Determining the Plausibility of Future Language in (Post-)Apocalyptic Fiction

by

Bart Meijer – 3187535

MA Thesis Western Literature and Culture

Faculty of Humanities

University of Utrecht

Supervisor: Prof. Dr. David Pascoe

Second Reader: Drs. Simon Cook

August 2011

Table of Contents

Introduction 3

Background 6

Scenario 1: Language Disappearance 14

1.1: Language Disappearance in Literature 16

1.2: Language Disappearance in Film 23

Scenario 2: Local Language 27

2.1: *Riddley Walker* 29

2.2: *Cloud Atlas* 37

2.3: *Mad Max Beyond Thunderdome* 39

Scenario 3: Universal Language 41

3.1: Basic English 43

3.2: Newspeak 46

3.3: Nadsat 49

3.4: Corpocracy 51

Conclusion 55

Works Cited 59

Primary Sources 59

Secondary Sources 60

Introduction

> I was pleased our dammit crookit guest'd teached ev'ry'un to step slywise an' not trust her, nay, not a flea, but I din't sleep none that night, 'cos o' the mozzies an' nightbirds an' toads ringin' an' a myst'rous some'un what was hushly clatt'rin' thru our dwellin' pickin' up stuff here an' puttin' it down there an' the name o'this myst'rous some'un was Change.
>
> (David Mitchell, *Cloud Atlas* 2005; 265)

Change is a key theme in Mitchell's *Cloud Atlas* and features in the novel on different levels. Not only does the work depict historical changes but it also engages with changes in language. Through the use of six different alternating story lines, Mitchell shows the progression and transformation of language through time and ultimately extrapolates this into the future, thereby ultimately creating a future language as depicted above.

The language used in the passage from *Cloud Atlas* is that of the inhabitants of post-apocalyptic Hawaii, or "Ha-Why", and is reminiscent of Russell Hoban's *Riddley Walker* (1980). As a matter of fact, Mitchell admits he got his inspiration for "Sloosha's Crossin' an' Ev'rthin' After" –the middle one of the six oscillating stories in the novel– from Hoban's work. In the interview "Silver Daggers and Russian Dolls", Mitchell explains that "What's good when a book like *Riddley Walker* exists is that it proves that it can be done and you won't necessarily make a fool of yourself. As for the form it takes, you often come to the same conclusions about, in this case, how to concoct a future dialect" (Barry 1). About his particular reasons for choosing the language used in "Sloosha's Crossin'" Mitchell states that "If you look at the way language really does drift, it's a heady mix of neologisms and archaisms" and "I think this is how a future language will look" (1).

Although Mitchell's claim invokes certain questions regarding its sustainability, it is still an interesting notion and worth elaborating upon. As it does not yet exist, future language might seem purely hypothetical. Nevertheless, it is theoretically possible to extrapolate existing phenomena such as language in works of fiction. Moreover, the same can be done with linguistic theories, for example when predicting the future of language on a local or global scale. Some work has been done to exemplify the parallels between linguistics and futuristic fiction; however, the attempts seem to be limited to works of science-fiction and dystopian or utopian fiction, in which various instances of constructed language can be found. Additionally, invented languages often feature in works of fantasy such as *The Lord of the Rings* by J. R. R. Tolkien, which has been discussed by linguistics extensively.

However, one body of works tends to be overlooked in the research conducted on the subject of constructed languages, being that of (post-)apocalyptic fiction. This particular genre has shown a rise in popularity lately, which is reflected in the success of films such as *2012* (2009), *The Book of Eli* (2010) and the various remakes of titles as *On the Beach* (1959/2000) and *The Day the Earth Stood Still* (1951 / 2008). Also, novels such as , Margaret Atwood's *Oryx and Crake* (2003), Cormac McCarthy's *The Road* (2006) and Douglas Coupland's *PlayerOne* (2010) illustrate the renewed interest in the genre of post-apocalyptic fiction. Despite its appeal to popular culture and the various post-apocalyptic literary works recently published, attempts at creating a future language remain scarce within the genre. Nevertheless, Coupland makes a convincing argument regarding constructed languages in futuristic fiction by stating that "The future is happening so fast and furious right now, there's no language to describe all these new sensations, so we have to begin inventing one" (Fillion 2).

In order to investigate the concept of future language in (post-)apocalyptic fiction and exemplifying how this is connected to the field of linguistics, a number of tasks have to be

performed. First of all, it is necessary to establish a theoretical framework. Initially, this entails identifying and exploring certain linguistic trends which are relevant in respect to future language. For this, it is beneficial to look into the idea of linguistic relativity and how this relates to constructed languages. Next, it is necessary to show how these ideas are reflected in works within the genre of (post-)apocalypse fiction. It has to be noted here that the prefix *post* is placed in brackets due to the scarcity of genuine post-apocalyptic works dealing with language, as well as due to the genre's overlap with science-fiction and utopian or dystopian works. By slightly broadening the scope a wider range of examples of works featuring future languages can be used, which then will serve as a base for comparative analysis. After this, it will be possible to discern the different possible language development scenarios and how these are depicted in fiction.

Furthermore, the plausibility of these scenarios, and in particular of the language they resulted in, can be tested by employing linguistic theories, as well as by looking into the extrapolation of these theories. In order to achieve this, it is necessary to look into recent developments in the field of linguistics. In this case, there are at least two theories which are particularly useful. First, there is the concept of chronolinguistics as formulated by Peter Stockwell, which draws upon linguistic extrapolation. Second, the rather novel practice of ecolinguistics is particularly relevant, especially due to its highly interdisciplinary character but also in the light of the current concerns with the environment and the condition of our planet. In addition to the disciplines ecolinguistics draws from –sociology, anthropology, evolutionary biology– philosophical approaches to language can be used in determining the plausibility of future languages as well.

Background

> Throughout history, languages have been invented for many different reasons –to expose the truth of the universe, to bring humanity together, to avoid the pitfalls of natural languages– and inventors have used methods tailored to their specific purposes and influenced by trends in the way people have thought about language in different eras.
>
> (Arika Okrent, "Questions Answered: Invented Languages" n. pag.)

Inventing a future language is closely related to the idea of *conlanging* as defined by Sai Emrys et al.: "*Conlanging* (n): the art and craft of making your very own language" (Emrys, Fink and Peterson: "Conlanging 101" 1). Emrys is credited as the founder of the Language Creation Society, an organisation devoted to the subject of constructed languages. A notable contributor to this project is Arika Okrent, author of *In the Land of Invented Languages* (2009). In this work, Okrent discusses almost nine hundred invented languages produced over the course of nearly a millennium. Already, it becomes clear that conlanging is not a novel practice; on the list provided on the accompanying website to Okrent's work, the first example –Hildegard of Bingen's *Lingua Ignota*– dates back to the year 1150. Although Bingen's reasons for inventing this language remain obscure, as do her intentions, it it seen as one of the earliest predecessors of modern conlangs. To give some most well-known examples of conlangs, Emrys points to the Elvish language Quenya, devised by J. R. R. Tolkien for the *Lord of the Rings* saga (1937-1945), and the Klingon language as found in the *Star Trek* series.

In order to elaborate upon future languages, an insight into the practice of inventing languages has to be provided. In "Conlanging 101", Emrys discerns a number of different

approaches to language construction. The first category is that of the *artlangers*, to whom "language creation is an artistic craft, somewhat like model railroad building, costume design, or modern architectural design" (1). Opposite to this are the *auxlangers*, who "seek to create an auxiliary language—a language that can be easily learned by anyone, and serve as a neutral bridge between speakers of different languages" (1). The main difference between these two practices is found in the labels attached to them; artlangers invent language for artistic and aesthetic fulfilment, while auxlangers aim to devise a universally accessible language, of which Esperanto is the best known example. The latter, then, employ a more idealistic point of view –hence the word Esperanto means *hope*– while the former can be seen to work from a more individualistic perspective (2). In respect to future language, the last category identified by Emrys is the most relevant: "*Engineered languages*, or *philosophical* languages, are both the rarest and the most radical. An *engelanger* takes a systemic concept and runs with it—with dramatic effects to the resulting language". In addition, Emrys notes that engelangs sometimes show overlap with the other categories, resulting in the fact that "many philosophical languages also have artistic or auxiliary elements" (2). Because of this, it is difficult to provide an archetypical engelang. Therefore, Emrys uses various examples, of which *Lojban* is most worth mentioning here, as it falls into the sub-category of *loglangs* or *logical languages*, where the goal is "maximum precision and unambiguity" (3). Furthermore, constructed languages appear in two main forms: "*A posteriori* languages [, which] are based on an existing language", and "*A priori* languages [, which] are made from scratch" (Emrys 3). With regards to future language in post-apocalypse fiction, the former category is the more relevant one, as the languages found within the works in this genre mostly deal with an extrapolation of history and language, thereby classifying as speculative fiction.

Next, to identify the foundations underlying the practice of constructing languages, certain linguistic theories and phenomena have to be examined. Core to this discussion is the

idea of linguistic relativity, which is often associated with the work of Edward Sapir (1884-1939) and his pupil Benjamin Lee Whorf (1897-1941), whose ideas are popularly referred to as the Sapir-Whorf Hypothesis. It has to be noted however, that “the label *linguistic relativity*, which is more common today, has the advantage that makes it easier to separate the hypothesis from the details of Whorf's views, which are an endless subject of exegetical dispute” (Swoyer n. pag.).[1] According to Cameron, the question at the core of the debate is “what if our ways of perceiving and understanding the world are determined by the structures of the languages we speak?” (1). Furthermore, there are two possible interpretations of this idea: the deterministic approach, referred to as the strong version of the linguistic relativity principle, in which the language we use determines our world view, and the weak version, which is relativistic; “i.e. structural linguistic differences may influence but do not determine what we take to be ‘reality’” (1).

Although Whorf’s idea of language influencing thought and consequently perceptions of reality might seem new, Alford points out that the concept of linguistic relativity can be traced back to ancient Greece, while the modern version of the theory is often associated with the German philosopher Wilhelm von Humboldt (1767-1835) (“Linguistic Relativity Theory” n. pag.). However, it was Whorf who propelled the idea to the foreground in the twentieth century, “whose collected writings became something of a relativistic manifesto” (Swoyer n. pag.). On top of this, Cameron notes that the concept of relativity as defined by Whorf “seems to have been a deliberate allusion to Einstein” (154), which in turn relates to Paul Brians’s statement that “the discoveries of X-rays by Roentgen in 1895, of radioactivity in uranium by Becquerel in 1896, of radium and polonium by the Curies in 1898, and of the possibility of converting matter into energy according to Einstein’s relativity theory of 1905” sparked the imagination of the public, giving rise to a number of works which gave impetus to the genre

[1] For a complete analysis of the origin of the term ‘Sapir-Whorf Hypothesis’ and the misconceptions surrounding it, see “Chapter Seven from The Secret Life of Language”, October 17, 2002 DRAFT, by Dan Moonhawk Alford.

of (post-)nuclear war fiction ("Chapter One: The History of Nuclear War in Fiction" n. pag.).

Following this, Cameron states that Whorf's idea "is among the Big Ideas of the twentieth century" (2). Moreover, linguistic relativism gave rise to various experiments concerned with exploring the connection between thought and language, of which George Orwell's *Nineteen Eighty-Four* (1949) is a prime example. To illustrate, Cameron states that "the role he gave to a language –Newspeak– in *Nineteen Eighty-four* resembles the role accorded to language in popular 'strong' interpretations of Whorf, while his observations in essays like 'Politics and the English Language' have an affinity with 'weak' Whorfianism" (2). In the classification proposed by Emrys, Newspeak can be seen as an engineered language, as it contains elements associated with auxiliary languages, as well as with artistic languages. Other examples of languages constructed in order to test the linguistic relativity principle are for instance James Cooke Brown's *Loglan*, which was designed in the early 1950s and aimed to lift the alleged constraints language imposes upon thought (Leith n. pag.). Furthermore, Suzette Haden Elgin's 1984 science fiction novel *Native Tongues* features Láadan, a language designed from a female perspective, based on the premise that "if women had a language adequate to express their perceptions, it might reflect a quite different reality than that perceived by men" (n. pag.). Thus, it is clear that linguistic relativism provided inspiration for authors to invent their own languages, as well as speculate about what a future language would look like. Initially, this practice was mostly found within the science fiction genre, yet later on spread to mainstream literature as well. Similarly, it will become apparent that (post-)apocalyptic themes developed in a similar fashion, thereby gradually crossing over from science fiction works to mainstream fiction.

Additionally, it can be stated that this influence is reciprocal, as Benjamin Kunkel explains in "Dystopia and the End of Politics". In his 2008 article Kunkel states that nowadays there seems to be an increase in "the migration of sci-fi material into the literary

mainstream" and vice versa (95). According to Kunkel, the reasons for this lie in the fact "that technology is advancing at an ever more rapid pace even as our world appears to accelerate toward a plunge into chaos more profound than any pre-technological civilization would be able to take" (95). This recent development can be seen as a reaction on earlier trends; Brians observes that up until the end of the 20th century, the relative unpopularity of (post-)nuclear war fiction can be attributed to the public's uneasiness with this subject. Moreover, Brians states that "Even in those years when a good many nuclear war stories were published, they were rarely widely read: most of them are science fiction, and until recently science fiction has had a very restricted audience" (n. pag.). Following Kunkel's argument, a shift has occurred in this respect, as science fiction stories become more and more realistic in contemporary society; nowadays, "there are already whole regions of the globe showcasing technological dystopia or post-technological collapse" (95).

Also, the public's awareness of the global state of affairs has increased. After the Cold War threat resided, public anxiety shifted to fear for environmental and ecological disaster, which is reflected in for instance the abundance of disaster films in the 1990s. A more recent example is Cormac McCarthy's *The Road* (2006), where the world has ended due to an unknown catastrophe. Kunkel argues that the cause of the collapse in this novel is a nuclear fallout (90). According to *The Independent*, on the other hand, McCarthy "seems to have imbibed a scientific pessimism currently expressed in, but by no means confined to, worries about climate change and environmental entropy" (Tonkin n. pag.), which implies that an ecological breakdown might be a more plausible explanation for the state of the world depicted in the story. Moreover, the language employed in the novel backs the notion of a breakdown, as it becomes increasingly austere as the story progresses. In any case, McCormack's novel illustrates the idea that science-fiction and literature increasingly influence each other, which broadens the scope of the genre of post-apocalypse fiction by

allowing works into its canon that previously would have been omitted. To illustrate, Kunkel includes examples such as Margaret Atwood's *Oryx and Crake* (2003), Michel Houellebecq's *Possibility of an Island* (2004), Kazuo Ishiguro's *Never Let Me Go* (2005), and David Mitchell's *Cloud Atlas* (2005), yet there is no mention of older works. However, it can be stated that the cross-over concept allows reconsidering and possibly admitting older science-fiction works to the body of post-apocalyptic works.

To further elaborate upon the genre of post-apocalypse fiction, a short overview of its history might prove helpful.[2] Roughly, the history of the genre can be split into two periods; before and after the Second World War. According to Willard Wells, "Starting about 1950, our world changed forever. Global population from then until 2000 multiplied by 2.5 and technology surged forward at an unprecedented pace. For some people these developments are a cause of great concern" ("Preface" ix). This in turn is reflected in works of post-apocalypse fiction, which can be said to express the audience's as well as the author's anxiety about the state of the earth and humankind. Moreover, Booker and Thomas state that before the Second World War (post-)apocalyptic fiction was concerned with fear of (super)natural disasters as found in for instance Mary Shelley's *The Last Man* (1826) and Richard Jefferies's *After London* (1885), works which are identified as archetypes of modern post-apocalypse fiction (53). As a matter of fact, the genre of end-of-the-world literature in its modern form can be seen to develop analogous to technological innovations throughout history, starting with the rise of the Industrial Revolution. "However, it was not until the atomic bombing of Hiroshima in August, 1945, followed by Cold War nuclear tensions, that post-apocalyptic stories – especially those dealing with nuclear holocaust and its aftermath – were propelled to the forefront of science fiction" (Booker and Thomas 53).

To summarise, the trends within post-apocalyptic fiction can be seen as a response to

---

[2] For a detailed account of the history of science-fiction and (post-)apocalyptic fiction, see *The Science Fiction Handbook* (2009), by M. Keith Booker and Anne-Marie Thomas.

natural threats such as disease or pandemic, to extraterrestrial threats in the form of aliens or astronomic impact, to technological innovations –especially in nuclear warfare– or to the state of the earth and the environment. Furthermore, recent events such as ongoing globalisation, ecological issues such as global warming, and the nuclear meltdown in the Fukushima power plant seem to have led to a recent resurgence in popularity of the genre. Kunkel illustrates this by stating that nowadays, “Every other month seems to bring the publication of at least one new so-called literary novel on dystopian or apocalyptic themes and the release of at least one similarly themed movie displaying some artistic trappings” (90). Jacqueline Smetak points out that critics argue that the reason for the fascination with the theme mainly lies in our changing perception of time:

> In pre-Christian and pastoral societies, time is cyclical. In post-Christian and technological societies, time is linear. It begins at a specific point, proceeds in a straight line, and then stops. It is this notion, that time stops rather than renewing itself, that causes the anxiety which has expressed itself in a body of literature, primarily religious in its orientation, that has come to be called apocalyptic. (45)

Thus, the ongoing technological innovations, as well as our increasingly secular society, and the public’s growing awareness of the state of the environment account for the popularity of the genre of post-apocalypse fiction.

Having established a theoretical linguistic framework as well a short overview and definition of the genre of post-apocalypse fiction, it is now possible to look for examples of future language within the genre. In short, it can be stated that within this genre, there are three possible language scenarios. First of all, language can either fade away or die out. The main example which will be used in analysing this scenario is Octavia E. Butler’s short story “Speech Sounds” (1983). Supplementary works are the films *Le Dernier Combat / The Last Battle* (1983) directed by Luc Besson, Yasuaki Nakajima’s *After the Apocalypse* (2004), and

the short Israeli student film *When It Will Be Silent* (2009), written and shot by Dan Sachar. In the second scenario language transforms into a more locally oriented form, which can be found in works such as Russell Hoban's *Riddley Walker* (1984), David Mitchell's *Cloud Atlas* (2005), and the 1985 film *Mad Max Beyond Thunderdome*, directed by George Miller and George Ogilvie. Last of all, language can evolve into a universalised form as depicted in the aforementioned Orwell novel *Nineteen Eighty-Four* and H.G. Wells's *The Shape of Things to Come* (1933). Furthermore, additional examples will be put to use in conducting an analysis of each of these scenarios.

Next, in order to analyse the feasibility of these constructed languages, it is beneficial to make use of the aforementioned idea of linguistic relativism, which gave rise to language experiments as well as the invention of new languages, both artistic and functional. In addition, striking thematic analogies can be discerned between works of post-apocalyptic fiction and the future languages found therein. For instance, the notion of cannibalism occurs in many of these stories, and can also be used to describe the way in which the aforementioned languages are constructed. Moreover, this idea holds connection to the concept of recycling, which is the only practice the inhabitants of the post-apocalyptic world can rely upon for rebuilding their environment. Next, by combining this idea with the concept of linguistic relativity a link to the recently emerged theory known as ecolinguistics can be made. Ecolinguistics, then, is characterised by the interdisciplinary approach currently representative for the modern view of the humanities. Furthermore, the theories formulated in ecolinguistics are useful in analysing future languages as found in post-apocalypse fiction, which will become clear in the chapters dealing with this subject. In addition, Stockwell's theory of chronolinguistics as formulated in the article "Future Talk: One Small Step Towards Chronolinguistics" might prove useful in discussing future language.

Scenario 1: Language Disappearance

Probably the most straightforward and concrete scenario of the future of language in the post-apocalyptic world is the idea that spoken language will completely disappear. However, addressing this subject in a work of literature poses some problems. First of all, no actual verbal language exists in such a setting, leaving merely the language used by the author to represent this scenario, while the language usually employed to show the characters' verbal interactions has been eradicated. This in turn is connected to the issue of linguistic awkwardness when describing a post-catastrophic situation. In "Silence and Awkwardness in Nuclear Discourse" Antony Rowland sets out to deal with what he identifies as the "central paradox in any discussion of linguistic silence" (153). Here, the contradictory elements are on the one hand the idea that the end of the world cannot be expressed through language, partly because it has not happened yet, and on the other hand the fact that "It is impossible to talk about it *without* using language" (153). It might well the case that this discussion cannot be resolved, yet artist's attempts to find or construct a language suitable to address apocalyptic events can be useful as well as valuable; as Rowland points out, not many critics seem to "perceive that a holocaust might be avoided if writers and theorists anticipate it in texts". Rowland admits that "It is an idealistic viewpoint, but perhaps if the horror of such an event is adequately communicated, readers might be jolted out of an apathetic attitude towards nuclear weapons" (152).

Having addressed the difficulties in expressing a catastrophic event, the issues of depicting a future world without language still remain. The main problem in discussing language disappearance with the genre of post-apocalypse fiction lies in the fact that few examples dealing with this subject can be found. David Crystal expresses this in his keynote speech "Crossing the Great Divide: Language Endangerment and Public Awareness": "For the

last five years I have been trying to find examples of artists who have addressed the issue of language death within their areas of expertise, and I have found next to nothing. I have asked hundreds of artists if they know of anything" (4). However, an in-depth assessment of the genre of post-apocalyptic fiction in search of the examples in question does yield some results, which will be discussed later on. For now, it is important to note that language death as Crystal perceives it stems from a linguistic point of view: "Obviously, a language dies if all the people who speak it are dead" (*Language Death* 70). Due to the 'hard' scientific approach pursued in linguistics, this argument does not leave any room for the idea that language can also disappear when people are in fact still present. This is not entirely impossible, especially seen the possible causes for the death of a language. UNESCO's *Atlas on Endangered Languages* features an overview of reasons for language disappearance, the most relevant here being "The actions of people of a dominant culture that lead to the destruction of the environment, habitat and livelihood of the speakers of local languages"; and "natural catastrophes such as volcanic eruptions, floods, wildfires, new devastating diseases and epidemics resulting from contacts between speaker of local languages and those of a dominant culture, where the former have no resistance to diseases" (n. pag.). As these scenarios are all speculative, it might well be the case that a number of people survive such an ordeal. Moreover, a catastrophic event might have an enormous impact on the language of the survivors; in fact, it could cause spoken language to disappear completely, which leads to a silent community that faces the problem of constructing alternative means of communication.

1.1: Language Disappearance in Literature

In order to investigate the above mentioned scenario and how this is depicted in fiction, examples are needed. After having discussed these works, it will be possible to test the plausibility of the scenarios depicted. As noted, Crystal points out that there are few artists who deal with language death in their works, especially within the literary field. Although language disappearance is a difficult subject to touch upon in literature, there is at least one author who has attempted this task: Octavia E. Butler. In 1984, Butler was awarded the Hugo Award for Best Short Story for her work entitled "Speech Sounds" (1983). The story was first published in *Asimov's Science Fiction Magazine* and was accompanied by a foreword by Asimov himself, who states that

> science fiction is committed neither to marvels nor to disasters. It deals with *possible situations*. It tries to draw a rational and self-consistent society, different from ours, which may be better, even much better, than our society; or worse, even much worse; or better in some respects and worse in others. The point of the story, then, is how people live and react in such societies. (1)

In "Speech Sounds", then, a virus has decimated the earth's population, an event which UNESCO identifies as a possible cause for language death. Moreover, in Butler's story the disease primarily affects people's language abilities, rendering them incapable of communicating in written and/or verbal form. According to Christina Smith, this view of the post-apocalyptic society "highlights the ways in which our complex linguistic system is so intricately tied to our complex societal systems" (45), a notion which directly ties in with the philosophy of ecolinguistics. Following the premise that language is linked to the ecosystem and thus to society (Calvet 9), Smith points out that "'Speech Sounds' shows a society in a moment of suspended collapse - struggling to let go completely of its old referents and accept [the] new, atavistic agrarian order" (46). In other words, Butler depicts the post-apocalyptic

world in its infant phase; the "transition from language-rich social order to anarchy is not yet complete but is in medias res" (45). In this scenario, the effects of the recent collapse of civilisation and consequently the changes in the ecosystem act upon society, and people are "struggling to make sense of these new paradigms" (48). Regarding future language, this transitional phase in which the story takes place is particularly interesting and unique because it gives an account of the situation before language actually disappears, while examples of works depicting a completely silent world are more common.

In any case, the loss of language in "Speech Sounds" has certain implications for society as well as for the ecosystem. First of all, Smith indicates that the inability to speak, read, or write eliminated the past and the future, thereby causing the survivors to be stuck in the "pre-linguistic present" (46). This idea then is exemplified through Rye, the protagonist of the story, who was a teacher before the catastrophe took place. Although Rye has retained the ability to speak, the virus has deprived her of her teaching skills, "Thus Rye, living in solitude with her myriad impotent books, represents the dying world of education, of learning and - importantly - of historical reality" (49). The fact that there exists no record of the past and that there will not be any account of the future leads to a radical collapse of existing systems; as Michelle Green points out, "like the biblical story of the Tower of Babel, Butler indicates that, deprived of the ability to share a primary language, individuals will leave off building their cities and wander into isolation" (176). On top of this, the absence of mass media and electronic devices causes the fall of the capitalist system, and thus a relapse into a feudal society (177). This, then, ties in with Marazzi's idea that "In the post-Fordist context, in which language has become in every respect an instrument of the production of commodities and, therefore, the material condition of our very lives, the loss of the ability to speak, of the 'language capacity,' means the loss of belonging in the world as such, the loss of what 'communifies' the many who constitute the community" (131). Following this, Green states

that "'Speech Sounds' thus tells the tale of an extremely public society forced to 'go private' without any warning" (177).

This, in turn, results in individualism, a tendency to primitivism and survivalism, and consequently leads people to resort to violence, mostly triggered by jealousy directed at the ones who retained their communicative abilities. An example of this is found in the children who Rye encounters when travelling with her new lover Obsidian, who was an LAPD officer before the apocalypse. Obsidian feels it is still his task to enforce the law in the increasingly lawless world; when he encounters an instance of domestic violence he steps in and gets killed, after which Rye kills the man who murdered her lover. The children are scared, and when the girl screams the boy tells her to "Be quiet" (11). Next, Rye asks herself whether "the woman [had] died because she could talk and had taught her children to talk?" or "Had she been killed by a husband's festering anger or by a stranger's jealous rage?" (11). As Smith sees it, "most of the inhabitants of this world … have already surrendered themselves to the consciousness of the animal world" (50). Taking in account this idea, questions arise concerning communication; in spite of lacking language in the human sense, animals nevertheless have been found to possess communication skills, albeit in other forms. Next, it is possible to elaborate upon how the animalistic society sets out to construct new ways of communicating. For this purpose, it is useful to look into theories about sign language and gestures.

First of, it is necessary to distinguish between signs and gestures. In the synopsis of *Gesture, Speech, and Sign* (1999) Zouhair Maalej points out that this is a much debated difference; for instance "Emmorey contrasts signs and gestures" (124), while "Stokoe and Marschark argue that what unites speech, sign, and gesture is more important than what divides them" (125). The former view is described by Adam Kendon as follows:

When 'sign' and 'gesture' are looked upon as distinct categories, 'sign' is regarded as

> something that is 'linguistic'. 'Gesture', on the other hand, is outside language — it is 'paralinguistic' or a part of what is often called 'nonverbal communication'. At the same time, 'gesture' is also often seen as intimately involved in the process by which spoken utterances are produced. (348)

Nevertheless, Kendon also indicates that the latter view argues against this, posing that "if this is so, and if signing is to be looked upon as a way of doing language that is the equal to doing language when speaking — then we should expect signers also to engage in 'gesture'. Yet, it has been asked, how can they do so, given that the medium they must use for their signing is the very same medium that is used for gesturing?" (349). To cut this discussion short,[3] it can be stated that in the case of "Speech Sounds" people have lost their language and do not possess knowledge of sign language, leaving merely gestures available to them. As derived from the quote above, these gestures are normally used in combination with verbal communication and therefore identified as speech-accompanying gestures or S-AGs. Now, when only these S-AGs are left another issue arise: determining to which degree these gestures are meaningful isolated from verbal expression. In Butler's story much confusion arises when people try to express themselves through gesture; already in the first scene on the bus, there is a conflict between two men whose "gestures stopped just short of contact—mock punches, hand games of intimidation to replace lost curses" (2). Next, Rye is very much aware of the delicacy and the risk of the situation, as "She watched the two carefully, knowing the fight would begin when someone's nerve broke or someone's hand slipped or someone came to the end of his limited ability to communicate. These things could happen anytime" (2). In fact, it does not take long before the men resort to violence, thereby causing consternation among the other passengers. Soon, "Three more young men roared in excitement and gestured wildly. Then, somehow, a second dispute broke out between two of these three—probably

[3] For a detailed overview of the debate concerning the division between gesture and sign, as well as a historical overview and an extensive literature list of works dealing with this subject, see Kendon.

because one inadvertently touched or hit the other" (2). Here, Butler shows how easily S-AGs are misunderstood when they are disconnected from the language they used to accompany.

Furthermore, it has been noted that the world in "Speech Sounds" is one in a state of transition, where language is in the process of disappearing. Therefore, the degree of language loss varies per person, which means that some individuals are still capable of verbal communication, while others are forced to express themselves through for example grunting, hissing, and murmuring. As Green points out, this distinction can be identified as the difference between speech sounds and speech, she states that "'Speech Sounds' are not the same thing as 'speech'; they are less determinate. To those accustomed to a delimited sign system, speech sounds are crude and incoherent" (178). On top of this, in phonetics speech sounds are also known as phonemes,[4] the smallest discernible unit in human speech. Following this, it can be said that in Butler's society is increasingly left with merely the building blocks of language, which become more and more useless as survivors' language abilities gradually disappear. There is, however, a spark of hope as the story comes to a close. According to Green,

> Butler's "Speech Sounds" end with Rye contemplating what it will mean to be a teacher to the children–to educate them in the use of a skill that may no longer be of any use, that others will envy enough to murder them. What will she teach them? The value of the old language, or the need for a new mode of communication? The hierarchical difference between "speech" and "speech sounds," or the need for a common language between the verbal and the mute? The story end before such question can be resolved, but it ends on a hopeful note. Rye knows that, speech or no speech, the next generation will never bring back the world as it was. They will have to create instead a new public order, more diffuse in form and more accepting in

[4] "a member of a set of abstract units which together form the sound system of a given language and through which contrasts of meaning are produced" (Colins and Mees 10).

difference than the old. They will have to be different. (178)

Although Green's idea of a language that facilitates the verbal as well as the mute might seem speculative, it actually premeditates a discovery made a decade later.

As a matter of fact, in 2005 Sandler et al. presented a study of a newly found language in an Israeli desert village, known as "The Al-Sayyid Bedouin Sign Language (ABSL), which serves as an alternative language of a community of about 3,500 deaf and hearing people" (Kiderra n. pag.). What makes this find so unique, then, lies in the fact that the researchers found that this language came into existence spontaneously, and was fully developed within one generation of speakers. On top of this, Sandler et al. established that ABSL developed "without any apparent external influence in a stable existing community" (2661).[5] With respect to the post-apocalypse scenario as described in "Speech Sounds", this implies that there is in fact hope for society in reconstructing means of communication and consequently a new language. Accordingly, when asked about the survivability of the human race Butler expresses her optimism regarding this subject: "We probably will have some very hard times ahead, just as we have had some very hard times behind us, but probably we will survive at least as long as we already have. I don't see us as destroying ourselves entirely. Something else will probably have to do that" (Palwick 150). Willard Wells, then, points out that this point of view is realistic, as overall "The probability of humankind's long-term survival is encouragingly high, roughly 70%" (93).[6] Following this, it can be stated that Butler's take on the end-of-the-world scenario is a feasible one, also in terms of language. To return to the study by Sandler et al., their observations illustrate the flexibility as well as the adaptability of the human race. Furthermore, it gives insight in how language develops in an isolated community consisting of speaking as well as mute people, which resembles the situation

[5] For an account of the exact methods used, as well as a complete overview of the results, see the report by Sandler et al.

[6] Although Wells employs a variety of mathematical, statistical, and scientific models he claims that in case of Apocalypse When? "the subject … is a more immediate and practical approach to survivability, a simple analytic model that transcends the quagmire of details" (x). For a complete explanation of this method, see Wells's work.

depicted in “Speech Sounds”. A particularly remarkable aspect of ABSL is the pace with which this language developed; researchers found that within 70 years, or “the space of one generation from its inception, systematic grammatical structure has emerged in the language” (2661). Moreover, deaf members of the community are by no means discriminated against or regarded as being impaired. In fact, hearing members attach great value to a high level of proficiency in ABSL as a second language (2662). In addition, Sandler et al. observed that

> Signers readily use their language to relate information beyond the here and now, such as descriptions of folk remedies and cultural traditions, some of which are no longer in force. We have documented personal histories of deaf members of the community and witnessed conversations about topics as diverse as social security benefits, construction techniques, and fertility. (2662)

When comparing these observations with the situation in Butler’s story, it can be stated that it should be possible to record and convey what is left of the past, thereby ultimately freeing society from being suspended in what Smith calls the “pre-linguistic present” (46). Consequently, this idea contradicts Smith’s claim that Butler suggests that in “Speech Sounds” survivors’ memories are also affected by the virus, “And so any oral history that could be passed along would probably soon be forgotten” (49). The notion that a language can emerge in such a rapid pace, as well as the observation that members of the Al-Sayyid Bedouin group share knowledge of the past and traditions which are now out of practice shows how resilient human beings are, and how this is reflected in how language is constructed, acquired, and developed. Thus, whereas Smith’s concerns can be said to be somewhat unwarranted, while Green’s notion of a future language facilitating both mute and speaking members of the post-apocalyptic community proves to be quite plausible.

1.2: Language Disappearance In Film

Next, even stronger variants of the scenario depicted in "Speech Sounds" can be discerned. However, as established earlier, examples of situations in which spoken language has completely disappeared remain scarce in literature. Visual media such as film, on the other hand, are particularly suitable for portraying wordless narratives. Although the silent film has long lost its popularity since the 'silent era' came to an end in the late 1920s, it is still a very powerful form when used properly. A recent example, for instance, is the short Israeli student film "When It Will Be Silent" (2009) by Dan Sachar. In this film, we see a man wearing a gas mask to protect him from the deadly atmosphere, who painstakingly buries his wife, decides to take of the mask and enters the grave to die beside her. Also, in 2004 a full-length silent post-apocalyptic film entitled *After the Apocalypse*, directed by Yasuaki Nakajima, was released. In this production, Nakajima chose to focus on interpersonal relationships by making extensive use of the actors' body language. Yet, however recent these works are, it has to be noted that they both are reminiscent of Luc Besson's debut film *Le Dernier Combat / The Last Battle* (1983), which will serve as the primary example in the analysis of the completely silent post-apocalyptic scenario.

In her analysis of Besson's work, Susan Hayward places his oeuvre in a postmodern framework. Hayward argues that Besson's films reflect our current postmodern condition, and points out that

> According to Frederic Jameson (1984, 53-94), we are post-everything: post-history, post-colonial, post-modern and so on. Indeed, since the 1950s we have been living in a post-industrial era which has become increasingly one of post-industrial decay. This is the world which Besson so faithfully records in his films as early as *Le Dernier Combat* and right through to *Le Cinquième Element* [a.k.a. *The Fifth Element*] (1997). (305)

Accordingly, this notion ties in with the observation that post-apocalypse fiction became more and more popular from the second half of the twentieth century. As noted, Willard Wells partly attributes this to the fact that since the Second World War people's awareness of the risk of world-threatening disasters has risen exponentially, especially due to the rapid technological innovations and the dangers accompanying these inventions. In *Le Dernièr Combat*, then, Besson depicts the world in a post-catastrophic state where society is post-language; that is, the ability to communicate verbally is completely lost. As Gabor Por points out, "We don't know the details of the cause of this situation, whether it was a nuclear war or other man made menace or a natural disaster" (2), nor is it clear how language has died out. There is, however, one clue as to how this happened, which is found in the scene where the protagonist and his host the doctor take in what seems to be pure oxygen, after which they are able to pronounce the word *bonjour*. This at least implies that after the catastrophe the composition of the air has changed, thereby affecting survivors' vocal chords. Nevertheless, no suggestions are made that a virus like the one in "Speech Sounds" is the reason for this condition.

Furthermore, the totally wordless scenario in *Le Dernièr Combat* can be seen as an extrapolation of the situation depicted by Butler, as the loss of language is much more extreme in the former. Moreover, there seem to be less communicational problems in Besson's film than in Butler's story. The explanation for this is multi-faceted: first of all, "In Luc Besson's future we can barely even speak of society, because not enough people are alive then" (Por 2). However, Por states that

> what *is* there follows a pattern [Besson] saw in the eighties. The group of people who the protagonist first approaches lives in a tribal way that reminded me of corporations. The leader - or CEO - lives in the highest comfort. Everyone else works mostly for his benefit, including all the others - the office workers - who toil to acquire privileges.

> The waterboy – the janitor -, who is permanently closed in the truck of a car, is on the lowest level of the hierarchy serving everyone else. Everybody knows his place on the ladder and nobody challenges the status quo. I think that the director wanted to show us the absurdity of this behavior. (2; emphasis added)

Contrastively, in “Speech Sounds” conflicts abound due to the ongoing transition towards a state of anarchy. Moreover, because of their low number and the established hierarchical order in *Le Dernièr Combat* the survivors have less need for a language than the people in Butler’s story. What is more, Besson depicts the inhabitants of the post-apocalyptic world as nomads, which is illustrated by the protagonist who possesses a flying machine which he uses to cover great distances. Consequently, this nomadic existence poses certain problems, such as overcoming the language barrier. In addition, constructing a universal language would be pointless as it is logistically impossible, let alone attainable in the hostile climate created by the harsh conditions that followed the apocalypse. Moreover, following the ideas of ecolinguistics it can be stated that the changes in the environment have strong implications for the language used to refer to the external world. In the words of Calvet,

> The basic idea is … that the practices which constitute languages, on the one hand, and their environment, on the other, form an *ecolinguistic system*, in which languages multiply, interbreed, vary influence each other mutually, compete or converge. This system is in interrelation with the *environment*. At every moment language is subject to external stimuli to which it adapts. (24)

Consequently, the complete destruction of the ecosystem as depicted in *Le Dernier Combat* implies that language would be greatly affected and possibly even could die out entirely. Moreover, in this approach diversity is seen as a positive factor; just as a higher degree of variation in ecosystems is deemed vital for the survival of the planet, greater linguistic diversity is vital because knowledge about the environment is embedded in language. Thus,

environmental loss is placed in relation with language loss, a fact which can be used to account for the silent communities found in the works discussed.

In conclusion, it can be stated that the idea that language will disappear after the apocalypse is not implausible. However, to what extent the post-apocalyptic world will be silent is highly dependant on the cause and the force of impact of the catastrophe, which determines the number of survivors as well as their communicative abilities. It is hard to say where the threshold lies, especially seen that humankind has proven to be resilient and adaptable when confronted with changes in language situations. The aforementioned example of the Al-Sayyid Bedouin Sign Language illustrates this idea, yet it can be said that in scenarios where the damage is higher and therefore has led to more extreme living conditions a totally silent world is not unthinkable. On top of this, following the ecolinguistic perspective implies a congruence between deterioration of language and the ecosystem, which makes this particular language scenario all the more plausible. To end on positive note, it is worth emphasising humanity's flexibility as well as people's remarkable desire to communicate and express themselves, a phenomenon which brings hope for the future of language no matter how extreme the conditions.

Scenario 2: Local Language

> The Littl Man sed, Easu wut is the idear uv yu? Eusa cudn say enne thing.
>
> The Littl Man sed, Yo doan hav to say wut it is. Just say *if* it is.
>
> Eusa still cudn say anything.
>
> (Russell Hoban, *Riddley Walker*; 35)

The lines above are representative for Hoban's writing style throughout *Riddley Walker* (1980), which is written completely in an –partly– invented dialect, thereby directly relating to the concept of conlanging as described earlier. Nevertheless, Hoban's constructed language is not easily defined along the lines of the categorisation proposed by for instance Emrys et al., which has led to ongoing debates and thus to different views regarding its classification. To illustrate, Nancy Taylor indicates that "Hoban's language is fascinating, and undoubtedly it will continue to interest the critics" (28). Before going into this discussion in depth, some basic assumptions can be made about the language used in the novel. First of all, several critics have used the term *Riddleyspeak* to refer to the dialect spoken by the inhabitants of Hoban's post-apocalyptic world. Furthermore, in conlanging Riddleyspeak falls into the class of "*a posteriori* languages", as it is "based on an existing language or languages" (Emrys et al. 3). Additionally, these languages are often "set in an alternative history", and thus serve to explore hypothetical scenarios as found in speculative fiction (3). Sometimes, this form of constructed language is referred to as an *altlang*, which is short for *alternative history language*. Following this, Hoban's Riddleyspeak can be seen as the result of an attempt aimed at extrapolating an existing language into the future. The novel thus confronts the reader with an account of how language will look like more than two thousand years after a nuclear fallout, a scarcely addressed topic in post-apocalypse fiction. What is more, the fact that

Riddleyspeak holds characteristics of a dialect implies that in *Riddley Walker* language has transformed into a localised form, which stands in contrast to the more universalised versions of language found on the other side of the spectre of post-apocalyptic future language. Moreover, the former variant is also described as a devolved version of an existing language, while the latter is mostly seen as a evolved variant.

In order to perform an analysis of Hoban's depiction of a future language and subsequently the plausibility of Riddleyspeak, it is first of all necessary to look into the different interpretations of the language in the novel. Next, it might prove beneficial to determine how *Riddley Walker* compares to works in which similar attempts at language extrapolation have been made. In this case, the examples which will be used are David Mitchell's *Cloud Atlas* (2005), and the film *Mad Max Beyond Thunderdome* (Miller and Ogilvie; 1985). Furthermore, for the purpose of analysing the feasibility of future languages Peter Stockwell's theory of chronolinguistics is particularly relevant, as are other approaches to linguistic extrapolation which will be used to complement the former. Finally, the field of ecolinguistics contains notions useful in undertaking the aforementioned analysis; as will become clear, the theories formulated by Mark Fettes are especially applicable in discussing the works mentioned.

2.1: *Riddley Walker*

It is not surprising that from the moment *Riddley Walker* was published the language in the novel received considerable attention, for it is one of the most striking features of the work. As Taylor notes in her 1989 article, "Riddley writes down his experiences … in a broken language, for like books, 'culture', and even mankind, language was almost destroyed during Bad Time" (28). This "Bad Time" is a term used by the characters in the novel to refer to the period after the fall of civilisation, which was caused by nuclear disaster. The story, then, takes place in "in England in the year '2347 o. c. which means Our Count'" (Taylor 27; *Riddley Walker* 125). In terms of setting and story, however, Taylor indicates that "Hoban's carefully created language has drawn almost more critical interest than have the novel's plot and characters" (28). This, in turn, is reflected by the critical discussion of Hoban's novel, which mainly focuses on analysing Riddleyspeak. One of the most thorough accounts of this practice is R. D. Mullen's "Dialect, Grapholect, and Story: Russell Hoban's *Riddley Walker* as Science Fiction", in which the author provides an in-depth linguistic analysis of the dialect used in the story. First of all, Mullen defines the impetus for his article as follows: "With respect to the language, the sf critic would not be satisfied simply with finding it an artistic success, but would want to know how systematic it is in its deviations from standard and nonstandard present-day usage in writing and speech" (391). The core idea of the article, then, is concisely described in the abstract: "This article examines the constructed language ('grapholect') in which Riddley writes, using linguistic analysis to suggest that the extrapolation of language in the novel betrays many inconsistencies" (417). Mullen shows that there are different views on this topic, and indicates that while I. F. Clarke praises the work as well as the language, "Norman Spinrad disagrees on both the value of the book and the quality of the language" (391-392). Spinrad, in turn, argues that

Hoban's transmuted and degenerated English is an entirely arbitrary creation in which

> words are broken into fragments and put back together again for low comic effect, in which the same phoneme may have several alternative spellings, and that all too often comes off like a baggy-pants American comedian rendering British dialects (Hoban is an American residing in Britain). (38, qtd. in Mullen 392)

Next, Mullen situates his view "somewhere between Clarke and Spinrad" (392). Nevertheless, in his reaction to the article Kenneth Andrews points out that Mullen quotes and follows Lake's point of view, who states that "Hoban has not really attempted to create a future English" (406; Mullen 391). In order to prove this point Mullen sets out to deconstruct Riddleyspeak, thereby ultimately backing his argument that "Riddley's language is a future English in only one respect, the folk etymologies. There is nothing in its phonology or in its morphology (with one important exception, the past forms of weak verbs) that cannot be found in one or another dialect of present-day English" (392).

Then, to determine the plausibility of the dialect used in *Riddley Walker* Mullen first distinguishes three versions of written English in the novel: "the 1980 spelling of *The Legend of St Eustace* (123-24) … the 'old spel' of *The Eusa Story*, and … Riddley's own spelling" (392-393). Next, Mullen concludes that "When we compare the respelled words of the old spel with their equivalents in the new spel, what must intrigue us most is the number of instances in which new spel has restored the spellings of 1980" (393). Following this, Mullen already identifies some inconsistencies, as words inherent to one spelling also occur in other spellings. The explanation for this is twofold: first, errors may have slipped through the editing process; "Second, author and publisher, either or both, may have pondered the convenience of the reader and decided or decreed that a certain proportion of familiar spellings be allowed" (394). David Sisk, however, argues against this by stating that "It is a necessity, not a convenience, to keep the reader in mind when constructing a fictive futuristic language" (410). Moreover, how well a conlang works cannot be determined along the lines

of linguistic theory; rather, one has to examine to what extent it is perceived as realistic (410). Nevertheless, Mullen's extensive linguistic analysis does provide some interesting notions, especially in terms of phonology and orthography. In short, by thoroughly breaking down the dialect, as well as charting all of its features, several inconsistencies in Riddleyspeak are exposed in this in-depth investigation, both on a phonological and a orthographic level. One example is that "The sequence *qu* appears always as *qw*", an illogical phenomenon as speakers of this dialect do identify the sound /w/, yet they do not discern that the other sound is /k/, which would logically lead to omitting *q* from their character set and to writing *kw*, or *cw* as found in Old English (397).[7] Following the inconsistencies found in the analysis, Mullen draws the conclusion that "If we judge a novel by the extent to which it fascinates and moves on a first reading, then *Riddley Walker* is a very good book indeed. But in an sf novel we, some of us at least, expect a reasonably consistent intellectual construct. On this basis, *Riddley Walker* fails, though hardly as thoroughly as Norman Spinrad claims" (406). Thus, for Mullen Hoban's invented language is too inconsistent to be plausible. There are, however, counter-arguments to this statement, which are published in addition to the article under the title "Ten Years After: Four Responses to R. D. Mullen". Apart from reacting on Mullen's claims, the comments by linguists contain a couple of ideas worth elaborating upon.

To begin, Andrews comments on Mullen and Lake's statement that Hoban has not tried to invent a "future English" by indicating that after almost three millennia –with or without disasters– the evolution of language would render standard English completely incomprehensible to present-day speakers (406). Thus, for Andrews it would be pointless to create a language this far into the future. To illustrate this point Andrews uses *Beowulf* (around 750 A.D.) as an example, as without specific knowledge the original text is practically indecipherable for modern readers (407). Moreover, this principle occurs in

[7] For a complete deconstruction of the phonology and orthography of Riddleyspeak, as well as a detailed breakdown of the dialect, see to the corresponding sections in Mullen's article.

Riddley Walker in the passage where Goodparley shows Riddley *The Legend of St. Eustace*, a text from earlier times which both men are unable to understand because it is written in Standard English (407). Nevertheless, despite the aforementioned argument Andrews also indicates that "Mullen quotes Clarke, who notes that 'every word adds to the impression of social degradation and vernacular corruption'". Moreover, it is stated that "Those statements correctly point to Hoban's *creative purposes*" (407; emphasis added). This implies that according to Emrys's classification Riddleyspeak should be categorised as an artlang rather than an engelang, which has certain implications on how it should be treated from a critical perspective. Firstly, Mullen treats *Riddley Walker* as a work of science fiction, and consequently approaches the language from a scientific point of view rather than focusing on its creative worth and workings. Already, Hoban resists the idea that his novel is hard science fiction in the interview by Myers by revealing that he deliberately did not look into linguistic or philological theories: "Just as in *Kleinzeit*: early on, I decided that I wasn't going to do medical research and find out symptoms and proper names for things; I'd just wing it. I thought, Here, I'll just rely on my ear. Otherwise I could have stalled endlessly on the research" (14). Following the latter point of view, Riddleyspeak should be judged on how well it fulfils Hoban's creative purposes by assessing how the language contributes to the reading experience. In order to elaborate upon this idea, ecolinguistics provides useful ideas. Also, it fits the proposed approach as it bases itself on conceptual rather than scientific grounds.

Strikingly, Hoban already touches upon the relation between language and the environment in the Myers interview; when asked how Riddleyspeak came into existence the author answers the following:

> I started writing it in straight English, and it just began to drift. The characters began to say words that didn't exist in English, and their English began to drift into a

> vernacular. Then I saw that what was really happening was the real linguistic process that does happen. Speech always encapsulates a place and a time and a world-view. And their speech would naturally do the same. They wouldn't be talking BBC English. (n. pag.)

Here, by referring to the relation between language and world-view Hoban enters the field of ecolinguistics. With respect to *Riddley Walker*, Mark Fettes's ideas concerning linguistic ecology are particularly relevant. First of all, Fettes distinguishes between primary and secondary discursive rules, of which the former "enables us to tell stories about the world we know from experience" (n. pag.). Subsequently, "the words and word-use rules produced in this way are then available to be strung together into more complex and abstract stories about the world outside our experience (including past and future)", which in turn constitutes secondary discourse (n. pag.). Next, the relationship between these two forms of discourse is delicate and is easily influenced by oppressing languages. Standardisation of language, for instance, authoritatively imposes universal truths upon society, which leads to static secondary discursive rules. Consequently, this "reduces the scope of primary discourse in a society to a minimum" (n. pag.). To illustrate, Fettes notes that "it does not seem accidental that the philosophical foundations of modernity … were laid at the very time that standard language was beginning to replace the vernaculars among the educated classes of Western Europe" (n. pag.).

Accordingly, As Andrews points out, the society in *Riddley Walker* faces a similar situation, as in the end "it seems that population growth, the re-emergence of the scientific method, and the re-discovery (or re-emergence) of gunpowder may put Riddley's society on the same path that mankind traveled once before" (408). Following this, it can be stated that the people in Hoban's story are constantly in the process of negotiating primary and secondary discourse. Moreover, this is precisely what drives Riddley to leave his tribe and set

out on his journey: “He wants to create his own ‘tels’ and ‘connexions’ but quickly discovers that the Mincery –the ruling government– expects him to follow party lines in his interpretation of the old stories and myths handed down by word of mouth since Bad Time” (Taylor 27). Thus, here, the protagonist is reluctant to accept the dictates imposed upon secondary discourse by the Mincery. Moreover, the fact that he uses Riddleyspeak to record his experiences ties in with the notion that “The local language has to be used to meet its speakers’ need for concepts and stories that make sense of the world *in their terms*” (Fettes n. pag.; emphasis in original). Riddley’s account of his journey is a clear example of such a story, and thus contributes to the tribe’s collective local knowledge.

What is more, from an ecolinguistic point of view Hoban’s choice to write in dialect is all the more realistic, as Fettes indicates that “arguments for the importance of local, community-based knowledge can be linked to the reintroduction of specific indigenous words for local realities; or the authority of non-indigenous sources can be undermined by ‘translating’ their impersonal and monolithic discourses into more human and concrete terms in the local language” (n. pag.). In the words of Timothy Bugler, “Languages adapt to the needs of their speakers; the abandonment or re-interpretation of technical vocabulary in Riddley’s speech indicates not that his language is inferior but that his society is different from ours” (416). As a matter of fact, both mechanisms can be seen at work in the novel. To react on Bugler, Mullen already points out that Riddleyspeak vocabulary is imbued with “computerese” (401), technical words which are remainders of past times when society’s technological development was peaking. Examples are “Puter Leat”, used to refer to the people who lived before the Bad Times known as the “Computer Elite”; “pirntowt”, meaning “printout”; and the “Power Ring”, which is the name for the nuclear reactor built before the fall. To relate to Andrews’s statement: if we take the inhabitants of the world in the story as the indigenous population, and the Puter Leat as the “non-indigenous sources”, then these

words are translations of words imposed by the latter. Similarly, the reappearance of “specific indigenous words” can also be discerned, for local expressions and idioms are found Riddleyspeak. “Blob’s your nunkel”, for instance, is derived from “Bob’s you’re uncle”, Cockney slang used to indicate that “Everything is perfect”. “Blob”, in turn, relates to the mutants found in the post-nuclear world. (*Riddley Walker* “Glossary” 233). Likewise, “Wotcher” is taken from the Cockney phrase “What cheer?” (235). Thus, words indigenous to the land are being recycled by the local natives to refer to the environment they live in, which ties in with ecolinguistic theories.

Next, another argument in favour of the plausibility of Riddleyspeak as a local dialect can be found in Peter Stockwell’s article on chronolinguistics, in which the author aims “to establish the first principles of the study of future language possibilities” (55). According to Stockwell, “[in] *Riddley Walker*, catastrophic social disjunction corresponds with radical linguistic change” (62). This notion, then, is reflected in the use of dialect in the novel. Stockwell argues that within the context of the story the simplified language suggests “a simple-minded perception” (62), which ties in with Will Self’s observation that the phonetic spelling decelerates reading speed, thereby bringing the reader down to the same pace of understanding as the characters (*Riddley Walker* viii). Furthermore, the names of locations in future Kent contribute to the depiction of an oral culture. To exemplify, Dover becomes “Do It Over”, Sandwich is now “Sams Itch”, and Faversham transformed into “Fathers Ham” (Stockwell 62). Moreover, “these forms … reflect current stigmatised pronunciations, towards the current local vernacular, but extrapolated further” (62). To back this statement Stockwell points to the analysis by Schwetman, who “points out further historical changes such as the simplification of voiced dental /d/ to a general unvoiced /t/ to indicate past tense (‘kilt’, ‘ternt’, ‘clattert’)” (62). In addition, Riddleyspeak invokes the feel of English used in the Middle Ages, which complies with the state of civilisation in the world depicted (63).

Following these arguments, it can be stated that the language scenario in *Riddley Walker* might not be so implausible as Mullen argues. The linguistic analysis of the dialect, on the other hand, helps in identifying more characteristics of Kentish present in Riddleyspeak.

As a matter of fact, there are various arguments against Mullen's claim concerning inconsistencies in Hoban's invented language. Andrews, for example, states that with his research Mullen not only exposes discrepancies but also "establishes Hoban's linguistic consistencies" (408). On top of this, Deborah Ruuskanen counters the argument that the inconsistencies can be attributed to insufficient editing by stating that "variant spellings are nothing new, and a given letter-writer might very well use different variants in different-sometimes even within the same-letters" (409). Moreover, Ruuskanen agrees with the statement that Riddleyspeak should be approached as a creative product rather than a scientific construct, which she backs by indicating that Mullen focus is too much on the language and too little on the story (409). In fact, when the work is regarded as a whole, the invented language works well in "creat[ing] an impression of a futuristic, primitive society, in which very few people can read or write" (409). Thus, to summarise and conclude: it can be stated that despite the large amount of time which has passed in the story –which should have led to an unrecognisable form of English– and in spite of the supposed inconsistencies, Hoban's artlang is not that implausible at all. Furthermore, it has been established that the choice to write the work completely in a devolved Kentish dialect is justified in various ways, and is especially feasible from an ecolinguistic and chronolinguistic point of view.

2.2: *Cloud Atlas*

In addition to the critical attention *Riddley Walker* has received over time, the novel has inspired various artists to invent a future language. The most obvious example in this case is David Mitchell, author of *Cloud Atlas* (2005), who acknowledges his indebtedness to Hoban for the language used in the novel's central story entitled "Sloosha's Crossin' an' Ev'rythin' After". Set on post-apocalypse Hawaii, this section revolves around protagonist Zachry, who speaks in "a dialect that was the result of decades of linguistic continental drift and was studded with onomatopoeia and puns" (Mitchell, "The Book of Revelations" n. pag.). With regards to *Riddley Walker*, Mitchell indicates that "Zachry's voice is less hard-core and more Pacific than Riddleyspeak, but Mr Hoban's singular, visionary, ingenious, uncompromising, glorious, angelic and demonic novel sat on my shelf as evidence that what I wanted to do could be done, and as encouragement to keep going until I'd got it right" (n. pag.).

Written twenty-five years after Hoban's work, one would expect that in terms of plausibility Mitchell has tried to avoid the pitfalls identified by Mullen et al. To begin with, the amount of time passed since the fall is not given in "Sloosha's Crossin'", thereby avoiding Andrews's argument that language would be unrecognisable after three millennia, as is the case with Riddleyspeak. Moreover, Sandrine Sorlin indicates that "In 'Sloosha', language is not conceptual: it is a language 'in the making', describing things as they occur without any prior structuring (82). In other words, "It is in the state it is in because of the circumstances" (86). This, then, ties in the ecological metaphor employed in ecolinguistics, where language is seen as being inextricably related to the ecosystem. On "Big I", or "Ha-Why", the environment underwent drastic changes since the fall, which as a result transformed the landscape into a primitive and rural landscape void of technology. The language, however, is still imbued with words reminiscent of past time inventions of which the current inhabitants try to understand the meaning (77). Here, as in *Riddley Walker*, the translation mechanism as

defined by Fettes can be seen at work again. To illustrate, "a *tel'scope* is … defined as 'the furthest seeing eye'" (77), which relates to translating non-indigenous words into "more human and concrete terms in the local language" (Fettes n. pag.). The opposite mechanism, on the other hand, is also present in "Sloosha's Crossin'". As Sorlin shows, several indigenous words have re-entered the language. Taking into account the rural character of the environment, various terms related to nature are found in the dialect used by the population. According to Sorlin, "Nature proves to be a rich linguistic source for the survivors in their description of human movements, for instance: 'hawkeyeing me', 'to spider up the crumbly ridge'" (78). From an ecolinguistic point of view this observation is plausible, as it can be attributed to the fact that the inhabitants of Ha-Why are not confronted with an oppressing language which restricts their secondary discourse, and therefore are able to freely develop their primary discourse. Moreover, while Riddley believes that the key to unveiling knowledge about the technologically advanced past is rooted in language, for Zach'ry "Language does not exhaust itself in one fixed meaning: like the people, it has become nomadic, refusing to settle itself anywhere" (87).

Following this, it can be stated that Mitchell's view on the post-apocalyptic society is somewhat more positive than Hoban's; whereas the people of future Kent are practically doomed to make the same mistakes as their forbears, the prospects for the inhabitants of Ha-Why are more hopeful due to the fact that their "Language has been set free" (87). To conclude, in terms of plausibility Mitchell's artlang is especially feasible from an ecolinguistic perspective, which is exemplified mainly by the resurgence of nature terminology which is in concordance with the ecosystem. However, since no in-depth linguistic analysis of the Hawaiian dialect has been carried out thus far it is difficult to make assumptions concerning the plausibility of its phonology and orthography (cf. R. D. Mullen). Nevertheless, as with

Riddley Walker, “It can … be said that this finely-worked language does not merely mirror the story it narrates, it gives shape to it, it makes it possible” (Sorlin 75).

2.3: *Mad Max Beyond Thunderdome*

Last of all, Hoban’s novel also influenced popular culture, which will be illustrated by discussing the film *Mad Max Beyond Thunderdome* (1985). To expose parallels between these two works, it is first of all beneficial to identify instances in the film where direct references to the novel occur. To begin, Eli Bishop points out that Max visits a tribe of children living outside Bartertown who are waiting for their saviour called “Captain Walker”. Furthermore, the “Aunty Entity” character played by Tina Turner is the ruler of Bartertown, and has the power to decide who lives and who dies. Strikingly, the “Aunty” in Riddley’s world is associated with death, and having intercourse with her is a metaphor for being taken by death: “Every body knows Aunty. Stoan boans and iron tits and teef be twean her legs plus she has a iron willy for the ladys it gets red hot. When your time comes you have to do the juicy with her like it or not” (*Riddley Walker* 90). In addition, Aunty Entity uses pig manure to power Bartertown, which in Riddley’s world is used “to get ammonia and nitrates such as saltpeter” (“*Riddley Walker* Annotations” n. pag.). Following these examples, it can be stated that George Miller’s film contains several allusions to Hoban’s novel.

What is more, the children Max encounters speak in a devolved form of English that is based mainly on slang. The result is a language reminiscent of Riddleyspeak; full of contractions and deteriorated grammar. The following example is taken from the scene where the tribe’s leader Savannah is about to tell Max a story: “We got it mouth-to-mouth. You got to listen it and ’member. ’Cause what you hears today you got to tell the birthed tomorrow”. This in turn links to *Riddley Walker*, for the story told to Max is known as “The Tell”.

Similarly, in Riddley's community Lorna Elswint fulfils the position of "tel woman" (Bugler 415). Furthermore, both groups rely on oral storytelling for their knowledge; at the end of *Mad Max* Savannah explains that

> Still, in all, every night we does the Tell, so that we 'member who we was, and where we came from. But most of all, we 'members the man who finded us, him that came the salvage. And we lights the city, not just for him, but for all of them that are still out there, 'cuz we knows, there'll come a night when they sees the distant light, and they'll be comin' home.

To return to the plausibility of the language used by the children, Natalie Maynor's article features an interesting explanation which is applicable to both works. Maynor argues that Riddleyspeak in many aspects resembles child language, and identifies six out of seven phonological processes inherent to child language acquisition in the novel, which nearly all lead to contractions and simplifications. Also, grammatical deviations can be explained along the same lines, as children go through an experimental phase in "mastering sentence construction" (21). Taking in account these statements, it might well be the case that when devoid of constant education both the feral children in Miller's film and the inhabitants of future Kent might never pass this phase in language acquisition. In this light, it can be concluded that the artlangs used here are, at least in this respect, plausible.

Scenario 3: Universal Language

Instead of disappearing completely or taking on a more local form, language might also become universalised in the future. This scenario is perhaps the easiest to imagine, as this process is already discernible in our present-day society. Recent phenomena such as ongoing globalisation and continuous technological innovations facilitating the ever growing information flow accelerate the process of language standardisation, with far-reaching consequences for the ecology of languages. As David Crystal indicates, "of the 6,000 or so languages in the world, it seems probable that about half of these will disappear in the course of the present century" (*The Language Revolution* 2004; 47). From an ecolinguistic point of view this is an alarming observation because linguistic diversity is a prerequisite for a healthy language ecology, just as biological diversity is key to the survival of a given ecosystem. Consequently, when an oppressing language is introduced in a certain area this has disastrous results for the existing languages. It has to be noted that for the purpose of the analysis which is to follow the emphasis will be on English as a world language, as well as on other dominant languages that might influence it, yet this is not the only language affecting linguistic diversity. Crystal, for instance, states that "in South America or in many parts of Asia … languages such as Spanish, Portugese, Russian, Arabic and Chinese have replaced local languages" (49).

This process, then, can be traced in works of fiction as well. It will become clear that the genre of speculative fiction is especially relevant in this case, as it facilitates an analysis of the topic of language change throughout history. Furthermore, additional factors influencing the process of language domination that have to be taken into account can be identified in these works as well. In order to elaborate upon this topic, a number of works dealing with this topic will be touched upon, with the purpose of illustrating how standardisation of language

might take place as well as assessing to what degree the scenarios depicted in the works haven proven to be accurate or –as is the case with more recent works– how plausible these predictions are. For the first part the analysis, which will touch upon language globalisation throughout the twentieth century, classic works such as H.G. Wells's *The Last War* (2001 [1914]; originally published as *The World Set Free: A Story of Mankind*) and *The Shape of Things to Come* (1933), George Orwell's *Nineteen Eighty-Four* (1949), and *A Clockwork Orange* (1962) by Anthony Burgess will be used. Furthermore, to see how this topic is dealt with by contemporary authors, the works of William Gibson, as well as David Mitchell's *Cloud Atlas* (2004), will serve as examples. Although not all of the works mentioned directly qualify as post-apocalyptic fiction, it has to be noted that they all contain a dystopian element, which in most cases shows overlap with the former genre. The reason for choosing these works lies in the fact that in the classic end-of-the-world scenario society's numbers are that diminished that the emergence of a universalised language would be impossible (cf. "Chapter 1 – Language Disappearance"). Moreover, the works mentioned all feature an apocalyptic event of some kind, mostly in the form of a World War, which in turn has led to a totalitarian regime. The situations depicted, then, are extrapolated into the far future and provide an insight in the state of civilisation after a global war, which is either dystopian or resolved by suggesting a solution in the form of a utopian society. On top of this, Stockwell indicates that "Utopias and dystopias are the typical forms of architextual science fiction [which feature elaborately designed worlds], and it is in these settings that science fictional extrapolation of alternative linguistic systems is most commonly found" ("Futuretalk" 61). Furthermore, in order to study the plausibility of the conlangs used it is beneficial to look into existing universal languages such as Esperanto and Basic English. In the categorisation proposed by Emrys et al. these languages are referred to as auxiliary languages, or auxlangs, which are designed to "serve as a neutral bridge between speakers of different languages" (2). Finally,

theories of ecolinguistics, chronolinguistics, and language change can aid in assessing the plausibility of invented universalised languages.

3.1: Basic English

To begin with a chronological approach to universal languages in dystopian and (post-)apocalyptic fiction, H.G. Wells is the first author to be discussed. Often associated with visionary ideas, Sylvia Hardy points out that Wells touched upon language change as early as 1899, when "A Story of Days to Come" was published (199). Furthermore, with *The Last War* Wells already foreshadows C.K. Ogden's auxlang Basic English, which later on is elaborated upon in *The Shape of Things to Come*.[8] Hardy indicates that "In both books English is adopted as the common language by re-emergent civilizations" (206). Moreover, the catastrophic event in both works is a World War, and is respectively fought with nuclear weapons and chemical weapons.[9] In fact, in *The Last War* the use of atomic bombs leads to a truly post-apocalyptic situation, which is described by referring to the writings of the fictional author Frederick Barnes:

> He gives a series of vignettes of civilisation, shattered, it seemed, almost irreparably. He found the Belgian hills swarming with refugees and desolated by cholera; the vestiges of the contending armies keeping order under a truce, without actual battles, but with the cautious hostility of habit, and a great absence of plan everywhere. Overhead aeroplanes went on mysterious errands, and there were rumours of cannibalism and hysterical fanaticisms in the valleys of the Semoy and the forest

---

[8] Hardy points out that during the 1920's and 1930s Wells corresponded with Ogden about Basic English (409). For a detailed overview of Basic English, please consult Ogden's *Basic English: A General Introduction with Rules and Grammar (1930)*, full text available both in print form and online.

[9] Strikingly, Leó Szilárd, the physicist to whom the idea of a nuclear chain reaction is accredited, read The Last War in 1932, the year when the neutron was discovered.

> region of the eastern Ardennes. There was the report of an attack upon Russia by the Chinese and Japanese, and of some huge revolutionary outbreak in America. (77)

Next, in order to end the war "the chief Powers of the world were to meet [in Brissago] in a last desperate conference to 'save humanity'" (78). After this, the state of affairs after the global war is described, which is then followed by an account of civilisation rebuilding itself with the ultimate goal of creating a utopian society. For Wells, the standardisation of language is a means to help create this utopia, which in hindsight proves to be a rather idealistic point of view. Also, the language proposed is described rather than constructed; Hardy states that in *The Last War* the Brissago Council –whose goal is to institute a global government– chooses to employ a simplified version of English as the universal language (206). According to the book, the reason for this particular "*lingua franca* for the world" lies in the fact that it was the most convenient option: the Council "seem[s] to have given little attention to the various theoretical universal languages which were proposed to them. They wished to give as little trouble to hasty and simple people as possible, and the world-wide distribution of English gave them a bias for it from the beginning. The extreme simplicity of its grammar was also in its favour" (126). Seen the fact that the government want to act as quickly as possible, it can be said the choice to use English as the basis for a universal language is more plausible than to instate a completely new language.

Moreover, Wells remained interested in Basic English and touches upon it in greater detail in *The Shape of Things to Come*, which features an entire chapter devoted to it under the title "Language and Mental Growth". Again, the guiding principles of the language are explained yet no conlang is actually devised. Also, the author's idealistic point of view can be discerned, as it suggested that "No deliberate attempt was made to establish it as the world language. It had many natural advantages over its chief competitors, Spanish, French, Russian, German and Italian. It was simpler, subtler, more flexible and already more widely

spoken, but it was certainly the use of Basic English which gave it its final victory over these rivals" (431). Objections against this idea are, for instance, that this scenario could not take place without being enforced by an oppressing power. In the book, the Language Bureau is appointed with the task of installing Basic English as "a truly universal language" (433). Wells refutes the negative connotations associated with this system, as the people in control of this organisation are extremely intelligent, devoted, and professional. Also, ongoing evolution has led to enhanced cognitive abilities throughout the entire civilisation (Hardy 208).[10]

Following this, it can be stated that Wells's his optimistic stance towards a global language is reflected in the utopian character of his works. Thus, in this case, the power of language is seen as a positive phenomenon which helps in achieving the ultimate goal of establishing a highly organised, well-developed, and very intelligent civilisation with a collective consciousness. However, despite the aforementioned arguments, Hardy points out that the way in which language is used by the government in *The Shape of Things to Come* is often associated with totalitarian regimes as found in for example Orwell's *Nineteen Eighty-Four* (207), which will be discussed in the next section. Now, certain assumptions will be made concerning the plausibility of the scenario depicted by Wells. First of all, Stockwell states that when extrapolating language change, "The greatest accuracy, then, is likely to be in the medium term: defined here as the period of the future between 20 and 100 years" ("Futuretalk" 57). Taking in account that in 1936 Wells provides an account of humankind's history up until 2105, the prediction extends almost 170 years in the future and is therefore inaccurate. In addition, it was virtually impossible to anticipate the technological innovations which were to occur during the course of history. According to David Graddol, this and other factors have changed the belief that "English will become the world language to the exclusion

---

[10] As Hardy indicates, it has to be noted that "Towards the end of his life Wells acknowledged that since language would always resist any attempts to control it, none of the 'auxiliary' languages, including Basic, were acceptable: 'It is quite conceivable that the happy and united world which may be possible ahead of us, will never have one universal speech at all' (1944: 142)" (208)

of all others" (1330). Instead, data suggests that future generations will be proficient in two or more languages. Currently, English is still spreading and thus seen as the dominant second language. However, due to recent developments Graddol indicates that "in the next decade, the new 'must-learn' language is likely to be Mandarin" (1330). In this light, Wells's predictions indeed prove to be inaccurate.

3.2: Newspeak

Orwell, in contrast to Wells, presents the reader with a cautionary tale about universal language. As a dystopian rather than a utopian work, *Nineteen Eighty-Four* shows how language can be used as an instrument of oppression instead of as a liberating force. The story is set in Airstrip One, part of the state of Oceania, and revolves around protagonist Winston Smith, who works for the Ministry of Truth. Meanwhile, Oceania is continuously at war with Eurasia and Eastasia, the two other states that remained after a global nuclear war. Moreover, the government has instated a totalitarian regime, under which freedom of thought is suppressed. The conlang designed for this purpose is Newspeak, devised by the ruling political party Ingsoc. In the appendix to the book, Orwell explains that "The purpose of Newspeak was not only to provide a medium of expression for the world-view and mental habits proper to the devotees of Ingsoc, but to make all other modes of thought impossible" (312). This directly links to idea of linguistic relativity, which is based on the premise that language and thought are connected. In order to achieve their goal, then, the Party strives to "[purge] all ambiguities and shapes of meaning" from Oldspeak –1949 standard English– and drastically simplify its syntax (314).[11] Due to the fact that Newspeak is based on an existing language it is categorised as an a posteriori language. Moreover, the unambiguous character

[11] The exact principles of Newspeak are described by Orwell in the Appendix to Nineteen Eighty-Four.

of this conlang implies that is it a loglang rather than an artlang. However, considering the creative elements in Newspeak, as well as the artistic context, it might be best classified as an engelang, in which features of different types of conlangs may overlap (Emrys et al. 2). Additionally, in terms of plausibility Newspeak falls within the zone of twenty to a hundred years extrapolation (cf. Stockwell), seen that the story was written in 1948 and takes place in 1984.

In any case, in the novel the language is meant to restrict free thought and impose the ideals of the Party upon society, thereby eradicating all other forms of discourse and mental concepts outside the political system. In 1984, protagonist Winston witnesses the installation of the oppressive language dictated by the Government. Syme, the character in charge of this operation, states that "The Revolution will be complete when the language is perfect. Newspeak is Ingsoc and Ingsoc is Newspeak" (55). Thus, society is at this moment in a transitional phase; Newspeak has yet to replace Oldspeak. Syme predicts that this process will be completed by 2050, when the Eleventh Edition of the Dictionary will be released, which "won't contain a single word that will become obsolete before the year 2050" (54). However, as long as this transition is in progress certain problems arise. As Chilton indicates, at this point in the story the two languages are seen as separate systems. The peculiar thing is that while it is possible to translate Oldspeak into Newspeak, the opposite is practically impossible as numerous concepts inherent to the former are erased in the latter (131-132). Moreover, Newspeak is not spoken and understood by the lower-class proles, nor does the Party expect them to. This implies that "Newspeak is the language of a bureaucratic elite", who thus are "the dominant social stratum containing the bilingual individuals" (134). With regards to the lower-class citizens, then, Syme simply states that "The proles are not human beings", and will in the future be rendered obsolete along with Oldspeak (Orwell 56). Again, the totalitarian character of the regime is emphasised, as well as how power is exerted through the

use of an oppressing language.

Next, in order to determine the plausibility of the scenario depicted in the novel it is necessary to see how it relates to situations found in the real world. Alex McGuinnis, for example, discerns the principle of allness thinking in *Nineteen Eighty-Four*. The term comes from an article by Charles G. Russell, who defines it as "Simply thinking and talking about the public without the linguistic reminders to designate some limits on a group of people as large and diverse as a total population" (35). Next, Russell shows how allness thinking is used by the media and government policy makers, and how this leads to generalisations; thinking for the masses will always result in the exclusion of minority groups (36). The government of Oceania, however, is not concerned with these groups, let alone interested in personal opinions. Due to the fact that allness thinking delimits individual views, the Party bases Newspeak on this principle (McGuinnis 109). To illustrate, the goal of establishing a collective and unified view through strict censorship of language stands in contrast to Russell's solution to the problem of allness thinking, as he points out that "Linguistic limits included with claims about people, places, and events can contribute to more accurate and responsible claims" (37). In Newspeak, the opposite applies: "*goodsex*", for example, refers to heterosexual intercourse, which is the only permitted form of sexual activity while "all else was *sexcrime*" (Orwell 319). Thus, by imposing restrictions on language the Party exerts complete control over its citizens, and rejects every form of dissent by means of exclusion from the masses.

Although this form of censorship and oppression might initially be associated with totalitarian regimes from the past, as well as with the propaganda devices used by the ruling force, it is still in practice today. To exemplify, Lezak Shallat points to the political situation in Chile, where linguistic manipulation still remains despite the disappearance of the dictatorial regime (2009; 39). Military rule ended in Chile in 1990, after which a period of

transition to a democratic system began. In these years the authorities used their power to control and alter language, and currently "Terms like 'class struggle', 'exploitation' and 'equality' have been erased from the political lexicon" (Shallat 39). Furthermore, the phrase "el pueblo", meaning "the people", was substituted for "gente", which means "folks". According to Shallat, the reason for this lies in the fact that the former phrase carries ideological connotations. On top of this, another Newspeak parallel can be drawn here: "*Pueblo*, like people, comes from the Latin *populus*, the citizens who possess civic-political responsibilities and rights as members of an organized community. *Gente* comes from *genus*, for family or tribe. If *gente* expels *pueblo* from political discourse, the possibility of debate concerning people's rights will also be silenced" (39). Following this, as well as taking in account the principle of allness thinking which is also at work here, it can said that the scenario depicted in *Nineteen Eighty-Four* might be more plausible than one would initially assume. However, as in the novel, government policy is not met without resistance; according to Shallat, the people of Chile are increasingly reluctant to accept the authorities' decisions, and take a more critical stance toward the language forced upon them (39). In the story, Winston's resistance is broken by the Party, and in the end he realises that "He loved Big Brother" (Orwell 311). Reality, on the other hand, is not that dystopian; regarding the situation in Chile Shallat concludes that "Big Brother may not get the final word, after all" (39).

3.3: Nadsat

Before turning to the more recent dystopian examples, there is one work which will be discussed because it contains one of the most well-known and notable artlangs: Nadsat. Invented by Anthony Burgess and used in *A Clockwork Orange* (1962) by rebellious, violent

youths such as Alex and his “droogs”, Nadsat is a concoction of “Russian, some Cockney Slang, some Romany, a pinch of Malay and German and a sprinkling of baby talk … mixed together with Shakespearean and King James biblical locutions” (Will Self viii). In contrast to Newspeak, the goal of this language is not to suppress people but to undermine and resist the ruling authorities. Another difference is that Alex is capable of speaking both the oppressing language as well as the teen slang, whereas the lower-class citizens of Oceania do not use Newspeak, and are not expected to do so. According to Robbie Goh, these oppositions can be attributed to the fact that “Burgess’s concern is with the individual’s lived experience within the novel’s given scenario, which encapsulates the effect of power in general upon the individual, rather than satirising a particular political regime or era” (265). However, the Russian influences in Nadsat are said to relate to the public’s fear of the communist threat during the 1960s, which in turn can be seen as an extrapolation of the state of affairs at that particular time (265). Due to ongoing globalisation and the growing tensions between capitalist and communist systems it was not unimaginable that the latter would gain on the former, thereby casting its influence on Western society. Following this, Nadsat reflects the increasingly universalising character of the world and consequently language.

Thus, whereas Orwell places emphasis on the authorities’ use of language to exert influence over its subjects, Burgess focuses on the individuals struggle with the oppressing language. In the words of Goh, “By making language and its relationship to experience the primary political arena, the novel emphasises the textuality of politics, its manifestation as power over the social praxis of the individual, and its creation of a dilemma of legality and individuality” (265). Nevertheless, Nadsat remains an artlang and therefore exemplifies the conceptual features of language rather than pursuing a realistic depiction of extrapolated language. For this reason, the plausibility of this invented language is less important than its

artistic value, which still remains today.

3.4: Corpocracy

To continue the historical approach to universalised language it is beneficial to discern phenomena that influenced more recently devised conlangs. After the fall of the Soviet Bloc the communist threat subsided and the Cold War came to an end, causing capitalism to spread fuelled by the ongoing globalisation of information and capital. This expansion led to growth of multinational companies and to the ongoing domination of certain markets by an increasingly smaller number of business concerns. Accordingly, these trends are reflected in language as well as in recent works of fiction. In his approach to chronolinguistics, Stockwell distinguishes between catastrophic and gradual linguistic change; to illustrate the former he uses *Riddley Walker*, while the latter can be found in the works of William Gibson. As a matter of fact, "Gibson has said that his language is an extrapolation of '80s Canadian biker slang. Into this he adds the format of modern brand and trade names and abbreviations to suggest a techno-capitalist future" (63).

This literary device, called branding, is also used by Mitchell in *Cloud Atlas*. The fifth story in the novel, "An Orison of Sonmi~451", is set in the future dystopian world Nea So Copros –former Korea– which revolves around consumerism enforced by the ruling "corpocrats", "psychogenomenicists", and the "Marketing" body (Mitchell 228). Consequently, the dominant position of corporations has changed language. As Sorlin states, "In this dystopian near future … what is a brand in our reality has now become a common name without any capital letters: 'traffic jams' are now called *fordjams*. People are equipped with their *sony*, they wear *nikes* and *rolex*. The Media use *nikons*" (77). As a result of this consumerist way of life natural resources are nearly exhausted, which in turn has changed

many parts of the land into “deadlands” (Mitchell 215). Furthermore, clones are being used to perform tasks in these wastelands, as humans are unable to cope with the irradiated atmosphere in these areas. Being designed for specific purposes, these fabricants are not supposed to have free will or emotions. However, protagonist Sonmi~451 does undergo this transformation in such a unique fashion that she is kept alive and taken away to serve as test subject in research aimed at unravelling the cause of these changes. In this process, known as ascension, Sonmi’s language also changes; she states that “my language evolved, much as Yoona~939’s had. When I meant to say ‘good’, my mouth uttered *favorable*, *pleasing* or *correct*. I learnt to edit and modify every word I used” (206). This, then, is uncommon for fabricants, as their language is programmed for a single purpose, thereby eradicating all other forms of expression. As Sorlin indicates, “Natural acquisition is tampered with through the use of a drug called Soap that erases all the new words they have learnt during the day” (80).

In fact, this complies with the use of Newspeak in *Nineteen Eighty-Four*, in which the Party aims to “exterminat[e] superfluous words” (Sorlin 79). In Mitchell’s “Somni”, the ruling party is called Unanimity, which is opposed by the underground movement that goes by the name of Union. Initially, it might seem that in Mitchell’s story the government only tries to control the fabricants, yet eventually a conspiracy comes to light and it becomes clear that the ultimate goal is to “To make every last pureblood in Nea So Copros mistrustful of every last fabricant” (*Cloud Atlas* 364). As N. Katherine Hayles points out, ultimately Sonmi~451 discovers that “her ‘rescue’ by Union operatives is in fact part of Unanimity’s strategy to control the pureblood population as well as the enslaved fabricants” (60).

Thus, once again language is used as a means to exert power over people. In Nea So Copros, the language is influenced by the government, which in turn is dominated by corporations pressing their products to encourage consumerism. This leads to the practice of branding, as well as to a form of discourse in which emotional elements are diminished.

Moreover, the way in which the oppressing party manipulates the language used is reminiscent of Orwell's *Nineteen Eighty-Four*. As shown by the example about the situation in Chile, this notion is plausible yet meets much resistance from the public. Furthermore, while these two works convey a firm warning regarding the power of language and how this can be abused by the state, H.G. Wells's ideas of a universal language can be seen as rather idealistic. In fact, this complies with the philosophy and the goals as pursued by the inventors of genuine auxiliary languages such as Esperanto, Volapük, Interlingua, and Basic English. While some of these auxlangs have acquired a number of speakers –Esperanto has an estimated number of hundred thousand to two million users– most of them failed, as they are seen as dominant languages invading the local language system. As noted, linguistic variety is of vital importance for the well-being of the language ecology, and an oppressing language is mostly received with hostility. Therefore, the dominant party will have to exert power to a high degree, which automatically leads to a totalitarian regime of one kind or another. Whether the government chooses to employ a communist or a capitalist regime is of little importance, the outcome remains the same and in practice never leads to a wholesome and peaceful society.

Nevertheless, there are some useful notions attached to the original, idealistic concept of universal language. The idea of creating a means of communication for global use is reflected in the world market system; Graddol points out that "In the new world order, most people will switch between languages for routine tasks" (1330). This implies that in the future language systems will become bilingual or multilingual, rather than monolingual. Moreover, statistics show that English might not be the dominant second language, as Spanish, Chinese, and Arabic are currently spreading and are gaining an increasing numbers of speakers who use it as their second language (1329). Thus, ultimately the concept of a global language is unattainable unless a totalitarian regime is installed, something which is undesirable in our

modern Western civilisation. Nevertheless, a system providing for universal communication is gradually coming into existence and can be found in increasingly bilingual language systems around the globe.

Conclusion

The aim of this paper was to test the plausibility of invented future languages as found in works of (post-)apocalyptic fiction. In order to carry out this task, three possible language scenarios have been discussed; language either disappears, takes on a more local form, or is manipulated to serve as a universal means of communication. Next, by tracing how these scenarios are depicted in works of fiction, and comparing these to actual situations certain assumptions regarding their feasibility were made. To accomplish this, various examples of post-apocalypse fiction were analysed, and complemented with a number of utopian, dystopian, and science fiction works. All of the books, stories, and films used fall into the category of speculative fiction, and their authors have aimed to depict a convincing image of the future and the language used. Consequently, the idea of language extrapolation –both in fiction and linguistics– stems from the idea of linguistic relativity as described by Whorf and his successors. To determine the actual plausibility of the future languages as found in the examples theories dealing with language extrapolation are useful, as well as studies aimed at specific language situations and linguistic phenomena.

In the case of language disappearance, the plausibility rises in correspondence with the level of impact of the apocalyptic event. It is more difficult to predict a low-level impact situation than a scenario depicting near-destruction, as with the former a large number of variables has to be taken in account. To illustrate, it is plausible that due to the harsh living conditions in a sparsely populated wasteland –as found in *Le Dernier Combat*– the inhabitants become extremely violent and less communicative, as they are reduced to an animalistic state of being merely aimed at survival. In a more densely populated area such as the one in “Speech Sounds”, on the other hand, loss of language might invoke frustration, which leads to anger, fear, and anarchy. In any case, from an ecolinguistic point of view the loss of language in a post-apocalyptic world is rather plausible, for the ecosystem has been gravely damaged.

This leads to a lack of variety, as well as to a reduced number of object and subjects to refer to and consequently to a decrease in signifiers needed. However, many instances have been recorded of languages disappearing and renewing themselves, be it in their original form or in a recycled variant. In addition, mankind's will to communicate and the individual's desire to express oneself gives hope for the future of language. After all, language remains one of the defining features of our being human, and is therefore not easily eradicated.

The second language scenario, in which language transforms into a more local variant, already indicates a recurring trend: after the apocalypse language becomes less complex. The simplified forms of Standard English, imbued with dialect, slang, and onomatopoeias as found in *Riddley Walker*, *Cloud Atlas*, and *Mad Max Beyond Thunderdome* all serve to strengthen the atmosphere of primitivism and survivalism. This fascination with the idea of a simpler way of life, then, can be attributed to the current state of the Western world. Ongoing globalisation and technological innovations have led to an explosion of the availability of information, and have caused a boom in world-wide communication methods. Accordingly, the concept of psychological stress came into existence, and it might well the case that to escape from these issues people long for a simpler life. Also, this accounts for the recent rise popularity of the genre of post-apocalyptic fiction in film, (young adult) literature, and games. Moreover, science fiction elements are more and more common in literary works, something which is seen in both Hoban's and Mitchell's novels. Due to this reason, there are some objections to the artlangs used in these stories. From a scientific perspective, attention should be paid to the period of time elapsed; extrapolating too far into the future would render a language completely indecipherable to a present-day reader. Accordingly, Stockwell indicates that medium term predictions are the most accurate (57). However, when looking past this objection, there are several arguments for the plausibility of localised form of language in a post-apocalyptic setting. Moreover, when focusing on the artistic purpose and

effect of these artlangs, they certainly aid in constructing a convincing narrative.

Following the analyses of these three distinct scenarios, it can be stated that the latter of the three is the most dangerous due to the fact that a global language can only be installed by using force, which is automatically associated with dirty politics, dominant parties, totalitarian regimes, and consequently oppression. Moreover, as exemplified by the situation in Chile (cf. Chapter 3) this situation is not as implausible as one would expect. Thus, in retrospect, the intentions of the first auxlangers who set out to create an easy-to-use, unambiguous, universal language are deemed more idealistic than realistic. Moreover, the public will resist adopting such an auxiliary language as their first language, for their culture is very much imbedded in their native tongue. On top of this, linguistic diversity is of great importance for the wellbeing of the language system. Nevertheless, due to phenomena such as globalisation and the ongoing expansion of the market system languages are disappearing world-wide at an alarming rate. If any conclusion can be drawn from this speculative scenario, it is that more effort should be put in preserving endangered languages before they die out, and along with them much valuable knowledge about the world around us. Accordingly, the works mentioned while discussing this scenario –with the exception of H.G. Wells– can all be read as a warning about the power of language.

To conclude, extrapolating language to a point after a global catastrophe remains a speculative practice, yet according to Stockwell "the achievement of a workable chronolinguistics is very difficult but not impossible" (56). As a matter of fact, it has been shown that this particular subject has been addressed by a number of artists, and the works they have produced are the only tangible instances of future languages we have. Apart from the fact that there are some fundamental counter-arguments against the plausibility of these constructed or invented languages, there is ample evidence that they might not be implausible

at all. Last of all, these works of fiction have proven their worth as cultural products; they warn us, they make us wonder, and they give us hope for the future.

Works Cited

Primary Sources

After the Apocalypse. Dir. Yasuaki Nakajima. Medama Productions, 2004. Film.

Burgess, Anthony. *A Clockwork Orange*. 1962. London: Penguin Books, 2010. Print.

Butler, Octavia E. "Speech Sounds." *Asimov's Science Fiction Magazine* Dec. 1983. PDF eBook: 1-12. Web. 17 June 2011.

Hoban, Russell. *Riddley Walker*. London: Bloomsbury Publishing, 1980. Print.

Le Dernièr Combat (The Last Battle). Dir. Luc Besson. Films du Loup, 1983. Film.

McCarthy, Cormac. *The Road.* Toronto: Picador, 2006. Print.

Mitchell, David. *Cloud Atlas*. London: Hodder and Stoughton Ltd, 2004. Print.

Orwell, George. *Nineteen Eighty-Four*. 1949. London: Penguin Books, 2008. Print.

Wells, H.G. *The Last War*. 1914, originally published as *The World Set Free: A Story of Mankind*. Lincoln: Bison Books, 2001. Print.

Wells, H. G. *The Shape of Things to Come*. 1933. Ed. Patrick Parrinder. London: Penguin Books, 2001. Print.

When It Will Be Silent. Dir. Dan Sachar. When It Will Be Silent, 2009. Sophomore project for Sapir Academic College, Israel. Short film.

Secondary Sources

Alford, Dan Moonhawk. “Linguistic Relativity Theory.” Moonhawk’s Pages, 2002. Web. 24 June 2011.

---. “The Great Whorf Hypothesis Hoax: Sin, Suffering and Redemption in Academe.” Chapter Seven from *The Secret Life of Language*, October 17, 2002 DRAFT. Moonhawk’s Pages, 2002. Web. 9 June 2011.

Andrews, Kenneth, Deborah K. Ruuskanen, David Sisk, and Timothy Bugler. “Ten Years After: Four Responses to R.D. Mullen.” *Science Fiction Studies* 27.3 (2000): 406-417. *JSTOR*. Web. 10 July 2011.

Awl, Dave. *The Head of Orpheus: A Russell Hoban Reference Page*. Ocelot Factory Sites, 2010. Web. 20 July 2011.

Bishop, Eli. *Riddley Walker Annotations*. Errorbar.net, 2010. Web. 19 July 2011.

Booker, M. Keith, and Anne-Marie Thomas. *The science fiction handbook*. 2009. Chicester: Wiley- Blackwell, 2009. Print.

Brians, Paul. *Nuclear Holocausts: Atomic War in Fiction*. 2003-2008. Web. 24 June 2011.

Calvet, Louis-Jean. *Towards an Ecology of World Languages*. Trans. Andrew Brown. Cambridge: Polity Press, 2006. Print.

Cameron, Deborah. “Linguistic Relativity: Benjamin Lee Whorf and the Return of the Repressed.” *Critical Quarterly* 41.2: 153-156. Web. 24 June 2011.

Colins, Beverly, and Inger M. Mees. *Practical Phonetics and Phonology*. London: Routledge, 2003. Print.

Crystal, David. “Crossing the Great Divide: Language Endangerment and Public Awareness.” *UNESCO. International Expert Meeting on Endangered Languages, Paris, 10 March 2003*. Keynote Speech. Web. 21 June 2011.

---. *Language Death*. Cambridge: Cambridge UP, 2000. Print.

---. *The Language Revolution*. Cambridge: Polity Press, 2004. Print.

Chilton, Paul. "Orwell, Language, and Linguistics." *Language & Communication* 4.2 (1984): 129-146. *ScienceDirect*. Web. 25 July 2011.

Elgin, Suzette Haden. "Introduction: The Construction of Láadan." From *A First Dictionary and Grammar of Láadan: Second Edition*. Ed. Diane Martin. Madison, Wi: Society for the Furtherrance and Study of Fantasy and Science Fiction, 1988: 3-6. *Láadan Language Materials*.... Suzette Elgin, 2004-2008. Web. 25 June 2011.

Emrys, Sai, Alex Fink, and David Peterson. "Conlanging 101." *Paper presented at the 26th Chaos Communication Congress (26C3), Berlin, Germany, December 28, 2009*. The Conlanger's Library, Dec. 2009. Web. 25 June 2011.

Fettes, Mark. "Stabilizing What? An Ecological Approach to Language Renewal." *Teaching Indigenous Languages*. Ed. Jon Reyhner. Flagstaff, AZ: Northern Arizona University. 301-318. Web. 11 July 2011.

Fillion, Kate. "Rachel wants a Baby." Macleans.ca. Maclean's, Oct. 7, 2010. Web. 16 May 2011.

Goh. Robbie B. H. "'Clockwork' Language Reconsidered: Iconicity and Narrative in Anthony Burgess's *A Clockwork Orange*." *Journal of Narrative Theory* 30.2 (2000): 263-280. *Project MUSE*. Web. 25 July 2011.

Graddol, David. "The Future of Language." *Science* 303.5662 (2004): 1329-1331. *JSTOR*. Web. 24 May 2011.

Green, Michelle Erica. "There Goes the Neighborhood: Octavia Butler's Demand for Diversity in Utopias." *Utopian and Science Fiction by Women: Worlds of Difference*. Eds. Jane L. Donawerth, Carol A. Kolmerten. New York: Syracuse UP, 1994. 166-190. Print.

Hardy, Sylvia. "A Story of the Days to Come: H.G. Wells and the Language of Science

Fiction." *Language and Literature* 12.3 (2003): 199-212. *SAGE Publications*. Web. 24 July 2011.

Hayles, N. Katherine. "RFID: Human Agency and Meaning in Information Intensive Environments." *Theory, Culture & Society* 26.2-3 (2009): 47-72. *SAGE Publications*. Web. 26 July 2011.

Hayward, Susan, and Ginette Vincendeau. *French Film: Texts and Contexts*. London: Routledge, 2000. Print.

Kendon, Adam. "Some reflections on the relationship between 'gesture' and 'sign'." *Gesture* 8.3 (2008): 348-366. Web. 7 July 2011.

Kiderra, Inga. "New Language Points To Foundations Of Human Grammar." *UCSD*. Official web page of the University of California, San Diego, 31 Jan. 2005. Web. 11 July 2011.

Kunkel, Benjamin. "Dystopia and the End of Politics." *Dissent* 55.4 (2008): 89-99. Web. 25 June 2011.

Leith, Alex. "What Is Loglan?" *From a brochure prepared by The Loglan Institute, Inc*. The Loglan Institute, 2007. Web. 26 June 2011.

Maalej, Zouhair. Rev. of *Gesture, Speech and Sign*, eds. Lynn Messing and Ruth Campbell. *Sign Language Studies* 2.1 (2001): 116-131. *Project MUSE*. Web. 7 July 2011.

Marazzi, Christian. *Capital and Language: From the New Economy to the War Economy*. Trans. Gregory Conti. Los Angeles: Semiotext(e), 2008. Print.

Maynor, Natalie, and Richard F. Patteson. "Language as Protagonist in Russell Hoban's *Riddley Walker*." *Critique* 26.1 (1984): 18-25. *Periodicals Archive Online*. Web. 27 July 2011.

McGuinnis, Alex. "Allness in Language and Politics." *ETC: A Review of General Semantics* 64.2 (2007): 108-110. *Academic Search Elite*. Web. 24 July 2011.

Mitchell, David. "Silver Daggers and Russian Dolls - David Mitchell, author of *Cloud Atlas*,

in interview.” By Shane Barry. Three Monkeys Online. Three Monkeys Online, Mar. 2005. Web. 16 May 2011.

---. “The Book of Revelations.” *The Guardian* 5 February 2005: 36. Web. 26 June 2011.

Mullen, R. D. “Dialect, Grapholect, and Story: Russell Hoban’s *Riddley Walker* as Science Fiction.” *Science Fiction Studies* 27.3 (2000): 391-406. *JSTOR*. Web. 10 July 2011.

Myers, Edward. “An Interview with Russell Hoban.” *The Literary Review* 28.1 (1984): 5-16. *Periodicals Archive Online*. Web. 11 July 2011.

Okrent, Arika. “Languages.” *In the Land of Invented Languages*. In the Land of Invented Languages Website, 2009. Web. 25 June 2011.

Okrent, Arika, and Paul Frommer. “Questions Answered: Invented Languages.” Interview ed. by Ben Schott. *Schott’s Vocab: A Miscellany of Modern Words and Phrases*. The New York Times, Mar. 2010. Web. 25 June 2011.

Palwick, Susan. “Imagining a Sustainable Way of Life: An Interview with Octavia Butler.” *ISLE: Interdisciplinary Studies in Literature and Environment* 6.2 (1999): 149-158. *Oxford Journals*. Web. 7 July 2011.

Por, Gabor. “Universal Inhumankind.” *Pgabor.com*. Pgabor.com, 3 Dec. 2002: 1-6. Web. 21 June 2011.

“Projects: *Atlas on Endangered Languages*.” *UNESCO.org*. United Nations Educational, Scientific and Cultural Organization, 2004. Web. 6 July 2011.

Rowland, Antony. “Silence and Awkardness in Nuclear Discourse”. *English* 43.176 (1994): 151-160. *Oxford Journals*. Web. 24 May 2011.

Russell, Charles G. “Allness and Public Policy.” *ETC: A Review of General Semantics* 55.1 (1998): 34-37. *Academic Search Elite*. Web. 24 July 2011.

Sandler, Wendy, Irit Meir, Carol Padden, and Mark Aronoff. “The Emergence of Grammar: Systematic Structure in a New Language.” *Proceedings of the National Academy of*

Sciences of the United States of America 102.7 (2005): 2661-2665. *JSTOR*. Web. 6 May 2011.

Self, Will. Introduction. *Riddley Walker*. By Russell Hoban. London: Bloomsbury Publishing, 1980. v-x. Print.

---. Introduction. *A Clockwork Orange*. By Anthony Burgess. 1962. London: Penguin Books, 2010. Print.

Shallat, Lezak. "'Newspeaking' to Deaf Ears." *New Internationalist*. 0.427 (2009): 19. *Academic Search Elite*. Web. 26 July 2011.

Smetak, J. R. "So long, Mom: The Politics of Nuclear Holocaust Fiction." *Papers on Language and Literature* 26.1 (Jan. 1990): 41-60. *Academic Search Elite*. Web. 17 May 2011.

Smith, Christina Jean. "What Disappears and What Remains: Representations of Social Fluidity in the Post-Apocalypse." MA thesis. North Carolina State University, 2007. Web. 31 May 2011.

Sorlin, Sandrine. "A Linguistic Approach to David Mitchell's Science-Fiction Stories in *Cloud Atlas*." *Miscelánea: A Journal of English and American Studies* 37 (2008): 75-89. Web. 24 June 2011.

Stockwell, Peter. "Futuretalk: One Small Step towards a Chronolinguistics." *Nottingham Linguistic Circular* 15 (2000): 55-68. *Nottingham ePrints*. Web. 25 May 2011.

Swoyer, Chris. "Relativism." *The Stanford Encyclopedia of Philosophy*. Winter 2010 Edition. Ed. Edward N. Zalta. Web. 24 June 2011.

Taylor, Nancy Dew. "'...you bes go ballsy': *Riddley Walker*'s Prescription for the Future." *Critique: Studies in Contemporary Fiction* 31.1 (1989): 27-40. *Academic Search Elite*. Web. 19 July 2011.

Tonkin, Boyd. "Cormac McCarthy: American Literature's Great Outsider." *The Independent*

26 Feb. 2008. Web. 25 June 2011.

Wells, Willard. *Apocalypse When?: Calculating How Long the Human Race Will Survive*. New York: Praxis, 2009. Springerlink (Online Services). Web. 25 June 2011.