein* can be considered either a "Male" or a "Female" Gothic work. This classification has been much used after Ellen Moers published her chapter on "Female Gothic" in the book

Literary Women (Moers, 1977). From that moment onwards, “Male Gothic” became an expression used to refer to texts from the old school, written by men, with male protagonists who represent what is to be considered wright and fight different forms of external evil. Moers stresses the fact that in Gothic narratives written by women, with female protagonists, things operate in a different way. It becomes difficult to separate evil within and evil without, and the emphasis in the narrative turns into psychological oppression rather than into supernatural events. In the case of *Frankenstein*, we have a narrative with male characters (Walton, Frankenstein, The Creature) who can be seen as protagonists, antagonists, or narrators. They belong in a book written by a woman who has been pregnant – and probably worried whether she would give birth to a healthy child. Who was in mourning for the loss of her child – and possibly felt responsible for that loss. Mary Shelley was also the offspring of a mother who died in giving birth to her. More blame could be added into the bargain, let alone the fear of dying in the process of giving birth, a reality which was too concrete in her life experience. Considering the sum of all fears, it was not surprising that she had the nightmare in which The Creature appeared for the first time.

Mary Shelley’s novel preserves the strong characteristics of Old Male Gothic, but it also undeniably introduces the psychological nuances that will be finalized by later 19th Century authors such as Charlotte and Emily Brontë. Robert Heilman, writing about the novel *Villette* in in his essay “Charlotte Brontë's ‘New’ Gothic”, is sensible to the fact that Brontë "finds new ways to achieve the ends served by old Gothic", focusing on "the intensification of feelings" (Heilman, 1967, p. 121). The Male Gothic relates to a time in which evil was associated with an external supernatural influence, when there is a great distance separating good and evil, protagonist and antagonist. In the Female Gothic, as the conflict is usually subjective and psychological, it becomes more difficult to determine who is right or who is wrong, or whose point of view is the one to be subscribed by the reader.

In *Frankenstein*, there is room for both traditions. The reader is not less affected by the Monster because it is associated with scientific rationality. On the contrary, the fact that scientific knowledge could evolve to provoke the creation of such a situation is more frightening than the former imaginary ghosts. In Mary Shelley's novel, besides the elements of the conventional Gothic, there is the introduction of a new treatment of science –the scientific environment, the use, though incipient, of scientific principles to be further

extrapolated, as well as the pessimistic tone of the narrative – are sufficient to initiate, and influence, the tendency of Science Fiction.

Remembering the discussion regarding Sci-fi in Chapter 1, especially Kinkaid's concept of a "web of resemblances", it is possible to apply this approach to Gothic and Sci-fi, and particularly to *Frankenstein*. As observed, several are the elements from the Gothic and further Sci-fi which can be analyzed in the novel. Therefore, Shelley's novel belongs both to the Gothic, due to the aspects previously mentioned, and to Science fiction, due to its interest in the scientific field through fiction, as it will be later specified. Furthermore, *Frankenstein* may be considered the turning point in which the early examples of Sci-fi books, recognized as such, emerged, through developments of the Gothic genre; although it would be precipitate to consider it the founder of the genre, since Sci-fi later evolved beyond its first established traits. Ultimately, Gothic and Science fiction, in *Frankenstein* and other works, share common aspects, especially the questioning of rationality, as Brantlinger defends in his "The Gothic Origins of Science Fiction", suggesting that "the conventions of both Gothic and science fiction involve a rejection or a symbolic putting to sleep of reason (...) (1980, p. 31). Now *Frankenstein's* anticipation of the Sci-fi genre is left to be examined, as well as its important influence in later fiction.

2.1.5 *Frankenstein's* Legacy and Science Fiction

Galvanism, electricity, and several other types of scientific influence can be observed in the Gothic genesis of *Frankenstein*. To begin with, there are the discussions concerning the nature of life and its creation as held by the famous group in the Summer of 1816. They were used as inspirational material in the writing of Mary Shelley's story, providing the uncanny background needed for the author to achieve her final effect. In the Preface of the third edition of the book, Mary Shelley notes:

> Many and long were the conversations between Lord Byron and Shelley, to which I was a devout but nearly silent listener. During one of these, various philosophical doctrines were discussed, and among others the nature of the principle of life, and whether there was any probability of its ever being discovered and communicated. They talked of the experiments of Dr. Darwin, (...) who preserved a piece of vermicelli in a glass case, till

> by some extraordinary means it began to move with voluntary motion. Not thus, after all, would life be given. Perhaps a corpse would be reanimated; galvanism had given a token of such things: perhaps the component parts of a creature might be manufactured, brought together, and endued with vital warmth. (SHELLEY, 2005, p. 356-57)

Erasmus Darwin (1732-1802) (Charles Darwin's grandfather) was much admired by Percy Shelley, who transmitted his enthusiasm to his wife (FLORESCU, 1998). His experiments related to the properties of electricity as a principle of creation were similar to those of Italian physicist Luigi Galvani (1737-1798), who was famous for having produced movement in frogs through a relation between electrical shocks and the nervous system of the animals (FLORESCU, 1998). Galvanism is indeed the main scientific theoretical path followed by Victor Frankenstein in the story, the principle through which the experiment ultimately functions, yet it is only mentioned in the third edition. Although by her Preface one could assume that Mary Shelley's interest in science was born on that day, when researching on her life it is easy to notice that the author already had some acquaintance with the matter; instead the spooky and stormy day served as the final touch in which all came together—fictional imagination and scientific hypothesis.

The work of another man of science, Sir Humphry Davi, was also important for Mary Shelley to reach the idea of a modification of nature, crucial to Victor Frankenstein's character (Schor, 2003, 17-18). Sir Humphry was part of the circle of acquaintances of William Godwin (Mary Shelley's father) and was frequently present in their household. Godwin is the philosopher who introduced the doctrine of Anarchism. He educated his daughter and other children at home, where "knowledge, scientific as well as literary, were equally available" (SCHOR, 2003, p. 29). William Godwin was considered a controversial writer in his time due to his radical writings about individual emancipation—and may be said to have served as an important influence to his daughter through his writings, especially the ones about occultism. Mary Shelley printed her father’s book *Lives of the Necromancers* in 1834, in which we find reference to some alchemists mentioned in *Frankenstein*, such as Cornelius Agrippa, most admired by Victor and of fundamental importance to the opposition between the old scientific practices and those in the present reality of the character.

Mary Shelley, thus, undoubtedly had some scientific background previous to her stay at Villa Diodati. This pioneering junction is still more evident when the nomenclature to

science is closely considered. The term "science" would only acquire its modern meaning during the 19th century; although the term already existed in the English language since the Middle Ages, it was first considered a mere synonym to "knowledge". In the course of time, science "stood for a particular kind of knowledge—firmer and less fallible knowledge" (ROSS, 1962, p. 67-68). This is why, in *Frankenstein,* scientists are still called "natural philosophers"; and the field Victor Frankenstein deepens his studies is, consequently, natural philosophy. Therefore, when the terms "science", "scientist" or "scientific" are used in this thesis in relation to Shelley's book, it is important to remember that the usage is made retrospectively, and that – ultimately – we are dealing with a sort of anachronism.

The book is thus set at a crossroad, at the start of the scientific expansion that would dominate the century and define modern science. This struggle can be felt in Victor's inclination towards the metaphysical ambition of the outdated authors of the past, in opposition to the practices of modern science. In Victor's vision, when studying modern science, he "was required to exchange chimeras of boundless grandeur for realities of little worth" (SHELLEY, 2005, p. 75). The scientist preserves the ambition of old alchemists in an age in which the studies of nature, later to be called "sciences", are suffering an important change of progressively losing these ambitions. At the same time, considering that the Monster is the product of a growing modern science, there is also a critique to the limits of this evolving practice, which, in Shelley's book, culminates with the scientific usurpation of a fundamentally natural process: the creation of life.

The fact that this formula created by Shelley—the scientist struggling with his desires—became particularly recurrent in 19th century works, such as Robert Louis Stevenson's *Strange Case of Dr. Jekyll and Mr. Hyde* and H. G. Wells's *The Island of Doctor Moreau*, shows the importance of Shelley's insight into the discussions to come. In Stevenson, scientific ambition causes Dr. Jekyll's inmost tendencies to emerge and personify themselves in the figure of Mr. Hyde, who, as the Monster, represents its master's double, ultimately causing destruction. In Wells the effect is the same, only with a more solid scientific background that would later dominate the Sci-fi genre: Dr. Moreau is pushed away from society due to his subversive experiments in which animals are vivisected and hypnotized, in order to become "humans"; however, the so-called Beast People constantly return to their original animal form, consequently turning against their

master.

It is not an overstatement to call Victor Frankenstein the father of these and many other scientist figures of later Gothic and Sci-fi literature. That does not necessarily mean, however, that *Frankenstein* is the father of all Sci-fi. Returning to Kinkaid's perspective, no Sci-fi work is able to contain all the meaning the genre can express. What is argued in the present thesis, instead, is that *Frankenstein*, or the Frankensteinian scientist, may be assuredly placed as the main influence to the line of works which would culminate in the properly called Science fiction genre. Since the genre was established, however, many other relations could be made to works even previous to Shelley's masterpiece, still within the borders of Sci-fi.

Being the first in the tradition of mad scientists, Shelley's novel accordingly lacks much of the scientific precision which would be evident in later writers/scientists such as H. G. Wells. When Victor discovers the "secret" of creation, for example, the author relies more on a literary rather than scientific language:

> I paused, examining and analysing all the minutiae of causation, as exemplified in the change from life to death, and death to life, until from the midst of this darkness a sudden light broke in upon me — a light so brilliant and wondrous, yet so simple, that while I became dizzy with the immensity of the prospect which it illustrated, I was surprised that among so many men of genius who had directed their inquiries towards the same science, that I alone should be reserved to discover so astonishing a secret. (SHELLEY, 2005, p. 79-80)

Although later on Victor explains that no specification could be made, should others follow the same path he had, the reader must remember that Mary Shelley—even having the set of influences already mentioned—was only an enthusiast of the subject she was depicting. This can be observed when the Monster awakens:

> “It was on a dreary night of November that I beheld the accomplishment of my toils. With an anxiety that almost amounted to agony, collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet. It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs.” (SHELLEY, 2005, p. 84-85)

In the excerpt above the vague and poetical expression "instruments of life" is used to refer to the procedures used to create the Monster, which, added to Frankenstein's visits to charnel houses to collect bones, in the previous chapter, are the only few examples of how science is dealt with in the first edition of the book. This lack of scientific facts, however, should not be seen as a flaw in the book. Considering *Frankenstein*'s legacy, it is evident that its contribution to Sci-Fi goes beyond the precision in the presentation of scientific facts – an aspect that was considerably refined by later writers. Taking advantage of the established Gothic conventions about the irrational, Mary Shelley introduced the "anti-scientific pessimism" (Brantlinger, 1980, p. 32), which became the most recurrent aspect of Sci-Fi as a medium. Excessive optimism about science is always brought, in this sense, as a warning to what its mishandling can cause. Since its development is unstoppable, a consequence of evolution, its questioning must always be pursued.

In addition to that, *Frankenstein* breathes science, or natural philosophy, through all its pages. Science is present in the crucial moments of the story, and its consequences are felt even when it is not mentioned by its name, in the figure of the created Monster, its anguish and destruction. There is no way, hence, to consider Shelley's novel placed out of the Sci-fi genre, since it constituted its first developments. And at the same time, however, there is no doubt that *Frankenstein*'s legacy, from the multiple influences of its origins to the legacy left in literature as a whole, has grown far outside the borders of Shelley's initial "hideous progeny". Gothic is fundamental for the atmosphere and thrilling fear caused by the irrationality of the Monster; while Sci-fi reinforces the threatening aspect of the book, the possibility of its creation. In this sense, the story also exemplifies the discussion about the origin and evolution and genres, showing that literature, as a human practice, tends to be flexible concerning its themes and its placing in different genres, which, by their turn, may also share common elements without losing their peculiarities. As Todorov claims, a single work of fiction may manifest different genres (1975), which will all contribute to its themes and message. *Frankenstein*, then, both deals with Gothic sensations and techniques of suspense as with Science fiction speculation and pessimism, anticipating the formation of the latter genre.

Finally, *Frankenstein*, besides being a literary text subject to its placing in different genres, is also a modern myth. This is no novelty since the novel itself is based on myths,

namely, the myth of creation from the *Genesis* and Milton's *Paradise Lost* (a book the Monster reads) and the Promethean myth, both of which reflect the relationship between transgression and punishment (ZIOLKOWSKI, 1981). The book is a double like Frankenstein and its Monster in several ways. It is a literary text, with all its particular features; but it is also an enduring myth, whose scientist-creation relationship turned out to be intimately related to its age of fast scientific evolution—and is fated to be ever-present as long as scientific practices are questioned.

2.2 *STRANGE CASE OF DR. JEKYLL AND MR. HYDE*: A POST-DARWINIAN FRANKENSTEIN

Gothic conventions abounded in 19th century English novels, which explored different perceptions of this same mode of writing which has to do with fear, the unspeakable, taboo. While Mary Shelley's *Frankenstein* is an heir to the sentimentalism of the female Gothic inaugurated by Ann Radcliffe – which would follow in the Brontë sisters' writing –, the book also explores a new thematic realm to be explored on its own: that of the scientific world which added new anxieties by enabling the creation, or manifestation, of man's inner repressed fears. That pessimist approach to the evolution of science influenced many other works to come, not to say that the genre of Science fiction itself. Robert Louis Stevenson's *Strange Case of Dr. Jekyll and Mr. Hyde* is perhaps the most immediate heir to Shelley's legacy, bringing the discussion to the end of the century. Here, the Darwinist theories had already affected people's stability, questioning their place as the modern being by presenting their line of evolution alongside.

More than continuing the development of the “scientist” theme, Stevenson's famous novella shifted classic Gothic scenery elements of previous stories to give space to the modern city. The predominance of nature and old buildings – Gothic architecture per se –, present in the tradition from Ann Radcliffe to the Brontë sisters, is now replaced by the suffocated confinements of the streets and rooms of London, which serve their purpose to the express the identity anxieties present in the book. The Gothic, therefore, previously a “'mixed' genre”, both affected and acting as an influence to romantic patterns (HOGLE,

2002), now abandoned some of those same elements in order to represent the modern Victorian society. The fears and the monsters, however, following Mary Shelley's tradition, are still very present, perhaps more terrifying due to their proximity to the reading public, and, in a further level, their existence inside the modern man himself. It is not a secret that Mr. Hyde became a still more striking double-figure than Shelley's Monster, an acknowledgment that, rather than diminishing Shelley's work, only shows how successfully the classic Gothic theme could be reworked into modern sensibilities.

2.2.1 Robert Louis Stevenson and the *Fin de Siècle*

Scottish author R. L. Stevenson's place in the ending of the 19th century is timely reflected in the psychological character of some of his work, especially his most famous work *Strange Case of Dr. Jekyll and Mr. Hyde* (1886), which became an archetype for the question of duality in men. The author, very eclectic in his writing, also produced other works which expressed a homage to boyhood, such as the adventure novels *Treasure Island* and *Kidnapped*, which became to be known as examples of an imperial fiction. Nevertheless, it is still *Jekyll and Hyde* – a book that touched the inner imperial sensibilities in a deeper level –, considered by many as “the most sophisticated of Stevenson's narratives” (SAPOSNIK, 1971, p. 715), which mostly contributed for the universal appraisal of the author. The allegory of a doctor who manages to divide his personality in two reflects its author's sharp sense of observation regarding the environment he was placed in, allowing for many readings: as an example of atavism, the fear of returning to a primitive state, which was brought to light by the theory of evolution; a critique to the quick scientific advancement, which resulted in a deformation of natural laws; and finally a call to the different positions assumed by people, either publicly and privately. As “a pivotal figure for English literary culture on the brink of its development into ‘modernism’ (POOLE, 2009, p. 258), Stevenson mirrored a world which was rapidly transitioning to modernist, evaluative aesthetics.

Psychological theories related to the properties of the "ego", which would be later specialized by Freud in the following decades, were already much in vogue in the *fin de siécle*. Three years prior to the publication of Jekyll and Hyde, Henry Maudsley in ‘The Disintegrations of the “Ego” discussed the multilayered aspect of the ego, as well as the exaltation of some of these diverse parts. To the author, such disruptions of attitude

regarding some people are translated in moral alterations (STEVENSON, 2006), the precise case of what happens in Stevenson's novella through the figure of Mr. Hyde. Stevenson himself maintained a correspondence with another psychologist of the time, Frederic Meyers, who even wrote critical papers upon the author's work. ‘The Multiplex Personality’, almost simultaneously published with *Jekyll and Hyde*, analyzes the causes for the duplicity of mind, as well as its drawbacks or improvement upon the self.

These authors are examples of possible scientific influences to Stevenson's discussion in his book, in which theories of the mind and Victorian personal anxieties are mixed up with Gothic conventions of suspense and horror, creating an enduring work. More than that, those early discussions represent a prelude to Freud and Rank's psychoanalytical developments in the years to come, which helped likewise the revisiting of the same themes which in part inspired them.

2.2.2 The Gothic Through the Double Personality

Dr. Jekyll, by giving “birth” to a creation of abhorrence which is an extension of himself, places Stevenson's work as “a version of Dr. Frankenstein and his monster for a post-Darwinian age” (POOLE, 2009, p. 265). The story, whose inspiration first came to Stevenson in a dream – which is confessed in “A Chapter on Dreams” (STEVENSON, 2006) – can be read as a continuation, or revisiting, of Mary Shelley's theme in many ways. In Stevenson, the figure of the double is still more evident, due to the fact that Jekyll and Hyde are physically “the same”: they share the same body. And yet, they are absolutely different in their appearance – the only point in which they deviate from Otto Rank's identical double –, which are reflections of their levels of consciousness (Jekyll) and unconsciousness (Hyde). The double is still a double due to all aspects analyzed in *Frankenstein* through Rank, the persecution and dependence of one character over the other, the never-ending cycle of violence which only ends in death.

As in Shelley's novel, the appearance of the respective creature is horrific and related to the “unspeakable”, that which is difficult to be grasped. This dimension of unspeakable is also reflected in the novel's structure, which aims to intensify the labyrinthine suspense of the Gothic. Similar to Shelley, here the story is not narrated by its protagonist at first. The third-person narrator is focused on Mr. Utterson's perspective, which is placed in the

narrative to provide an external view to Jekyll's situation, and hide, until the last moment, the horrific revelation that the two characters are actually one. The suspense is intensified when Dr. Lanyon, another witness character, assumes the narration to describe Jekyll and Hyde's transformation. The motives and intentions of the protagonist are only fully revealed in the last chapter, finally narrated in the first person by Jekyll himself, in a letter. The fact that, after this last epistolary chapter, the narration simply stops, not acknowledging Utterson again, expresses a feeling of estrangement, as if nothing else could be said or concluded after Jekyll's revelation – again, a trait of the "unspeakable" that is manifested when the repressed come to the surface.

Jekyll's intention, of separating his "vicious self" from himself, so "life would be relieved of all that was unbearable" (2006, p. 53), ends up giving to himself an identity of its own, that of Mr. Hyde, similarly to Victor Frankenstein's action with the creation of the Monster, an identity which manifests the self's repressed impulses. In the same way, the destiny of Jekyll and Hyde is based on persecution and destruction, following Otto Rank's analysis, which leads to Jekyll's suicide and Hyde consequent death. Definitely not a final coincidence, both protagonists use scientific means to achieve their ends, although they are more implied than described. This creates a discussion regarding the evolution of science in different moments of the 19th century, unanimously regarded in a pessimistic sense, a "monster creator".

Regarding the Freudian concepts already discussed, it seems evident enough that Mr. Hyde can be interpreted as Stevenson's version of Freud's Id, as is the Monster in *Frankenstein*. The *"*uncanny" also fits here, since Hyde is familiar to Jekyll to the extent that he represents the Ego's repressed desires; more than that, he is the embodiment, the physical representation of those desires; finally, Hyde causes a feeling of estrangement in everyone who sees him, relating to a sense of primitiveness which will be later discussed. In this sense, the Id manifests the Ego's passions which have been long repressed and now come to light, creating a conflict with the life of the self. The own name "Hyde" represents this repression in two ways. The first time it appears, it does out of nowhere in the book as something certain, a name and a surname, as if that identity was something familiar to Jekyll, possibly as a lost part of himself – "I saw for the first time the appearance of Edward Hyde" (STEVENSON, 2006, p. 55). Secondly, "Hyde" is a homophone to the verb "to hide", a purposeful reminder of Edward Hyde's previous repressed state in relation to

Henry Jekyll, which is actually alluded to by another character, Mr. Utterson, when he is investigating the relation between the two men – "'If he shall be Mr. Hyde,' he had thought, 'I shall be Mr. Seek.'" (STEVENSON, 2006, p. 14).

At firstc, the nature of this repression seems to point to violence as the essential force which now is manifested in Hyde's aggression of the young girl in the beginning of the novella, the murder of Carew consecutively, and finally the death of Dr. Lanyon, a product of Hyde's transformation into Jekyll. However, the predominance of a masculine universe in the book – indeed there are no female characters except for a servant which barely appears – can be interpreted, as in *Frankenstein*, as a reflection to the protagonist's repressed sexual desires, which, as a matter of fact, are never clearly referred to. The closing chapter of the novella, "Henry Jekyll's full statement of the case", helps the reader to plunge into Jekyll's assumed motivations in creating the formula to divide himself, a product of his dual nature:

> (…) "the worst of my faults was a certain impatient gaiety of disposition (…) such as I found it hard to reconcile with my imperious desire to carry my head high, and wear a more than commonly grave countenance before the public" (…) "I regarded and hid them [the irregularities] with an almost morbid sense of shame". (STEVENSON, 2006, p. 52)

The need of assuming two different identities – a "grave countenance" to conform to the norms of Victorian society, without leaving behind a certain "gaiety of disposition" – places Jekyll, from before his scientific experiment, as an essentially double individual. This "gaiety of disposition" seems to point, as further interpretations do, to the repressed urge for sexual desire. The film adaptation of 1931, for example, by Rouben Mamoulian, added to the story two female characters who are evidently not present in Stevenson's original work. Muriel appears as Jekyll's fiancée, and Ivy Pearson as a woman who tempts an engaged Jekyll into loving her; these two characters thus create the context for the manifestation of the doctor's vicious side: his need to divide himself both to accord to Victorian moral norms, marrying Muriel, and pursue his other inclinations with Ivy. This interpretation only hinted at in Stevenson's book, seems to agree with its intrinsically Gothic structure in which what is not said matters as much as what is indeed declared – a reminder of Sedgwick's notion of the unspeakable, here reflected in Jekyll's actions which for some reason caused him a "morbid sense of shame". In this sense, a possible

interpretation may follow that the numerous manifestations of violence acted by Edward Hyde can be analyzed as much as the products of his lack of a moral side – being he repressed for so much time in relation to Jekyll –, as the instance that that calls the reader's attention the most, the trait that determines Hyde as the primary Gothic villain, in detriment of the unsaid sexual desires which represent the "unspeakable".

Henry Jekyll's feeling of charging himself as the ultimate culprit of the entire experiment – "the worst of my faults" – points yet to another Freudian concept which adds to the relationship of the Ego and the Id: that of the Super-ego. According to the psychoanalyst, this Ego-ideal

> (…) is the heir of the Oedipus complex and thus it is also the expression of the most powerful impulses and most important libidinal vicissitudes of the Id. (...) Whereas the Ego is essentially the representative of the external world, of reality, the Super-ego stands in contrast to it as the representative of the internal world, of the Id. (FREUD, 1984, p. 376).

The Super-ego, establishing a close relationship with the Id, acts as an instance of vigilance to the Id's possible eruptions. It is an heir to the Oedipus complex, assuming the place of the authoritative father. From this perspective, the conflicts Jekyll faces are understandable, as well as his classical portrayal as the "mad scientist": the Ego has to subject itself to a) the pressures of the outside world, the Victorian society which demanded a "grave countenance" from it; b) the libido of the Id, with its repressed sexual desires; and c) the severity of the Super-ego, creating a higher moral ideal for the Ego to mirror himself.

In this case, being Jekyll the Ego and Hyde the Id, we may relate the latter not only to his own impulses but also to the core which contains the consciousness – Henry Jekyll. At an early point in the novella, the scientist still believes he has a certain power over his counterpart: "(...) the moment I choose, I can be rid of Mr. Hyde" (STEVENSON, 2006, p. 19). It is this belief that drives Jekyll to continue with his double life until the last extent, the certainty that he was the center from which only a small part had escaped, which could sustain itself separately. As the story progresses, Hyde gains more space and importance, as well as height, a subtle element which points out to a subsequent inversion of the center which apparently could control all – "(...) it had seemed to me of late as though the body of

Edward Hyde had grown in stature (…)" (STEVENSON, 2006, p. 59). Moreover, the transformations, previously only possible by the means of a formula, now could be done naturally during sleep, without Jekyll noticing it:

> "I must have stared upon it for near half a minute, sunk as I was in the mere stupidity of wonder, before terror woke up in my breast as sudden and startling as the crash of cymbals; and bounding from my bed, I rushed to the mirror. (…) Yes, I had gone to bed Henry Jekyll, I had awakened Edward Hyde." (STEVENSON, 2006, p. 58)

Everything was planned for Hyde to assume Jekyll's place, when the latter's space was finally extinguished due to his repression in relation to Hyde. However, this inversion never completely happens – the principle of reality governed by Jekyll cannot give way to Hyde's principle of pleasure, at least not without deviating from Freud's theory in which "the Ego tries to mediate between the world and the Id, to make the Id pliable to the world and, by means of its muscular activity, to make the world fall in with the wishes of the Id." (FREUD, 1984, p. 398). As the protagonist fails to maintain this relationship of power, the conflict reaches a climax of violence, akin to the double. The "body of a self-destroyer" (STEVENSON, 2006, p. 41), now a singular body and never again the double, is once again evidence of the shock which the acknowledgment of a double life could cause in Victorian times. Jekyll's suicide – as all evidence points out[10] – can thus be read as the ultimate conflict between the Ego and the Id, which lived until their origin was hidden, but could not be revealed as having the same original self. Jekyll's fateful experiment is, therefore, a metaphor of the complex relations of identity with which everyone has to deal, following Freud's psychoanalytical analysis.

Finally, it is possible to refer to other important Gothic conventions, not entirely comprised into the realm of psychoanalysis. Concerning the environment, the book takes place in, for example, the claustrophobic scenery of the city of London and the inner spaces of its houses is a sharp contrast to the Mary Shelley's descriptions of fields, lakes and mountains of Switzerland. Even so, the mood is still intrinsically Gothic in Stevenson. The inside and outside of London's households ultimately reflect the protagonist's own

10 In the very last sentence of the book, Jekyll declares the ending of his life, what could be read as his acknowledgment that he could never again come back with no more powders. However, some lines earlier, Jekyll refers to Hyde's fear of his "power to cut him off by suicide" (2006, p. 65), a reminder of Hyde's esteem of life. As the body is found dead, it is presumed that Hyde would probably not be the one to cause it.

anxiety and double inclinations, for they represent the different places in which Jekyll is forced to hide or show his repressed side:

> The fog still slept on the wing above the drowned city, where the lamps glimmered like carbuncles; and through the muffle and smother of these fallen clouds, the procession of the town's life was still rolling in through the great arteries with a sound as of a mighty wind. But the room was gay with firelight. In the bottle the acids were long ago resolved; the imperial dye had softened with time, as the colour grows richer in stained windows; and the glow of hot autumn afternoons on hillside vineyards was ready to be set free and to disperse the fogs of London. (STEVENSON, 2006, p. 26)

The obscure elements present in the description of the streets of London, the "drowned city", the "fallen clouds", corroborate the "grave countenance" Jekyll is bound to assume in the public sphere of his relations. As for the choosing of London itself rather than Edinburgh – Stevenson's hometown – one must remember that the capital city of England indeed represented the "*locus classicus* of Victorian behavior (…), a microcosm of the necessary fragmentation that Victorian man found inescapable" (SAPOSNIK, 1971, p. 77-78). Opposite to the outside, this sphere of public contact, Jekyll's rooms breathed warmth and life, not by coincidence described by the author through the colors of his chemical acids, the scientific means which will ultimately bring to life the repressed energy inside the doctor. The division of rooms also show the levels of intimacy, or consciousness, which is progressively broken through the narrative. From the narrator's eyes, Hyde begins by entering through a backdoor to Jekyll's house; as the story progresses he is a constant guest allowed to walk freely in the house; ultimately, the double Jekyll/Hyde has his study broken and invaded, a literal and metaphorical image for the final level of consciousness in which the outside and the inside were visibly bound as one.

2.2.5 Science: Evolution or Regression?

The scientific ambition which enabled Shelley's and Stevenson's protagonists to reach beyond natural possibilities, though a point in common between both books, has

different implications here and there. In *Frankenstein*, Victor's ambition towards the creation of the Monster may be read as a reflection of his desire towards Elizabeth, which is repressed. Since he cannot have his “sister” as his wife, he wants to prove himself capable of filling her place, thus giving birth to the Creature, who, by his turn, revolts against his master's lack of care toward him, revealing Frankenstein's failure in the process of “substutive formation”. Science is thus seen, simultaneously, in a pessimistic and an optimistic sense: it can replace natural processes, such as the creation of life; but it is also the means through which the monstrous repressed desires can emerge. In *Jekyll and Hyde*, besides the double perspective of the central scientist facing his ambitions, their benefits and drawbacks, there is also a still more noticeable double perspective concerning the handling of science through the opinions of the two doctors in the story: Dr. Jekyll and Dr. Lanyon. Here, however, science is regarded both in a conservative and a transcendental manner. Both characters are medical men with an initial “bond of common interest” until Lanyon refrains himself not to follow Jekyll's metaphysical speculations, “too fanciful for his conceptions” (STEVENSON, 2006, p. 12). In the end, Lanyon is forced to behold the results of Jekyll's “transcendental medicine” (STEVENSON, 2006, p. 50), witnessing his friend's transformation into Mr. Hyde, a vision that will later take his life alongside his scientific beliefs.

The discussion present in *Frankenstein* at the beginning of the century, thus, already points to a crisis of identity concerning the possibilities of science. If Erasmus Darwin's experiments with electricity – which would later influence the “galvanism” of Luigi Galvani – were a base for Mary Shelley's scientific principles in her book (FLORESCU, 1998), Charles Darwin's (Erasmus' grandson) theory of evolution was fundamental for the fear of primitiveness present in R. L. Stevenson's novella. The British naturalist first developed his theory of evolution in a general manner in *The Origin of Species by Means of Natural Selection* (1859), applying his principles to a great number of animal species among themselves. After the controversy of its initial release, and the support of other scientists, such as Thomas Huxley[11], Darwin publishes *The Descent of Man and Selection in Relation to Sex* (1871), bringing back his discussion in order to apply the principles of natural selection specifically to the human species. The scientist analyzed especially the

11 A curious proof of the web of correlations of science and fiction in the 19th century, which this work intends to highlight: Thomas Huxley – a friend of Charles Darwin and evolutionist supporter – was also H G. Wells' professor and main influence into the particular scientific pessimism in the fiction of the author, as it is going analyzed in the next chapter.

presence of rudiments in men, such as the amount of hair or bone structures. which proved a linking with simian ancestors mostly, but also other species:

> Thus [based on natural selection], we can understand how it has come to pass that man and all the vertebrate animals have been constructed on the same general model, why they pass through the same early stages of development and why they retain certain rudiments in common. Consequently, we ought frankly to admit their community of descent; to take any other view, is to admit that our structure, and that of all the animals around us, is a mere snare laid to entrap our judgment. (DARWIN, 1971, p. 265).

This highlighting of our primitive ancestors acted as a reminder of people's lowest impulses, which could still be present, albeit thousands of years of human evolution, into the civilized modern man. This feeling of uneasiness and anxiety can be read between and in the lines of Stevenson's novella, through Hyde's primitive and indescribable appearance, his behavior marked by an “ape-like fury” (STEVENSON, 2006, p. 20) against all who surround him.

In *Jekyll and Hyde*, therefore, the pair public/private is placed as an accessory of the pair primitive/civilized, in such way that both extremes of duality reflect the relation between the self and his primitive/repressed desires. This results in the feeling of anxiety regarding the countenance one should have in the many spheres society and the fear that man's primitive repressed traits may emerge at any moment. Not by coincidence, it is the same science that brought the revelation of the nature of man's inner self to light[12] that should enable a possible escape from this repressed entity. Although further in the novella, Jekyll “began to profit by the strange immunities of [his] position” (STEVENSON, 2006, p. 56) as Hyde, being contaminated by the close presence of his previously far self; he first desired to eliminate his vicious side. However, both Frankenstein's and Jekyll's scientific experiments turn their repressed desires ever more evident, through the figures of the monsters which are so remembered from Gothic tradition.

The theme of scientific subversion is thus appropriated through new, although similar perspectives. Science is again the means of monster creation, despite the creators not

12 Through Darwin's theory of evolution before the publication of *Jekyll and Hyde*, what acted as an influence, but also through Freud's further Metapsychology, through which this analysis could be done in retrospect.

wanting this result; again the creature is a reflection, a “double” of his creator's repressed feelings, which can be read as sexual repression due to society's social norms; again both creator and creature are set into a destructive conflict which can only end in their deaths; and finally, scientific evolution and ambition is again indirectly criticized. However, there are a number of innovations present through Stevenson's revisiting of Gothic themes. Science is perceived in a pessimistic sense not only due to its possibility to create monsters but because of its intention of showing men's primitive ancestors and thus unsettling their place in society. This dichotomy of the primitive/civilized is added to Jekyll's anxieties regarding his attitudes in public and private spheres, all of which are represented through Jekyll/Hyde metaphor throughout the novella. If the double was present in Shelley's novel, it is much more evident in Stevenson's book, through many layers of interpretation, which developed previous Gothic conventions.

The choosing of those works is justified inasmuch as they both reflect the anxieties of the self facing the opportunity of scientific development. Both Frankenstein and Dr. Jekyll are punished by their ambitions of overcoming human boundaries through the use of science. In the same sense, their motivations for doing so follow a similar logic in which their repressed desires lead up to their actions regarding the handling of science, but also the opportunity of scientific transcendence itself serves as a disruption for those same actions. The two classic monsters created in those books are thus a consequence of both what is present and what is not.

The “mad scientist” theme will be revisited once again one decade later, in the very end of the 19th century, still an heir to Darwinism and the scientific pessimism persistent in previous fiction. H. G. Wells' fiction, however, presents more of an outline of a new genre, with a focus on the scientific, although Gothic fears and themes are still present. *The Island of Dr. Moreau*, the book that fits the most *Frankenstein*'s and *Jekyll and Hyde*'s legacy, will be the final one to be considered in the next chapter.

3 H. G. WELLS: THE “TURNING POINT” OF THE SCIENCE FICTION GENRE

Herbert George Wells (1866-1946) is often referred, by critics and readers alike, as the founder of what was later to be called the Science Fiction genre, although this label would only come to be years after his first publications. The fact that he was the first man of science (at least to have a solid background of scientific education) to write about it is perhaps one of the main reason for his accomplishments, the other being his ever-present passion for writing. Having studied three years at the Normal School of Science, in London granted Wells with the basis for an interest that would pursue him for years. His first "scientific romances", written in the last years of the 19th century, dealt with science in this descriptive manner, as well as adding a social commentary implicit in the narrative's apparently adventurous plot. Precisely because of this moral and social preoccupation, as well as his scientific knowledge that helped him create pseudo-scientific suppositions, Wells is considered a turning-point of a genre that already existed, or the founder of a new one. As observed, Shelley's novel, alongside other known Gothic narratives, such as Stevenson's novella *Strange Case of Dr. Jekyll and Mr. Hyde,* deal with the scientific matter as a way to expose Victorian anxieties about the fast evolution of science itself. Therefore, it is impossible to neglect the origins of scientific supposition on those formerly Gothic narratives, as well as the maintenance of Gothic traits in Wells' Science fiction.

This final chapter intends to approach Wells' work through both a general and a more specified approach. The books of the so-called “first cycle” will be analyzed in terms of determining how Sci-fi operates, in relation to the previous Gothic conventions and Darwinism, the main motivation for the science in Stevenson and in all of Wells. Finally, *The Island of Dr. Moreau* is going to be approached in order to understand how the mad-scientist theme, from Shelley and Stevenson, is now present, and mostly why there is here a more profound deviation from Gothic conventions, which can justify a turning-point of a previous genre.

3.1 WELLS' SCIENCE FICTION

3.1.1 The Story of a Brain

Coming from a poor family, the life of H. G. Wells, if not for his persistence, pointed to a completely different direction than that which he ended up taking. In his *Experiment in Autobiography: Discoveries and Conclusions of a Very Ordinary Brain (Since 1866)* (1934), we discover the constant wish from young Wells of abandoning the drapers business – the selling of cloth which his family was involved with – and employing himself in a work where he could show his vision of the world. After several failed "starts in life" – circumstances in which he purposefully ran away from occupations his parents put him in –, Wells received the first input that would place him in his future path by becoming a science student in London in 1884 in the Normal School of Science (nowadays Imperial College London). There he studied, among other subjects, Zoology under famous professor Thomas Huxley[13], a circumstance which would have some importance in his future writing of Science fiction and the extrapolation of Darwin's theory of evolution. Perhaps as an inheritance of his studies, Wells constantly refers to himself as "a brain" in his autobiography, whose main story was, in his opinion, "(...) the development, the steady progressive growth of a modern vision of the world, and the way in which the planned reconstruction of human relationships in the form of a world-state" (WELLS, 1934, p. 425).

Despite working as an assistant teacher for some time after his studies, Wells concluded that he did not have "either the character or the capacity for a proper scientific career" but that he was "a remarkable wit and potential writer" (WELLS, 1934, p. 238). Working as a journalist and editor in the following years, the author simultaneously worked on drafts of what would be his grand debut as an imaginative writer: *The Time Machine* (1895). Here he created an impossible scenario which, nonetheless, seemed realistic enough to sustain the reader's interest, due to the depth of the scientific knowledge employed. Therefore, time-traveling seems almost possible when there is a long convincing digression concerning the properties of the dimensions of space and time. The

13 Known public supporter of Darwinism, Thomas Huxley is the grandfather of Aldous Huxley, the famous author of the Science fiction dystopia *Brave New World* (1932).

idea for this first novel came when he was a science student, and the consideration of a fourth spatial dimension as rising among professors. This led Wells to write a scientific paper on the matter, "The Universe Rigid", which served as a background for the first part of the novel, in which the explanations are postulated – roughly that space and time share properties, and, therefore, time may be considered as having more than one direction, as space has. The article was, in Wells' opinion, "an ill-written description of a four-dimensional space-time universe", the "sort of thing [that] was far away from the monthly reviews" (WELLS, 1934, 294) but, despite that, served perfectly for the realm of fiction, when this scientific involvement was not common.

Upon the immediate success of *The Time Machine*, and the advise of editors for him to continue with the same technique, H. G. Wells wrote his "scientific romances" in the following years: *The Island of Dr. Moreau* (1896), *The Invisible Man* (1897), *The War of the Worlds* (1898), *First Men in the Moon* (1901), among several short stories. Those stories are commonly referred to as the "first cycle" of Wells' Sci-fi, by authors such as Darko Suvin (1979), due to their common patterns. In fact, Wells Sci-fi began undifferentiated from the whole – because there was no defined genre – but was later turned into a "sub-genre" called[14] Hard Sci-fi, "a work of sf (...) [in which the] relationship to and knowledge of science and technology is central to the work" (JAMES; MENDLESOHN, 2003, p. 187). After the turn of the century, however, already established as a well-known writer, Wells allowed himself some creative freedom and stopped the technique employed in his first scientific novels. Now his fiction tended more to realistic and autobiographical novels, as well as scientific anticipations of things to come.

Even though H. G. Wells was still mostly known as a Science fiction writer, the first to clearly have the knowledge to write deeply about it even before the genre existed, he was also employed himself in many fields of fiction and non-fiction. Montgomery Belgion, in a short biographical account, first refers to him as a double "author of both the fantasies and the seemingly realistic novels", and, through a further glance, a multiple writer, who "turned himself a one-man encyclopædist" later in his life (BELGION, 1955, p. 9; 11). However, according to Belgion, it is impossible to ignore a sort of "dead enthusiasm" for the writer later in his career, if we are driven to compare his late fictional work with the first cycle. This fact was observable by Wells himself, who, at some point in his

14 " Only in the late 1950s was there a felt need to name it", due to the evolution of the genre into several new branches. (JAMES; MENDLESOHN, 2003, p. 187).

autobiography, recognizes that lately, for some, he was merely known as the author of *The Invisible Man* – possibly an influence of the recent 1933 movie.[15] This evident loss of prestige can be seen as a natural consequence of the "evolution of his brain", as he himself put it. His wish to expose his ideas and live from writing predates his scientific education, whose employment led him to be recognized as a known writer in the first place. The famous Sci-fi writer Wells came to be seen, thus, as a first step into the writing career he always aimed for, but which did not necessarily involve the use of his scientific knowledge, which was, at that time, primarily a escape from the drapers business his family wanted to impose him. In this sense, it is only natural that at some point he would want to deviate from that first framework of fiction, once he achieved some security and reputation, to seek for creative freedom. Concerning this, the author comments about his distinction between novels and scientific romances, which can be interpreted respectively as inward and outward styles of writing:

> I set out to write novels, as distinguished from those pseudo-scientific stories in which imaginative experience rather than personal conduct was the matter in hand, on the assumption that problems of adjustment were the essential matter for novel writing. (WELLS, 1934, p. 410)

Having written, therefore, a sort of fiction which relies heavily on scientific fact and imagination, the author must have developed the wish to write about the personal relationships which are so akin to the novel. It was needed to focus on one type of subject in each of the books, considering the way he developed his writing, unless one would deviate the attention from the other.

A comparison between early Wells and late Wells is, therefore, inevitable, but ultimately not fruitful. If the late stories do not sustain the same exhilarating wonder of his first fiction, they at least represent another phase of self-recognition, which can rather be seen through a wider scope of fictional experimentation. And if the author is ever to be considered one of the first exponents of Sci-fi as a formed genre, as it would shortly be, this is no small accomplishment for the man who also searched for numerous means to express his ideas of the world that was and would come to be.

15 *Experiment in Autobiography* was published one year after, in 1934.

3.1.2 First Sci-Fi Cycle: 1895 – 1901

The most recognizable period of Wells' career is also its outset. Since the publication of *The Time Machine* in 1895, the next books[16] would follow a similar method in the treatment of science, enriched it with actual scientific theories and jargon. This, alongside an adventurous plot and highly imaginative extrapolations, would render the classic fiction by which the author is instantly recognized up until today.

According to Darko Suvin, the whole first cycle "is a reversal of the popular concept by which the lower social and biological classes were considered as "natural" prey in the struggle for survival" (SUVIN, 1979, p. 25). This is strictly related to Wells vision on Darwinism. He, as already mentioned, had classes with the famous Darwinist defensor Thomas Huxley, and believed himself on those principles. However, his books often work out ways to portray disastrous consequences of this very theory, subverting evolution to involution. As Peter Straub points out (STRAUB apud WELLS, 2002), this attitude is due to a preoccupation with modern scientific development, a fear of what results may come from an overly ambitious approach to science. The persistent pessimism of his work, thus, the Science fiction which is actually a sort of Anti-science fiction, served as an alert to what was a natural consequence of the fears already visible in previous Gothic works. More than that, the problem was not so much that monsters may become real, but that the appliance of Darwinism and the notion of natural selection into social contexts could indicate patterns of "evolution". This Social Darwinism which generated Eugenics[17], sought the definition of desired traits in humans in the same way that they were selected by nature, a principle which, put that way, was contradictory to what Darwin had defined in the first place:

> Man can act only on external and visible characters: Nature, if I may be allowed to personify the natural preservation of survival of the fittest, cares, nothing for appearances, except in so far as they are useful to any being. She can act on every internal organ, on every shade of constitutional difference, on the whole machinery of life. Man selects only for his own good. (DARWIN, 1971, p. 41)

16 The first cycle of what Wells himself called "scientific romances": *The Time Machine* (1895), *The Island of Doctor Moreau* (1896), *The Invisible Man* (1897), *The War of the Worlds* (1898), and *The First Men in the Moon* (1901), as well as various short stories produced in this period. By the turn of the century, his production changed focus to autobiographical novels and scientific works with less scientific background and more predictive elements.

17 A " movement that is aimed at improving the genetic composition of the human race", the term was first coined in 1883, meaning "well-born". (RIVARD, 2015)

Having studied the principles which were in discussion in scientific circles, Wells was the perfect authority to define his view to the general public, although, unfortunately, the Social Darwinism he opposed evolved to the deplorable consequences of the 20th century. With his stories, which are only masked as essential entertainment, as it is viewed by some[18], on a primary level, but which reveal much more on a deeper analysis regarding the transposition of theory to fiction, Wells developed a sort of didactic fiction, in which what mattered was "not knowledge, but a critical and inquiring mental habit" (WELLS; PHILMUS & HUGHES, 1975, p. 2-3). A central chapter called "The Scientist Explains" is usually common in his books, in which the science that made the experiment possible is discussed almost as if in a scientific article. Therefore, as common themes, we can find either the classic conflict of the creation which turns against its creator in *Moreau,* the animals that refuse, by their biology, to follow the experiments of their "master"; or other cases where the apparently "weaker" beings end up surviving against all odds – an indication that appearances do not reflect one's inner biological composition.

Another important aspect of H. G. Wells' fiction is the technique of employment of science, which makes his stories believable and even "probable", despite the absurd situations. This method consists, in Wells's words, in "[tricking] the reader into an unwary concession to some plausible assumption and get on with his story while the illusion holds" (WELLS, 2003, pp. xii-xiii); this "plausible assumption" is the scientific explanation of the plot – the fourth dimension in *The Time Machine*, or the digression concerning the properties of vivisection in *The Island of Dr. Moreau* –, which needs to seem realistic enough for a certain time so that the "fantastical" elements of the story seem plausible within the setting of the narrative. The success of those stories showcases a need for "realism" in the realm of the fantastic. The scientific extrapolations now felt ever more real and terrifying with these plausible assumptions, different from the Gothic of Shelley and Stevenson, where the reader simply accepted that such things as the creation or alteration of a being would be possible. Wells himself believed that he had merely transposed

18 Wells is frequently referred to as an entertainer, in a criticism disguised as a compliment. British author T. S. Eliot, for example, analyzes the first cycle as a necessary step for "the ambitious youth of literary gifts and humble origins", making a living by "giving the public its entertainment", so "when one got sufficiently established, then one might be free, either to devote oneself to a work of literary art, or to preach openly to a public which is docile and respectful to success." (ELIOT, 1972, p. 320) This common lack of appreciation in regard to Wells' early work evidently does not recognize the mechanisms through which his fiction operates, which this thesis showcases.

elements of previous genres, such as Gothic, possibly, into what he called scientific romances. "It occurred to me," Wells writes, "that instead of the usual interview with the devil or a magician, an ingenious use of scientific patter might with advantage be substituted ... I simply brought the fetish stuff up to date, and made it as near actual theory as possible." (WELLS apud BRANTLINGER, 1980, p. 31-32)

Therefore, in Wells, there is more specificity about scientific principles and uses, so to approximate it to the public. On the other hand, the fiction loses its former romantic traits related to the Gothic genre. A counter criticism is that, while occupied with the plot and the consequences of the new possibilities made true, Wells lacks focus on his central characters. They can be defined as types, most commonly the scientist and the witness. The latter is a layman on the subject and needs to understand what is happening in the story, in the same way as the reader does, being instantly identifiable with, not for his inner qualities, but for his bewilderment in face of what is happening. This analysis will be more closely done in the case of *Moreau*, in the next section. As for now, we are left to analyze some general points which are present through Wells' early Science fiction, especially how evolution – or devolution – is portrayed.

The Time Machine, the first fictional product of the writer's sense of observation to both natural and social world, is a novella in which the main character, simply called The Time Traveler, goes to a far future just to find that humanity had evolved (or devolved) into two distinct species, the Eloi and the Morlocks, the first the prey of the second. This dystopia reflects the author's view about social classes, at the same time that sets a pessimistic setting on evolution which would be common in the author's work. One of the main features of this first book is the accuracy in the description of the scientific element—in this case the consideration of time as a fourth “spacial” dimension—in a way that was not commonly observed before in a work of fiction which contained scientific matter. In a preface of 1931, Wells called it "a very unequal book", "a slender story [which] springs from a very profound root" (WELLS, 2005, p. 94). This is due to the merging of elements from adventure stories with an early solid scientific theory to justify time-traveling, the consideration of time as the fourth dimension of space, which, therefore, should follow the same properties of the latter, such as free movement in the future and past "directions". This is concluded based on the assumption that, if one can defy the force of gravity going up on a ballon. then it can also be supposed that another sort of mechanism could defy the

natural present-future direction of time: a time-machine. About the scientific background, Wells comments:

> That one idea is now everybody's idea. It was never the writer's own peculiar idea. Other people were coming to it. It was begotten in the writer's mind by student's discussions in the laboratories and debating society of the Royal College of Science of the eighties (...). (WELLS, 2005, p. 94)

The early theory – which would have something to do with Einstein's theories of relativity at the beginning of the century[19] – was the channel through which Wells could access the far future and portray, with a pessimistic vision, the destiny of humanity, should that follow the principles of natural selection to its very roots. The making of the machine is never closely discussed: the end of the exposition is the point from which the attention of the reader holds, and the adventurous plot may ensue, without giving space for questioning. In the story, both species which derived from humanity devolved in some way: the Eloi, though beautiful beings, were deprived of intelligence and emotions, while the Morlocks degenerated into underground predators, similar to animals. The fear of involution present in Gothic narratives, such as *Dr. Jekyll and Mr. Hyde*, is thus clearly visible here, as well as the element of horror and tension. The story can also be read as an allegory of the conflict between proletariat versus bourgeois society, in which the Morlocks, the underground and thus lower class, rise against their oppressors making them their slaves. Again, considering Suvin's consideration, the apparently weaker species tends to overcome their condition in the struggle for survival.

In the following year, *The Island of Dr. Moreau* is published. One year after, in 1897, Wells publishes *The Invisible Man.* Perhaps the less celebrated work of Wells' first cycle Sci-fi, due to its low range of critique, the book is nonetheless an interesting approach on – and a consolidation of – the theme of the "mad-scientist", born in *Frankenstein*. Portraying Griffin, a man supposedly ahead of its time, but deprived of human intentions, the book deals with the disastrous outcomes of an overly ambitious scientific experiment. Science here is only a key to egoistic control, and the madness present in the central character's

19 Albert Einstein's consideration on "special relativity" deemed that "space and time were interwoven into a single continuum known as space-time", in a way that events may happen at different times for distinct observers (REDD, 2017). The consideration of space and time as dependable entities could be traced back to the discussions at the end of the 19th century, which Wells was familiar with.

attitudes can yet point to another Gothic trait, present in its subtitle: “A Grotesque Romance”. In the same fashion of Dr. Jekyll, Griffin, a young scientist, decides to apply his discoveries, the formula for invisibility, upon himself, taking advantage in a series of situations in order to create an empire of his own. However, his lack of planning turns his aspirations unsuccessful – the book mostly deals with his persecution by the people of a village he travels to, in order to conclude his experiments. The outcomes of this fantastic situation are not as broad as in other books by the author, precisely because the main character cannot make them so. Invisibility would represent a revolution in scientific understanding, but instead, the action is reduced to a terrorizing pursuit in a small scenario – in the same way that Griffin's intelligence is reduced to selfish and petty intentions. Again here, the pessimistic Gothic/Sci-fi in the tradition of Shelley and Stevenson deems the overly ambitious mind incapable of succeeding due to its merciless intentions, and what is left are only monsters fabricated, in this case, the own creator/creature. But perhaps what is most striking concerning this romance, in relation to all others in the first cycle, is the detail employed in the extense scientific descriptions conveyed by the protagonist:

> Just think of all the things that are transparent and seem not to be so. Paper, for instance, is made up of transparent fibres, and it is white and opaque only for the same reason that a powder of glass is white and opaque. (...) And not only paper, but cotton fibres, linen fibres, woold fibres, woody fibres, and *bone*, Kemp, *flesh*, Kemp, *hair*, Kemp, *nails* and *nerves*, Kemp, in fact the whole fabric of a man except the red of his blood and the black pigment of hair, are all made up of transparent, colourless tissue. (WELLS, 2012a, p. 92)

The author could have stopped there with enough background for the formula, but the problem of hair and blood is yet discoursed ahead, and how it could be solved using such and such properties. The attention to detail goes as far as showing the consequences that such a process of making oneself invisible would implicate – smoke and food which are made visible while in contact with the body, blood which, out of the body, turns visible after coagulating, etc. Whether this information corresponds to reality, it is not necessary for the purposes of fiction. The key innovation of Wells' romances is the convincement carried out by the story, which usually dedicates an entirely separate chapter of the plot for the explanation. In comparison to Shelley's "instruments of life" (SHELLEY, 2005, p. 84-85) and Stevenson's "salts and drugs", the only slightly scientific descriptions provided in

the respective novels, Wells' fiction ends up showing that all of that, or something yet more terrible, *could* be real, because there are properties that *could* allow it, perhaps not now, or then, but in a future occasion.

That being considered, Gothic fears are renewed to the age of fast scientific development: now they are more present in the readers' reality because they can dialogue with what is being discussed in the world. The focus on the scientific aspects here is an important trait which differentiates his fiction from the previous, more romantic attempts of Shelley and Stevenson. It is important to state, however, that none of those authors were conscious of the Science fiction genre which would emerge much ahead. That is why this analysis seeks only to establish how patterns made themselves present through the 19th century, until they would reach, in Wells, a turning-point with the outlines of what determined more clearly the genre which would emerge in the following years.

Wells' next romance, *The War of the Worlds*, is perhaps the best known book from his entire collection of scientific romances. The precursor of the alien-invasion tradition, this work has less evident foundations on the scientific descriptions than its predecessors. The protagonist is a witness to the alien invasion, and all the science involved in the physiology of the aliens is, inside the purposes of the narrative, unknown to humans. However, a strong trait of the evolution theory following Darwinism is perceptible upon a close reading, regarding, mostly, the appearance of the Martian invaders. Despite being a superior race – due to their power and machinery –, their appearance resembles a primitive and limited form similar to an octopus:

> Two large dark-coloured eyes were regarding me steadfastly. The mass that framed them, the head of the thing, was rounded, and had, one might say, a face. There was a mouth under the eyes, the lipless brim of which quivered and panted, and dropped saliva. The whole creature heaved and pulsated convulsively. A lank tentacular appendage gripped the edge of the cylinder, another swayed in the air. (WELLS, 2012b, p. 18)

Remembering Darwinism, natural selection is "the preservation of favourable individual differences and variations, and the destruction of those which are injurious (...)" (DARWIN, 1971, p. 40). Following this theory to the very limit, the only members of the body which would survive in an overly superior being which would go the farthest state of adaptation and variation would be a) the head, where the brain is located, and b) the arms,

the instruments which can put into action the will of the brain. The result is thus purposefully an ugly and primitive creature, which puts into perspective, once again, the question of primitiveness and evolution. This can be interpreted as a warning related to what the mindless pursue for evolution and "perfection" followed by some branches of science, such as Eugenics, might result in. In the end, the death of the aliens results from their own lack of adaptability to the conditions of planet Earth, and not by any action of men in the war which took place – which brings us back to the scientific background which surrounds and justifies the plot of Wells' narratives.

The First Men in the Moon is published in 1901 and, unlike the other stories, it does not present a completely new theme, but the usual journey-to-the-moon type of plot[20]. In the story, the scientist Cavor creates a substance “opaque to gravitation” (WELLS, 2003, p. 15), what, therefore, enables him to build a spaceship which can be repelled from the Earth's and attracted to the Moon's field of gravity. The usual scientific jargon is present here to justify the possibility of this travel, although other further elements on the story take that credibility away from the reader of today, such as the possibility to breathe in the Moon. The theme of evolution as something not so outwardly evident is present once again here, when one observes the inhabitants of the Moon. The Selenites are insect-like creatures, who, despite not having a spoken language and being very fragile in their body structure, are a far more advanced civilization than humans in matters of intelligence and morality. The main critique of the novel appears in regard to how human history would be viewed by a foreign advanced race: when Cavor naively tells the Selenites about human wars, the aliens are struck with amazement and instantly cut any relationship they could have with Earth's people in the future. The longest from all of the stories from the first cycle, *The First Men in the Moon* would also mark its end, whether this deviation was planned by the author or not.

During the period analyzed, Wells also published numerous short-stories involving the same, or a similar, technique, employed in the romances. In the most recent collection by The Modern Library, edited by Ursula K. Le Guin, Wells' stories are divided in a number of subgenres which demonstrate the range of the author's vision: Visionary Science Fiction; Technological and Predictive Science Fiction; Horror Stories; Fantasies; Fables; and Psycho-Social Science Fiction. The first category would perhaps fit better the scientific

20 *The Cambridge Companion to Science Fiction* (JAMES; MENDLESOHN, 2003) in a chronology of important books of the genre, lists at least Johannes Kepler's *A Dream* (1634), Francis Godwin's *The Man in the Moone* (1638) and Jules Verne's *From the Earth to the Moon* (1865) as other books following the theme.

background akin to the longer scientific romances; it is here that “The New Accelerator” is placed – the story chosen by Gernsback to be published in the first edition of the magazine *The Amazing Stories* in 1926, the one that, by looking at the fiction of the past, influenced a whole generation of Science fiction, now a genre with a name.

3.2 GOTHIC AND SCIENCE FICTION IN *THE ISLAND OF DR. MOREAU*

3.2.1 Science Fiction: “Monsters Fabricated”

Resembling a classic “island-adventure” on the outside, in the tradition of *Treasure Island*, *Moreau* is a far more dense and psychological tale, visible akin to the father of the monster-creating trend, *Frankenstein*. The story has its first-person narrator, Edward Pendrick, with no other choice except going to the mysterious island, since the ship he was in had drowned. There, he faces an ambitious doctor, who was cast away from England due to his outrageous scientific methods. Although the book first intends for the reader to think that Moreau is making hybrids of humans and animals – the screams Pendrick hears seem too human –, this instead serves to intensify the changes the doctor is making on those same animals, applying vivisection and hypnotism to them with the intention of making them similar to humans in behavior and mind. The attitude of “playing God” is here ever more visible, since the animals create a “Law” – a remnant from the hypnotism applied to them – by which they would have to obey their master and treat him as the uttermost being, through a sort of prayer:

> Not to go on all Fours; *that* is the Law. Are we not Men? (...)
> Not to eat Flesh or Fish; *that* is the Law. Are we not Men? (...)
> Not to chase other Men; *that* is the Law. Are we not Men? (…)
> *His* is the House of pain.
> *His* is the Hand that makes.
> *His* is the Hand that wounds.
> *His* is the Hand that heals. (WELLS, 2002, p. 79-80)

His attempts of creating ideal beings, however, following natural selection and other

principles and eliminating specific traits of the specimens, end in catastrophe, as they ultimately attack their own creator and come back to their primitive form. The “Introduction” of the story hints at a more rational interpretation in which all was a delusion, and everything that happened after the sinking of the ship had happened only on Pendrick's mind, for the island was empty, although it remains a mystery how he would have survived in the sea for eleven months.

The book, thus, deals with questions of primitiveness and humanity, leaving its protagonist with doubtful impressions about whether both traces can be present alternatively. The island is also portrayed as a fraction, a smaller version of the scientific world and its practices. All three main characters of the story, Moreau, Mongomery (his assistant) and Pendrick, studied science at some level – Pendrick even claims to have studied in the Royal College of Science, under Professor Thomas Huxley, a reference to Wells' own life experience. The three of them regard the matter with different degrees of attachment: Moreau will do anything to achieve his goals, ignoring any sense of what is moral or not, and considering his experiments mere “monsters manufactured” (WELLS, 2002, p. 97); Montgomery, despite being an accomplice to everything that is done, has some attachment to the Beast-folk, as they are called, and liked to be near them; Pendrick, the witness of the entire process, serves as the eyes of the reader, who inevitably tend to be of horror and disaproval, while also identifing human traits in the animals and relating to them. The first creature to befriend the narrator, for example, was the Ape Man – a symbolical indication of the common origins of both, “five-finger men”.

The classic structure of Wells' first cycle is present here. As Moreau's experiment is complex and wide-ranging, encompassing a number of different animals, the book presents their characteristics and behavior throughout, relating each species to a certain response which should occur; the puma, for example, is the most aggressive of the animals, an indication of his behavior in nature. Moreover, a chapter (didactically named “Dr. Moreau Explains) is dedicated to the explanation of the scientific process through which all of that could be possible, which is done halfway through the story, when all other hints were indirectly given and could, therefore, be put in contrast with “reality”:

> (…) the possibilities of vivisection do not stop at a mere physical metamorphosis. A pig may be educated. The mental structure is even less determinate than the bodily. In our growing science of hypnotism, we

> find the promise of a possibility of replacing old inherited instincts by new suggestions, grafting upon or replacing the inherited fixed ideas. Very much indeed of what we call moral education is such an artificial modification and perversion of instinct; pugnacity is trained into courageous self-sacrifice and suppressed sexuality into religious emotion. (WELLS, 2002, p. 99)

Instead of the heavy scientific jargon of other books, here Wells uses only the sufficient amount of scientific background for the extrapolation to be possible while focusing on the moral aspects involved in the experiment. Moreau's attitude is then based on the allegation that whatever he was doing on the island, has already been done throughout history, the indirect modification of humans by cultural practices which shape their ideas and original instincts. This notion of variation is given by Darwin at the beginning of *The Origin of Species*, when the author discusses domestic variation, which happens when men create or cultivate animals or plants “under condition of life not so uniform as, and somewhat different from, those to which the parent species had been exposed under nature” (DARWIN, 1971, p. 9). Wells was aware of that notion and defended the idea that social and moral modification was important for the education of men, which worked in contradiction with the tendency of the “culminating ape”, i. e., returning to its primitive origins; “the artificial man” was, therefore, a “highly plastic creature of tradition, suggestion, and reasoned thought”. (WELLS; PHILMUS & HUGHES, 1975, p. 12)

The ambiguity with which the notion is treated, either in a positive or negative sense, reflects the many views men of science might have upon the same subject, as the ones in the book do and Wells himself does. In relation to his other books previously discussed, here the criticism against the misuse of science, as well as the consequences which could ensue, is once more present. According to Pendrick, in the novel, the island resembled the outside world, “the whole balance of human life in miniature, the whole interplay of instinct, reason and fate in its simplest form” (WELLS, 2002, p. 133). The consequences are indeed fantastical, but even more than that terrifying and inhumane, perhaps the most shocking extrapolation made in Wells' scientific romances.

Ultimately Moreau does not feel the pain he causes because he considers it only part of evolution, an artificial one always present in history. This disregarding of the human factor is not done by Wells, who considers the “plasticity” of men – the idea "that a living

thing might be ... so moulded and modified that at best it would retain scarcely anything of its inherent form and disposition" (WELLS, PHILMUS & HUGHES, 1975, p. 16-17) – a characteristic to be worked upon for the betterment of mankind, instead of in Moreau's anti-ethical way:

> Darwinism for Wells had always been a way of thinking rather than primarily a body of facts, and now he was able, with a sense of active implementation, to use the evolutionary model in areas other than biology. Freed from the "grotesque" theology of Moreau, the study of the man-making operation might become a hopeful affair and one that made a difference in one's actions—not just in one's beliefs—because man-making (Wells now felt) was a human enterprise rather than a natural process. (...) For civilization is not "material": it is "a fabric of ideas and habits" which "grows . . . through the agency of eccentric and innovating people". (...) in Education lies the possible salvation of mankind from misery and sin" and their equivalents in the evolutionary process, "suffering and 'elimination.'" (WELLS; PHILMUS & HUGHES, 1975, 185-86).

The conclusion of the story is pessimistic while also optimistic. The experiments end up failing, as the Beast-folk keep coming back to their original primitive form, but this failure is a reassurance that such amoral artificial intervention could not succeed. The whole island is always full of monsters since Moreau turns them out when he begins "to feel the beast in them" (WELLS, 2002, p. 107), thus none of them manages to go through a complete process of humanization. As soon as the beasts taste blood, ignoring the fixed idea against it, implanted by Moreau's hypnotism, they recover their instincts and begin returning to their natural form, without speech and the sense of human hierarchy dictated by the "Law". With the deaths of Montgomery and Moreau amidst the catastrophe, it is left for Pendrick, unable to leave the island, to live among the creatures until he could make a raft and finally escape to open sea.

Upon returning back to civilization, the protagonist fears the same reversion to primitiveness in people, an indication that he could never completely trust men again. One final conclusion we may get from the book, however, is not that primitiveness always prevails, in the case of the Beast-folk, or in Moreau's attitude, primitive in a moral rather than in a biological sense; but that such interpretations and processes are possible and may happen – for he himself believed in the theory –, maybe without the same dreadful results, but with similar ones in what reaches the ethical boundaries of doing science. The

plasticity of men can be done through other means such as education, but it becomes problematic when natural selection is considered and transformed into artificial selection. The ending thus points to a cycled process through which the anti-ethical intents of men end up resulting in their own degradation, how the flight from the primitive shows, even more, the primitiveness in their intention.

Now we are left to observe how H. G. Wells, especially through *The Island of Dr. Moreau*, dialogues with conventions from the Gothic tradition, as well as how those conventions follow a progression, in Mary Shelley and R. L. Stevenson, until they culminate in his fiction.

3.2.2 Gothic Roots: The Culmination of the "Mad-Scientist"

The most obvious resemblance among Wells', Shelley's and Stevenson's novels is the central plot involving a scientist whose overly ambitious and immoral experiment ends up attacking its own creator. This common trope, born in Shelley – when science was not even used in the same sense as later on –, involves the creation of a new being almost from ground zero, with a consciousness of its own and a wish to be cared for. The negligence of Victor Frankenstein makes him partly guilty of the atrocities the Creature performs hence, although this is a divisive question. *Frankenstein* is thus a very personal tale, in which the psychology of the characters – as it was employed in the last chapter –, especially Victor and the Creature, tells much about the possible conflicts they may face. The same pattern follows on *Strange Case of Dr. Jekyll and Mr. Hyde*, when this time a scientist who decides to perform an experiment in himself in order to end the conflict of his bipolar nature, bounded to assume different dispositions in the public and private spheres. The double, the tendency of dividing oneself into two attitudes, be it Victor as a reflection of the Creature, or Jekyll and Hyde as even closer counterparts, is reduced, in both books, to the dichotomy primitive/civilized: the experiments tend to follow a primitive behaviour, while the scientists try to maintain the order and repair the wrongs they themselves made.

When we observe *The Island of Dr. Moreau*, this relation with science itself evolves and is ever more present. One of the consequences is the obvious advancements of science, especially through Darwinism, what is already visible in *Dr. Jekyll and Mr. Hyde*, although never named as a direct influence, in the primitive, ape-like behavior of Hyde, representing

the fear of atavism. As a student in the area, Wells makes use of his knowledge to deliver a story with a similar tone, only with more specifications regarding the processes that could make, in a fictional realm, the creations possible. Likewise, the experimentations with live beings cannot stop the force of nature, and primitive forces, here the natural regression of the Beast-folk, inevitably prevail, as did Shelley's creature or Stevenson's Mr. Hyde. We can see, therefore, a clear natural evolution of a theme which was eminently Gothic at the beginning of the century. The sense of horror is kept as well, perhaps even more convincingly due to the more complex scientific extrapolations which makes everything closer. Science or Natural Philosophy, the branch of study always gave some credibility when mentioned in fiction, but now in Wells, it is not as supernatural as it seemed in the Gothic tradition of the previous books. As Renee Phillips observes, one of the few researchers who made a comparison between the genres and among these books, as this thesis also intends, "His scientific process of experimentation of these animals makes the novel science fiction, but there is also an atmosphere of fear on the island that interacts with the science to make this story a work of Gothic science fiction" (PHILLIPS, 2005, p. 25).

Concerning this presence of science as a creator of horror throughout the books, there is also another common Gothic convention: the conflict between the ancient, related to nature, and the new, the development of science. In *Frankenstein*, the early possibility of inducing an electrical current in a dead body was already a motive for Shelley's imaginative creation. From Erasmus Darwin to Charles Darwin, the primitiveness of men becomes more noticeable when detailed by science, and thus highly influence the works of Stevenson and Wells. In all novels the work of nature is spotted: in the former the capacity of giving birth is neglected, a product of science that had much to do with Frankenstein's psychology, as it was analyzed; in the latter the natural development of Jekyll's consciousness is changed, creating an unlevelled balance between Ego and Id that should not take place, following Freud; and finally in the Wells', natural selection gives way to artificial selection in an attempt of changing nature's original development of those animals tested by Moreau. In all three books, scientists become ambitious and try to change the old order of things, the natural order which could be related to religion, hence the expression "playing God", so common when one discusses these books. The criticism, however, does not seem to be set on the advancement of science, but how this evolution is faced by those who have the power to use:

> These works of Gothic science fiction do more than just express a cultural fear of science and technology. Science and technology are not feared in themselves, but in the hands of people who misuse them, making these stories less a critique of science but a critique of human nature. (PHILLIPS, 2005, p. 28)

This overall pessimism, which mirrors the fear of how science could be mishandled by men, departs from Shelley, when Natural Philosophy was already a common theme, in spite of not being very known by the author to be specified; reaches Stevenson in a moment when Victorian sensibilities were already affected by the fear of regression, the "culminating ape" mentioned by Wells; and finally finds in Wells a turning-point in which the genre still maintains many Gothic conventions, but now is much more about science and the extrapolations for social commentary that it makes possible, rather than the inner conflicts of the characters portrayed.

Therefore, a fruitful comparison concerning those different phases of Sci-fi/Gothic fiction is the scope of the action involved and the importance that is given throughout the narrative. In Wells, at the end of the 19th century, the discussions concerning human evolution are considerably more present than in years past, influencing the outcome of what is discussed in his fiction:

> If the conceptual bridging of distances in space was a concomitant of Darwin's theory, the telescoping of time was a necessity. Evolution enlarged human consciousness of time: most obviously, because for the theory to be true this planet must be older than anyone before Darwin had supposed it to be (...). For the young Wells, with the lectures of Thomas Huxley fresh in his mind, this extension of the temporal perspectives of evolutionary theory seemed not merely possible; it seemed logical. (WELLS; PHILMUS & HUGHES, 1975, p. 4)

The consequences of what is presented, the artificial selection performed by Moreau, if successful, may alter the whole understanding of human evolution. The creation of an artificial being in Shelley could have the same impression, however, there the conflict resides much more in the psychology of Victor and the Monster and whether they could ever make amends regarding their relationship. In Dr. Jekyll and Mr. Hyde, the whole conflict of the story is also fundamentally based on the duality of its main character, which

is discovered in the last epistolary chapter. Instead, this extremely outward outcome carries on in Wells' whole narrative, which does not have space to properly deal with the inward conflict of the characters in the same extent that Shelley and Stevenson do. The theme of the mad-scientist, the creator of an ideal and evolved being, reaches in Wells a similar impact than in Shelley and Stevenson, but here the focus is given to the consequences of the actions, rather than to the individuality of the characters. An important Gothic trait is, therefore, less present in Wells, as the focus on science and plot become more important in his fiction. Resuming Patrick Brantlinger, in the presenting of the genres done in the first chapter, "(...) the nightmare of reason has expanded and turned outward in the evolution from Gothic to science fiction. Again, the scale of disaster is individual and inward in the earlier form, but social and often cosmic in the later one" (BRANTLINGER, 1980, p. 40).

As the central character, in Wells, is primarily a witness to the action presented – as Pendrick is in *Moreau* –, he only occasionally has some space to reflect his feelings. Similarly, with this loss of empathy towards the scientist and the focus on the protagonist mainly as a witness, there is no space for the romanticism present in early Gothic, notably in Mary Shelley. Pendrick has no one to care for other than his own survival on the island, which is a dreary and claustrophobic landscape that does not allow for divagations to counterbalance the horror present there.When his feelings appear, they tend to represent the social implications of what such scientific extrapolation may ensue, rather than the impact for himself, although it seems an individual apprehension for the character himself, as when Pendrick returns to civilization and reflects upon his experience:

> They say that terror is a disease, and anyhow, I can witness that, for several years now, a restless fear has dwelt in my mind, such a restless fear as a half-tamed lion cub may feel. My trouble took the strangest form. I could not persuade myself that the men and women I met were not also another, still passably human, Beast People, animals half-wrought into the outward image of human souls, and that they would presently begin to revert, to show first this bestial mark and then that. (WELLS, 2002, p. 182)

Pendrick's adventure on the island was certainly traumatic, but most importantly he was not the who caused all the horror that took place there. He seems important due to the fact that, having some knowledge of science, he is more authoritative to question Moreau's actions; but other than that, one may have the feeling that he could be any other person

whose doubts and ultimate shock would justify the suspense of the narrative: “They seemed to me to be brown men, but their limbs were oddly swathed (...)”; “They had lank black hair, almost as horse hair, and seemed as they sat to exceed in stature any race of men I have seen” (WELLS, 2002, p. 33).

Unlike Jekyll and Frankenstein, Pendrick's name is not on the cover of the book; he is not the ambitious scientist with dreams of grandeur. And the title character, Moreau, is not the narrator of the book. This position of the mind of the scientist, in Wells' scientific romances, is now more detached from the reader, who does not have much access to it. A similar technique of suspense is done in Stevenson, who has its main narrator, Mr. Utterson, positioned as an investigator and witness to the strange facts that form the story; but there the narration is given to Jekyll in the last chapter, who has now space to tell his personal inclinations and motivations for the creation of his formula. Moreau, on the other hand, is always detached and is primarily a villain throughout the book, with no redeeming qualities that could have made him the double of Gothic narratives. In the chapter “Dr. Moreau explains”, when we have more access to the character, he seems a proud and ambitious man of science with no other visible counterpart of repentance concerning his actions. Despite confessing to being “a religious man (…), as every sane man must be” (WELLS, 2002, p. 101), Moreau does not feel touched by the pain he inflicts in the process of humanization of the animals. His obsession with the plasticity of man becomes a satire, once more, of the beliefs Wells himself had in an ethical level; the limits one may go to when ethics are left behind.

The culmination of the figure of the mad scientist, considering this progression since Shelley and Stevenson, is that of the double-figure, subject to many interpretations, turned into a detached villain whose purposes are easily comprehended. Consequently, a psychological analysis of the characters does not fit here as much as it did in the previous chapters, particularly because here the double is not present. This cannot be considered a weakness in Wells' fiction, however, but rather a different approach to a similar theme dealt with in the past. Some conventions of the Gothic are still present, such as the sense of fear, the pessimism regarding human nature and its actions, as well as the more general conflict between past and present. In the same sense, new conventions are created, most of which are related to a deeper focus on the scientific extrapolation involved as a means of creating social commentary, especially regarding the own use of science for the wrong purposes –

in the case of *Moreau*, the plasticity of man which is done in a purely physical way, and not through intellectual enterprises, such as education, as Wells believed.

Resuming the first considerations about genre followed here, both Gothic and Science fiction, with all the conventions attached to them, can find themselves present from Mary Shelley to H. G. Wells. Genres carry so many associations with them, that it would be a very restrictive decision to relate any book to only one genre. There is a “web of resemblances”, following Paul Kinkaid's propositions, in all three books analyzed here, all of which can be related to the number of conventions defined afterward as Gothic and Science fiction. Another advantage of this reading is the considering of literature as an ever intertextual process, as defined Julia Kristeva, a “mosaic of quotations” where different works from different authors and genres can be put in comparison as motifs for one another, all of which change the same conventions they once adopted into a new approach to the genres. The particular choice of Wells to conclude this cycle of comparison is due to the amount of effort and innovation into the scientific matter done by him, something which was previously only mentioned but not specified – since there were other aspects of the Gothic to be focused on at that particular time, near Romanticism. Wells' imaginative power, scientific knowledge carried with social and scientific commentary toward the position of man in relation to science and society can define him, as Darko Suvin does, as a “turning-point” of the Sci-fi genre not even named yet, but already solidly defined by the author, “the first significant writer who started to write SF from within the world of science, and not merely facing it” (SUVIN, 1979, p. 32).

CONCLUSION

> *Farewell, Walton! Seek happiness in tranquillity, and avoid ambition, even if it be only the apparently innocent one of distinguishing yourself in science and discoveries. Yet why do I say this? I have myself been blasted in these hopes, yet another may succeed.*
>
> Mary Shelley*, Frankenstein.*

The last words of Victor Frankenstein, in Shelley's famous novel, represent a warning to Walton, the first and final narrator of the book, or, more than that, all men who would venture in preserving ambition. This theme of the ambitious scientist is not considered an "innocent one" by the young character by mistake. He is the first in this tradition which would make itself present throughout literature maybe much longer than M. Shelley herself could have imagined. Indeed, this particular branch of Gothic fiction was so deepened and explored that, at a certain point, a new name was required for the scientific Gothic. Not to say that all Gothic fiction had something to do with Science fiction[21], only a specific part of it that, now, around the end of the century, made itself present not only through some classic Gothic conventions, such as the horror, the unspeakable, the double, but also new ones that dealt especially with the new information that the constant scientific development had gathered that far.

Ambition was maintained as a recurrent theme among those men of science, but each time it involved a different motivation, said or presumed, through the respective novels here analyzed. If the creation of life may have, in *Frankenstein*, the affective distance of the protagonist step-sister as a possible cause, when one analyzes the book through a psychoanalytical perspective, a similar feeling has in *Strange Case of Dr. Jekyll and Mr. Hyde* the nuances of a double identity formed by the pressure of Victorian rigorous

21 It is understood by the author of this work that only a small parcel of what both genres have to offer was chosen here, even from the time period analyzed, but this is due to the specific scope and objectives which this thesis must focus on. Certainly many other authors influenced the Sci-fi genre in other different but also important ways, such as Jules Verne – who, like Wells, is also present in the 1st edition of Gernsback *Amazing Stories*, but it was thought as a better approach to consider a certain theme to work with; hence the mad-scientist character and the question of ambition in Gothic and Sci-fi.

behavior, creator of a repressed being that could only be set free by a scientific process still in formation in the writer's imagination. In these first attempts, the same science which creates monsters in fiction is the one which served as inspiration for the fiction to be created in the first place, as this thesis showed through the writer's contact with what was happening at their time. Scientific explanations, however, were still in an amateurish form on Shelley's and Stevenson's hands and were not in themselves the main focus of the books, which would rather develop the situations created through the new magic called science, situations which had to do with the central character's psychological perceptions. The science as a focus would only mature with H. G. Wells, at the cost of losing the more Gothic personal approaches and focus on characters of the previous books. Here, a new ambition emerges. Although Moreau still preserves ideas of perfectionism and defiance of a Frankenstein and a Jekyll, his position as a detached villain eminently develops a more definite vision of what it is to be expected from science, deviating from the ambiguity characteristic of the previous books.

This thesis plays with this game of differences and relations among the books, once they were considered in the same influx, operating from similar themes. Due to their place in time, a progression was also possible to be defined, where certain aspects were maintained in all of them, or just some of them, as well as how the main themes dialogued with the conventions of the genres Shelley, Stevenson, and Wells were commonly associated with: Gothic and Science fiction. The division of chapters reflected an early impression which now, at the end of this work, was confirmed: that of a closer association of Gothic themes in *Frankenstein* and *Dr. Jekyll and Mr. Hyde*, especially the possibility of using a background of psychoanalysis demanded by the books; whereas *The Island of Dr. Moreau* and the whole of Wells' first cycle is evidently occupied with other themes, despite retaining Gothic tropes. Even if Stevenson and Wells are alike in their use of Darwinism – more overt in the latter –, as well as in their closeness to the *fin-de-siècle*, Wells' narrative does not retain the same level of psychological analysis allowed before. Those considerations are not done in a tone of criticism towards the author, but rather to demonstrate how this Gothic branch of Science fiction, born with *Frankenstein*, managed to change while preserving vital aspects that were maintained in history so fiction would still have interest in them: the anxiety of scientific evolution and the place of men within this setting.

If Wells leaves out the depth of character development of early Gothic books, it does so to focus on aspects which were not thought important that far, such as the specificities of how this technology which creates monsters may operate, in a quasi-real demonstration that is no less frightening, or may even be more frightening, than the monsters created themselves. The analysis managed, therefore, to both determine common conventions on the three books, as well as important differences that set the works in distinct yet complementary places in the Gothic/Sci-fi spectrum of 19th century English fiction. This is explained by the evolution of science itself, from the natural philosophy of *Frankenstein* to the Darwinism of Wells' whole first cycle of Sci-fi, the distancing of romantic and character-focused Gothic towards a fiction that is more worried about the mishandling of science and its outward outcomes, instead of inner conflicts involved with the characters themselves, both agents and victims of their ambitious experiments.

The genres are thus considered in the way their conventions connect to each other, as well as how they differ, considering Shelley, Stevenson and Wells. This intimate connection between Gothic and Sci-fi conventions led to the conclusion that the latter genre emerged from a certain approach of Gothic, which experimented with using science as a producer of Gothic fears and a tool that enabled characters' repressed desires to become real, only to later haunt them as their doubles; while, at the same time, the genre evolved to the point of being considered something apart. This vision of genres as ever-forming entities was dealt with especially in the first chapter, which listed a range of authors who defended this position that defines literature as a “mosaic of quotations”, according to Julia Kristeva, or a “web of resemblances”, as Paul Kinkaid defines them; in summary, genres as tools that broaden the horizon of interpretation of a given book, instead of restricting it to the conventions of one single genre.

Tzvetan Todorov is used as the most recurrent theorist due to important considerations which fit the central foundations of this work, particularly the evolution of genres from other pre-existent genres, the fact that a “new genre is always a transformation of one or several old genres" (TODOROV, 1976, p. 163); as well as the consideration that a work of art may manifest several genres and not the contrary. This last aspect reinforces the approach used in this thesis, through which *Frankenstein*, *Dr. Jekyll and Mr. Hyde* and *The Island of Dr. Moreau* were analyzed as examples which fit the conventions of both genres, in a particular way by which an evolution could be traced, where the presence of

science could be felt increasingly in the books that attempted to those aspects as time passed. In this context, the Darwinist theory of evolution was the most important external factor that affected Wells, as well as Stevenson's, fiction, i. e., science affected the development of Science fiction, as it had done in Mary Shelley at the beginning of the century. Only now Wells' scientific knowledge contributed to the credibility of the fiction he was engaging and, more than that, using his "formula" to catch the reader's attention and set the plot in motion, the author could extrapolate certain aspects concerning the principles he was working with, most of which dealt with failed attempts of controlling life and its creation.

The evolution of Gothic/Sci-fi here analyzed moved from an inward analysis, which falls more to the Gothic side, where the books' characters (Frankenstein and Jekyll) and their repressed conflicts are focused, which is highlighted by the double figures born from science they ambitiously dare to trifle with; to an outward consideration, which reclines more to the Sci-fi side, where science's mishandling may change the future of mankind and the understanding of what is to be a man in a Darwinian age. All the books may be considered Gothic *and* Science fiction, since they all share certain conventions (E. K. Sedgwick), or resemblances (P. Kinkaid), even though they may play out their role differently, as it was made evident in previous chapters. The conjoint analysis in this thesis sought to define the workings of those aspects so an evolution, a chain of changes, could be made, therefore, evidencing the process of intertextuality (Kristeva) through which literature operates, how genres dialogue and may have several conventions in common, how they can be both alike and apart depending on how one analyzes them and which books are chosen exemplars of the said genres.

A particular point which was not focused and may be considered a limitation of the present work is the lack of an acknowledgment of the aspects from the post-Wells Sci-fi, which could be related to the author in order to showcase his influence in the fiction to come. This analysis was not made here due to the extensive dimension such study would induce, considering three different books from three different authors were already chosen as the primary corpus of this research. Therefore, an analysis of the progression of fiction within 19th century English literature seemed more adequate, which does not prevent, however, a subsequent study from taking into account how Wells' fiction, after being formed from Gothic conventions, influenced the new genre of Sci-fi it unconsciously

solidified in the turn of the century onwards. Therefore, the whole evolution of the genres could be grasped in a broader aspect, with H. G. Wells as the turning-point, interchanging him with relevant fiction that comes before and notably, Sci-fi after him[22]. This would not only legitimate the conclusion carried out by the present research, but also enrich the intertextual relation of the genres and books to be analyzed.

Finally, this thesis argues that the study of genres is still a valid matter. They open the horizon of interpretation of a given work by presenting certain aspects that may or may not be confirmed therein, depending on whether the book may conform or defy the pre-determined conventions. The manner how this action of adapting to a genre or deviating from it works helps us understand what the author is aiming for and which tradition he is dialoguing with. When one genre is put in comparison with some other it is historically linked to, the repertoire of guidelines for interpretation becomes still richer, due to the arising of intertextual relations detected. The Gothic and Science fiction genres made numerous connections possible due to their relation common to a 19th century English literature that was ever more worried about the place of science in people's lives. Therefore, we can say that they both existed simultaneously in the books analyzed, from Mary Shelley to H. G. Wells – since conventions of what they would later be defined can be found in those books –, as well as that the latter genre gained the proper definitions of a separate genre towards the end of the century. There the still dormant aspects of the previous books, the use of the principles of science for extrapolation and social and biological critique, became the main focus, rather than the inner questioning of the self.

This is no coincidence, since “genres, like any other institution, reveal the constitutive traits of the society to which they belong” (TODOROV, 1976, p. 163). Each of the works analyzed, therefore, *Frankenstein*, *Dr. Jekyll and Mr. Hyde* and *The Island of Dr. Moreau*, represent a form of considering science in their time period, here more subtle – as the product of inner monsters –, there more overt – as the informer of future catastrophes – but always forming a representation of their specific contexts, and, as a consequence, of the whole dialogue of literature.

22 One can also consider how other conventions of the Gothic distanced from the scientific-focused ones may have evolved to new genres in the 20th century, which tended more to the horror aspect, for example.

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