CRIME, CRIMINALITY & SOCIAL REVOLUTION

by

Shaun Yates

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ABSTRACT

This thesis is concerned with Jacque Fresco's ideas regarding crime, criminality and social revolution. A historical inquiry into the life work of Jacque Fresco was conducted. Additionally, this thesis benefited from a personal interview with Jacque Fresco and his partner Roxanne Meadows.

In order to gain a greater understanding of Fresco's ideas concerning crime, criminality and social revolution, an investigation into his surrounding beliefs was conducted. The results of this investigation are presented in 'Part I'. This section presents five themes of Fresco's work: 'human needs', 'language', 'critique of monetary politics', 'the role of technology', and 'culture, values and human behaviour'. 'Part II' of this research critiques these key themes in Fresco's work. 'Part III' critically evaluates Fresco's ideas concerning crime, criminality and social revolution. Following 'Part III', a conclusion is presented, summarising the usefulness of Fresco's ideas.

It is concluded that there are major theoretical shortcomings in Fresco's ideas. Although Fresco's criticisms of monetary systems are valid, his ideas lack the scope and depth of other contemporary thinkers. Additionally, there are ethical concerns surrounding the mobilisation of Fresco's alternative vision. It is recommended that Fresco should garner greater sociological knowledge before attempting to mobilise his alternative vision.

CONTENTS

Introduction	1			
Who is Jacque Fresco?				
Theoretical Foundations				
Method	5			
PART I				
1.0 Themes of Fresco's Work	12			
1.1 Human needs	12			
1.2 Language	15			
1.3 Critique of Monetary Politics	21			
1.4 The Role of Technology	25			
1.5 Culture, Values & Human Behaviour	28			
PART II				
2.0 Critique of Fresco's Themes	33			
2.1 Language	33			
2.2 Human Needs	34			
2.3 Critique of Monetary Politics	37			
2.4 The Role of Technologies	43			
2.5 Culture, Values & Human Behaviour	50			
PART III				
3.0 Crime	55			
3.1 What is Criminology & Is Fresco a Criminologist?	55			
3.2 The Definition of Crime	56			
3.3 Experience vs. Academia	61			
3.4 Zemiology	65			
3.5 Language & Techni-culture	66			
3.6 Fresco & The Critical-Realist Approach	68			
3.7 Inability to Satisfy Human Needs & Strain Theory	70			
3.8 Consumerism, 'Alienation' & Cultural Coercion	73			
3.9 Environmental Crime & Punishing the Powerful	75			
3.10 'Crime Prevention through Environmental Design' & Cybernated	Technology 76			
3.11 Prisons, Punishment & Hospitals	78			
3.12 'Radical Alternative'	80			
3.13 The Misuse of Technology & Scientific Racism	81			
3.14 Sacrificing Sub-Cultures for the Greater Good	82			
3.15 Fascism, the New 'Power Elite' & the New Deviant	83			
Conclusion	85			
References	87			
Appendix	99			

INTRODUCTION

Jacque Fresco is an individual who has spent much of his life contemplating a broad spectrum of issues such as war, poverty and social harm. This thesis is concerned primarily with Fresco's ideas concerning crime. What is of interest, is Fresco's ideas regarding how science and technology can address crime.

In the 1990s, Fresco presented 'The Venus Project' (TVP). TVP is a movement aimed at establishing an alternative social system (Fresco, 1995). Fresco claims that TVP is the product of his life work to understand and challenge social phenomena such as war, poverty and crime (Fresco, 1995, 2002, 2012). For this reason, TVP will be the main focus of this study.

TVP can be viewed as a two-part enterprise. The first part offers Fresco's understanding of social phenomena. Here, Fresco explicates issues such as crime and describes how such phenomena have developed in global society. Fresco also critiques current strategies aimed at addressing social phenomena, such as legal reform. The second part of TVP advocates Fresco's 'alternative vision' (1995: 2). This 'alternative vision' emphasises the role of science and technology in challenging issues such as crime and criminal behaviour. This thesis will investigate and challenge the ideas that are encompassed in both of these parts. This thesis also makes use of a personal interview that was conducted with Jacque Fresco and his partner Roxanne Meadows. Because of this original research, new information emerges that challenges the *status quo* that surrounds Fresco's work.

This thesis presents a critical appraisal of Fresco's ideas concerning crime, criminality and social revolution. This section evaluates the quality of Fresco's work with emphasis on the depth and scope of his ideas. Additionally, the ethical legitimacy of Fresco's ideas is appraised. It is concluded that there are major theoretical shortcomings regarding Fresco's ideas. It is recommended that Fresco should acquire greater sociological knowledge in order to improve the legitimacy of TVP as an alternative social system.

WHO IS JACQUE FRESCO?

Jacque Fresco was born in 1916. He spent his early years in Brooklyn, New York. He has spent much of his life travelling across America and now lives in Florida.

Fresco has conversed with many notable individuals such as Albert Einstein, Earl Muntz and Hubert Humphrey. Additionally, due to Fresco's unconventional life style, he has had many extraordinary experiences. For example, in the 1940s, he lived with the natives of the South Sea Isles. These experiences have significantly shaped Fresco's views and opinions. It is with this insight that Fresco critiques popular macro socio-economic systems and the politics that are attached to them. He argues that such systems cause 'unnecessary suffering'. Fresco continues to argue that we should redesign our socio-economic systems in order to avoid this suffering. Specifically, Fresco argues that by making proper use of technological advances we are currently capable of overcoming 'unnecessary suffering'. Fresco calls this critique and redesign of society, 'The Venus Project' (TVP). TVP is a social movement that aims to challenge 'unnecessary suffering' on a global scale. This social movement is the product of his life work.

Fresco worked as an engineer for the US Air Force, which allowed him to sharpen his knowledge of technical engineering. Following this career, Fresco established himself as an architect, gaining knowledge of how to design and construct buildings. As Fresco progressed through life, garnering new skills and greater knowledge, his ideas for social progress developed. In 1953, he established his first social movement named, 'Project Americana'. This was Fresco's first attempt to use his knowledge to critique and redesign a new socio-economic system. In 1971 however, Fresco revised and renamed this project, 'Sociocyberneering'. 'Sociocyberneering' was very popular amongst university students and as a result, Fresco's project for social change gained significant political leverage. However, US state officials fearing Fresco's socialist values heavily criticised his ideas. As a result, 'Sociocyberneering' lost political traction. In order to recuperate his losses, Fresco moved to Venus, Florida, and once again revised his social movement. In 1994, 'Sociocyberneering' was officially renamed 'The Venus Project'. Since then, Fresco has embarked on a publicity campaign to raise awareness of his ideas.

Although Jacque Fresco has received much publicity and has been prolific in his work, his name is largely unknown to the public and academia alike. This is especially surprising, as Fresco has toured the world giving public lectures. Additionally, he has appeared in several widely viewed motion pictures – such as 'Zeitgeist: Addendum', 'Zeitgeist: Moving Forward' and 'Paradise or Oblivion'. Due to this unusual position, Fresco and his 'The Venus Project' have received a somewhat 'cult status'.

The purpose of this thesis is to investigate Jacque Fresco's work and to evaluate the usefulness of his ideas.

THEORETICAL FOUNDATIONS

I subscribe to a scientific, anti-realist perspective. I acknowledge that there is an objective reality to understand and that empirical knowledge is useful. However, I also reason that the ontological knowledge of unobservable phenomena is withheld. Unobservable findings are highly useful, though ultimately, this knowledge cannot be claimed as a literal account of reality. Moreover, I believe that such findings that are not empirically evident are relative to other holistic beliefs which are historically and culturally relative. Therefore, like Quine (2003, original publication in 1951), I advocate a revision of the popular logical positivist or 'reductionist' analytical framework that is used to acquire scientific knowledge. Specifically, I argue that a theory gains scientific value through its ability to explain phenomena in a rational, systematic, and parsimonious way to a greater degree than previous theories. In this regard, what qualifies a theory to be scientific is its usefulness¹ – not its refutability or falsification (see Popper, 1963). The goal of scientific theorists therefore, is to be *less wrong* in their explanations – relative to their predecessors.

Building upon David Deutsch's (2012) understanding, I believe that 'variation' defines whether an explanation is 'good' or 'bad'. The less variation a theory has in its explanation of phenomena, the better it is, and vice-versa. Therefore, the goal of this thesis is to offer an accurate but parsimonious, rational explication of Jacque Fresco's work – following this, a critical engagement with Fresco's ideas will be conducted.

Knowledge is relative to time and place (Skinner, 2002). Therefore, in order to achieve the greatest possible insight into Fresco's work, his use of language needs to be historically contextualised. As far as possible, the goal of this research is to understand Fresco's ideas within the nexus of his other supporting ideas. In order to achieve this goal, an adaptation of Skinner's (2002) historic-analytical approach will be employed. This research does not claim that Skinner's method, or my adaptation of his method, is perfect for rendering fact. Rather, I argue that Skinner's method offers a more comprehensive means of accounting for Fresco's work in comparison to other deterministic and/or reductionist methods, such as those proposed by scientific realists and logical positivist positions.

Specifically, my method advocates an in-depth, holistic investigation into Fresco's 'world' (Skinner, 2002: 7); to understand Fresco's rationale, beliefs and influences in order '..to see things their way.' (Skinner, 2002: vii). Additionally, by considering the position that Fresco was in at the time of delivering his work, it is argued that a clearer understanding of what Fresco is

¹ Here, 'useful' refers to a theory's ability to make sense of phenomena.

attempting to 'do' as well as 'say' will emerge (Skinner, 2002: 3). Using Skinner's terminology, it is argued that by examining Fresco's 'time', 'place' and supportive 'beliefs', a clearer understanding of his work will emerge. It is this appreciation of Fresco's external and internal influences that will allow for a more thorough, in-depth understanding of Fresco's work.

METHOD

For this thesis, a diverse range of media has been collected regarding Fresco's life and work. These resource are in the form of interviews, newspaper and magazine publications, Fresco's own published works, radio transcripts, Fresco's publically-available personal documentations (such as travel permits, filed patents and photographs) and television broadcasts, amongst other forms of media. This material was gathered via library and internet searches. Due to the large amount of material collected, I have catalogued and archived much of Fresco's work for my own personal study. However, much of this material was already pre-catalogued by TVP's archivist, Nate Dinwiddie. For this, I am very grateful to Nate for his contributions. In order to engage with Fresco's ideas more critically, I familiarised myself with all of this media to the best of my ability. I did this by analysing as much of it as possible and situating this information into a chronograph of Fresco's life². From here, I was able to gain a greater vantage point for understanding Fresco's life, his work and his beliefs. By reading through this material I was able to classify his work into key themes. The themes that emerged when reading this material are as follows, 'human needs', 'language', 'critique of monetary politics', 'the role of technology' and finally 'culture, values & human behaviour'. Following this, each theme was critically analysed. This resulted in 'meta themes' of Fresco's work emerging. These meta themes are presented in Part II. Building upon the progress of Part II, Part III utilises these meta themes in order to compare Fresco's ideas with that of other social scientists – critically evaluating the usefulness of his work.

Additionally, during my analysis, I conducted a personal interview with Fresco and his partner Roxanne Meadow in order to clarify my understanding of his ideas. The transcript of this interview is included in Appendix 14³. Although the majority of the time spent in constructing this thesis has been attributed to investigating Fresco's history and examining his published works, the focal point of this thesis is the interview I conducted. The interview is important because it allows this thesis to contribute original knowledge. Within this interview I ask penetrating questions that challenges the *status quo* which surrounds Fresco's work. As a result of this, an original and sometimes controversial insight into Fresco's ideas is presented in this thesis.

I agree with Skinner that an in-depth holistic engagement with the subject needs to be conducted. The difference between Skinner's application of his method and mine is that my subject is not as historically distanced from me as Skinner's subjects were, such as Hobbes. With this in mind, it becomes possible for me to be closer to the text than Skinner was able to be with

² See Appendix 13.

³ To avoid confusion, rather than referencing my Interview with Fresco & Meadows as 'Appendix 14', I will from this point onwards reference to this item as, 'Interview'.

his subjects. This is not to claim however, that this requires less analytical insight. Rather, I argue that an equal amount of analysis is needed. Because Fresco is a more contemporary subject, there is an abundance of resources available for analysis. Skinner however, would have perhaps been more limited in the information he could use during analyses. Therefore, the greater threat to this thesis is to be overly analytical of evidence. This 'overly-analytical' critique is cited in Skinner's work as he explains that such a method 'robs the subject of its point' (2002: 5). I agree with Skinner that this critique is poorly founded. Therefore, the issue of being 'overly analytical' will not be a problem. As argued previously, this descriptive process contributes to a more explicit understanding of a subject rather than robbing 'the subject of its point'.

Even though this research is predominantly concerned with Fresco's ideas concerning 'crime', his other surrounding beliefs need to be explicated. This is because his ideas on 'crime' is influenced by his other surrounding beliefs. For this reason, an investigation into Fresco's themes will be conducted. Namely, his views on human needs, language, monetary systems, the role of technology, culture, values and behaviour will be investigated. By situating Fresco's ideas concerning 'crime' within the context of these auxiliary ideas, a more accurate understanding of his work will emerge – this holistic appreciation is inspired by Quine's article 'Two Dogmas of Empiricism' (2003, original publication in 1951).

Skinner (2002), developing Quine's work further, argued that language holds a different meaning in the context of 'time' and 'place'. More importantly, Skinner argued that researchers should be aware of such contextualisation as this dramatically influences the accuracy of a researcher's work (2002: 49-51). This can be demonstrated with Skinner's example regarding how Jean Bodin⁴ uses the term 'witch' and how this term holds different meanings at different times and at places. Skinner views Bodin's use of the term 'witch' to be '...patently absurd' (2002: 20). It should be noted that what Skinner holds to be true is based on his auxiliary beliefs and that these auxiliary beliefs are different to what Bodin holds to be true. Interestingly therefore, although it is recognised that both these thinkers wish to achieve a greater understanding of truth, their understanding of what should be considered as truth is dramatically shaped by their auxiliary beliefs. For this reason, in order to understand why Bodin believed what he believed to be true, an appreciation of his auxiliary beliefs need to be understood, otherwise inaccurate conclusion will be made - for example, it may be incorrectly concluded that Bodin was insane. Therefore, a high premium is placed on achieving an in-depth understanding of what Fresco's beliefs are and why he holds these given beliefs, as this will impact the accuracy of the claims made in this thesis. It is acknowledged that to achieve absolutely 'unvarnished news' is an

⁴ An influential 16th century writer of demonology.

impossible task (Quine, in Skinner, 2002: 2). The goal of this research is to attempt to be as objective as possible without claiming that such findings are free of bias or are a literal description of reality. In this regard, the task can be viewed as an instrumentalist's revision of what Hume describes as the 'archaeo-historicist' method (1999: 61-71).

The argument that emphasises the importance of contextualising language is inspired by Austin and his account of 'illocutionary' force and 'perlocutionary' consequence (in Skinner, 2002: 148). Austin's account explains that actors participate in language games and that speech acts attain varying degrees of meaning through the speaker's intentionality and the receiver's interpretation. Skinner states that to understand the speaker's intention and to tackle the issue of language interpretation, a holistic method is needed (2002: 83). Skinner argues that this is achieved by creating a historical analysis of the subject that allows the listener to make an informed decision regarding the speaker's intentions. It is argued that by understanding the subject's background, influences, relationships, beliefs, audience, and other holistic factors; a clearer understanding of the speaker's intentionality can emerge. I agree with Skinner that by situating speech acts in 'time', 'place' as well as in the nexus of a speaker's beliefs, a greater insight into the speaker's intentionality is gained. This process, as Skinner expresses, involves viewing the subjects with the 'longue durée' (Skinner 2002: 5).

However, it should be emphasised that conclusions drawn from examining the holistic use of a subject's language, and subsequent claims concerning their intentionality, should not be taken as facts. This is where my theorising and Skinner's differ. Where Skinner claims that by adopting his method of historical inquiry, facts are produced, I disagree (2002: 88). I argue that such a scientific-realist task is unachievable, as making judgements over a subject's intentionality via Skinner's method would not produce a literal account of objective reality. However, I also believe that Skinner's method would not produce speculation. Instead, I argue that Skinner's method produces informed rational judgments based on evidence. These informed judgements are useful for investigating the likelihood of a subject's intentionality but it is ultimately incorrect to claim that such judgements, no matter how evident, are a literal description of an objective reality. In this regard, I am in agreement with Jacques Derrida's understanding of 'truth' and how it is perceived. Specifically, I agree with Derrida's deconstructivist method that claims that what...

'...we can call "context" the entire "real-history-of-the-world," if you like, in which this value of objectivity and, even more broadly, that of truth (etc.) have taken on meaning and imposed themselves. That does not in the slightest discredit them. In the name of what, of which other "truth,"

moreover, would it? One of the definitions of what is called deconstruction would be the effort to take this limitless context into account, to pay the sharpest and broadest attention possible to context, and thus to an incessant movement of re-contextualization. The phrase which for some has become a sort of slogan, in general so badly understood, of deconstruction ("there is nothing outside the text" [it n y a pas de hors-texte]), means nothing else: there is nothing outside context' (1988: 136).

I argue that explanations concerning a subject's illocutionary force does not produce an objective description of reality or facts. Rather, these so-called facts achieve the more modest goal of offering evident beliefs – not a literal account of reality. Now that this understanding has been established, a more accurate definition of the term 'fact' can be presented. I understand that the term 'fact' can be used to refer to very useful knowledge but not as an account of actual reality. I appreciate that the term 'fact' has its merits as it can aid with simplifying knowledge. However, I place a high premium on the explication of phenomena in this thesis. Therefore, the term 'fact' is largely unused in this thesis. Again, it is with this approach that I claim that spuriousness will be avoided and a more accurate, detailed account of Fresco's beliefs will be produced in comparison to those methods that are based on a scientific-realist perspective.

Continuing with this critique of fact, a more detailed account can be provided regarding how this thesis will understand the subject's use of language. Skinner explains that the researcher should consider the subject's audience as this is an important factor that shapes what the subject says and how he says it. Skinner argues that by considering the speaker's audience, a more detailed account of what the speaker is attempting to do in what they were saying will emerge. I mostly agree with Skinner's method here. However, I critique this theorising by drawing attention to how Skinner's method builds on progressively uncertain grounds. Specifically, I would like to draw attention to how Skinner advocates using evidence-based reasoning to contextualise the subject in their 'time' and 'place', and progresses to use this as factual, objective evidence to construct an understanding of the speaker's mental processes (2002: 53-54, 86-88, 99). I argue that this method increases the likelihood of spurious. It is important to recognise that these knowledge claims concerning the speaker's mental processes are not based on a perfect reflection of objective reality. Rather, these knowledge claims are based on an analysis of a limited amount of evidence. Therefore, it is identified that knowledge claims regarding the speaker that are based on earlier knowledge claims - no matter how evident - results in those secondary knowledge claims becoming increasingly less likely to be true representations of objective reality. In short, I critique Skinner's work for advocating an overrationalisation of evidence and supporting a method that is prone to spuriousness.

In order to preserve the usefulness of this thesis, I will indicate as I conduct my investigation when secondary knowledge claims are being made. More specifically, I will indicate how my conclusions concerning Fresco's illocutionary force are arrived upon in order to avoid an overrationalisation of evidence. This thesis does not claim to offer objective 'facts' so to speak, rather my knowledge claims will simply be less wrong and more reliable than other competing knowledge claims – such as those offered by the scientific realist position and the Skinnerian method.

This method of historical inquiry will differ from Skinner's original method in one final significant way. Rather than presenting a chronological, biographical account of Fresco's history, I will present a summarised account. This is not to claim that the historical enquiry into Fresco's theorising has not been adequately conducted; rather that this method of presenting my findings will be more useful. I argue that this method of analysis is useful for this study, as it will allow for a clearer engagement with Fresco's underlying beliefs.

I foresee a criticism of this method that may accuse my research of not presenting enough evidence of its 'in-depth historical inquiry' and that perhaps I have preferentially selected information in order to coincide with my themes of Fresco's theorising. In order to overcome this obstacle, I will present a thorough bibliography and cite work as intensely as possible. Additionally, I will present a timeline detailing Fresco's history, citing significant sources (see Appendix 13). I argue that by presenting such abundant evidence and referencing this evidence as much as possible to support a given point, a claim that I have manipulated the evidence in order to achieve my own biases will be disregarded.

Finally, it is important to distinguish what I am not advocating in this method. This method does not promote the positivistic depoliticisation of hermeneutics. This method acknowledges that the absolute objective approach is impossible and that subsequently, the pursuit of achieving 'facts alone' is impossible (Elton, 1991: 108). Additionally, this method does not propose the impossible task of attempting to 'get into the head' of the subject (Skinner, 2002: vii). Instead, this thesis advocates the employment of '...ordinary techniques of historical enquiry' in order to gain a more evident understanding of the subject's ideas (Skinner, 2002: vii).

In conclusion, a historical enquiry into Fresco's beliefs will be conducted. This will be done in order to understand Fresco's work as a product of his relative *longue durée*. Although this may seem arbitrary regarding the purpose of this research, I have argued that such a holistic method is crucial in order to gain a more accurate, encompassing account of Fresco's ideas. This argument is predominantly based on the ideas of Quine (1953) and Skinner (2002), who propose that ideas share a dialectic relationship and no idea can be understood in isolation. To clarify, I

advocate a holistic method of inquiry as there is valuable information beyond a given text (Derrida, 1988). Therefore, by considering holistic factors, a more in-depth account of the subject's work will emerge.



1.0 THEMES OF JACQUE FRESCO'S WORK

1.1 HUMAN NEEDS

The *telos* of Fresco's lifework is to challenge 'unnecessary suffering' (Fresco, 2002: 8). He aims to achieve this through the implementation of 'The Venus Project' (TVP), which is a plan for how a society can efficiently satisfy 'human needs' (2002: 8). Fresco states that the purpose of TVP is to redesign society so that '...the age-old problems of war, poverty, hunger, debt, and unnecessary suffering are viewed not only as avoidable, but also as totally unacceptable' (2002: 8).

Understandably, therefore, this concept of 'unnecessary suffering' largely defines Fresco's TVP. In recognition of this, it seems strange that Fresco's definitions of 'human needs' and 'unnecessary suffering' are vague. As this investigation will reveal, he gives many examples of what he *means* by these terms, though he does not provide explicitly scientific or specific definitions. Additionally, when Fresco has been prompted to define what constitutes as 'human needs' (2002: 116-117) he refers back to his goal of avoiding 'unnecessary suffering'. Moreover, when asked to define 'unnecessary suffering', he refers to his goal of satisfying 'human needs' (2002: 7-8). Within this circular argument, Fresco continues to present examples such as 'free education', 'good nutrition', etc., as he consistently avoids the issue (Interview :148, 164; 2002: 38).

Fresco continued to present this circular argument when I interviewed him (Ibid). I attempted to gain clarity regarding these terms by comparing his 'human needs' ideas with Maslow's hierarchy of needs (Interview: 155). In this conversation, I asked Fresco if a 'human need' is whatever is perceived to be by that individual as 'all the necessities of life' (Interview: 168). Fresco confirmed this by adding that these necessities of life need to be available 'without a price tag' (Interview: 169). Subsequently in the interview, Fresco continued to advocate TVP claiming that, in theory, it is able to satisfy all 'human needs' (Interview: 220). In the process of this, Fresco continued to present examples of what he means by 'satisfying needs'⁶ and returned to his circular argument. From this conversation, it can be concluded that Fresco wishes to satisfy human needs through easily accessible and abundant resources and services, such as free food and free education. However, he still did not present a specific definition that encompasses how all 'human needs' will be satisfied and consequently how 'unnecessary suffering' will be challenged. This suggests that Fresco has a contingent view of 'human needs'.

⁵ By 'the age old problems', Fresco also means the 'crime problem'.

⁶ Such as commodity libraries and making food abundantly available to the public, (Interview: 148, 164).

Ultimately, Fresco does not present a specific and explicit definition of his term, 'human needs'. This is problematic for a number of reasons. The main problem is that this term forms in large part, the *telos* of his work. He explains this consistently while commenting on a number of topics. Whether Fresco is talking about the structure of a building (2002: 77), designing a more adequate educational system (2002: 76), child development (2002: 38), the role of technology in society (2002: 77), food production (2002: 77) and/or its distribution (2002: 77) or any other major part of TVP; Fresco always prioritises an awareness of 'human needs'. Specifically, he emphasises how these subjects can be best utilised in order to satisfy 'human needs'. As a result, it becomes difficult to gauge how valuable his contributions are, as it is unclear what it is he is arguing for.

Often, Fresco details what 'human needs' are through examples, very rarely offering specific definitions for what he means. Because of this approach, Fresco's scientific definition of 'human needs' has to be excavated through analysing his work. This is problematic for this thesis as it becomes difficult to engage with Fresco on his own terms.

The following extract is important for establishing a detailed understanding of what Fresco means by his term 'human needs':

'In a resource-based economy motivation and incentive will be encouraged through recognition of, and concern for, the needs of individuals. This means providing the environment, educational facilities, good nutrition, health care, love and security that people require.' (2002: 38).

When Fresco uses the term 'needs' in this instance, he is not just describing the biological necessities required in order to live, such as 'good nutrition', he is also describing metaphysical, social necessities. This extract supports the argument that Fresco believes human needs are contingent as they are based on the 'needs of the individual'. Therefore needs should be defined on an individual basis. Fresco's account of 'human needs' consists of two parts. The first being the objective and physical necessities. The second part accounts for individual, subjective and psychological requirements. Fresco often refers to these objective needs as 'basic needs' (2002: 43) or 'physical needs' (2002: 53, 73). The subjective needs are referred to as 'social needs' (2002: 47). This contingent understanding of social needs is most explicit in Fresco's statement:

"...the future will provide newer materials and methods, which in turn will result in vastly different expressions of structural form and function that will be consistent with evolving and changing social needs" (1995: 39).

It is observed that Fresco believes social needs have a capacity to change over time and space. Fresco also comments on the topic of religious needs and how each individual should be catered for on a case-by-case basis, (in V-Radio 2010: 6:30-12:00min). Again, this demonstrates Fresco's split understanding about what constitutes 'human needs'. To reiterate, Fresco believes that 'basic needs' are fixed, but 'social needs' are contingent.

What is problematic however, is that Fresco often claims that social needs are objective and fixed, much like 'good nutrition'. He does this by merging the two distinct terms, 'basic needs' and 'social needs', under the umbrella terms 'human needs' or 'needs'. For example, Fresco on the topic of interpersonal relationships and his alternative vision, states:

'A world-wide resource economy could bring about vast changes in human and interpersonal relations without the enactment of laws. It could encourage values relevant to the needs of all people.' (2002: 58).

In this comment, Fresco seems to presume what people's 'social needs' are. This is strange, as in other extracts, Fresco openly accepts that some individuals' 'social needs' may never be met due to their complex subjectivity. This can be demonstrated as he claims 'We have the capability to intelligently apply humane science and new technology to provide for *most* human needs.' (2002: 61. Italics added) – emphasising the impossibility of satisfying all the social needs of individuals. Additionally, Fresco claims that 'In a society that provides for *most* human needs...' (2002: 68. Italics added) a better society will emerge. Furthermore, Fresco has 'no notions of a perfect society' (2010: 1643), but he 'know[s] we can do much better than what we've got.' (2010: 1644). Fresco seems to be aware of the absurdity of some of his sweeping statements as he acknowledges that all human needs will not be satisfied within his society. Regardless, Fresco persists in making sweeping claims that such needs can be satisfied in his society.

This lack of consistency in Fresco's statements can be attributed to his use of rhetoric. As Fresco is continually attempting to rally support and interest, especially when speaking on a public platform, it can be observed that Fresco changes his use of language for an intended result. He often intentionally simplifies his message in order to increase the likelihood of laypersons understanding. Therefore, although Fresco states sometimes that his social system will be able to satisfy all needs, he actually means *most* needs.

Now that Fresco's term 'human needs' has been analysed, revealing its associate ideas, this term can be used to establish what Fresco means by 'unnecessary suffering'. 'Suffering', according to Fresco is an event that occurs when either of these two distinct needs is not satisfied. He uses

'unnecessary' to mean suffering that occurs in a given society despite having the means to prevent said suffering (Fresco, 2002: 33).

To demonstrate these ideas consider the following example. As of the 20th November 2012 there were 259,000 'long—term empty properties (empty longer than six months)' in the UK (Wilson, 2013:1). At the same time it was also reported that in 'the 2012 calendar year, the total number of acceptances [statutory homeless individuals] was 53,450'⁷ (Department for Communities and Local Government, 2013:4). With these figures, it is identified that there are 4.8 empty homes for every legally identified homeless individual in the UK. Fresco would understand this issue to be an example of unnecessary suffering, as society has the means to satisfy the objective physical needs of people (housing) but despite this, society does not satisfy this 'basic need'. Hence, there is 'unnecessary suffering' within society.

In conclusion to this point, Fresco does genuinely believe that his system will be able to satisfy all objective and physical needs, such as 'good nutrition'. However, Fresco believes that his social system will be unable to satisfy all subjective and psychological needs - or 'social needs'. Moreover, Fresco views social needs to be ever-changing and he has anticipated this phenomenon when designing his TVP and RBE. It is with this understanding that he believes that *most* human needs will be satisfied in his alternative vision. Fresco explains that those needs that are not satisfied will be an issue of concern for his alternative social system. As a result, available and appropriate resources will be directed towards these unsatisfied needs. Therefore, Fresco claims that his alternative vision will continually be involved in efforts to challenge 'unnecessary suffering'.

1.2 LANGUAGE

Fresco's ideas concerning 'human needs' is claimed to be different from that of a humanistic approach. I make this point as the two concepts can be considered similar or entwined and Fresco explicitly stresses that he does not advocate a 'humanistic' approach (Interview: 88-89). Fresco elaborates on this issue by expressing that an 'adequate view' of human behaviour, or specifically, 'how to change people', is needed (Interview: 84). In order to understand why Fresco rejects the humanistic approach it is crucial to appreciate his beliefs regarding 'abstract' and 'clear' referents (Interview: 280). This is argued as his ideas regarding language have significantly shaped Fresco's 'alternative vision'.

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⁷ During the final quarter of this statistical review, 29,060 applications were received by the Department for Communities and Local Government. Of which, 17 per cent were 'found not to be homeless' (2013: 2). As it is recognised that local authorities gathered these statistics, it is also suspected that this research may be subject to self-serving biases. Therefore, it is likely that the true rate of homelessness in the UK in 2012 is actually much higher. Regardless, their statistics will be used for this demonstration.

Specifically, Fresco's belief that 'abstract' referents should be replaced with 'clear' referents is of interest. This belief, concerning the inadequacies of 'abstract' referents, is based on the work of Stuart Chase (1938). Fresco explicitly states that Chase's work aided his understanding of language (The Venus Project, 2011; Fresco, 2007: 16; Interview: 279-280). Focusing on the second 'sin', Chase explains:

"..two besetting sins of language. One is identification of *words* with *things*. The other is the misuse of abstract words." (Chase, 1938: 5. Original italics).

Chase continues to explain that abstract words can embody many different meanings and consequently, the use of these words has limited explanatory power. Fresco repeatedly expresses that he agrees with this explanation by Chase (The Venus Project, 2011; Fresco, 2007: 16; Interview: 279-280), and he elaborates on Chases ideas, stating:

'If communication is to improve, we need a language that correlates highly with the environment and human needs. We already have such a language in scientific and technological communities and it's easily understood by many.

In other words, it is already possible to use a coherent means of communication without ambivalence. If we apply the same methods used in the physical sciences to psychology, sociology, and the humanities, a lot of unnecessary conflict could be resolved.' (2002: 15)

It can be observed that Fresco rejects the 'humanistic' approach because it does not describe how to change human behaviour accurately enough. This is an odd argument to be made by Fresco, as his terms and explanations often lack clear definition. Moreover, he often fails to provide an explicit, scientific account of his ideas. Fresco, in this regard, has become the victim of his own criticism. This is because Fresco argues against the use of such abstract statements, but then use them in his own work⁸.

Continuing with this investigation into Fresco's criticism of language, more questions arise regarding his beliefs. Such as, why does Fresco believe that the language used within 'psychology, sociology, and the humanities' is problematic? What is the 'unnecessary conflict' that Fresco identifies and how does he intend to resolve this issue? Additionally, why does Fresco believe that a more scientific language would resolve this 'unnecessary conflict'? In order

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⁸ For example, Fresco states, 'People would have the means and time for intellectual and *spiritual* growth, and would realize what it really means to be human in a caring society.' (2002: 103. Italics added). Fresco uses the word 'spiritual' in an unclear way. In greater detail, Fresco does not provide an explicit scientific account that explains what 'spiritual growth' is. Therefore, this word is being used as an abstraction from something else.

to answer these questions, an insight into exactly what it is that Fresco is advocating should be expounded.

It is observed that Fresco has adopted Chase's understanding of general—semantics within his 'alternative vision' (1995: 2). This theoretical position of Chase has been labelled as part of the 'logical positivist' camp (Black, 2000: 223-246). Additionally, Fresco can be viewed as being part of the logical positivist movement. I argue this because both Chase and Fresco cite Alfred Korzybski as a major influence in their understanding, specifically regarding Korzybski's work 'Science and Sanity' (Chase, 1938: 4; Fresco & Keyes, 1969: 93). This is important as Korzybski was an affiliate of the Vienna Circle (Korzybski, 1995) and as stated previously, the Vienna Circle was an advocate of Ludwig Wittgenstein's logical positivist philosophy. Additionally, Fresco also co-authored a book called 'Looking Forward' (1969), with Ken Keyes, Jr. who was a student of Korzybski. This logical positivist influence seems to have become a core idea in Fresco's work as he continued to advocate general semantics in his 2002 book stating, on the topic of education in his 'alternative vision':

'Semantics would become a core skill that would greatly improve human communication. Students would intelligently evaluate a situation and access relevant information rather than simply solve rote problems. It is not that they would suddenly become better or more ethical, but the conditions responsible for hostile and egocentric behaviour would no longer be present.' (58).

In recognition of this evidence, although Fresco does not express the point explicitly himself, it becomes useful to understand Fresco as a logical positivist as he predominantly advocates the views of other logical positivists and the logical positivist tradition⁹.

It is debatable, however, to claim that Fresco is an advocate of the logical positivist position as he does not explicitly state that he follows in the tradition. Regardless, the majority of his work supports the logical positivist tradition. Thus, it is appropriate to label him as such - even if he occupies the position for purely rhetorical reasons.

With this in mind, an explanation can be given as to why Fresco perceives there to be a 'lot of unnecessary conflict' within 'psychology, sociology, and the humanities' (2002: 15). It seems that Fresco believes these disciplines should utilise general semantics. As Fresco believes that there is a single objective understanding of reality, the use of abstract notions convolutes the discovery process. Therefore, it seems that Fresco would encourage the disbandment of terms such as 'freedom' in the social science as it is subjective and abstract (Interview: 231). He argues

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⁹ Such as, Chase, Korzybski and Keyes.

that such abstract words can be used for dubious political means. This point is best expressed in this statement by Fresco:

'Democracy is a con game. It's a word invented to placate people to make them accept a given institution. All institutions sing, "We are free." The minute you hear "freedom" and "democracy", watch out... because in a truly free nation, no one has to tell you you're free.' (Fresco on Russia Today, 2010: 4.42-5.30)

Fresco is challenging those knowledge industries and establishments that perpetuate rhetoric rather than useful accounts of phenomena. Fresco, in an attempt to overcome this problem, advocates the use of clear referent. He simplifies this message stating that he wants 'psychology, sociology, and the humanities' to adopt a 'scientific language' (Interview: 231). Fresco's true belief however, is that he wants these institutions to be free of rhetoric and bias that perpetuates 'unnecessary suffering'. In conclusion to this point, Fresco can be viewed to be advocating the logical positivist position for rhetorical means. His underlying belief however, rejects logical positivism.

Additionally, I have encountered some rare instances where Fresco acknowledges the methodological limits of science. For example, Fresco states that:

'No scientific conference is scientific. Scientific would mean a wide range of inquiry, and so we don't have that yet. If anything were scientific, it wouldn't change.' (1975: 27.30min).

Here, it can be observed that Fresco is commenting on the contradictory nature that is encompassed within a logical positivist's methodology. Specifically, Fresco argues that there is a contradiction in the scientific method as it attempts to create a fixed, systematic account for phenomena by continually revising its fixed, systematic framework. It seems strange, therefore that Fresco would articulate this argument but also claim that 'science and technology are the tools with which to achieve a new direction – one that will serve all people, and not just a select few' (2002: 9). It makes sense therefore that Fresco uses the logical positivist and pro-scientific position for rhetorical reasons. Fresco as a public speaker, uses these positions to simplify his message in order to communicate with greater impact.

The reason why I believe Fresco uses these positions for rhetorical reasons requires a deeper explanation. To do this, a greater insight into Fresco's history needs to be explicated. The political climate of America in the 1970's was anti-communist/socialist. America was entering a post-McCarthy era and the Vietnam War was a reinforcement of anti-communist, anti-left sentiments. As a result, a stigma was attached to any form of socialism, or left-wing politics. It is

also recognised that Fresco's ideas are socialist in nature; even in appreciation of Fresco's adamant rejection of being labelled a socialist (2002: 28). This observation, that Fresco holds socialist views, has also been identified by other scholars (Swan, 2009: 12; Goldberg, 2011: 4, 19; Newman 2011: 22, 49). Therefore, using Fresco's 1974 television interview with Larry King as an example, it can be viewed that for Fresco to claim that 'Sociocyberneering' is an apolitical project rather than a socialist project would be an advantageous move. This is because the prior claim, that his project is apolitical, would not carry the stigma that was attached to the left-wing position¹⁰. Even in contemporary Western society, 'communism' is still viewed to be a 'dirty word' (Johnson, 2013: 1). Therefore, it is identified that Fresco's claim that his socialist views are apolitical is actually a perlocutionary act, committed in order to better manage public support. To elaborate further, it is more advantageous for Fresco to lobby for a scientific or 'technical' (Fresco, 2002: 70) 'psychology, sociology, and the humanities' rather than a stigmatised socialist 'psychology, sociology, and the humanities'. Therefore, insight is gained into why Fresco lobbies for a more 'scientific', logical possitivist knowledge industry — as this would be less damaging to his public relations campaign.

In addition to this observation, it should be noted that Fresco's rarer statement that science should be revised, is taken from a 1975 lecture. It is reasonable to assume that the 20-30 year time gap between Fresco's publications, changed his views of science. I believe that Fresco's understanding of the limits of science did not change. Contrary to Fresco's modern rhetoric, he believes that scientific advancement is not enough to secure successful social change. Again, I argue this because of the stigma associated with left wing politics. To support my assertion, a more detailed account of Fresco's beliefs needs to be presented.

When Fresco was teaching in the 1970's, he had a growing amount of 'disciples' 11. I argue that Fresco in this 1975 speech act that accounts for the limits of science, was expressing his beliefs more explicitly - abandoning any strong rhetoric. The reason for this, was to allow his group of avid followers to engage more deeply with his ideas. At the same time, it is recognised that Fresco's concerns about losing public support was alleviated as these 'disciples' were already interested in his beliefs. Therefore, Fresco was able to be speak more openly about his ideas without provoking a damaging public response. Additionally, the original footage of the 1975 speech act was not originally intended for a public audience. This suggests that Fresco had

¹⁰ Moreover, this explanation can be used to understand why Fresco encouraged the US to '..beat the communists to it' (in Smith, 1963: 3) whilst at the same time, he adamantly opposed nationalism (Andreeva, 1950: 1, Fresco, 2002: 6).

¹¹ Anderson (1973: 1) explains that 'disciples' was the name associated with Fresco's student that had a particularly intense interest in his ideas regarding social change.

reservations about the publication of this media. Again, this supports the conclusion that Fresco was attempting to create a more publically supported image of his socialist vision.

In support of this observation, Fresco argues that in order to communicate effectively, the speaker needs to tailor their approach to the audience. He demonstrates this point using his own experiences with a Ku Klux Klan community (Fresco, 2012). In this account, Fresco explains that he reshaped his use of language and displayed false beliefs in order to influence the Ku Klux Klan group (Fresco, 2012). Fresco concludes that due to these actions, he was able to successfully dissolve the group through coercion. It becomes rational to believe that Fresco's statements are a product of this coercive method. It is recognised that Fresco's contradictions¹² are likely to be precautionary acts. There is enough evidence to rationally assume that Fresco has purposely tailored his language with the intent of creating a more appealing public image.

This rhetoric becomes a problem as it convolutes Fresco's true beliefs and possibly confuses TVP supporters. Specifically, Fresco's 2002 work, 'The Best That Money Can't Buy Beyond Politics, Poverty & War' is identified as the source of much of the confusion associated with TVP¹³. When this book is appreciated in its historical-political context, new information arises. This book is intended for a broad public reception, which Fresco admitted through multiple promotional articles, as he recommended his book via newspapers, magazines, interviews, TV shows and numerous other media, (Ynclan, 2002: 2e; Industrial Engineer, 2002; London Real, 2012; Chalmber, 2009). This book can be understood as a means to mobilise public support for TVP. Specifically, the book was published with the intention of encouraging the public to take an interest in Fresco's ideas. The book sacrifices consistency for public image. Most notable, is Fresco's paradoxical claim that the book is 'beyond politics' whilst at the time, he invites public 'participation' in TVP political movement (2002: 121). To clarify further, Fresco denounces the role of politics whilst simultaneously rallying supporters for his own cause, in the same text.

This insight into Fresco's rhetoric can be used to gain a deeper insight into Fresco's speech acts. For example, it is because of this rhetoric that when I asked Fresco, 'some may argue that the "scientific method" that you advocate in the book¹⁴ is paradoxically a political stance in itself. How would you address that argument?' (Interview: 121-122). He abruptly answered; 'I'm sorry about that interpretation, but they are not correct.' (Interview: 127) – suggesting that this was an awkward topic of discussion.

¹² Such as his 'apolitical' socialist statements.

¹³ And to a lesser extent his 1995 work, 'The Venus Project A Redesign of A Culture'.

¹⁴ 'The Best That Money Can't Buy Beyond Politics, Poverty & War' (2002).

In conclusion, Fresco suggests to his public audience that he holds similar beliefs to that of the logical positivist position. However, Fresco is actually critical of this position and uses the image for rhetorical reasons. Specifically, he uses the logical positive position and an emphasis on scientific solution to criticise the knowledge industry. He claims that the knowledge industry should promote the use of a 'scientific language' in order to overcome abstractions. Fresco's true intention here, is to encourage the knowledge industry to abandon politics that promote 'unnecessary suffering'.

1.3 Critique of Monetary Politics

In many of Fresco's publications, he describes his experiences whilst living in Brooklyn in 1929 (in Andreeva, 1950.; in Smith 1961.; in Joseph 2011.). It should be noted that this was the year the US stock market crashed, marking the start of 'The Great Depression'. In later life, Fresco would report that these teenage experiences confused and angered him (Galzecki, 2006a, 2006b, 2006c; Gore, 2011). This experience is the starting point for all of Fresco's subsequent work. As part of this emotional time, Fresco witness disturbing events such as his father being forced to sleep on the street whilst there was vacant housing (Chalmers 2009: 3:00-3:20). Despite an abundance of food and commodities on display in the commercial sector, Fresco observed that the majority of the general public could not legally obtain these resources (Gore, 2011: 5). This disturbing episode in Fresco's life generated a powerful dissatisfaction with the socioeconomic system that forms the *telos* of his life work. Specifically, regarding what it means to prevent 'unnecessary suffering'. This observation can be supported with the evidence provided by Gore's interview with Fresco:

'I looked around, and the stores had everything in the windows ... whatever people would need [...] But [people] had no money.' (Fresco in Gore, 2011: 5).

It is these experiences during 'The Great Depression' that motivated Fresco to investigate and challenge 'unnecessary suffering' (in Joseph 2011). This motivation is perhaps most explicitly evident in Fresco's statement that 'the rules of the monetary system are obsolete and create needless strife, deprivation, and human suffering' (2002: 35). Fresco elaborates on this statement by expressing that:

'In a monetary system, purchasing power is not related to the capacity to produce goods and service. For example, in a recession there are computers in store windows and automobiles in car lots; but people do not have the purchasing power to buy them' (Fresco, 2002: 5).

Fresco believes that monetary systems *cause* 'unnecessary suffering'. Fresco believes that the reason for why monetary systems cause this suffering is because 'purchasing power is not related to the capacity to produce goods and service' (Fresco, 2002: 5). These are typical criticisms of the capitalist system and Fresco elaborates further on these harms, explaining that:

'In a monetary system, the major aim is profit: maintaining the competitive edge and the bottom line is all that matters. The social and health problems that arise from mass unemployment of people rendered obsolete by automation are considered irrelevant, if they are considered at all.

Any social need that may be met is secondary to acquiring a profit for the business. If the profit is insufficient, the service will be withdrawn. Everything is subordinate to increasing the profit margin for shareholders. It does not serve the interest of a money-based society to engage in the production of goods and services to enhance the lives of people....' (Fresco 2002: 28)

What is interesting here is Fresco's use of language. Fresco's critique of the 'monetary system' is really a critique of the capitalist system. As Fresco is an American public figure, it would be advantageous of him to veil his critique of capitalism. This is firstly due to the associated criticism of Marxist thinkers in the US. Secondly, this is because of the close affiliation of capitalism with American cultural values. Therefore, in order to arouse as little criticism as possible, it would be advantageous for Fresco to critique something more culturally ambiguous. This is why Fresco uses the term 'monetary systems' rather than 'capitalist system'. As monetary systems are a component in past materialisations of communist and socialist societies, Fresco can avoid the criticism that he is targeting American cultural values. Instead, Fresco can strategically argue that he is criticising all cultures that have a 'monetary system'.

However, on occasion, Fresco does explicitly address capitalist societies and their problems. What is interesting is the style of Fresco's criticism when addressing capitalist societies. In comparison to his comments regarding communist and socialist societies (in Smith, 1963: 3; in King 1974), Fresco's criticism of capitalist societies is modest – at least when he is on a public platform. Fresco does not position himself to be absolutely opposed to a 'free-enterprise' system. Instead Fresco explains that the '...free-enterprise system creates incentive. This may be true.'. Following this statement, Fresco presents a mild criticism of 'monetary systems':

"...the argument that the monetary system and competition generate incentive does not always hold true: most major innovations today were brought about

by individuals who were genuinely concerned with solving problems and improving processes, rather than with mere financial gain.' (Fresco, 1995: 18).

As part of this critique, Fresco argues that monetary systems are an 'obsolete' method of resource management. He continues to argue that if the goal is to prevent 'unnecessary suffering' and to maximise society's access to satisfying needs, then a monetary system is ineffective. Fresco elaborates further explaining:

'...if all the money in the world suddenly disappeared, but topsoil, factories, and other resources were left intact, we could build anything we chose to build and fulfil any human need. It is not money that people need, but access to the necessities of life... [...] ...money is irrelevant. What's required are the resources and manufacturing and distribution of the products.' (Fresco 2002: 35).

It is observed that Fresco believes society is currently capable of satisfying human needs without the use of a monetary system. Moreover, Fresco explains that through the use of technology, resource management can be more efficient in comparison to a monetary system. Specifically, Fresco advocates his 'Resource Based Economy' (RBE) and the use of cybernated technologies. Ultimately, Fresco is dissatisfied primarily with capitalism due to its perpetuation of unnecessary suffering. Additionally, Fresco criticises the use of monetary systems as a technologically inferior means to manage resources — targeting past materialisations of communist and socialist societies.

Fresco claims that any political ideology reliant on such a system will 'seek differential advantage by maintaining their economic competitive edge' and will consequently, compromise their capacity to satisfy 'human needs' (Fresco, 2002: 28). Fresco elaborates on this issue by arguing that political ideologies that rely on a monetary system '...perpetuate social stratification, elitism, nationalism, and racism' due to their drive to maintain 'their economic competitive edge' (2002: 28). Consequently, such systems are counter-productive to satisfying 'human needs' as they inherently provide amoral motivation that overwhelms other social concerns, such as 'love and security'. This point can be supported by Fresco's comments on Amschel Rothschild's popularised quote:

"Give me the power to issue and control a nation's money and I care not who makes its laws." As it is applied today, financial power is truly amoral.' (Fresco, 2002: 30)

It is with this understanding that Fresco critiques political ideologies, such as 'socialism, communism, fascism, and even our free enterprise capitalist system' (Fresco 2002: 28). Fresco

believes that political ideologies that rely on a monetary system are unable to counter the inherent systemic harms it perpetuates (Fresco, 2002: 28). However, what is interesting here is that Fresco seems to believe that communism is a political ideology that relies on a monetary system – at least this is the belief that he publically presents.

Another dissatisfaction Fresco has of 'monetary systems' is that they do not produce 'technical' answers (Chalmers, 2009: 4:00-8:00). Rather Fresco explains that such systems promote abstract political ideas that are not based on 'clear referent'. Fresco elaborates on this dissatisfaction regarding monetary based politics, stating:

'It's not politicians that can solve problems. They have no technical capabilities, even if they were sincere. It's the technicians that produces the desalination plants, it's the technicians that give you electricity, that give you motor vehicles, ... [etc]. It's technology that solves problems not politics, politicians cannot solve problems because they are not trained to do so. [...] ...manmade laws are attempts to deal with occurring problems and not knowing how to solve them; they make a law.' (In Zeitgeist: Moving Forward, 2011).

In this extract, Fresco's term 'technical' gains a deeper meaning. Fresco uses the term 'technical' to denote more than a method of understanding a problem in terms of its clear referent, but also to describe the application of technological knowledge to clarify the ambiguous term: 'problems'. Fresco also uses the word 'technical' as a rhetorical device in order to separate those useful solutions from those that are not. Furthermore, the 'technician' encompasses any individual that is able to 'solve problems'. Using Fresco's own definition, a politician can be a 'technician' as long as s/he 'solves problems'. What Fresco is targeting here, are those political figures that do not challenge 'unnecessary suffering'. As the majority of political discourse in the US is based on supporting the monetary system, Fresco has made a rhetorical move to label the entire political system as being incapable of problem solving as they have 'no technical capabilities'.

As part of this criticism, Fresco also challenges the usefulness of laws. Fresco believes that adequate social change cannot emerge out of a capitalist system. This leads Fresco to state:

'We must stop constantly fighting for human rights and equal justice in an unjust system, and start building a society where equal rights are an integral part of the design' (Fresco, 2002:29)

This suggests that capitalist society needs to be radically changed as reform is not an adequate means of challenging 'unnecessary suffering'. Within this argument, Fresco also provides a critique of political identity:

'...all politics is immersed in corruption. Let me say it again: communism, socialism, fascism, the democrats, the liberals- we want to absorb human beings. [...] ..all organizations that believe in a better life for Man! There are no Negro problems, or Polish problems, or Jewish problems, or Greek problems, or women's problems. There are only Human problems!' (in King: 1974, 26:16-26:51).

It is identified that Fresco rejects the idea of single issue politics. To expand further, it is observed that Fresco views political groups that lobby for issues regarding sex, race, gender, etc. to be lobbying for the same fundamental issues. These separate political groups are actually attempting to achieve greater equality, inclusion, acceptance, etc. What Fresco suggests about these fragmented groups is that they should see the similarities between themselves rather than lobbying for their own single-issue causes. With this appreciation, Fresco views the monetary system to be the cause of inequality, exclusion, rejection, etc. due to its amoral drive.

Fresco criticises contemporary monetary based politics further, explaining that the economic structure of such societies are based on 'unsane' principles (in Gazecki 2006: 27:21-28:00). Fresco continues to argue that monetary societies are more concerned with insignificant issues such as brands and consumables, than with more important subjects, such as how to end suffering in third world nations. Fresco claims that modern monetary societies are 'unsane', meaning that they are capable of rational, constructive thought but have not been given the appropriate environment to allow such beneficial behaviours to emerge. By this, Fresco means that a sane society would be one that prioritises the needs of individuals over issues such as consumerism. To reiterate, Fresco believes that a sane society is one that challenges 'unnecessary suffering'.

1.4 THE ROLE OF TECHNOLOGY

Fresco's 'alternative vision' is designed with the intentions of satisfying 'human needs' and preventing 'unnecessary suffering'. In order to do this, Fresco advocates a change in the economic basis of monetary society. Fresco has continued to promote a technological replacement for the economic base in order to overcome this obstacle. Fresco claims that technology can facilitate for the needs of individuals – he argues that this should be done through automation and other 'cybernated technologies'. This section is concerned with what Fresco means by this. Specifically, what is the scope and depth of Fresco's vision regarding

technology? What does Fresco view to be the limits of technology? What specific technologies does Fresco advocate in his 'alternative vision'? And most importantly, how and why does Fresco think this will be an apolitical society?

Continuing with Fresco's critique of monetary politics, Fresco claims that, 'Only in a cybernated world can decisions be based on the full range of data available, without interference from human ego or self-interest.' (2002: 47). Fresco's TVP is heavily reliant on the use of cybernated technology to prevent 'unnecessary suffering'. He believes that by using technology, his society will be 'beyond politics' (Fresco, 2002). However, what Fresco actually means by this is that he wants his society to be beyond 'unnecessary suffering'. This, contrary to Fresco's rhetoric, encompasses political solutions - as long as they 'solve problems' (in Zeitgeist: Moving Forward, 2011). Therefore, Fresco's alternative vision is not actually apolitical. Rather, Fresco occupies a political position that aims to utilise technology to '...eventually provide us with the best solutions to most social problems.' (2002: 47).

In order to get a better insight into the political position Fresco occupies, the term 'cybernated technologies' should be explicated:

'Automation simply means replacing human hands and feet by machines that do the same job—only better. Computers today replace human brains with electronic equipment that manipulates figures, makes programmed decisions, and gives instructions far more efficiently than any human. Cybernation means the control of the entire factory by a computer that acts in place of the boss.' (Fresco & Keyes, 1969: 39).

'Cybernation' in this regard can be viewed as a development of Fresco's previously discussed term, 'technical'. Simply stated, 'cybernated technology' is a rhetorical device used by Fresco to give the public a clear choice between supporting legitimate knowledge that can 'solve problems' or solutions offered by politicians that support the perpetuation of the monetary system. To reiterate, 'cybernated technologies' follow the political agenda to prevent 'unnecessary suffering' and satisfy society's needs. Fresco's understanding and use of technology within TVP, contrary to his rhetoric, is not apolitical. Rather, Fresco intends to make technology accessible to all individuals with the political intention of these individuals satisfying their needs and preventing 'unnecessary suffering'. Moreover, Fresco wants this use of technology to be decentralised. This means that he intends for individuals to have access to 'cybernated technologies' whether they are part of a community or by themselves. This type of society that relies on the sharing of technological advancements for the benefit of the entire

population can be compared to a peer-to-peer network – all participants have access to all goods and services and their contributions to the network is a personal choice.

Fresco continues to detail the usefulness of 'cybernated' technologies as he explains that:

'With computers processing trillions of bits of information per second, existing technologies far exceed the human capacity for arriving at equitable and sustainable decisions concerning the development and distribution of physical resources.' (2002: 8).

Following this, Fresco emphasises that political decisions will be arrived upon with the *aid* of technologies – not by technology itself. (in Chalmers 2009: 4:00-8:00). Fresco believes these technologies will be designed for the facilitation of satisfying 'human needs' and to prevent 'unnecessary suffering'. Fresco considers this to be a largely objective task as what constitutes as a 'basic need' is defined by biological factors, such as caloric intake, 'good nutrition', etc. (Interview: 148, 164, 2002: 38). However, it can be viewed that Fresco believes 'cybernated' technologies are limited with regards to their ability to satisfy 'social needs' – although it is noted that Fresco is reluctant to acknowledge this limitation¹⁵. Fresco continues to claim that such technologies will be able to *facilitate* for the satisfaction of social needs but they will not be able to *satisfy* these needs (2002: 83).

A final point should be made to highlight another way that Fresco uses the term 'cybernated technologies'. Fresco often claims that the means to mobilise his alternative vision already exists. However, it is unclear from Fresco's work whether he is implying that the social means exists to develop a better society or whether he has technological plans that will aid in the mobilisation of this alternative vision. This is a crucial difference as it affects the usefulness of his work. I believe that Fresco has intentionally avoided discussing this subject because he is aware that if the public believes he has an actual technical plan for societal change, he can garner greater public support.

It is acknowledged that Fresco has made many models of his cybernated society and claims that he has detailed technical models of such technologies but these claims have never been verified by a third party. When Fresco is pressured to present his plans, he claims that if he does so, he will be exploited by the monetary economic system. Specifically, Fresco believes that his ideas will be used for monetary gain rather than for their intended purpose¹⁶. It becomes impossible

¹⁵ This reluctance can be attributed to Fresco rhetorical ambition to promote a simplistic image of his TVP and its RBE. ¹⁶ This seems to be a legitimate belief of Fresco as he has been offered private contracts to help establish his TVP but he has rejected them. He argues that these offers will affect the purpose of his project due to the effect of monetary politics (see Appendix 13).

therefore, to confirm whether Fresco has a detailed working plan of the technology he intends to use in his alternative vision, or whether he is simply creating a public image that suggests he has such designs for rhetorical reasons. This is potentially another limitation concerning Fresco's technological ideas.

In conclusion, it is recognised that Fresco does not present any detailed account of 'cybernated' technologies. Instead, Fresco uses the term rhetorically in one sense to clarify which information is useful. It is unclear whether he uses the term to refer to existing detailed plans of the technological machines he intends to use in his society; or whether he is suggesting that he has designed working technologies in order to arouse interest in the public. This means that Fresco does not openly offer a detailed, technical plan of his proposed cybernated technology.

1.5 Culture, Values & Human Behaviour

Fresco believes that human behaviour is almost absolutely defined by environmental conditioning (Interview: 118). In my interview, Fresco was asked the question, 'Is it true that you believe all behaviour is culturally defined?' to which Fresco clearly answered, 'yes'. However, an insight into Fresco's experiences should be detailed in order to establish a greater understanding of what he means by this and why he believes this.

Fresco travelled to Hawaii in 1939 (Appendix 4). Shortly after his arrival in Hawaii, Fresco spent a time living amongst the tribal people of Tuamotus on the South Sea Isles. Fresco claims his experience with this tribe resulted in a realisation about 'environmental conditioning' (Fresco, 2002: 60). Fresco describes that the fishermen on the island did not claim, when distributing fish to the locals, "You owe me five bucks [...]", They shared whatever they had' (in Gore, 2011: 4). Additionally, Fresco adds 'There were no Peeping Toms [...] There were no fetishes'. This contrast in cultural differences regarding Fresco's own experiences during 'The Great Depression' to that of the Tuamotus tribe had a dramatic impact on his understanding of behaviour (Fresco, 2002: 60). Fresco expresses that his experiences on the island allowed him to have a greater appreciation of 'culture', 'conditioning' and 'values', and their effects on shaping human behaviour (Fresco, 2002: 66-67). Fresco elaborates on these terms, stating:

'A culture must be seen relative to time, relative to place, and relative to a particular framework of values, thinking methodology, and technology. [..] It isn't "natural" for a person to want money. It's a value most people in our culture acquire [...] Almost everything we do is a reflection of our own personal value system. What do we mean by values? Our values are what we want out of life. No one is born with a set of values. Except for our basic physiological needs, such

as air, water, and food, most of our values are acquired after birth.' (Fresco & Keyes, 1969: 25).

It can be observed that Fresco believes that 'culture' and 'values' share a dialectic relationship-meaning that these terms rely on each other to be defined. Fresco uses the term 'culture' to refer to the social and physical environment that a person is exposed to. This 'culture' shapes individuals' 'values'. Consequently, 'values' are the product of this psychical and social environmental conditioning. Fresco explains that 'values' define what a person will 'want out of life'. 'Basic needs' also form part of an individual's 'values'. Fresco goes as far to claim that these 'values' encompass not just 'basic physiological needs', but also culturally defined 'wants'. In this regard, social needs or 'wants' are also considered to be part of an individual's 'values'. It is with this definition of 'culture' and 'values' that Fresco elaborates further as he comments on social problems and the usefulness of laws:

"...all human behaviour is lawful, that the reactions and values that all people have are perfectly lawful to the environment that they come from. Every human being is perfectly well-adjusted from where they are coming from' (Chalmer, 2009: 4:28-4:35).

Fresco views behaviour to be the product of environmental conditioning. What is interesting is that Fresco views environmental conditioning to be the only factor that shapes behaviour – apart from instances involving physiological difference such as 'brain damage' (Interview: 200). Fresco advocates an environmentally deterministic approach concerning understanding human behaviour. Fresco continues to explicate his understanding of what he believes forms human behaviour by stating that:

'Bigotry, racism, nationalism, jealousy, superstition, greed, and self-centred behaviour are all learned patterns of behaviour, which are strengthened or reinforced by our upbringing. These patterns of behaviour are not inherited human traits or "human nature" as most people have been taught to believe. If the environment remains unaltered, similar behaviour will reoccur. When we come into the world, we arrive with a clean slate as far as our relationships with others are concerned' (Fresco, 2002: 38).

This extract is useful as it cuts to the core of Fresco's ideas regarding human behaviour and how it is manifested. Fresco employs a classical epistemological theory known as the 'tabula rasa', or blank slate. With this understanding, Fresco views all individuals to be essentially the same and that behaviour is instilled by environmental factors or 'culture'. In this regard, Fresco views all

individuals to be standardised. This idea of standardisation, or lack of individuality, is most explicit in his statement:

'every word you use is taught (to) you; "cup"; "house"; "building"; "momma"; "papa"; every word you use, every facial expression, occurs in your movies, your books, your novels, your role models. So, I don't see any individuality.' (Interview: 196).

To emphasise this point, closer attention should be given to this sentence; 'If the environment remains unaltered, similar behaviour will reoccur', (2002: 68). Why does Fresco in this instance use the word 'similar' instead of 'the same'? This is a crucial question as Fresco seems to subtly acknowledge that it would be absurd to believe that identical behaviours would emerge even 'If the environment remains unaltered'. Fresco acknowledges that individual differences do in fact shape behaviour contrary to his statement that 'I don't see any individuality'. However, Fresco's beliefs explain that these individual behaviours are the result of minor 'cultural' or physiological differences¹⁷ – rejecting the idea that such individual behaviours have a preternatural cause.

Another point of interest is Fresco's understanding of the politics that surround contemporary Western culture. He explains that:

'Psychiatrists, psychologists, sociologists, and scientists try to adjust people to this culture [in reference to the US]. But to be adjusted to this mess we are in is to turn out worse than we began. That's why I have always attacked our basic system values.' (in Mayhall, 1990: 63)

Fresco seems to be attacking 'scientists' in this extract. This is out of step with his other beliefs as he often praises the contributions and usefulness of science (2002: 83). This inconsistency also raises questions such as, what does Fresco value in science? It is understood that Fresco strongly believes that society should be scientifically oriented. However, Fresco is critical of 'scientists' as they try to 'adjust people to this culture' – in reference to the United States (Fresco, 1990: 3). This conflict of ideas, for and against science, can be explained when his other beliefs are taken into account.

Fresco believes the monetary system perpetuates negative social behaviours such as greed and ego (2002: 82). Fresco is not dismissive of science or scientists but the 'values' they hold that form negative behaviours. More explicitly, Fresco is supportive of 'technical' scientists – meaning that he is against science that supports the perpetuation a monetary system. Fresco

¹⁷ It should be made clear that Fresco does not believe genetics have a significant effect on shaping behaviour (see Interview: 179-216).

explains that when scientists attempt to adjust individuals to a monetary society, their efforts should really be directed towards changing society, as this is the cause of 'unnecessary suffering'. To do otherwise 'is to turn out worse than we began'. In more detail, Fresco believes a scientific community under the influence of a monetary society generates unreliable and harmful science and this should be challenged.

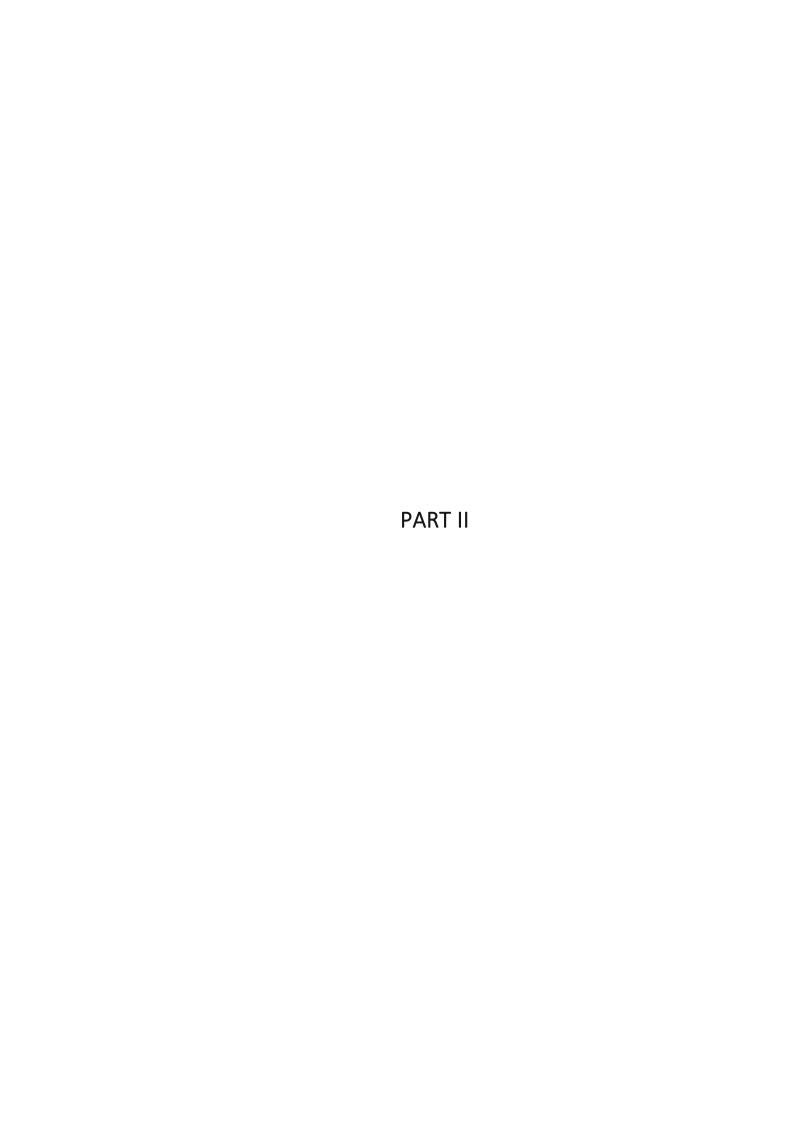
Fresco explains that an individual's behaviour is shaped by their socioeconomic conditions (2002: 103). Fresco claims that if an individual is able to satisfy their basic and social needs without unnecessary suffering, then that individual will develop the relevant values of that culture. Specifically, Fresco argues that such a society would not support negative behaviours such as greed, violence, ego, etc. Fresco elaborates on this issue as he explains that:

'In a society that provides for most human needs, behaviour that is constructive would be rewarded, and people who have difficulty interacting in the community would be helped rather than imprisoned.' (1995: 27).

Fresco intends to develop the public's values through 'technical' coercion. Specifically, Fresco is attempting to change societal norms in order to change the behaviours of individuals. By modifying the environment, negative social behaviours are reduced and 'constructive' behaviours are rewarded. In this regard, Fresco's 'cultural' coercive ambition is ethnocentric¹⁸ as what is defined as negative or 'constructive' behaviour is relative to his understanding.

31

¹⁸ I use the term 'ethnocentric' here with the same meaning as Robert King Merton (1996). Specifically, that it is 'the technical name for the view of things in which one's own group is the centre of everything, and all others are scaled and rated with reference to it' (126).



2.0 CRITIQUE OF FRESCO'S THEMES

By comparing and contrasting Fresco's work with that of others, Fresco's ideas will be challenged. Through this process, a more critical insight into the life work of Fresco will be achieved. This section will examine Fresco's ideas, revealing some problematic issues within his work. Those ideas that are unclear, contradictory or by other means failing to develop useful knowledge will be highlighted in this section.

This section follows the structure of 'Part I'. However, rather than starting with the theme of 'Human needs', this section will begin by investigating 'Language'. I have made this change because Fresco's use of, and ideas concerning, language is foundational for some of his other beliefs. Therefore, this change will support a more flowing critique of Fresco's work.

2.1 LANGUAGE

Throughout Fresco's work, he uses terms that lack clear definition. Although Fresco often presents scientific arguments, he often does not provide a clear account of what he means by certain terms. This is odd as Fresco, albeit for rhetorical reasons, emphasises that he wishes to 'eliminate "abstract" words and only use clear referential' (Interview: 282; 2002: 17). This section will critically evaluate Fresco's ideas regarding language and his use of language, including his use of these vague terms.

Fresco explains, 'All human behaviour is lawful, that is, it follows natural law' (1995: 27). Fresco uses the term 'natural law' in an abstract way. Rather than explaining the detailed factors that form human behaviour, Fresco uses a term that is an abstraction from this explanation. This is a problem because Fresco publically criticises, for rhetorical reasons, the use of abstract words. This is because such words do not support his 'technical' vision. In this regard, Fresco falls victim to his own rhetoric. Specifically, what Fresco criticises politicians for, he is doing himself in this section – he is using words with abstract meanings. As a result, Fresco's rhetoric questions the legitimacy of his true beliefs.

Fresco's advocacy of general semantics and the logical positivist position damages the legitimacy of his 'alternative vision.' This advocacy is problematic because, as stated in the '*Theoretical Foundations*' section, this position has been largely discredited. Consequently, followers of Fresco's TVP are being proactively equipped with ineffective knowledge (The Venus Project, 2013b). Fresco seems to be aware of this but advocates such ineffective knowledge because it is rhetorically useful, which is morally questionable. Additionally, the effectiveness of this approach to empower TVP is also questionable. It is speculated that Fresco's TVP may have had greater success if its members were equipped with more effective knowledge.

This strategy aimed at empowering TVP has also confused other academics. For example, Dr. Notaro states:

'Today's pressing problems require a holistic approach, – various disciplines, arts science, philosophy working on a "convergence mode", unfortunately Fresco's vision seems to consolidate the long established view that the "two cultures" (Science and Art) are antagonistic.' (2005: 15-16).

Contrary to what Dr. Notaro believes, Fresco does in fact advocate the sciences and arts in his TVP. However, these 'two cultures' must be 'technical' - meaning that they should be motivated towards preventing 'unnecessary suffering' and satisfying human needs.

2.2 HUMAN NEEDS

Fresco's 'alternative vision' is an attempt to facilitate for 'the needs of individuals. This means providing the appropriate environment, educational facilities, good nutrition, health care, love and security that people require.' (2002: 38). However as stated previously, Fresco does not sufficiently explain what constitutes these needs. To reiterate, Fresco does not provide an explicit, scientific definition of his term. It has emerged however, that Fresco views 'human needs' to be composed of two parts; 'basic needs' (2002: 43) and 'social needs' (2002: 47).

What persists as one of the more puzzling aspects of Fresco's work is his adamant promotion of scientific discourse coupled with his own failure to provide scientifically robust accounts of his ideas. He does this to the extent that he states, 'We want a scientific language' (Interview: 231). In support of this statement, Fresco argues that what is needed in contemporary society is clearer use of referents above that of the abstract (Interview: 280) – again, rhetorically promoting the logical position. I will not reiterate my criticism of Fresco's lack of a scientific writing style here. Rather, I feel that it is necessary to point out that he continues with this unscientific theme as he describes 'human needs', and consequently, his work is not as useful as it could have been.

Fresco believes that religious needs are 'social needs' (V-Radio 2010: 6:30min). To expand further, Fresco claims that religious individuals should be allowed to practice their religion and that these practices should be facilitated for by society¹⁹ (V-Radio 2010: 6:30min). He also, perhaps incongruently, claims that his vision does not support irrational theological beliefs (V-Radio 2010: 11:30-12:00min). How religious needs are to be treated in Fresco's alternative vision

¹⁹ Meaning that in Fresco's alternative vision, an appropriate amount of space and resources would be allocated to allow these individuals to satisfy their religious needs.

is never fully explained by Fresco, which raises ethical concerns. Specially, as Fresco's work has anti-religious undertones, his alterative vision may be antagonistic towards religious individuals.

Problems reside in Fresco's ideas concerning 'social needs' and 'basic needs'. Specifically, he does not comment on which one should be prioritised during a conflict between the two. This issue can be demonstrated with the question; should the Jewish practice of child circumcision be considered a legitimate religious practice or child genitalia mutilation? This one act can be viewed to violate a 'basic need' - by causing unnecessary suffering via objective avoidable harm. At the same time however, child circumcision may satisfy a social, religious need. Fresco provides no answer as to how this conflict should be resolved. As Fresco does not account for which of the two needs should take precedence when there is a conflict between them, his work can be considered to be limited. Specifically this is an issue as Fresco does not explain in sufficient detail what constitutes 'unnecessary suffering'.

The limits of Fresco's work can be revealed in more detail when it is contrasted with that of other scholars. Herbert Marcuse and Fresco share many similarities in their beliefs. This can be demonstrated by comparing Marcuse's use of the term 'vital needs' with that of Fresco's 'basic needs'. Marcuse describes vital needs as follows:

'The only needs that have an unqualified claim for satisfaction are the vital ones - nourishment, clothing, lodging at the attainable level of culture. The satisfaction of these needs is the prerequisite for the realization of all needs' (2002: 7, originally 1964).

Both these thinkers believe that there are objective and physical needs of individuals. However, what is interesting is that these similarities run deeper, as Marcuse also identifies that individuals have 'genuine social needs' (Marcuse, 2002: 47). Again, similarities continue as Marcuse defines social needs to be subjective and psychological. Importantly however, Marcuse identifies a new type of human needs within the sphere of social needs. He names these needs, 'false needs':

"False" are those which are superimposed upon the individual by particular social interests in his repression: the needs which perpetuate toil, aggressiveness, misery, and injustice. Their satisfaction might be most gratifying to the individual, but this happiness is not a condition which has to be maintained and protected if it serves to arrest the development of the ability (his own and others) to recognize the disease of the whole and grasp the chances of curing the disease. The result then is euphoria in unhappiness. Most of the

prevailing needs to relax, to have fun, to behave and consume in accordance with the advertisements, to love and hate what others love and hate, belong to this category of false needs.' (2002: 8, originally 1964).

From analysing Marcuse's work, it seems he views consumer society to produce these 'false' needs. Consequently, Marcuse continues to explain that efforts should be made to satisfy 'vital' and 'genuine social needs' above 'false needs'. This provokes a deeper question regarding the definition of needs; according to Marcuse's definition, would Fresco's 'religious needs' be regarded as 'false needs'? In order to attain an answer to this question, a deeper analysis of the subject needs to be conducted.

Similarities can be drawn between the work of Fresco and that of Feuerbach. Feuerbach (2008, originally 1841) argues that religion is a portrayal of human needs:

'The impoverishing of the real world and the enriching of God is one act. [...] God springs out of the feeling of a want; what man is in need of, whether this be a definite and therefore conscious, or an unconscious need, – that is God.' (38).

Similarly, Fresco argues that 'Religion focuses on unresolved human problems of insecurity, shame, fear, and wish fulfilment, and offers hope for a better life in the next world' (2002: 21). Fresco continues to suggest that religion is the manifestation of attempts to understand and resolve problems. He then continues to stress that if science is applied without ego or bias, then these problems can be more accurately understood and therefore resolved (Fresco, 2002: 8). Nietzsche expresses a similar belief in his 'Parable of the Madman' (1974, originally published 1882: para 125). In this text, Nietzsche explains that in the advent of the scientific era, there has been a decline in the amount of Westerners participating in religious practices concerning the Abrahamic God. As a result of this, he coins the phrase, 'God is dead' which he repeats throughout his work. The common idea between these thinkers is that as science advances its explanatory calibre, the social reliance on religion to satisfy needs shrinks. Moreover, these thinkers identify that religion represents a means of satisfying needs that could not be previously satisfied. This idea is also present in the work of Marx and consequently, it can also be extrapolated that Marcuse follows in this tradition. Therefore, religious needs can be viewed as 'false needs' as they dictate how:

'...to have fun, to behave and consume in accordance with the advertisements, to love and hate what others love and hate, [these needs] belong to this category of false needs' (Marcuse, 2002: 7).

It is evident that Marcuse is able to present a hierarchy of prioritisation regarding the satisfaction of human needs where Fresco does not. According to Marcuse's work, the first needs that should be satisfied are the 'vital needs' because 'The satisfaction of these needs is the prerequisite for the realisation of all need' (2002: 7, originally 1964). Secondly, Marcuse argues that 'genuine social needs' should be satisfied. Finally, 'false needs' should be considered. It is with this explanation that Marcuse's work can be used to solve the religious needs dilemma. However, after analysing Fresco's work it can be interpreted that he believes that the prioritisation of needs are contingent, just as 'social needs' are.

Marcuse's ideas are more far-reaching than Fresco's. In more detail, Marcuse's ideas convey very similar ideas to Fresco, though provide more detail about the construction of needs and the types of needs that arise. Additionally, it should be noted that Marcuse's beliefs were published in 1964 whereas Fresco's beliefs were published in 2002. Given the time difference between these two thinkers, it is disappointing that Fresco does not elaborate further on the concept of human needs. It is this criticism of Fresco that raises questions about usefulness of Fresco's work. More precisely, the question arises, what is Fresco contributing to the modern human needs debate? Unfortunately, it appears that he is only providing supportive arguments for more in-depth and broader thinkers.

2.3 Critique of Monetary Politics

To begin this critical appraisal, a two-part task will be proposed. Firstly, Marx's work will be used to critique Fresco's analysis of the monetary based system; capitalism. Secondly, Marx's work will be used to critique Fresco's 'alternative vision' (1995: 2). Marx's ideas will be extracted and contrasted against those of Fresco. This will be done in order to challenge Fresco beliefs.

Beginning with a critique of capitalism, it is observed that Fresco and Marx both agree that legal rights are inadequate for creating equality in a capitalist society (Fresco, 2002: 29; Marx 2010²⁰: 117-135; 1999²¹: 10-11). However, they have different reasons for arguing this. Marx argues that the bourgeois uses legal rights as a tool to manipulate the proletariat in order to create stability. Harvey (2010), following the Marxist tradition, elaborates further in his account of the Western bourgeois during the 19th century. In this case, the bourgeois lobbied for their workers to have a lower tax on wheat. Harvey explains that this served to reduce the proletariat wages without causing the withdrawal of wheat-based commodities. The purpose for this was to create a more stable exploitative environment without the workers becoming hostile - it was recognised that

²⁰ This item is a republication of Marx's 'Capital: Volume I' 1867.

²¹ This item is a republication of Marx's 'Critique of the Gotha Programme', 1875.

the workers would have become hostile if they were unable to receive wheat-based products on this new lower wage.

Fresco commenting on contemporary capitalist society, argues that technology has the capacity to solve many of the problems identified by legal rights. Fresco explains that human rights²² are unnecessary when the problems that they attempt to solve can be addressed using 'technical' means rather than social contracts (2002: 57). Fresco continues to explain that technology is more effective than social contracts (2002: 57-58). Therefore, the application of technology should be considered above legal rights when attempting to solve social problems.

Fresco acknowledges that the issues that human rights and other legal rights attempt to solve are important (2002: 43). He does this to the extent that he intends 'to organize a global economy based on human rights and basic human needs' (2002: 43). Moreover, it has also been explained that Fresco provides a critique of political identity, which argues that 'There are no Negro problems, or Polish problems, or Jewish problems, or Greek problems, or Women's problems. There are only Human problems!' (Fresco in King: 1974, 26:16-26:51). However, he also explains that laws are inadequate as he argues 'We must stop constantly fighting for human rights and equal justice in an unjust system, and start building a society where equal rights are an integral part of the design.' (2002: 29). Fresco elaborates further explaining that:

'Manmade laws seek to preserve the established order and protect people from deceptive business practices, false advertising, theft, and crimes of violence. This calls for constant monitoring of the populace because the laws are continuously violated. Such problems are often caused hunger poverty, war, oppression, and scarcity, but the answer lies in removing the conditions that are responsible for these problems. There is so much economic deprivation and insecurity, even in the most affluent nations, that no matter what laws are enacted, the problems persist. The legislators passing laws have permitted gross violation and often break the law themselves.' (2002: 43).

Marx and Fresco view legal rights to be inadequate for achieving emancipation and the satisfaction of needs. However, the reasons why these thinkers hold such beliefs are significantly different. Marx prioritises the need for a social change by targeting socioeconomic and political relations whereas Fresco demands social change by promoting a 'technical' solution. However, it has been explicated that 'technical' is a rhetorical device that Fresco uses to refer to any method that promotes that satisfaction of needs and challenges 'unnecessary suffering'.

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²² Meaning societally derived, legal rights.

Moreover, Fresco intends to target those socioeconomic and political relations that are counter to this objective. In conclusion to this point, it is recognised that Marx and Fresco criticise the use of legal laws for the same reasons. Explicitly, they both believe capitalist society perpetuates an 'unjust system' that supports *inequality* and 'unnecessary suffering'.

To reiterate a previous point, Fresco uses the term 'monetary system' rhetorically in reference to the 'capitalist system'. With this in mind, not all of the societies that Fresco denounces support a monetary system. For example, higher phase communism is a political position that does not use a monetary system (In Marx's 1875 work, 'Critique of the Gotha Programme', republished 1970:11). To a lesser extent, lower phase communism can be viewed to not use a monetary system - rather it advocates a labour certificate system (Hollander, 2008: 394). As discussed previously, Fresco denounces communism because it uses a monetary system. Fresco is not challenging the idea of communism here. Rather he is challenging so-called 'communist' societies. Specifically, he is critiquing them because of their attachment to harmful social relations that perpetuate inequality. This is a criticism that Marx would also have of past manifestations of 'communist' societies. This strengthens the conclusion that Fresco follows in the Marxist tradition – despite his rhetoric (Fresco, 2002: 10, 106).

In this regard, it can be viewed that Marx and Fresco hold a similar set of beliefs to that of Winner (1978: 303), who views technology to have political, specifically ethical, 'architecture' – meaning that political intent is entangled into the technology. More specifically, it can be explained using Winner's understanding that money in its present Western form has within its 'architecture', a political tendency to encourage negative ethical behaviours; such as greed and ego. However, the details of *how* this happens still seem to be a matter of curiosity and therefore this warrants further investigation. Marx explains:

'Since money, as the existing and active concept of value, confounds and confuses all things, it is the general confounding and confusing of all things... [...] ... of all natural and human qualities. [...] He who can buy bravery is brave, though he be a coward. As money is not exchanged for any one specific quality, for any one specific thing, or for any particular human essential power, but for the entire objective world of man and nature, from the standpoint of its possessor it therefore serves to exchange every quality for every other, even contradictory...' (Marx, 1959:62).

Marx continues with this critique of money as a tool for value exchange as he aspires for a system free from 'contradictions embrace' (Marx, 1959:62):

[A society that can facilitate for] '...man to be man and his relationship to the world to be a human one: then you can exchange love only for love, trust for trust, etc. If you want to enjoy art, you must be an artistically cultivated person; if you want to exercise influence over other people, you must be a person with a stimulating and encouraging effect on other people. Every one of your relations to man and to nature must be a specific expression, corresponding to the object of your will, of your real individual life.' (Marx, 1959:62).

In this extract, Marx views monetary systems to be useful for developing capitalist society. However, he is aware of its limits. Marx was critical of monetary systems because of how they facilitated for individuals to be alienated from themselves, labour, and the products of their labour. With this in mind, Marx stated that in societies without money, 'If you want to enjoy art, you must be an artistically cultivated person'. However, in a monetary system, an individual does not need to 'be an artistically cultivated person'; rather, money facilities for these individuals to overcome such obstacles.

Fresco does not go into this much depth in his work. Fresco provides a social commentary on how consumer society 'degrades' individuals (1995: 18) but he does not explain the detailed process of alienation that is encapsulated in Marx's work²³ and later by Marcuse (2002). In conclusion to this point, the work of Marx and that of the Marxist tradition provides a greater insight into the phenomena of monetary systems than what Fresco is able to offer. Although Fresco's work is supportive of Marx and Marxism, he does not go beyond their findings.

Fresco's rhetoric states that he will achieve the inherently impossible task of depoliticising resource distribution (Interview: 98-150). In reaction to this criticism, it should be made clear that Fresco is not attempting to remove the political elements of resource distribution, although his intense rhetoric suggests otherwise. Fresco challenges monetary politics, as he believes such politics only perpetuate 'unnecessary suffering'. Fresco does not discredit politicians or politics providing 'technical' solutions. Therefore, it can be assumed that Fresco is not attempting to depoliticise resource distribution. Instead, he is attempting to remove the monetary aspect from

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²³ There is a shift in Marx's ideas that takes place over the lifetime of Marx's work, which needs to be noted. More specifically, Marx is interested in utilising a monetary system in his earlier years, most notably within the 'Communist Manifesto' (1848)²³. However, in later articles such as the 'Critique of the Gotha Programme' (1875, republished 1999: 10-11), Marx changes his stance on monetary systems as he criticises all monetary systems including his once endorsed labour certificate system – which was a system originally proposed as an alternative to the capitalist monetary system (Marx, 1999: 10-11). In appreciation of this, it can be viewed that Marx's dissatisfaction with monetary systems was an enlightenment that only came about in his more mature writings. Therefore, it can be understood that Marx's later work is a development of his younger statements and resultantly, this later work should be considered as a development of his prior ideas regarding monetary systems.

resource distribution due to its 'corroding' effect (Marx, 2004: 109). In particular, Fresco advocates the autonomous distribution of resource and services on an individual scale, capitalising on the technological development of late-capitalist society (Fresco & Keyes, 1969: 98). Fresco anticipates that all individuals will make personal political choices regarding the use of these goods and services. It is revealed therefore, that the political economy of Fresco's alternative vision comprises of many micro political choices that are technologically informed – via the use of 'cybernated' technology. This is what Fresco means by the term 'Resource Based Economy' (RBE).

To contextualise this approach, Fresco's economic beliefs can be contrasted with those of Kropotkin and his anarcho-communist vision. Like Marx, Kropotkin did not 'draw up a detailed program' (Price, 2013: 70) regarding how his alternative vision should be manifested. However, he did, like Fresco, write several books describing how free working people could reorganise their city after a revolution²⁴. The similarities to Fresco can be demonstrated with this statement made by Kropotkin:

'Voluntary associations... would... substitute themselves for the state in all its functions. They would represent an interwoven network, composed of an infinite variety of groups and federations of all sizes and degrees, local, regional, national, and international - temporary or more or less permanent - for all possible purposes: production, consumption, and exchange, communications, sanitary arrangements, education, mutual protection, defence of the territory, and so on... for the satisfaction of an ever-increasing number of scientific, artistic, literary and sociable needs...' (Originally published as Kropotkin's entry regarding "Anarchism" in the 'Encyclopædia Britannica 1910', republished 2002: 284-286).

Both Fresco and Kropotkin reject the use of money or tokens of exchange (1892 republished 2007: 25, 27, 42). Moreover, both of these theorists believe that there should be 'voluntary associations' within their society. This is a concept that Kropotkin developed in his 1892 work 'The Conquest of Bread' and later in his 1902 work 'Mutual Aid: A Factor of Evolution'. In these books, Kropotkin explains that 'mutual aid' will arise in societies that are free of government and individuals will be able to live more fulfilling lives – meaning that they will be able to easily satisfy their needs (Kropotkin, 2007: 25,27,42). Kropotkin's work is supportive of Fresco's ideas.

41

²⁴ For examples of this see Kropotkin's 1892 work 'The Conquest of Bread' and his 1898 work 'Fields, Factories, and Workshops'.

However, Fresco's work does not go beyond those sociological ideas established in Kropotkin's work. This is disappointing considering the time gap between the two thinkers.

Ultimately, it can be established that Fresco does not go beyond the ideas of Marx, Engles or Kropotkin. Interestingly, these thinkers present ideas with greater depth and scope than that of Fresco. Although the works of these thinkers support the true beliefs of Fresco²⁵, Fresco should not be viewed as an improvement on these thinkers. Fresco can be criticised using the Mises' Austrian perspective and the economic calculation problem.

In Mises' 1920 article 'Economic Calculation in the Socialist Commonwealth', he explains that the price system is crucial in managing any dynamic society – meaning that any society that intends to develop scientifically, productively, culturally, etc. requires a price system. Mises, in his later work presents a critique of socialist economies in his appropriately named 1922 work, 'Socialism, an Economic and Sociological Analysis' (republished 1981). Mises explains that a price system is crucial for any society that strives for economic growth or security. Mises explains that there should be no centralised planning of a state's economy. He argues this because he believes that what distinguishes the value of a resource comes from the needs of individuals within that society. Moreover, the only way to accurately discover what 'needs' of the populace require satisfaction, is to allow businesses to compete over providing goods and services. This will render a price system that appropriately values said goods and services as it relates to the demands of needs. This is something that a socialist planned economy is unable to do to an adequate degree, as Mises argues in his 1922 work.

The theory that Mises presents is that individuals will buy according to their needs and as a result, those businesses that do not sell the goods people want will be eliminated. Equally, those businesses that satisfy the demands of people will continue to prosper. Mises explains in his 1922 work that the reason why this system is superior to the socialist planned economy is because it is more dynamic and stable. For example, a particularly hot summer may change consumer demand and consequently, the economy of Mises' society can react quickly to those demands. However, Mises continues, a socialist economy is largely static and thus unable to react as flexibly to these economic disturbances. What is at the heart of this critique is Mises' emphasis on the usefulness of a price system²⁶. The price systems allow a society's population to immediately communicate with the market about what goods and services it desires.

²⁵ In comparison to his rhetoric.

²⁶ Specifically, Mises explains, a price system defined by demands of individuals in the market that allow for a supple and adaptable economy.

Consequently, Mises argues, through this process, economic growth emerges that is superior to the socialist model (Mises: 1981).

This theory by Mises has been chosen because of its specific attack on socialist economic theory and it is often viewed to be a response to the theorising presented by Marx. Admittedly, if Marx's ideas are considered in abstraction, then Mises' critique seems to be contingent. For example, Mises' theorising can be used to counter Marxist beliefs that there should be a 'Centralisation of credit in the hands of the state, by means of a national bank with State capital and an exclusive monopoly' (Marx, 1998: 37), as Mises claims this would create an inflexible economic model. However, when Marxism's later work is also considered alongside Marx's 'distorting power' argument, the critique of capitalism is still valid. For example, even with Mises' free-market ideology, consumer culture will still be prevalent as businesses invest in attempts to increase the sales of their product, hence creating what Marcuse terms, 'false needs' (2002: 7) and consequently, 'unnecessary suffering' (Fresco, 2002:8). When Marx's work is not considered in abstraction, the problems that he highlights regarding the inadequacies of capitalism are still valid, regardless of Mise' argument.

Other monetary scholars such as Keynes (1944²⁷, republished 2001) challenge Mises' ideas. Equally, Marx's work can also be used to critique Hayek's ideas. Marx's work can be used to suggest that Hayek and Keynes are attempting to solve different crises within capitalism without identifying that the crisis is capitalism. This criticism can be made for modern contemporaries of Mises' theorising that presents itself in Thatcherism (Hall in Radical History Review, 1991: 142). Interestingly however, as Fresco's ideas support Marx, Fresco's alternative vision can be contrasted against the idea of Mises and his later thinkers. Consequently, Fresco's understanding of the crisis of capitalism is valid. However, his contributions to explaining the phenomena of capitalism do not surpass those of other sociological thinkers such as Marx.

2.4 THE ROLE OF TECHNOLOGIES

The legitimacy of Fresco's technological claims needs to be critically appraised. Fresco's claim that he has designed working cybernated technological machines²⁸ is unconvincing. Fresco has many blueprints and models that show how 'cybernated' technology will work (Fresco in Gazecki 2006; Fresco, 2007), though these blueprints have not been peer reviewed and therefore their usefulness cannot be verified. Fresco explains that he is reluctant to share his designs with society as he is sceptical over copyright laws and is afraid that his ideas may be used for capitalist gain rather than their intended functions. Of course, as no third parties have been granted

²⁷ 'The Road to Serfdom'.

²⁸ That he intends to use to his TVP.

permission to examine or review his designs, it becomes difficult for him to gather support for his claim that such designs are functional.

This insight, by its own merits is enough to significantly discredit Fresco's project. As there is no evidence of this cybernated technology, his work can be viewed to be constructed upon illegitimate grounds, discrediting his alternative vision. However, it seems strange that Fresco has gone through such efforts to promote his TVP and he has been a prolific, legitimate inventor even from the age of 15²⁹. Regardless, this evidence is not enough to restore legitimacy to Fresco's claim that he has a 'practical' and attainable alternative vision (Fresco, 1995: 2). It does give one reason to continue exploring the legitimacy of his claimed project.

Karl Popper is an academic who has studied 'social engineering'³⁰. Using Poppers work, Fresco is identified as 'piecemeal social engineer' (Popper, 1966: 11). This means that Fresco's alternative vision is not a 'dangerous dogmatic attachment to a blueprint for which countless sacrifices' should be made. Rather, Fresco's blueprints 'contribute to the rationality or to the scientific value' of his cause (Popper, 1966: 166). As has been explicated, Fresco's arguments are scientific, this supports the conclusion that Fresco is a 'piecemeal' engineer. Additionally, Fresco continues to claim that 'I do not believe that we can design the ideal society. I believe that we can design a much better society.' suggesting that he does not have a 'dangerous dogmatic attachment' to his beliefs (Interview: 244). Fresco goes further, explaining:

'If I designed a very good city that's the best I know up to now, but I know that that new city would be a straight jacket to the kids of the future. They'll design their own cities. If you made a statue of me in front of that city, you hold back the future.' (Fresco, in Veitch 2011: 25).

With this statement, it is appreciated that Fresco advocates the reworking and development of his ideas. It can be understood that Fresco does not propose a 'dogmatic attachment' to his RBE. However, even with this account, there are striking similarities between Fresco's alternative vision, and what Popper defines as the 'Utopian engineer'. In analysing the next passage, it is difficult to imagine that this text was written without specific reference to Fresco's ideas:

²⁹ In this instance, Fresco designed a detailed, scientifically accurate revision of an aeroplane wing, which was later patented by the US military in 1939, (Appendix 1 and 2). These contributions were later officially praised for their value to the US Air Force (Appendix 3). Additionally, Fresco has also designed functional medical equipment, housing, and various other intricate items. (Appendix 5a, 5b and 5c). What is worth noting about these items is the degree of technical superiority of Fresco's designs considering the time they were produced. Harold M. Garrish, a representative of Major Florida properties demonstrates this point in his comments on Fresco; 'Mr. Fresco's ideas were very helpful... We flew him up to Philadelphia to work with our architects and engineers. But a lot of the stuff he does, you might say most of it, is way ahead of the times. [...] We couldn't use a lot of the things he designed - like the moulded plastic bathroom. In ten years, maybe, yes. But you can't revolutionise home-building overnight.'(Smith 1961: 3).

³⁰ A school of thought that Fresco claims to be a part of (in, Gazecki 2006a).

'What I criticize under the name Utopian engineering recommends the reconstruction of society as a whole, i.e. very sweeping changes whose practical consequences are hard to calculate, owing to our limited experiences. It claims to plan rationally for the whole of society, although we do not possess anything like the factual knowledge which would be necessary to make good such an ambitious claim. We cannot possess such knowledge since we have insufficient practical experience in this kind of planning, and knowledge of facts must be based upon experience. At present, the sociological knowledge necessary for large-scale engineering is simply non-existent.' (Popper, 1966: 165).

It becomes difficult to understand which category Fresco best fits because of his complex rhetoric. For example, Fresco incites immediate social revolution (King, 1974: 26.11-26.55) but then explains that social revolution will emerge as a slow progressive phenomenon (King, 1974: 17.51, 38.54). Once this rhetoric has been decoded however, it emerges that Fresco has a contingent view of social revolution, like Marx. Therefore, in some instances it becomes relevant to criticise Fresco's TVP for advocating large-scale engineering without the necessary 'sociological knowledge'. Equally, Fresco can be interpreted to be advocating a 'piecemeal' approach due to his openness about how social revolution should materialise. Fresco, for rhetorical purposes, occupies both the 'piecemeal' and 'utopian' engineer position and alternates depending on his audience.

When Fresco claims that he has literal cybernated technological plans to mobalise his alternative vision, he can be criticised for having 'insufficient practical experience in this kind of planning', and at present 'we do not possess anything like the factual knowledge which would be necessary to make good such an ambitious claim' as a cybernated city. Although Fresco claims that we currently have the technological capacity to achieve his alternative vision, it can still be argued that 'At present, the sociological knowledge necessary for large-scale engineering is simply non-existent' (Popper, 1966: 165).

Given that there have been no accounts of a community living in a truly cybernated environment, it is unknown whether such a society would be successful even on a small scale. Fresco's TVP research centre has some completed buildings that Fresco has designed. However, this community is not cybernated to the point that all basic needs are satisfied through technology. Rather, this community exists within capitalism, and relies on a monetary economic base. Moreover, the community has not attempted to engage with the more challenging task of satisfying social needs via 'cybernated' technology. In this regard, Fresco can be viewed to be a 'Utopian engineer'. Popper associates this position with social harm (1966: 6). Even though

Fresco advocates this position dominantly for rhetorical reasons, this raises moral questions about effects of this rhetoric and the direction of TVP. Fresco has a capacity to cause social harm by evoking social revolution. This moral issue raises questions concerning the legitimacy of Fresco's approach.

Marx's work emphasises that the bourgeois use technology as a tool to control workers³¹. David Harvey elaborates on this point by commenting on a 19th century group of proletariat revolutionaries named 'Luddites'. This group purposely damaged productive machinery in order to challenge their class oppression (Harvey, 2010). Specifically, Harvey explains that these individuals were 'punished' by the bourgeois through the employment of labour-saving machines. These machines were more efficient and replaced the workers. These workers were then unable to find employment or received dramatically lower pay. Without money, these workers inevitably suffered within the monetary society. Harvey elaborates on this concept by identifying that workers became deskilled due to technological innovation. Again, this resulted in either unemployment or the lowering of wages due to skilled labour no longer being necessary. In this regard, technological innovation can be viewed as a strengthening factor in a capitalist system as it continues to empower the bourgeois.

Contemporary thinker Langdon Winner supports this point regarding the political bias of emerging technologies (Winner, 1980). Winner explains that the 'architecture' of technology can inherit a political bias (Winner, 1978:303, 1993). Winner means that emerging technologies can be designed for specific political intent. As part of this, limits are designed within the technology to control the range of use in order to support a political purpose. As a result, this political ideology has become part of the technology's 'architecture'.

This conclusion clashes with Fresco's rhetoric that scientific and technological development will lead to a society more effectively challenging 'unnecessary suffering'. However, once the rhetoric has been removed, Fresco and Marx share similar beliefs. Specifically, Fresco views that those knowledge industries that are not 'technical' will create harmful contributions to society, such as nuclear weapons (in King 1974). Confusion arises here because of the word 'technical' and cybernated 'technologies' that implies that Fresco really does support a purely scientific and technological revolution when he does not.

Marx also argues that technological innovation has a destabilising effect within a capitalist society. Marx claims that technological innovation encourages the proletariat to take action against the bourgeois due to class oppression (Marx's 1887 work 'Capital: Volume I', republished

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³¹ To increase surplus value at the expense of labour value.

2010: 310-311). It is through this process that the bourgeois are encouraged to re-employ and satisfy their work force or increase their wages. However, pressure to competitively produce more goods and services encourages the bourgeois to replace their labour with machinery³². Marx explains that this process puts pressure on the Capitalist system and a crisis can emerge, as it is unable to satisfy the proletariat and bourgeois demands. Marx continues to explain that crises can emerge in other ways through the employment of technology. Marx suggests that as technology is used to increase the 'reserve army' of labour (2010: 444), many employees are replaced by machinery and the amount of money in circulation is reduced. As a result, the goods and services produced by the bourgeois cannot be purchased. Consequently, the capitalist system slows in growth or stops completely, creating another crisis. In this regard, Marx believes that technological advancement aids the destabilising of capitalism (Marx, 2010: Chapter 15). This point by Marx, in abstraction, supports Fresco's rhetoric that technological advancement will render capitalism obsolete (Fresco, 2002: 35; King 1974). This rhetorical argument by Fresco can be criticised by Marx however, when his ideas are not viewed in abstraction.

Fresco rhetorically argues that monetary societies will eventually develop technologies that are so advanced and readily available to the public that there will be an abundance of all goods and services. Consequently, society's needs will eventually be satisfied via technological advancement (King 1974; Fresco 1995, 2002). Fresco continues to argue that the shift from a monetary to a cybernated society is imminent because of this technological phenomenon.

Marx's ideas challenge Fresco's rhetoric. Specifically, Marx explains that overproduction and increased equality can also create a crisis in capitalism. It is argued that if there is overproduction, then the circulation of money will slow or stop, as there is no demand for overproduced goods. This is because there would be too much supply to meet demand. As a result, capital cannot be gained by completing Marx's formula M-C-M (Money – Commodity – Money). As M-C-M relies on generating profit from the process of reselling, profit cannot be gained as long as the commodity cannot be sold. Consequently, there is stagnation. Marx argues that the bourgeois will attempt to combat this crisis in order to preserve their position. Fresco unfortunately, does not provide an account as to how the proletariat should counter such resistance by the bourgeois apart from increasing public knowledge of his work (2002: 121). As a result, the shifting process that Fresco described cannot be completed because a capitalist society is concerned with preserving the social relations regarding capital and not the

³² Or 'dead-labour', as Marx calls it (Marx 2010: 107).

development of goods, services, technology, equality, etc. Hence, Fresco's certainty that there will be a revolution caused by technological advancement can be criticised.

What is interesting about this conclusion is that according to Fresco's rhetoric, he had the adequate historical condition for his system to flourish but it did not. Specifically, Fresco's project 'Sociocyberneering' came to the peak of its popularity in 1979, with a reported 250 members (Hagan 1979: 1). At the same time, the Keynesian economic era had ended (Time Magazine, 2008). It is important to note that the US public had witnessed, over the course of 80 years, an incredible change in political and economic landscape of their country. In more detail, the US public witnessed events such as the 'The Great Depression' and the 'New Deal'33 which was later named the 'Golden Age of Capitalism' (Skidelsky, 2009). As part of this 'Golden Age', the US economy developed technologies that Fresco argues are necessary for establishing his alternative vision such as computing, automation, etc34. Additionally, in the 1970s the US faced a financial crisis, brought about due to the collapse of the Bretton Woods system in 1971 (Bordo, 1993), the 1973 oil crisis (Merril, 2007), and the 1973–1974 stock market crash (Mishkin, 2002). The material conditions existed to realise Fresco's vision and the US public had a motive to establish his project, yet this did not happen. Thus, Fresco's claim that 'Sociocyberneering' is 'going to do this thing just as the automobile phased out the stagecoach', was not to be (in King 1974: 22:45-23:00). Fresco's alternative vision was not able to successfully mobilise even though the nation had the technological capacity. This is because he was unable to successfully challenge the social relations in society. Fresco, beyond his rhetoric, is aware of this.

When questioned as to why he has encountered difficulty in implementing his ideas, Fresco has responded, 'Because I can't get to anybody. [...] Maybe because it seems idealistic, or maybe it's hard to look ahead when the present is so bleak' (FOX, 2009: 0:01-3-03:59). Fresco's response here, supports the previously mentioned criticism that Fresco's vision currently lacks the 'sociological knowledge necessary for large-scale engineering' (Popper, 1966: 165). More importantly however, Fresco faced significant political resistance concerning the mobilisation of his 'cybernated' community³⁵.

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³³ The 'New Deal' was a project enacted by Franklin D. Roosevelt in 1933-1936 involving dramatic public spending intended to boost the US economy. As part of the 'New Deal', construction project such as the Hoover Dam where enacted.

³⁴ Fresco supports this point in his 1974 Interview with Larry King as he state, '10 or 15 years from now, our society will go down in history as the lowest development in Man. We have the brains, the know-how, the technology, and the feasibility to build an entirely new civilization.' (13:18-13:31).

³⁵ This can be demonstrated in Appendix 6 which details Fresco communication with US statesmen, including Vice-president Hubert Humphrey (also see Appendix 7, 8 and 9). In these discussions, it is evident that Fresco's vision faced resistance due to the political agendas of other more power statesmen. It is speculated that these statesmen were concerned with their political image and consequently rejected Fresco's socially orientated project. Due to the concern that they themselves may have been construed as 'communist'.

A point should be made here to emphasise that according to Fresco, he had the technological means to mobilise his 'cybernated' city. Additionally, the conditions, according to Fresco's rhetoric, were appropriate for the construction of his 'cybernated' community. With this in mind, it becomes a matter of curiosity as to why Fresco did not use his 'cybernated' technological plans to establish his community. This suggests that such literal, technical plans do not exist. It becomes rational to believe that these speech acts are rhetoric aimed at garnering public support.

Continuing with this critique of Fresco's rhetorical arguments, the notion that he is a 'Utopian engineer' will be expounded further. When I asked Fresco 'how would you contrast your "alternative vision" to that of Popper's definition of the "Utopian Engineer"?' (Interview: 251). Fresco selectively targets Popper's claim that limited knowledge would prohibit the implementation of wide scale engineering. Regarding this claim, Fresco argues that there is an issue with Popper's analytical methods, and not with his own ideas. At this point, Fresco highlights how Popper should ask more accurate questions and that he should not make sweeping judgements about the usefulness of ideas. Instead, Fresco suggests Popper should examine what elements within a given idea are useful. Fresco illustrates this understanding in the following statement:

[I asked people] ""You think man will ever get to the moon?" I asked a lot of people. They said, "not in a thousand years!". I said, "Have you studied rockets?", "no". "Have you studied space travel?", "no". How do you come to that conclusion?' (Interview: 254-255).

Although Fresco's criticism of Popper is coherent, Fresco does not challenge Popper's criticism that his alternative vision lacks sufficient sociological knowledge. Rather, Fresco argues that we have the potential to develop relevant technology and because we have this potential, his project is a legitimate alternative to the current system. I agree with Popper's ideas (1966) that this is not enough to legitimise Fresco's full scale engineering project because Fresco lacks the sociological knowledge concerning how to create a successful 'cybernated' society.

In response to Fresco's suggestion that there should be a more accurate critique of his work, I submit the following. The claim that Fresco's vision lacks sociological knowledge is an accurate criticism. This is because there has been, as explained earlier, no account of a functional cybernated community. Therefore, it is unknown as to whether such a community could actually work. Fresco has produced a theoretical model of cybernated society. However, as third parties are unable to examine this model in detail, it is impossible to say with any degree of certainty

that Fresco's vision is theoretically sound. Consequently, Fresco's RBE model is an unsatisfactory replacement for any society's economy because 'At present, the sociological knowledge necessary for large-scale engineering is simply non-existent' (Popper, 1966: 165).

2.5 Culture, Values & Human Behaviour

Fresco does not provide an in-depth explanation concerning what he believes shapes human behaviour. Fresco consistently claims that human behaviour is not genetically determined (Fresco, 2002: 67; Interview: 181). However, he concedes that in rare cases, biological factors can override environmental influences in shaping behaviour. This point is emphasised as he jokingly dismisses the idea of the 'republican gene', claiming that environmental factors largely shape behaviour, rather than genetics (Interview: 206). Fresco however, does not elaborate upon this interaction between genetics and the environment. The key word here is 'genetics'. Fresco believes that he does not need to engage with the genetic-behaviour debate as he emphasises environmental influences, or 'culture', to be the most significant factor that shapes behaviour. This is a fair point, but I argue that if Fresco was more specific in his account of the relationship between genetics and behaviour, he would be able to provide a more encapsulating account of what shapes behaviour.

Fresco believes that what shapes behaviour is a mix of both nature and nurture. However he continues to explain, nurture seems to be the most significant factor in this shaping process. This conclusion has already been largely accepted by the academic community. This provokes the question; what is Fresco contributing to the modern human behaviour debate? Fresco does not explicitly identify schools of thought within his work and he does not scientifically define his terms. Therefore, it becomes difficult to distil useful knowledge from his work. Moreover, Fresco does not define precisely what it is about a person's physiology that does or does not shape their behaviour. This limits the explanatory power of Fresco's work and brings into question why his work should be considered before that of other more critical thinkers.

Fresco's account does not successfully engage with modern debates on human behaviour. Even if Fresco presented his contemporary ideas in 1971, thinkers such as Foucault and Chomsky would dominate them. Specifically, the year 1971 is used here because this is when Foucault and Chomsky participated in a modestly famed debate concerning the topic of human behaviour (in, van der Putten 2013). In this debate, Chomsky's ideas are contest with those of Fresco. This is because Chomsky argues that there are 'innate mental structures' within humans that facilitate for such things as language acquisition (1965: 30, 51). Because of this, it is hypothesised that humans have an innate biologically determined schema that allows them to learn human

language. This biologically determined mental structure is unaccounted for by Fresco in his explanation of human behaviour. Instead, Fresco states on the topic of language:

'You're not born any way. Chinese baby was never born speaking Chinese. No matter how many centuries their ancestors spoke Chinese, they had to learn all over again. That's why I accept environment.' (Interview: 210).

Fresco advocates a simplistic understanding of language, at least in comparison to the work of Chomsky.

Similarly, the criticism that Fresco has a narrow understanding of human behaviour can be supported using Foucault's standpoint in the 1971 debate. Foucault argued that all human behaviour takes place within an 'epistemological field' (in, van der Putten 2013, 00:15:10). Consequently, human behaviour can be viewed to be constructed from experiences taking place within this field. To this extent, Fresco and Foucault can be viewed to largely agree on what it is that shapes behaviour; environmental experience. However, Foucault goes further to detail how this 'epistemological field' is able to establish power relations and shape society. It can be viewed that Fresco's view of 'culture' and 'values' is similar to that of Foucault's account of the 'epistemological field' and its ability to shape behaviour. However, Foucault offers a more thorough account of how power relations can manifest within discourse and consequently create harmful cultural practices³⁶. However, it is recognised that Fresco acknowledges that contemporary society, due to its monetary influences, causes negative behaviours. Fresco does not have the depth of Foucault's vision. This is because Fresco does not detail aspects such as how power and knowledge can take form within society. Consequently, Fresco can be viewed to be supportive of Foucault but unable to progress past Foucault's ideas.

Fresco's vision is based on his narrow understanding of human behaviour. This damages his claim that 'I do not believe that we can design the ideal society. I believe that we can design a much better society.' (Interview: 245). This provokes the question, how is Fresco able to make this claim? His understanding of the subjects involved in designing 'a much better society', such as how human behaviour works, is shallow in comparison to other thinkers. It appears that Fresco's knowledge of human behaviour is accurate, though the scope and depth of his knowledge is inadequate for legitimately making the claim that he can 'design a much better

51

³⁶ This concept is best demonstrated in Foucault's 1973 translation of 'Naissance de la clinique: une archéologie du regard médical' otherwise known as, 'The Birth of the Clinic: An Archaeology of Medical Perception'. In this text, Foucault describes how the medical profession employs a dehumanising 'medical gaze' that separates a patient's identify from their body. Additionally, Foucault explains that due to a difference in power, based on a difference in knowledge between the patient and the medical members of a given clinic. This opens a window of opportunity for the possible manipulation of the human body.

society'. This is because he neither comments upon, nor displays an understanding of the influences that shape human behaviour, such as epigenetics, knowledge and power, innate structures, etc. Therefore, how can he design a society that anticipates for such influences? Simply stated, Fresco's vision does not anticipate such influences. Ultimately, this criticism of Fresco returns to the argument that his vision lacks the 'sociological knowledge' to validate his TVP as 'a much better society' (Interview: 254). It can be viewed therefore, that Fresco's argument is based on inadequate evidence and as a result, he cannot justify his claims that TVP is 'an attainable vision of a bright and better future' (1995: 2).

Specifically, historical events such as the failure of the Marxist-Leninist socialist economy, otherwise known as the Soviet Union, casts doubt on Fresco's alternative vision. Although it is acknowledged that Fresco intends to preserve his cybernated society through 'cultural' coercion, how successful this coercion can be is debateable. For example, as Fresco does not account for individual differences, there remains the possibility that Fresco's envisioned society will systemically be unable to satisfy social needs due to its design. In this regard, Fresco's TVP is ethnocentric – meaning that the 'culture' and 'values' coercively promoted in TVP will be imposed on the 'culture' and 'values' that emerge out of individual differences.

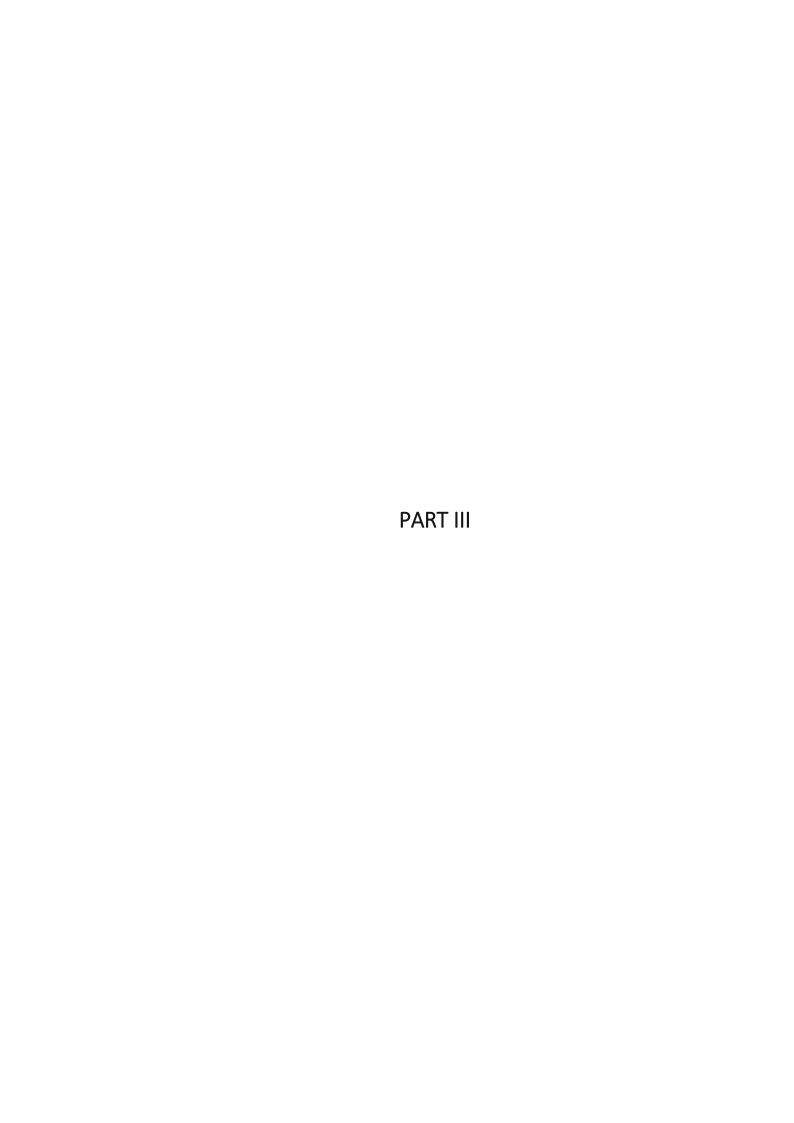
Fresco's alternative vision can be viewed as unethical, as it denies an individual the right of self-actualisation within his society. To explicate this ethnocentric ethical criticism of Fresco, Huxley's 1932 novel, 'Brave New World' can be used. In this modern classic, a dystopia is depicted where the protagonist has access to satisfy all his basic needs, and his social needs are facilitated for. This society advocates cultural coercion so that the populace develop similar 'values'. Similarly, Fresco wishes to achieve the promotion of 'constructive' behaviour in society through his proposed vision (Fresco in The Predictions Magazine, 1994: 1). Despite this, the protagonist feels that what made his life valuable was his un-facilitated lifestyle where he could 'feel strongly' and experience the struggle of achieving need satisfaction. This is something that is suppressed though cultural coercion in Huxley's dystopia. As a result of this suppression, the character resorts to self-harm, and eventual suicide. This dissatisfactory element is best illustrated when analysing the following extract from Huxley's novel. In this abstract, a teacher in Huxley's dystopia is explaining to young students about how people lived prior to the establishment of their 'utopia':

'Their world didn't allow them to take things easily, didn't allow them to be sane, virtuous, happy. What with mothers and lovers, what with the prohibitions they were not conditioned to obey, what with the temptations and the lonely remorses, what with all the diseases and the endless isolating

pain, what with the uncertainties and the poverty—they were forced to feel strongly. And feeling strongly... [...] ...how could they be stable?' (1932, republished 2002:30).

Huxley emphasises the inability to 'feel strongly' within this dystopia. As 'feeling strongly' formed a part of the protagonist's individual 'values' and 'social needs', he consequently suffered in this society. Although this is a fictional piece, I believe it demonstrates a deep criticism of Fresco's alternative vision. Specifically, it can be argued that Fresco's vision is not truly concerned with satisfying the needs of *all* individuals.

In this regard, Fresco can be labelled as a utilitarian. John Rawl criticises a utilitarian position, stating that the happiness of two people cannot be meaningfully counted together (1921: xii). Equally, it can be argued that the 'unnecessary suffering' of two distinct people cannot be meaningfully counted together. Therefore, via the use of Rawl's ideas, Fresco's TVP culture that challenges 'unnecessary suffering' does not have an ethically adequate appreciation of 'Justice'.



3.0 CRIME

The ensuing sections will explore Fresco's ideas concerning crime. Fresco advocates a two-pronged approach towards challenging crime. The first prong aims to broaden the definition of crime to encompass harms caused by society and institutions — such as the state and corporations. The second prong of Fresco's approach aims to remove the word 'crime' from the lexicon in favour of a more technical, literal description of behaviour. Fresco suggests this would broaden the parameters of the debate to include a range of socially harmful behaviours. The following section explores these two approaches. It is this section's goal to explicate, situate, and critique Fresco's ideas from a criminological perspective.

3.1 What is criminology & is Fresco a criminologist?

Fresco does not consider himself to be an academic or a 'criminologist' (Fresco 1995: 21; Appendix 14: 31-40). Additionally, the idea that criminology is a distinct discipline in its own right is debatable (Ericson & Carriere, 1996). Rock (1988) explains that 'criminology' is a 'rendezvous' subject — meaning that criminology is the sum of other disciplines which share a common interest. Using this understanding, Fresco can be labelled a criminologist. This is because TVP '...is a prodigious project calling for many disciplines' (Fresco, 2002: 10). Additionally, his project aims at challenging the issue of social harm — or as he terms it, 'unnecessary suffering' (Fresco, 1995; 2002; Interview). Consequently, Fresco's work is identified as having criminological significance. This section will explore the definition of criminology, its purpose, and where Fresco fits into this debate.

Criminology has been described as a 'state sponsored discipline' (Garland, 1997). This means that the knowledge produced by this 'discipline' is the product of a state agenda. As a result, legal definitions of 'crime' are shaped to satisfy a governmental plan – for example, a state may redefine crime in order to generate 'political capital' (Tonroy, 2004). As counter intuitive as it may seem, the emphasis of this 'state sponsored discipline' is *not* to establish a 'justice', but to support the governmental agenda.

This idea of a state sponsored discipline is supported by a range of critical criminologists (van Swaaningen, 1999; Muncie, 1999; Dorling et al., 2008) and has been the subject of intense debate. The debate of whether criminology is a 'discipline' is also widely contested. Rock (1988) explains that criminology is the sum of many other disciplines. Similarly, Walklate (2005) and Lea (1998) argue that criminology should be viewed as a field of study rather than a 'master discipline' (Rock 1988). In contrast to this, the British Society of Criminology (2006) argues that criminology is a distinct discipline. They argue that despite the fact that criminology is a product

of other theories originating from sociology, psychology, law, etc., criminology is a 'new synthesis'; ergo, it is a new discipline.

Although Fresco distances himself from academia, I argue that he should be considered a criminologist as he uses many converging ideas to explain the concept of crime and human behaviour (Interview: 31, 188, 192)³⁷. Therefore, whether criminology is viewed as a perspective or a discipline, Fresco should be understood as a criminologist. Importantly, as Fresco has operated outside of government discourse, his work may have *critical* criminological significance. In order to evaluate Fresco's criminological contributions, the following sections will contrast his work with that of other criminologists. Through this process, Fresco's ideas will be tested. Finally, his criminological contributions will be presented.

3.2 The Definition of Crime

There are many competing definitions of crime. Mainstream criminology presents legal definitions of crime that focus on the actions of individuals (see Police Service of Northern Ireland, 2013). In this definition, those behaviours that are forbidden by the 'law and order' culture of society are labelled as 'crimes'. Others however, explain that "what is crime" rests crucially on the power to define and the power to police certain "transgressions" whilst ignoring or giving little attention to others' (Muncie, 2000: 1). This definition is based on understanding the importance of the role of the sum of power relations in defining crime. There is tension between these ideas of 'crime'. This section will explore these varying definitions of crime and the tension that exists between them. Within this discussion, Fresco's idea will be contrasted and critiqued.

Functionalists view crime as embodying a social role in society (Durkheim, 1897; Merton, 1957). They argue that by examining the social functions of crime, crime itself can be better understood. This is a traditional Durkheimian understanding of crime, in which crime acts as a social device to maintain order and social cohesion. Acts are publically recognised as criminal in order to sustain a consensus of what is good and bad in society. The function of crime therefore, is to keep social order. Using this understanding, society's social interests define crime.

However, Becker, from a labelling perspective argues that:

'...social groups create deviance by making rules whose infraction creates deviance, and by applying those roles to particular people and labelling them as outsiders. From this point of view, deviance is not a quality of the act the person

³⁷ In this reference, Fresco draws upon psychology, cultural sociology, and the role of biological and genetic factors in his explanation of criminal behaviour.

commits, but rather a consequence of the application by others of rules and sanctions to an "offender." The deviant is one to whom that label has been successfully applied; deviant behaviour is behaviour that people so label.' (Becker, 1973: 9).

In this extract, Becker emphasises that criminology should be concerned with the relationship between people, the social meanings associated with certain acts and how the label of 'the criminal' is applied. This definition of crime is in contrast to Marxist criminology, which argues that socio-economic and political interests of the ruling class define crime (Jerry Cohen, 1988). Marx explains:

'The criminal produces not only crimes but also criminal law, and with this also the professor who gives lectures on criminal law and in addition to this the inevitable compendium in which this same professor throws his lectures onto the general market as "commodities".' (Marx, 1861-1863:306)

Marx is drawing attention to how 'the criminal' plays an economic role in society; this is in comparison to Becker's social account of 'the criminal'. Jerry Cohen argues that it is the ruling class' vested interest in economic power that shapes the definition of crime (1988).

Fresco's alternative vision shares some ideas with Marxist criminology in his account of crime. Fresco believes that inequality shapes what society defines as 'criminal' (Interview: 161-171, 216-218). Within this inequality, socioeconomic and political issues such as 'scarcity' and 'fear of scarcity' (Interview: 217) encourage behaviours that are then labelled as 'criminal'. Fresco explains that 'crime' is a product of unequal social relations. Admittedly, however, Fresco's work regarding crime focuses mainly on economic relationships (Fresco, 1995, 2002). Additionally, Fresco does not comment on the complex subject of feminist criminology. Specifically, Fresco does not comment on why young males have become the target of mainstream criminological research (Brown, 2005: 29), in comparison to their female counterparts. This lack of direct engagement with feminist ideas in Fresco's work is dissatisfactory.

The relationship between criminology and the state has been the subject of intense debate. Muncie (1999) and van Swaaningen (1999) argue that criminology, as a knowledge industry, is a product of socioeconomic and political inequality. Hillyard and Tomb develop these ideas as they reason that there is a need to go 'beyond criminology'. It is argued that the private economic and political agenda of this unequal system creates a dominant, illegitimate understanding of crime (Scraton, 2001: 1; Hillyard & Tombs, 2008). It is in appreciation of this that Hillyard and Tombs advocate a more legitimate 'social harm approach' regarding defining crime (Hillyard &

Tombs, 2008). Equally, Fresco can be viewed to go 'beyond criminology'. However rather than advocating a 'social harm approach', Fresco offers a 'technical' approach – meaning that crime is defined as 'unnecessary suffering'. Fresco, and Hillyard and Tombs are evidently frustrated with the dominant definition of crime. Additionally, they all advocate a broader definition of crime that emphasises the importance of social harm rather than a private economic agenda.

Grounding Fresco more firmly within established criminological discourse, he shares similar beliefs to that of Cesare Beccaria (1764). Beccaria and Fresco believe that crime is the product of a proverbial 'social contract' that materialises in the form of law (Beccaria, 1764: 53; Fresco, 2002: 11). However, Fresco continues to explain that how society defines crime is often a dubious process (2002: 11). Fresco believes that 'most man-made laws in our present culture attempt to control behaviour and values so as to serve vested interests' (2002: 68). He continues to explain that these 'vested' interests are in conflict with establishing an egalitarian society. In this regard, Fresco has similar beliefs to that of Marxist criminologists (Bonger, 1916; Ruggiero, 2006; Althusser, 1969). Specifically, Fresco is dissatisfied with the legal system's definition of crime, as this is the product of a ruling class and their efforts to achieve a private socioeconomic and political agenda. With this understanding, it can be concluded that Fresco is dissatisfied with the use of laws in society as a means to understand and deal with crime (Fresco, 2002: 11, 60).

In this regard, Fresco challenges the 'law and order' definition of crime as sponsored by the state. There are similarities between these ideas of Fresco and those presented in C. W. Mills' work, 'The Power Elite' (1956). Fresco believes that the majority of the world's political-economies are competitive in nature, which results in inequality and social harm (2002). Fresco argues that these powerful groups monopolise goods and services to achieve a private 'vested' agenda. Therefore, there will always be an economically motivated definition of crime emerging in these societies. In this regard, Fresco's understanding of crime can be compared to 'conflict theory' and its account of how capitalist societies perpetuate inequality. More accurately, Fresco is most similar to Philip Scraton. Scraton explains that:

'The issue of the "mainstream club" as the primary site of definition, discourse and dissemination has troubled critical analysts since C. Wright Mills deconstructed Talcott Parsons. Certainly it has been a dilemma throughout my 25 years as a teacher, researcher, writer and campaigner. [...] So, as critical criminologists, we remain free to research, to write and to teach but only at the periphery, rarely at the core. Yet the essential problem remains. The "core" is the "core," mainstream is mainstream, because of the inherent and inherited power relations of the industrial-military-state complex underwriting and

underwritten by its heavily *invested* academy. We know precisely what a detailed study of mainstream journals, their editorial boards, their review processes and their citations, will throw up.' (Scraton, 2001: 1. Italics added)

Fresco and Scraton share similar ideas. They both agree that 'vested' interests of the powerful perpetuate illegitimate knowledge. However, Scraton and Mills detail the relationship of power and knowledge to a greater degree than Fresco does. Fresco's usefulness is limited in this area because he lacks the discipline and rigour that is promoted within the academy. Although it is recognised that his work has benefited from his unaligned, freethinking approach³⁸; it is also acknowledged that his work has suffered because of it.

Scraton is able to discuss the socio-economic and political agendas of the academy in detail – specifically targeting the criminological knowledge industry. Moreover, Scraton identifies a point of resistance for the industry – 'critical criminology' (Ibid). Fresco on the other hand, does not provide adequate detail of how the industry should resist this biased agenda. This reflects Fresco's failure to acknowledge or recognise the contributions that critical criminologists have made in challenging the hegemony of administrative criminology.

Fresco promotes his TVP movement but it is too vague to be considered useful for knowledge industry researchers. Critical criminology, on the other hand, provides a detailed method for how academics should go about their research in order to maintain the scientific rigour of their work and their integrity as researchers (Scraton, 2001: 1-2). Although Fresco's project explicitly has the goal of creating equality and preventing 'unnecessary suffering', his work can be misinterpreted and used to promote inequality and perpetuate suffering, which is concerning for his work. For example, Walters (2003: 35) explains that modern Western criminology is focused on 'technocratic research', as it focuses on methods of designing-out the criminal individual. Fresco, with his rhetoric that promotes only 'technical' solutions (2002: 47), can be misinterpreted to suggest he is in support of individualising the study of crime.

This point is best demonstrated in my interview with Fresco. When I asked Fresco, 'I'm aware that Jacque was once a member of the technocracy group. Could you define in your own words how their philosophy for social change differs from your philosophy for social change?' (Interview: 44). He replied first with rhetoric, explaining that he has a more technical solution than theirs; 'They had no blue prints. They claimed they had blue prints for the new society.

59

³⁸ as he is not publically aligned with any schools of thought, this helps his public image. Specifically, he can more successfully reject the 'socialist' image.

There were no blueprints that I found' (Interview: 46). However, his true beliefs then emerged as to why he believes his vision is different to that of technocracy:

'They also had no blacks in the organisation. I asked Scott, how come there were no black? Howard Scott was the chief engineer. He said let them start their own section, that bothered me. Then I asked him, how come there were no Orientals? He said the oriental mind can't grasp technology. This was er... 60 years ago. And I said you were wrong! Today, they lead the world in robotics. So I resigned because I could not support the segregation of people.' (Interview: 49-63).

In support of my previous conclusions regarding Fresco's true beliefs, Fresco is not in favour of 'technocratic research' as Walter describes the task. Rather, Fresco uses the phrase 'technical solutions' as a rhetorical device to engage with his audience in a compelling way. However, due to this rhetoric, it is understandable why readers may be confused by what he *says* in comparison to what he *means*.

Fresco's definition of crime, interestingly, does not account for individual differences. Fresco believes that:

'...every word you use, every facial expression occurs in your movies, your books, your novels, your role models. So, I don't see any individuality.' (Interview: 193-195)

Fresco considers all behaviour to be the result of culture, which presents some problems for Fresco's definition of crime. Fresco's understanding of 'socially offensive behaviour' does not account for those behaviours that occur in spite of cultural conditioning³⁹. For example, Fresco's work (2002; Interview) cannot explain those behaviours that were 'constructive' but arose out of Nazi Germany during WWII. Fresco cannot explain the behaviour of Oskar Schindler. This individual was culturally conditioned to be a 'politically violent' (Ruggiero, 2006) anti-Semite but he developed behaviours that were incongruent with this culture. Fresco does not address how individuals who are raised in similar cultures vary in their commitment or rejection of cultural values. More importantly for this thesis, Fresco does not explain this phenomenon's relationship to how criminality is defined. In conclusion to this point, it is identified that there is a gap in Fresco's ideas that do not account for individual differences.

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³⁹ Although Fresco admits that physiological conditions such as 'brain damage' can be the cause of 'socially offensive behaviour' (Interview: 201). As part of this explanation, Fresco presents a bio-social explanation of crime that explains biology can be the cause of particular physiological conditions. Therefore, Fresco explains 'crime' is a social construct and behaviour is a mechanical result.

Fresco's second prong in his approach towards defining crime aims to remove the word 'crime' from the lexicon. This approach endeavours to promote a literal understanding of why individuals act the way they do and why it is considered to be criminal within society. Fresco explains that, via the promotion of this approach, the use of the word crime will be demoted in favour a more useful, literal phrase, 'socially offensive behaviour' (Interview: 229-240). As Fresco is unable to account for individual differences in his explanations of crime, his literal account of 'socially offensive behaviour' will be incomplete. In conclusion to this point, Fresco's account of behaviour is insufficient, therefore the second prong of his approach to understanding crime, suffers.

In summary, Fresco explains that the idea of the 'criminal' should be recalibrated within society. He proposes this using a two-pronged approach. The first prong explains that the focus of 'crime' studies should move from the individual to the environment. As part of this, the definition of what is defined as 'criminal' is broadened to encompass all forms of 'unnecessary suffering'. Fresco's second prong however, promotes the idea that the use of the word 'crime' should be replaced with a literal explanation of behaviour. However, Fresco is unable to provide a full account of this literal behaviour. This questions the usefulness of Fresco's second approach towards defining crime.

3.3 Fresco's Experience vs. Academia vs. Politics

Fresco is dissatisfied with the segregation of equality campaigns and advocates a unification of these causes (King, 1974). However, Fresco's efforts to establish greater equality in society could be argued to be undermined through his active distancing from academia (Appendix 13; Interview: 36-41). Fresco does this because he is sceptical of the contributions of the knowledge industry. Additionally, Fresco's rhetoric only promotes scientific and 'technical' solutions. As part of this, he stigmatises academia (Fresco, 2010). He does this by conflating his concerns with monetary politics within the academy. Fresco makes sweeping statements about the whole of academia rather than specific parts:

'They are no solutions. They are clumsy, academic approaches by people immersed in this kind of society, coming up with their cop-out solutions that have no relationship to the problems.' (King, 1974: 33.33-33.47)

Although he is in favour of 'technical' solutions which encompasses academic ideas, Fresco suggests that all academic approaches are a product of the 'cop-out' monetary system. Specifically, he believes that illegitimate knowledge is perpetuated by issues such as ego or monetary incentives in the knowledge industry (2002: 83). Using this criticism, Fresco explains

that his views were shaped by 'experience' rather than by the academic community (Interview 30-41) – even though he has worked in academia (Appendix 13; Interview: 20-40). This section explores Fresco's dissatisfaction with academia and the politics that surround it.

Fresco's work, contrary to his stated mission to unite equality campaigns (King, 1974), has contributed to the isolation of equality campaigns. Specifically, Fresco's rhetoric has rejected academia as a whole. Resultantly, Fresco has distanced himself from valid academic contributions that support equality campaigns—such as feminist literature. Fresco seems to have an overly simplistic view of academia. He shares similar views to those expressed within the critical criminological position. This brings into question the legitimacy of Fresco's absolute rejection of the knowledge industry, as a movement aims to counter contaminating effects of ego and monetary incentives within the industry. There is a body of work within criminology, which offers a more sustained and comprehensive critique of criminology, and its relationship with the state than that offered by Fresco (Scraton, 2001; Stout, Yates & Williams, 2007). Fresco has proverbially, 'thrown the baby out with the bath water'. In his attempt to challenge the illegitimate knowledge of those 'vested' academics, Fresco has also rejected academic contributions that would have otherwise supported his cause. This is a particularly confusing point as Fresco has previously acknowledged the usefulness of some academic contributions, labelling them 'technical' solutions. Therefore, his rejection of legitimate academics is a point of concern as this has damaged the usefulness of Fresco's work. In summary, Fresco's ideas have consistently supported academia, however the way Fresco has presented these ideas has been inconsistent. This has caused confusion for academics (Notaro, 2005: 14-15) and by extension; this has limited the value of his work.

Fresco is dissatisfied with the politics entangled within academia, not academia as a whole. This is a dissatisfaction that other academics share. Specifically, the New Labour project is an area of dissatisfaction for many academics (Muncie, 1999; Osler, 2002; Pitts, 2003; Hillyard & Tombs, 2004; Brown, 2005; Rock, 2010). Walters argues that the production of criminological knowledge is 'entangled in processes of power, government and the administration of individuals' (2003: 14). This is the root of Fresco's dissatisfaction. Fresco is frustrated with the power relationships between academics and the government and other economic forces that shape criminological knowledge.

In many respects, Fresco's work is not as advanced as it could be. Specifically, his rejection of academia has limited the usefulness of Fresco's work. Whilst clearly innovative, creative, and challenging, Fresco's work lacks the depth and rigour of other contemporary thinkers, a situation which could have been avoided. For example, Noam Chomsky offers a more sustained critique

of capitalism (2001). It can be speculated that Fresco's TVP movement may have had greater substance and success if he had merged his efforts with academic communities and discourses. More explicitly, it is speculated that if Fresco conversed with thinkers such as Marcuse and Chomsky in the 1970s, during promotion of his 'Sociocyberneering' movement, Fresco's efforts to secure greater equality in society may have been more successful.

As part of Fresco's rhetoric, he advocates using a scientific, 'technical' method. However, what he specifically means by this is that he advocates ideas that prevent 'unnecessary suffering'. Because of this rhetoric, Fresco's work can be used to support causes that he is opposed to. Walklate (1998) explains that the New Labour project has promoted the use of reductionist positivist means to deal with the 'crime problem'. On the same theme, Pitts explains that the gaze of 21st century administrative criminology focuses dominantly on the individual, rather than on holistic environmental issues (Pitts, 2001, 2003). As Garland (1997: 21, Italics added) explains, so-called 'criminal justice' is achieved through 'science in the service of management and control'. Garland continues to state that the job of the criminologist has been reduced to a 'scientific goal', an 'administrative task' (Ibid). Walters (2003: 160) agrees with this conclusion, stating that government-sponsored criminologists are 'dominated by a spirit or legacy of pragmatism, which has promoted a scientific and administrate criminology to aid the immediate policy needs of government'. The government in this regard has created criminological technicians. Fresco's work, with its advocacy for 'technical' solutions can be misinterpreted to suggest that he favours the 'scientific' method. Fresco is opposed to right realist and New Labour methods for challenging crime. However, due to his rhetoric, it is easy for the public and academic community to be confused by what Fresco says and what he means. This confusing rhetoric has hindered the success of Fresco's work that aims to challenge 'unnecessary suffering'. However, his reasons for adopting this approach are understandable.

Fresco's has conducted his work in order to achieve the greatest possible support for his cause. To do this, Fresco has employed rhetoric that is often confusing. As a result, the usefulness of this rhetoric is debateable. In comparison to the methodology of other academics, whose work is more theoretically and empirically grounded, Fresco's rhetorical method can be viewed to be ineffective. Contrasting Fresco's work with that of Wilkinson and Pickett (2010) demonstrates this point.

Fresco links inequality to 'unnecessary suffering'. This is similar to the work of Wilkinson and Pickett (2010). However, Wilkinson and Pickett provide a more clear and supported understanding of the issue. Specifically, Wilkinson and Pickett make use of quantitative data in order to support their beliefs. By grounding their conclusions on this evidence, their work can

be viewed as more 'scientifically' credible than Fresco's. This is because Fresco makes little, if any, use of quantitative data to support his beliefs. This is a particularly powerful critique as Fresco often argues that his work is more 'scientific' than that of his academic rivals (Fresco, 2002).

Even though Wilkinson and Pickett's work has been criticised (Simic 2012), there has been a tradition of studies confirming a significant correlation between inequality and crime⁴⁰. Therefore, even when Wilkinson and Pickett's work attracts criticism (Mises' School of Economics, 1984) they are able to draw upon the work of their supportive tradition to defend their work. As Wilkinson and Pickett are critical policy analysts, they can argue that such criticism of their method is illegitimate and that their rivals may be the result of an 'invested academy' (Scraton, 2001). Fresco does not have this liberty because he distances himself from academics. This is a weakness of Fresco's work.

Furthermore, Fresco's work can be used to criticise himself. For example, Fresco has not conducted any 'technical' sociological studies whereas Wilkinson and Pickett have. What is meant by this is that Wilkinson and Pickett have made use of 'scientific' quantitative data in order to reduce what Fresco calls 'unnecessary suffering'. Fresco's published work largely consists of political philosophy, not quantitative studies. By Fresco's own standards, 'technical' studies and solutions are more valuable than political ones. Therefore it can be concluded that according to Fresco, Wilkinson and Pickett's work is more useful than his own.

This brings into question the legitimacy of Fresco's method. More explicitly, this rationalisation suggests that Fresco should abandon his rhetorical in favour of a more 'scientific', 'technical' method - such as that of Wilkinson and Pickett.

Additionally, Fresco does not provide support to academic grass roots movements, such as the feminist movement (Smart, 1989). Instead, Fresco distances himself from the academy as much as possible (Appendix 13; Interview: 36-41). It is identified that Fresco's rhetoric has adversely affected his campaign for greater equality in society. It is concluded that his campaign for greater equality would have been more effective if he supported other academics. Additionally, it is identified that his work would gain legitimacy if it used academic methods. For example, if he had a stronger empirical base, his findings would receive greater recognition. Consequently, his TVP would receive greater public support.

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⁴⁰ See Antonaccio's 2007 study supporting Bonger's Marxian theory of crime.

Interestingly, the work of other academics seems to be in support of some of Fresco's ideas. For example, Ruggiero also comments on the link between scarcity and crime. Criticising mainstream criminology, Ruggiero states:

'Criminology is particularly comfortable when studying marginalized communities and powerless individuals, who are perceived as needy of its missionary zeal and philanthropic support. [...] when discussing conflict theory, I have mentioned that this comfortable attitude describes a "sociology of misery"... Political violence may be the result of the availability of resources, of preceding patterns of oppositional politics, of the accumulation of skills, passion, collective memory and organizational expertise. It may also be the result of a misunderstanding of all of these.' (2006: 159)

Ruggiero elaborates that social harm is not the purpose of mainstream criminology. Rather criminology is a state tool, using 'specialists in coercion' to perpetuate the effect of labelling theory and 'secondary deviance' (Lemert, 1967). This coercion targets 'powerless individuals' and encourages them too commit themselves as 'criminals'. 'Political violence', Ruggiero explains, is one of the "forms" through which power is created and perpetuated (2006: 174). This understanding of power is something that is missing in Fresco's work. While Fresco accounts for how the 'availability of resources' links with politics and harm, he does not explain how this is used to create and perpetuate power. Crucially, as Fresco does not account for this, his TVP movement lacks vital knowledge needed for engaging with political resistance. In conclusion to this point, Fresco's TVP suffers due to his lack of understanding concerning how power operates. This issue was avoidable if Fresco's TVP movement was more accepting of select academic contributions.

3.4 ZEMIOLOGY: THE SOCIAL HARM APPROACH

'The principal aim of a social harm approach is to move beyond the narrow confines of criminology with its focus on harms defined by whether or not they constitute a crime, to a focus on all the different types of harms, which people experience from the cradle to the grave. [...] The new discipline was termed Zemiology, from the Greek Zemia, meaning harm. It has since been described as "horribly named" (Hil and Robertson, 2003). Others prefer the word "Zemiotics". For the purposes of this book we used the more easily understood term social harm.' (Hillyard & Tombs, 2004: 10, 285).

This definition of 'zemiology' is in reference to an alternative approach to understanding crime that breaks away from mainstream criminological research. Fresco, in this regard, uses a zemiological approach in his work. This is argued as Fresco makes similar points to Edwin Sutherland on the topic of 'White Collar Crime' (1985). More precisely, Fresco explains that corporations, although acting legally, create great social harms, though are not considered to be acting 'criminally'. He does this with explicit reference to monetary systems and their institutions, targeting businesses such as the Federal Reserve (Joseph, 2008). Pearce (2003) comments on this phenomenon, explaining that such harm is common in many countries but is rarely prosecuted. Fresco's dissatisfaction with society's view of the actions of corporations can be compared to those expressed in Tombs and Whyte's work, 'Safety Crimes' (2007). Tombs, Whyte and Fresco all agree there is a crime wave that does not attract the attention of politicians, the media, or the knowledge industry – including the social sciences (Tombs & Whyte 2007, Fresco 2002). Specifically, these thinkers are targeting legal social and environmental harms. They argue that the term 'crime' needs to be readdressed to encompass harm rather than the 'vested' interests of the powerful.

In this regard, Fresco's work can be compared to that of Dorling, Gordon, Hillyard, Pantazis, Pemberton and Tombs in their 2008 work, 'Why Harm Matters More than Crime'. Hillyard and Tombs (Ibid) and Fresco argue that the image of the criminal should be broadened in order to encompass the harmful actions of the establishment – whether they are legal or not. Fresco's work, in this regard, is supportive of the critical criminological school of thought. These thinkers move away from a reductionist approach of understanding crime to one that examines the 'context' of crime (Hillyard & Tombs, 2008: 9). This is Fresco's first prong in his approach towards challenging crime. It is a zemiological, 'social harm' approach.

3.5 Language & Techni-culture

Fresco's second prong in challenging crime rejects the term 'crime' completely. This is because the word is abstract and does not account for the technical processes involved in 'socially offensive behaviour' (Interview: 2002: 60). Fresco's ideas can be compared to Bonger's understanding that 'It is not the man himself, it is his circumstances that form his character' (1916: 21). To elaborate, Fresco believes the term 'crime' is overly simplistic and does not adequately describe an individual's behaviour. Fresco ultimately desires to disband the use of the term 'crime' in favour of 'clear referent' (Interview: 231-234). This leads Fresco to make statements such as '...in the future, in a saner culture, people will view our notions of criminal behaviour as naïve' (2002: 68) – suggesting that the use of the word 'criminal' is limited in its explanatory power.

Concerning his critique of the term, 'crime', other thinkers, such as Tombs and Hillyard share similar ideas with Fresco. Tombs and Hillyard (2004) prefer to use a 'zemiological' or 'social harm' approach in contrast to a 'crime-ology' approach (Muncie, 2000: 1). However, Fresco's recommendations for change are too vague. Where Tombs and Hillyard are able to provide an alternative, robust framework for understanding what is conventionally termed 'crime', Fresco does not provide sufficient detail. Specifically, Fresco does not explain how social relationships and individual differences will be accounted for in his framework. For example, it is unclear how Fresco's framework would be able to account for those deviant behaviours that are committed because of the 'seduction' and 'buzz' that the actor assigns to them (Katz, 1988). Although it is assumed that Fresco would begin by explaining that such behaviours are related to an individual's 'culture' and 'values', this would not explain why people from similar cultures who share similar values react differently to 'seductive' acts.

During my interview with Fresco and Meadows, I asked the question 'how would you address this issue of crime and criminality in your alternative vision?' (Interview: 219), to which Fresco responded, 'we want a scientific language', emphasising how the use of a encapsulating language will reshape how society views crime (Interview: 229-240). However, I believe this response is part of Fresco's rhetoric. Specially, Fresco uses the term 'scientific' in the same way that he used the term 'technical' in the past. He is attempting to make a simplistic distinction between those methods that support the monetary system and 'unnecessary suffering', and those methods that can aid in the satisfaction of human needs. To this degree, Fresco claims he 'wants a scientific language' when, he evidently wants a more useful language, able to accurately describe phenomena⁴¹.

In an attempt to draw out Fresco's beliefs more explicitly, I asked him, 'Do you believe that if we have a scientific language, we will be able to challenge "crime" and "criminality"?'. He answered, 'There won't be any crime, because you would raise children differently' (Interview: 234). It is with this answer that Fresco reveals that his ultimate goal is to dissolve the use of the word 'crime' from society. To reiterate, Fresco's second prong to defining crime promotes a 'culture' that emphasises 'technical' explanations. For the usefulness of this thesis, I coin this idea a 'techni-culture'.

This is a simplistic understanding of crime. Fresco does not have empirical evidence to support his claim that 'there won't be any crime' (Interview: 229-240). Moreover, interactionalists such

⁴¹ This theme is consistent in Fresco's written work. In his 2002 work, for example, Fresco offers a logical positivist approach as a means to understand crime. However, as previously discussed, he does not support logical positivism. Instead, he uses it simply as a rhetorical tool.

as Becker (1963) argue that deviance will arise within a society regardless the 'label' used. Using the classical work of Durkhiem, it can be argued that Fresco's techni-culture would foster 'anomie' – meaning a moral crisis could emerge surrounding what is considered to be socially harmful. As Durkheim explains in 'Suicide' (1897), the focus of social harms should not be attributed to the individual, but to the arrangements of society⁴². In the same way that 'Anti-Social Behaviour Orders' have criminalised behaviours previously considered to be as trivial as bad manners (Millie, 2006), Fresco's alternative vision is also capable of criminalising trivial issues. Even though Fresco's alternative vision will not use the word 'crime', the concept of crime and deviant behaviour will persist. This, again, suggests that Fresco's alternative vision may reflect something similar to that of Huxley's dystopia (1932) – specifically regarding the cultural support of issues such as premature death.

3.6 Fresco & The Critical-Realist Approach

Young and Lea, in reaction to the monopolisation of the criminal justice system by 'law and order' politics, established 'left realism' (1986). This approach aimed to fill the perceived vacuum between right realism and left 'idealism'-in reference to 'The New Criminology' movement (1973). Fresco's approach towards understanding crime is similar to that of the left realist position:

'...the left realist solution to the problem of crime proposes a democratic, multiagency approach geared to a more equal distribution of resources and a reformed system of legal justice. Central to the work of left realism has been the labelling and rejection of "idealism"...' (Chadwick & Scraton in 'Sage Dictionary of Criminology', 2001: 70)

Fresco and 'the left realist solution' share a number of similarities. For example, Fresco has made efforts to change social policy with the intention of establishing 'a more equal distribution of resources and a reformed system of legal justice'⁴³. Additionally, Fresco adamantly rejects the label of 'idealism' (Chalmers, 2009; FOX: 7 News 2009). Thus, Fresco can be labelled a 'left realist'. However, I believe that Fresco can be defined more acutely. Specifically, Fresco can be viewed to meet the 'critical realist' criteria set by Mathews – a contributor to the left realist position. This is argued as he states:

⁴³ See Appendix: 6, 7, 8 & 9, where Fresco converses with Hubert Humphrey, with the goal to change social policy in an effort to materialise his socialist vision.

⁴² Durkheim demonstrates this by contrasting how 'suicides' are defined from community from community – specifically from Protestant to Catholic communities.

[Critical realists] '... advocate more active engagement in public debate and the possible development of advocacy organizations to disseminate criminological knowledge. In this way he [Elliot Currie] suggests we might move beyond what he refers to as "so what?" criminology, by which he means those highly technical and dauntingly quantitative studies that focus on trivial issues, are conceptually weak or present their findings in impenetrable language.' (Mathews 2009: 341-342).

Fresco is advocating a critical-realist, cultural movement. Specifically, Fresco aims to mobilise a techni-culture 'counter culture'⁴⁴ movement. He has established a global movement that engages with the public in layman terms with a goal to achieve greater equality and challenge 'unnecessary suffering'. To reiterate, Fresco has established an 'organization to disseminate criminological knowledge'⁴⁵, specifically advocating a 'social harm approach' (Hillyard & Tombs, 2008) towards challenging crime. Fresco's success in this regard—as a critical realist- is profound. He has reached an attentive global audience⁴⁶ (IMDB, 2008), conducted a world tour lecture series to raise awareness of inequality and 'unnecessary suffering' (Appendix 13; Interview: 96) and created a global forum in support of 'a more equal distribution of resources and a reformed system of legal justice' (The Venus Project, 2013c).

Fresco's immediate goals jeopardise Fresco's long term purpose. This criticism is rooted in Fresco's inadvertent advocacy for critical criminology and left realism. In Richard Quinney's 1974 work, 'Critique Of Legal Order', it is expressed that social reform will never be able to successfully challenge inequality in a capitalist system⁴⁷. Quinney explains that efforts to create social reform will only perpetuate the harms of capitalism rather than challenge the root of the issue. Therefore, left realist efforts to challenge inequality will always be dominated by the inherent inequality embedded within the capitalist system. In this regard, Fresco's vision to shift the image of the criminal to encompass a broader definition of harm, undermines his efforts to dissolve the use of the word 'crime'. In greater depth, Fresco's realist objectives strengthen a capitalist society. As a result, Quinney argues, capitalism becomes an illegitimate but accepted means for social emancipation (Ibid). As it has been established that Fresco and 'conflict theory' agree that equality can never be fully achieved within a capitalist society, Fresco's realist efforts perpetuate the problem of inequality. This is because Fresco uses those so-called 'legitimate'

⁴⁴ to use Marcuse's terminology (2002)

⁴⁵ For example, Fresco's 'Sociocyberneering' (King, 1974) and 'The Venus Project' (Fresco 1995, 2002) movements both attempt to challenge the harms caused by a competitive society.

⁴⁶ For example, Fresco targets the 'stupidity' of a 'nuclear arms race' on national television (King, 1974: 26.14-26.20).

⁴⁷ Specifically, when Quinney was making this point, he was targeting the 'New Deal' social policy that was established in the United States (168-170).

methods that are sponsored by capitalist society. This projects an image that capitalist society provides an adequate, acceptable way to deal with systemic social harm. This issue is identified by Althusser, who argues for social revolution rather than social reform (1969). Therefore, Fresco's two-pronged approach towards defining crime is problematic as he simultaneously advocates a reformist and a revolutionist position. These positions are incongruent and create inconsistency in Fresco's work.

Tombs and Hillyard (in 'Beyond Criminology', 2004) criticise left realism, explaining that even those political parties that claim to embrace left realism fail to challenge institutions that create the greatest degrees of harm. Tombs and Hillyard identified that the 1997 'New Labour' government which was in favour of left-realism, pursued '"unfit parents", "aggressive beggars", "sex offenders", and, most recently, "terrorists" or their "sympathisers" rather than the issues that caused the greatest amount of inequality and harm (2004: 31). Fresco's efforts to establish equality within a capitalist system can be considered self-defeating⁴⁸ via the use of these scholars' ideas. Further, Fresco's attempts to create equality will undermine his later efforts to dismantle the capitalist system – an issue that is emphasised by Althusser (1969: 133).

3.7 Inability to Satisfy Human Needs & Strain Theory

Returning to the classical school of criminology, Fresco shares similar views to that of Marcus Aurelius who once stated, 'Poverty is the mother of crime' in 'Meditation' (167 A.C.E, republished in 1994). Fresco and Aurelius view environmental factors to be responsible for criminal behaviour. In this regard, Fresco frames inequality using environmental factors. Additionally, Fresco also adopts some basic principles that John Locke advocated. For example, Fresco advocates the 'blank slate' idea – otherwise known as the tabula rasa (in 'An Essay Concerning Human Understanding' 1690, republished 1947: 26). Fresco and Lock believe individuals are 'naturally equal' (Locke, 'Two Treatises of Government', 1689, republished 2005: 37). However, Fresco goes further to explain that he does not believe in 'free will'. He continues to explain that criminal individuals are 'perfectly lawful to the environment that they come from' (Chalmer, 2009: 4:28-4:35) and consequently 'Just as we are shaped by culture, it [criminal behaviours] could be unshaped by culture' (Interview: 203). In this regard, Fresco follows in 'The New Criminology' tradition that advocates a fully social explanation of criminal behaviour. With this in mind, Fresco explains that there is a relationship between so-called 'criminal' behaviour and an inability to satisfy needs (Interview: 218). Explicitly, Fresco links inequality to so-called 'criminal behaviours'. Fresco's criticism of mainstream criminology is similar to that of Ruggiero

⁴⁸ Specifically, Fresco's discourse with Hubert Humphrey and his ambition to establish social policy can be identified as Fresco attempting to achieve equality via left-realist means. (see Appendix 6, 7, 8, 9).

who called mainstream criminology a 'sociological of misery' (2006: 159) – emphasising that 'criminal behaviour' emerges out of miserable conditions and it is this that should be the focus of criminologists, not the individual.

Fresco and Marxist criminologists (Chambliss, 2010; Cohen, 1988; Althusser, 1969) argue that a capitalist society will create the conditions for so-called 'criminal' behaviour. These thinkers, including Fresco, believe that the capitalist system needs to be radically changed in order to prevent 'socially offensive behaviour' (Fresco, 1995: 1-15, 2002: 8). Like Marx, Fresco believes that the social relations surrounding the distribution of wealth need to be managed 'intelligently' (2002: 76). Otherwise, tensions will arise in society and criminal behaviours will be produced to cope with these tensions — this idea is similar to Merton's 'strain' theory (1957). Although Fresco targets 'free market' societies, he also targets socialist and communist societies. Like France (2000: 317), Fresco challenges the established conception that social problems are a reflection of 'individual shortcomings rather than as a result of social processes'. Fresco explains that these societies generated an unequal distribution of goods and services, creating social inequality and in turn, individuals were unable to access means to satisfy their needs. Fresco explains this situation arouses 'socially offensive behaviour'.

What Fresco means by 'socially offensive behaviour' is similar to what Jean Meslier called 'evil':

'Another abuse, and one that is almost universally accepted and authorized in the world, is the appropriation of the wealth of the soil by individuals, in place of which all ought to possess it equally in common and enjoy it equally in common. [...] They should all... [...] ...ought to love one another as brothers and sisters and, in consequence, live peaceably together, having all things common. [...] And all this should be done, not under the direction of those who would like to dominate over others tyrannically and imperiously, but only under the direction of the wisest and best intentioned, for the maintenance and advancement of the public weal [...] ... wealth is so badly distributed among men, some having everything, or at least much more than their true share and others having nothing, or lacking a part of what is useful and necessary... [...] ...it results from this, I say, that hatred and envy first of all arise. [...] ...those who have nothing, or who have not all that they need, are constrained and obliged to employ evil means to get subsistence. From this come the frauds, deceptions, rascalities, injustices, extortions, robberies, thefts, murders, assassinations, and brigandages which cause such an infinity of evils among men.' (Meslier, 1830 'Le testament de J. Meslier' in Bonger, 1916: 7. Italics added)

Fresco would reject Meslier's use of the word 'evil' for being too abstract. However both of these thinkers believe that individuals are rationally and emotionally 'obliged to employ' whatever 'means to get subsistence' within their culture. This similarity between Meslier and Fresco is best observed by contrasting their understandings:

'Is he a bad guy? No. He's reflecting his culture. So, I believe if you were brought up as a baby in Nazi Germany all you see is "Heil Hitler", "Deutschland Über Alles!" And all the books are burnt, you become a Nazi. Is he a bad guy? No. That's all he's been exposed to. So I do not blame people, no matter what they are. I even think that a serial killer is made that way by the environment they are reared in.' (Chalmers, 17:11-18:04. Italics added)

It can be summarised that these thinkers believe 'It is not the man himself, it is his circumstances that form his character; an unfavourable environment produces a bad man, a favourable one a good man. The organisation of the society of today is such that it awakens in a man all evil qualities' (Bonger, 1916: 21). In conclusion to this point, Fresco believes an individual's 'culture' and the satisfaction of needs determines behaviour. In this regard, Fresco's ideas support Merton's (1957) account of structuralism and 'strain'. Specifically, Merton and Fresco agree that the structure of a society and the 'functions' within it define cultural needs (Merton, 1957) – or what Fresco would term, 'social needs'. Fresco's ideas also support those of other contemporary 'strain' theorists such as Messner and Rosenfield (2013), who argue:

'...high rates of crime in the United States do not arise from the "sick" outcome of individual pathologies, such as defective personalities or aberrant biological structures. Neither are they the "evil" consequence of individual moral failings, such as greed. Nor does the American crime problem simply reflect universally condemned social conditions, such as poverty and discrimination, or ineffective law enforcement, or lax punishment of criminals. Rather, crime in America derives, in significant measure, from highly prized cultural and social conditions.' (2013: 6)

Fresco's ideas however, are subject to the same criticisms that were originally attached to strain theory. Specifically, the work of Mann (2007) and his development of Herbert Blumer's (1969) 'symbolic interactionism' can be used to criticise Fresco's ideas. Mann explains that meaning arises out of interactions between individuals. Mann argues that social relations are the point of interest. Fresco does not give this issue enough attention in his work. Explicitly, Low (2008)

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⁴⁹ Otherwise known as socio-economic and political environment.

explains that social structures and individuals affect each other equally. This understanding of 'symbolic interactionism' challenges Fresco's understanding of 'culture' and 'values'. 'Symbolic interactionism' explains the point of origin for meaning and behaviour is within the individual. 'Symbolic interactionism' is able to provide support for the idea that 'individual pathologies' are the source of behaviours, whether 'criminal' or not (Messner & Rosenfield, 2013). As Fresco does not provide an account of these individual differences, the usefulness of his work suffers. Specifically, his work can be criticised for being 'culturally' deterministic.

3.8 Consumerism, 'Alienation' & Cultural Coercion

Fresco also targets Western consumerism – on a global scale (Interview: 94-101). Fresco's ideas explain that societies have unsuccessfully challenged harm partly because of the development of consumer culture. This is an idea that is has been supported by other social harm thinkers (such as Marcuse, 2002). Fresco explains that consumer society perpetuates what Marcuse calls 'false' needs⁵⁰ (Marcuse, 2002: 8, originally 1964). As part of this, Fresco explains that these 'false' needs create the illusion that 'human needs' are limitless. In this regard, Fresco's ideas challenge the Mises School of Economics, who advocate the opposite (Mahoney, 2001). Fresco's ideas go further to explain that the manufacturing of 'false' needs causes an inappropriate use of resources – such as the perpetuation of planned obsolescence (Fresco, 2002: 68). Therefore, consumer culture should be challenged by society. Fresco continues to explain that a benefit of this is that 'basic' and 'social' human needs will be priorities by global society and consequently, crime will be challenged.

Young contributed to this idea of cultural coercion, by explaining that there is 'heightened individualism in an era of mass consumerisms' (Young, 2007:2). Hall et al goes further to explain that consumerism has created a 'new culture of narcissism' (Hall et al., 2008). Bryne describes this new era as a collection of 'cultures of poverty' (2005: 115). He explains that the harms of modern society are a collection of societal ills that include consumerism. Willis (1977) for example, explains that education is used to reproduce class division and subsequently, to sustain inequality. As part of this 'culture of poverty', Grover (2008: 3) explains that 'criminal justice agencies basically manage poor people'. Ultimately, Fresco can be criticised for not addressing the issue of crime and 'unnecessary suffering'. Specifically, he does not comment on how education and the 'criminal justice system' perpetuate 'unnecessary suffering' – at least not to an acute degree (Fresco, 2002).

⁵⁰ Although Fresco does not use the term 'false needs' in his own work or draw upon the work of Marcuse, I believe that these thinkers identify the same problem in consumer society. Therefore, as it is a useful term, I will continue in this discussion to use Marcuse's phrase.

Fresco explains that consumer society 'degrades' individuals. He argues this by explaining that consumer society distances the consumer from the labour and resources entangled within products. It is with this understanding that Fresco explains:

'Merely being born in a developed country we have access to many things that we put no effort toward, such as the telephone, the automobile, electricity, running water, etc. These gifts of human ingenuity and invention do not degrade our lives, but rather they enrich us. What degrades us is our lack of concern for those unfortunate enough to experience poverty, hunger, lack of medical care, and war.' (1995: 18)

Fresco explains that this 'lack of concern'⁵¹ is harmful and should be considered 'socially offensive behaviour'. Moreover, he believes such negative behaviour produces deeper harms by creating an unequal distribution of goods and services. This in turn, Fresco explains, causes more crimes to emerge. In this regard, Fresco and Marcuse share the same belief that consumerism is harmful. Specifically, Fresco is concerned with consumerism's ability to draw society's attention away from 'environmental and human concerns' (Fresco 1994: 2). In this sense, Fresco's ideas suggest consumerism has a coercive effect.

Fresco's beliefs and those of Zygmunt Bauman (1989) can be contrasted in relation to this coercive effect of consumerism. Bauman's ideas concerning the moral distancing effect of the Nazi regime are particularly relevant. Bauman makes a similar argument to Fresco regarding the harmfulness of coercive distancing. It is specifically the effect studied under the Milgram experiments (1974) that Bauman is concerned with (Bauman, 1989: 26). Fresco and Bauman both argue that the social distancing of harm is extremely harmful, as it distorts an individual's perceived responsibility for other individuals. Bauman (Ibid) considers this phenomenon as a product of modernity and suggests that this phenomenon explains why the Nazi regime was able to create such an incredible degree of destruction in comparison to the rest of human history.

Katz's work (1990) argues that the 'foreground' of criminal acts needs to be appreciated by criminologists in order to attain a fuller understanding of behaviour. He argues that the act of deviance itself can be a reason why individuals commit criminal acts. Again, Fresco's understanding of what shapes harmful behaviour can be critiqued using an interactionalist perspective. Fresco believes that given a 'constructive' culture (2002: 38), harmful behaviour will be challenged. This does not address acts of deviance committed for the sake of emotional

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⁵¹ Otherwise known as Marx's 'alienation' concept (Marcuse, 2002: 27).

reward. Katz's work is able to detail the phenomenon of behaviour, and specifically, 'crime', in ways that Fresco does not. Again, Fresco's work is criticised for not accounting for the role of individual differences in his alternative vision.

3.9 Environmental Crime & Punishing the Powerful

In support of the critical criminological perspective, Faure and Visser argue that:

'...criminal law has been, and can be, used in the fight against environmental pollution' (in Sjogren & Skogh, 2004: 58).

This perspective is interesting, in that these thinkers have a critical criminological perspective similar to Fresco. However, they advocate the use of laws to challenge harm, unlike Fresco. They continue to argue that such laws can adequately secure societies' 'basic requirements'⁵², which Fresco also rejects. It is interesting that these two thinkers have similar ideas, but arrive at different conclusions regarding challenging harm.

This limitation of criminal law is emphasised with the work of Steve Tombs and David Whyte (2007). These scholars publically criticised Sonae Industria for their health and safety failures and the harm they have caused in the local environment. After the death of two employees (Trade Union Congress, 2010), '22 serious accidents' (Bartlett, 2010), multiple fines (LetsRecycle, 2003), local protests (MP George Howarth in LetsRecycle, 2007), 'a series of chemical leaks and fires' (Thompson, 2010) and the issuing of 'many statutory notices on Sonae, including two prohibition notices, 10 enforcement notices, five variation notices, and one notice requiring information, with which Sonae did not comply' (MP George Howarth, in LetsRecycle, 2007), Sonae Industria was brought to (in)justice. The factory was closed for a month. Arguably, criminal law is an ineffective way of challenging crime. Eventually however, in 2012, and after public outrage and 'political difficulties', the plant permanently close (Duffy, 2012). This suggests that the social relations surrounding crimes of the powerful should be the focus of harm prevention, not criminal law.

Using Becker's (1968) ideas concerning the rational criminal, Faure and Visser argue that the Criminal Justice System (CJS) should be used to punish those that cause environmental harm. These thinkers target corporate businesses and suggest using CJS processes as a means of punishment. Faure and Visser intend to make a corporate executive, for example, experience a court trial as a means of punishment, regardless of the verdict (Faure & Visser, in Sjogren & Skogh, 2004: 62). Additionally, they suggest using large fines coupled with greater regulations

⁵² This term is similar to Fresco's 'basic needs'.

to make environmental pollution unprofitable. Although this is ethically questionable, Faure and Visser argue that the rational corporate executive would rationally take actions to avoid a court hearing and a large fine. As a result, they argue, environmental harm will be reduced.

Fresco, Faure, and Visser show desire to change societal social relations. However, their methods of achieving this are very different. Fresco's vision for social change is very broad and can be criticised for being vague⁵³. Faure and Visser's work is more concentrated and consists of a sustained effort to challenge the specific issue of environmental crime via criminal law. In this regard, Faure and Visser can be argued to have contributed more to challenging environmental 'unnecessary suffering' than Fresco due to their more realistic agenda.

3.10 'CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN' & CYBERNATED

TECHNOLOGY

Fresco explains that in order to successfully challenge harmful behaviour, the socioeconomic structure of society needs to be radically changed. Fresco summarises this argument, stating:

'How would crime be eliminated? [...] By the redesign and modification of the physical and social environment, and of our educational system, constructive patterns of behaviour can evolve. The new environment would reinforce constructive human values and behaviour and would surpass the need for prisons and the conditions that lead to interpersonal aggression.' (The Predictions Magazine, 1994: 1)

Fresco continues to explain that what he means by 'redesign' is encapsulated in his TVP and RBE model. This is a 'technical' explanation of how to design-out harmful behaviour (2002: 9) — though this technical plan is incomplete. Fresco explains his intentions to change the environment, through implementing cybernated technologies, in order to design-out the conditions responsible for 'socially offensive behaviour' (1995: 26-27). It should be reiterated here, that Fresco's 'cybernated technologies' reflect the mobilisation of 'technical' solutions. Thus, Fresco's work can be situated at least partially within the theory of 'Crime Prevention Through Environmental Design' (see Casteel & Peek-Asa, 2000). This point can be emphasised, as Roxanne states 'Crime is really a by-product of the inefficiencies of the culture' (Interview: 237). This implies that if the society culture was altered, crime would be reduced.

76

⁵³ Although it is recognised that in Fresco's earlier work, he lobbied for legal changes, this was not a sustained effort that continued into his later work.

More explicitly, Fresco explains that by using cybernated technologies, goods and services will be available to all and as a result, human needs will be satisfied. Consequently, the conditions for 'crime' will be reduced (2002: 78). For example, Fresco argues that cybernated technologies can be used to challenge 'over-crowding' (1995: 21), which is considered one of the conditions responsible for perpetuating 'socially offensive behaviour' (1995: 26-27). Fresco views this method to be essential to challenging harm in his alternative vision. This point is evident in Fresco's statement:

'If we are genuinely concerned about the environment and our fellow human beings, and want to end territorial disputes, war, crime, poverty, hunger, and the other problems that confront us today, the intelligent use of science and technology are the tools with which to achieve a new direction — one that will serve all people, and not just a select few.' (Fresco, 2002: 9. Italics added)

Interestingly, Fresco uses the term 'cybernated technologies' to refer to 'technical' solutions. 'Technical solutions' refer to solutions that prevent 'unnecessary suffering' and provide individuals with the means to satisfy their needs. In this regard, Fresco's solution for a better society is a repackaging of Marxist ideas. Fresco is not a technological determinist, as his rhetoric suggests. Instead, it is rational to believe that Fresco uses words such as 'technical' and 'cybernated technologies' in order to give fresh legitimacy to Marxism in the US.

Fresco does not provide sufficient detail about the limits of cybernated technology in his envisioned cybernated society. However, he is explicit in stating that, how technology is used by individuals in the future will follow a libertarian philosophy. He explains that individuals will choose on an individual basis how to use cybernated technology. Fresco explains that harm will not arise out of this mobilisation of libertarian philosophy, as the conditions that cause 'socially offensive behaviour' will not exist. Fresco does not provide empirical evidence to support this claim. Again, this point supports a previous criticism of Fresco that his alternative vision is based on insufficient sociological knowledge (Popper, 1966: 11).

Fresco's cybernated technology is largely self-managing and requires little human labour to maintain and upgrade. This presents a power dynamic within Fresco's envisioned society, in that those who have a greater technical understanding of cybernated technologies will have power superiority. This is because such individuals will be utilised to maintain and upgrade the cybernated technologies and will therefore be placed in a position of power. These technicians can be viewed to assume a similar role to those medical professionals described within Joe Sim's

work 'Medical Power in Prisons' (1990). In this case, however, it will be technical power within a cybernated society.

Again, Fresco does not address this issue. As Fresco's work does not go into sufficient depth, he is unable to provide an adequate answer regarding how power relations will be managed amongst citizens. Therefore, he is unable to argue against the criticism that potentially devastating harm will arise out the mismanagement of power in his alternative vision. This issue relates to a main criticism of Fresco's work that his vision lacks the 'sociological knowledge necessary for large-scale engineering' (Popper, 1966: 165).

3.11 Prisons, Punishment & Hospitals

Fresco's ideas are similar to Taylor et al.'s approach of challenging crime. Fresco agrees with their argument that:

'Phenomenology looks at the prison camp and searches for the meaning of the 'prison' rather than for its alternative; and it searches for the meaning in terms of individual definitions rather than in terms of a political explanation of the necessity to imprison. Indeed, one of the recurring criticisms we have had of many of the theorists discussed in this book is the way in which they place men apart from society.' (1973: 279).

Fresco agrees that the way crime is dealt with in contemporary, particularly Western, society is inappropriate. Fresco explains, like Taylor et al. (1973) and White (2008: 5) that the politics surrounding how to tackle crime need to be addressed. These thinkers advocate a dialectical understanding of the 'crime' and 'criminal behaviour' phenomena. Specifically, they explain that holistic factors need to be considered when attempting to engage with such phenomena, so researchers do not 'place men apart from society'. This, they argue, will provide a more explanatory account of crime. In turn, this will provide a more appropriate solution to the 'crime problem'. Fresco shares similar beliefs to those of Taylor et al. and demonstrates his dissatisfactions with the politics of prisons, punishment, and crime prevention, stating:

'...our current approach to dealing with an increase in crime is to build more prisons rather than to attempt to alter the conditions that are responsible for socially offensive behaviour. [...] Shifting our attention to over-crowding, unemployment, malnutrition, poor role models, stresses in family life, lack of purchasing power, people's inability to resolve conflict without the use of

physical force, etc. would be a much more effective approach to solving these problems.'54 (Fresco, 1995: 21)

Fresco explains that because 'criminal behaviour' is largely the result of socioeconomic issues, efforts to challenge crime should focus on these issues - rather than on the individual and his 'criminal' behaviour. Continuing on this theme, Fresco holds similar beliefs to those described within the 'Abolitionist' movement (Downes & van Swaaningen, 2007; Sim, 1990; Scott, 2008).

Van Swaaningen (van Swaaningen, 1986: 9; Downes & van Swaaningen, 2007) provided a detailed explanation of how the penal system causes de-socialisation and perpetuates social harm. Furthermore, van Swaaningen suggests that the next step is to become politically active and to lobby for the abolishment of the prison system. Sim also provides a penetrating insight into the harms of the prison system and its legitimisation of harmful, specifically medical, practices (Fitzgerald & Sim, 1982; Sim, 1990). In contrast to these thinkers, Fresco's ideas do not provide any additional understanding to explaining the prison phenomena. Fresco's beliefs regarding the use of prison to challenge crime are useful, but not as useful as the beliefs of van Swaaningen and Sim. This criticism becomes significant in other areas of Fresco's theorising.

Fresco explains that regarding those very rare cases where harmful behaviours are '...determined by brain damage I would say that they don't belong in jail, they belong in a hospital and to be treated' (Interview: 201). This is a very interesting statement as it exposes Fresco's beliefs to a spectrum of criticisms. Again, it can be argued that Fresco is creating a power structure in his society. Specifically, Fresco recommends that if an individual's 'socially offensive behaviour' is attributed to a biologically shaped issue -such as 'brain damage'- then that individual should be hospitalised. In this regard, Fresco's alternative vision can be contrasted against the 'defectology' facilities in Croatia during the communist period. Fresco's alternative society will promote the ideas that the structural inequalities of past societies are removed. Therefore, any deviant behaviour can be rationally considered a 'defect' within the individual. As a result, perceived biological deviants may be hospitalised, which raises ethical concerns. Fresco does not detail exactly how this hospitalisation process will work, but it is clear that

⁵⁴ Fresco makes a similar statement in his 2002 work when he states; 'Many social reformers tried to solve problems of crime within the framework of the monetary system by building more prisons and enacting new laws. [...] This has accomplished little, yet requests for funding to build more prisons and hire more policemen fare far better in legislatures and voting referendums than do pleas for education or aid to the poor. Somehow in an area of plenty, we have meanly approved punishment as an answer to all problems. One symptom of insanity is repeating the same

Fresco believes his society could challenge these harmful behaviours determined by physiological factors (Interview: 201).

Fresco's views regarding the hospitalisation of some 'socially offensive' individuals (Ibid) may result in his welfare system becoming a power outlet in TVP community. Specifically, hospitalisation may be utilised as a means to punish individuals, whether they are legitimately in need of medical care or not. This misuse of medical power as a power outlet is a well-documented phenomenon (Foucault, 1977; Sim, 1990). Therefore, the harm that can arise out of such a misuse of power should be taken seriously when examining Fresco's alternative vision.

Fresco believes that TVP's culture will not produce such harmful behaviours or abuses of power, as it will instil 'values' that promote '...human and environmental concerns' (1995: 2). However, he does not give sufficient evidence as to why individuals will act this way. It has already been established that Fresco intends to capitalise on the coercive effect of his culture to promote more 'constructive' values (2002: 68). However, using the work of Foucault, Fresco does not describe how his alternative vision will prevent individuals from disciplining and punishing themselves. To elaborate further, Foucault explains that the prison is used to establish a division between a law abiding citizens and the delinquent class within the public consciousness. The same paradigm will likely emerge within Fresco's proposed society. Even if his society eliminates the use of the word 'crime' in favour of a more literal explanation of behaviour, a new type of deviant will likely emerge in Fresco's society (Becker: 1963). Rather than having law-abiding citizens and the delinquent class, Fresco's society will differentiate between individuals that are either 'physiologically damaged' or 'physiologically healthy'. In this regard, 'physiological health' will replace the functional role of crime. Fresco does not address this issue in his work and as a result, the legitimacy of his ideas suffers.

3.12 'RADICAL ALTERNATIVE'

Fox (FOX: 7 News, 2009) claims that Fresco's alternative vision and its means to challenge the 'crime problem' is a radical alternative. This observation highlights how Fresco's vision has become increasingly radical over time. For example, Fresco advocates the abolitionist perspective, which is labelled as a radical position by some academics (Lynch & Groves 1986, in Scott, 2008). However, when Fresco's alternative vision is viewed in the context of the 1970s, his vision does not seem overly radical. At the time, 'left idealism' advocated changes similar to Fresco's alternative vision (Scraton, 2001). However, since the introduction of 'left realism', the use of prison as a way of dealing with crime has become more established. From 1970 to 2005, the prison population in the US has increased dramatically. This point is best illustrated in the following figure:

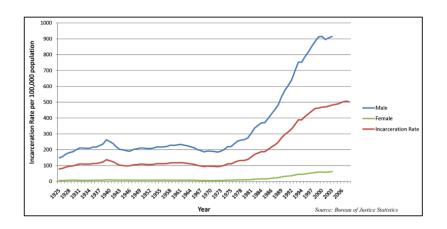


Figure 1. Graph to show 'Incarceration Rate of Inmates Incarcerated under State and Federal Jurisdiction per 100,000 Population 1925-2008' (U.S. Department of Justice: Bureau of Justice Statistics, 2010)

It can be observed that Fresco's views have become increasingly radical since the 1970s, because of the proliferation of incarceration (Ibid). Relative to the US government's use of prisons to deal with 'criminal behaviour', Fresco's vision has become increasingly radical without a change in his beliefs. This is because the gap between an alternative solution and the established solution for dealing with 'crime' has widened. This makes any change in contrast to the *status quo* seem radical. This brings into question whether Fresco's ideas are 'idealistic'.

3.13 THE MISUSE OF TECHNOLOGY & SCIENTIFIC RACISM

Fresco does not identify his alternative vision's potential to facilitate for harm, through the process of rationally applying technology to challenge 'socially offensive behaviours'. Zygmunt Bauman explains this issue when he states that the Holocaust 'arose out of a genuinely rational concern, and it was generated by bureaucracy true to its form and purpose' (1989: 17). Bauman continues to explain that the technology that arose out of Nazi Germany, such as gas chambers and the politics concerning the use of this technology, was rationally supported by the culture (Ibid). Fresco's ideas concur with this conclusion. However, he does not comment on the possibility of his alternative vision's capacity to create harms similar to those inflicted by the Nazis. Interestingly, the Nazis utilised what Fresco calls 'cybernated technology' – meaning the mobilisation of 'technical' solutions.

It is recognised that 'technical solutions' refers to those solutions that cause 'unnecessary suffering' and promote the satisfaction of human needs. However, it is also recognised that Fresco's vision is utilitarian. Returning to Rawl's (1921) argument that utilitarianism cannot be used to establish a meaningful definition of 'justice'; it can be argued that Fresco's vision cannot not produce a meaningful definition of 'justice'. Consequently, it can be concluded that in

certain circumstances, Fresco's vision would support the decisions made by the Nazis. Fresco's work does not address this serious issue⁵⁵. Specifically, Fresco's vision does not account for 'the commodification of knowledge' (Tombs & Whyte, 2003: 103) and how this shapes a 'technical' solution. As a result, the legitimacy of his work is limited.

The importance of this issue can be demonstrated by contrasting Bauman's work with Fresco's more closely. In Fresco's 1969 work, he describes his envisioned cybernated future using two fictional characters, Scott and Hella:

'The world that Scott and Hella live in is a world that... [...] ...has developed a finger-sized computer that is implanted in the brain of every baby at birth (and the babies are scientifically incubated, the women of the twenty-first century need not go through the pains of childbirth), and that has perfected genetic manipulation that allows the human race to be improved by means of science.' (Keyes & Fresco, 1969: 1)

What Fresco means by 'perfect genetic manipulation' and 'improved' is subjective. For example, it can be understood that the 'Final Solution' had the same intentions as Fresco's 1969 alternative vision: to achieve 'perfect genetic manipulation'. Fresco's work subscribes to a teleological, utilitarian framework. Therefore, when Fresco talks of designing-out criminal behaviour in society, it should be recognised that his work lacks an account of how to avoid harm. Consequently, it can be viewed that there is a significant issue regarding the ethical legitimacy of Fresco's work. Specifically, Fresco does not discuss issues such as ADHD (Attention deficit hyperactivity disorder) or autism. Does his vision not consider such phenomena 'perfect genetic manipulation'? This provokes the question, how can Fresco judge what is 'perfect'? As objectivity is subject to time and place, there can be no such thing as 'perfect'. Again, this brings into question the ethical legitimacy of Fresco's sociological ideas.

3.14 SACRIFICING SUB-CULTURES FOR THE GREATER GOOD

Phil Cohen's 1972 work contrasts two different youth cultures: 'Mods' and 'Skinheads'. He explains that these groups adapted to UK society in very different ways. Where Mods embraced the new affluent culture of the 1970s, Skinheads reflected upon more traditional working class ideals. Cohen continues to explain that both of these cultures were a reaction to the dominant values of capitalist society. As youth cultures have relatively little influence on societal change,

82

⁵⁵ It should be clarified that I am not suggesting that Fresco's work is fascistic or anti-Semitic. Fresco's ideas are opposed to fascistic and anti-Semitic ideas, but his work has the potential to be interpreted in such a way, given the relevant conditions.

capitalist society has not developed a significant means of hegemonic control for such cultures. This is in contrast to the hegemonic devices used to promote conformity within the working class such as mortgages, credit cards, family commitments etc. Cohen's findings suggest that Fresco's alternative vision will develop sub-cultures that will challenge the dominant coercive culture of his society. This raises ethical concerns regarding how Fresco intends to deal with these sub-cultures.

Becker explains that deviance is defined not by the *act*, but by an external actor (1964). As Fresco's alternative vision promotes only 'constructive' behaviours, his society is likely to label those behaviours that are not considered 'constructive' as deviant. As a result, Fresco's vision may create deviants out of individuals such as Skinheads (Cohen, 1972), Rockers (Cohen, 1955) and others who may wish to 'feel strongly' (Huxley, 1932). This will create suffering and is ethically concerning. However, a more important inquiry is whether Fresco's vision would consider this to be suffering to 'necessary'.

The ideas of Bernard Williams (1973) can be used to critique Fresco's utilitarian perspective. Specifically, Williams explains that Fresco's alternative vision focuses on the results of an act, rather than the act itself. Additionally, as the telos of Fresco's vision is to prevent 'unnecessary suffering'; paradoxes arise concerning the mobilisation of his alternative vision. To elaborate, Fresco argues that his TVP and proposed cybernated society will be an improvement on current society, as it will be concerned with preventing 'unnecessary suffering'. However, if such a cybernated society is established, it is likely to label minority cultural groups as deviant, thus causing social harm. Therefore, it can be stated that the act of implementing Fresco's alternative vision will create unnecessary suffering - as this implementation does not have to happen. Therefore, Fresco's alternative vision is self-defeating. However, as Fresco advocates a utilitarian perspective, it is likely he believes this suffering is tolerable for the greater good. Specifically, he may claim that '...the Venus Project is not perfect, it's just a hell of a lot better than the system today. And it will get better.' (Fresco, 2009). This understanding provided by Fresco is similar to Popper's criticised 'utopian engineer' who advocates 'dangerous dogmatic attachment to a blueprint for which countless sacrifices' must be made (1966: 166). In this regard, Fresco's alternative vision could be considered ethically illegitimate.

3.15 FASCISM, THE NEW 'POWER ELITE' & THE NEW DEVIANT

Fresco suggests that society should identify itself as part of a global community, and reject harmful cultures that promote 'unnecessary suffering'. By doing so, Fresco explains, 'socially offensive behaviours' will be reduced (Fresco, 2002: 39-40). This belief has clear fascistic undertones, specifically in his rejection of cultures considered to cause 'unnecessary suffering'.

Although Fresco's envisioned global community consists of voluntary members, he strives for a common culture. This culture is similar to that which Meslier (in Bonger 1916) promotes, in the sense that it is 'dedicated to environmental & human needs' (Fresco, 1995: 2). Within this community, all sub-cultures are forced to arise out of Fresco's cultural framework. This means TVP's cultural coercion will only *support* certain behaviours and *tolerate* others, segregating the needs of those who may wish to 'feel strongly', for example (Huxley, 1932). In this regard, Fresco's vision harbours fascistic undertones.

The product of such fascistic undertones will result in some cultures being involved in a 'war of position' (Gramsci, 1926: 194, 229-239). As part of this, 'folk devils' may emerge (Cohen, 1973) and consequently, the stability of Fresco's vision will be jeopardised. Another issue regarding Fresco's alternative vision is the shift in social power. Specifically, a shift that empowers medical and technological members of Fresco's society may occur. Those individuals in positions of power can be viewed to resemble what Mill labelled the 'Power Elite' - a concept previously discussed. In Fresco's society, those individuals who have medical or technological power will be able to impose their agenda upon society, so a 'technical' elite may emerge. Consequently, the medical and technological members of society may form 'The New Power Elite'. This is the rational conclusion in a society that supports a coercive techni-culture. As a by-product of this techni-culture, it also seems plausible that a new deviant class will emerge. Specifically, those who are opposed to the coercive techni-culture may become 'The New Deviant'. Fresco's alternative vision systemically advocates fascism, and it has been argued that Fresco's cybernated technologies can be used to justify violations of 'justice' (Rawl, 1921). Thus, it can be argued that Fresco's vision is likely to foster harmful behaviour. This undermines his zemiological approach, and as a result, undermines his project's goal to challenge 'unnecessary suffering'.

CONCLUSION

This research has unveiled the work of Jacque Fresco, revealing his underlying ideas. This work has distinguished between ideas that he uses for rhetorical means, such as logical positivism and scientific determinism; and those he genuinely supports, such as utilitarianism. Through this investigation, the theoretical shortcomings of Fresco's ideas have also been exposed. These criticisms significantly damage the legitimacy of Fresco's work. Specifically, there are serious ethical concerns regarding his proposed vision. However, Fresco's benevolence is something that is truly needed in modern society. This is because his criticism of 'monetary' societies is valid - even in recognition that his work lacks the depth of other contemporary thinkers. He is correct to conclude that capitalist societies perpetuate social harm and his efforts to challenge this phenomenon are understandable and inspiring. However, his vision lacks the sociological knowledge to successfully challenge this phenomenon. This weakness however, can be overcome if he were to merge his ideas with select academic contributions – such as those that are supported by critical criminologists. This will allow his work to overcome the criticism that his ideas are dated. Finally, Fresco's rhetoric needs to be revised as it causes confusion amongst his supporters and academics.

To conclude this research, I present an extract by David Harvey. I believe this excerpt contextualises Fresco's work well. Additionally, it offers hope for Fresco's alternative vision and by extension; to the victims of 'unnecessary suffering'.

'It has long been the dream of many that an alternative to capitalist (ir) rationality can be defined and rationally arrived at through the mobilisation of human passions in the collective search for a better life for all. These alternatives — historically called socialism or communism — have been tried in various times and places. In the 1930's, the vision of one or other of them operated as a beacon of hope. But recently they have both lost their lustre and been dismissed, not only because of the failure of historical experiments with communism to make good on promises and the penchant for communist regimes to cover their mistakes by repression, but also because of their supposedly flawed presuppositions concerning human nature and the potential perfectibility of the human personality and of human institutions. [...] Lenin's famous question 'What is to be done?' cannot be answered, to be sure, without some sense of who might do it and where. But a global anti-capitalist movement is unlikely to emerge without some animating vision of what is to be done and why. A double

blockage exists: the lack of an alternative vision presents the formulation of an oppositional movement, while the absence of such a movement precludes the articulation of an alternative. How, then, can this blockage be transcended? The relation between the vision of what is to be done and why, and the formation of a political movement across particular places to do it, has to be turned into a spiral. Each has to reinforce the other if anything is actually to get done. Otherwise potential opposition will be for ever locked down into a closed circle that frustrates all prospects for constructive change, leaving us vulnerable to perpetual future crises of capitalism, with increasingly deadly results. [...] The struggle for survival with justice not only continues; it begins anew. [...] To understand the political necessity if this requires first that the enigma of capital be unravelled. Once its mask is torn off and its mysteries have been laid bare, it is easier to see what has to be done and why, and how to set about doing it. Capitalism will never fall on its own. It will have to be pushed. The accumulation of capital will never cease. It will have to be stopped. The capitalist class will never willingly surrender its power. It will have to be dispossessed.

To do what has to be done will take tenacity and determination, patients and cunning, along with fierce political commitments born out of a moral outrage at what exploitative compound growth is doing to all facets of life, human or otherwise, on planet earth. Political mobilisation sufficient to such a task occurred in the past. They can and will surely come again. We are, I think, past due.' (Harvey, 2011:223, 227, 260)

Finally, I feel that it is important to add that although Fresco's ideas lack the scope and depth of other thinkers, his contributions are undoubtedly important. His engaging lectures and charisma has captured the imagination of millions — especially of young people. He has presented difficult social issues such as inequality and the effects of consumerism in a way that has gained the attention of a global audience. I believe this quality of Fresco is the most valuable. This element is often lacking in other thinkers. This is why his contributions are important. For these reasons, where other academics failed, he succeeded in encouraging me to attend a university and to pursue a career that would challenge 'unnecessary suffering'.

References

Althusser, L. (1969) *Ideology and Ideological State Apparatuses*. France: La Pensee.

Anderson, M (29th April 1973) 'Life Should Be Easier Says System Advocate' In: *The Miami Herald*. USA.

Andreeva, T. (3rd March 1950a) 'Frustrated Genius' In: Olean Times Herald. USA. 13.

Andreeva, T. (6th March 1950b) 'Advanced Plane Ideas Rejected' In: *Abilene Reporter-News: Texas*. USA. 9.

Antonaccio, O. (2007) 'A Cross-National Test of Bonger's Theory of Criminality and Economic Conditions' In: *Criminology*, 45, (4). 925-958.

Ashby, W. (1960) Design for a brain: the origin of adaptive behavior. USA: Wiley.

Aurelius, M. (167 A.C.E.) 'The Meditations' In: The Internet Classics Archive. (1994) *The Meditations*. Global: Open Source.

Barsky, N. (1997) Noam Chomsky: A Life of Dissent. USA: MIT Press.

Bartlett, D. (2010) 'Sonae factory's shocking safety record revealed after deaths'. Available: http://www.liverpoolecho.co.uk/news/liverpool-news/sonae-factorys-shocking-safety-record-3388117#ixzz1FkGokBzk. Last accessed 20th Sept 2013.

Bauman, Z. (1989) Modernity and the Holocaust. USA: Cornell University Press.

Beccaria, C. (1764) 'On Crimes and Punishment' In: University of Toronto. (2009) *On Crimes and Punishments and Other Writings*. Canada: UOT Press.

Becker, H (1963) Outsiders: Studies in Sociology of Deviance. USA: The Free Press.

Becker, G. (1968) 'Crime and Punishment: An Economic Approach' In: *Journal of Political Economy*, 76. 169–217.

Becker, H. (1973) *Man in Reciprocity: Introductory Lectures on Culture, Society and Personality*. USA: Greenwood Pub Group. 9.

Bellamy, E. (1887) Looking Backward. USA: Houghton Mifflin.

Bergson, H. [1907] (2010) Creative Evolution. Global: FQ Books.

Black, M. (2000) 'Korzybski's General Semantics' In: Black, M. (2000) *Language and Philosophy: Studies In Method*. USA: Cornell University Press. 223-246.

Bonger, W. (1916) Criminality And Economic Conditions. USA: Little, Brown, And Company.

Bordo, M. (1993) *The Bretton Woods International Monetary System: An Historical Overview.* Global: NBER Programs.

Brownfield, C. (19th May 1997) 'Futurist says science holds key to society' In: *The News-Journal*. 1. USA.

Byrne, D. (2005) Social Exclusion, (Second edition). Maidenhead: Open University Press.

Burns, J. & Swerdlow, R. (2003) 'Right Orbitofrontal Tumor with Pedophilia Symptom and Constructional Apraxia Sign' In: *Archives of Neurology*, 60 (3).

Casteel, C. & Peek-Asa, C. (2000) 'Effectiveness of Crime Prevention Through Environmental Design (CPTED) in Reducing Robberies' In: *American Journal of Preventive Medicine*, 18, (4S). 99-115.

Carnap, R. (1959) 'The Elimination of Metaphysics through Logical Analysis of Language' In: Ayer, A. J. (1978) *Logical Positivism*. USA: Free Press. 69-73.

Carson Robinson Trio (1932) 'Prosperity is Just Around the Corner'. [Single Track]. USA: Ogg Vorbis.

Chadwick, O. & Scraton, P. (2001) The SAGE Dictionary of Criminology. UK: Sage. 70.

Chambliss, W. J. (2000) Power, Politics, and Crime. USA: Westview Press.

Chase, S. (1966) The Tyranny of Words. USA: Harcourt Publishers Ltd College Publishers.

Chomsky, N. (2001) For a Free Humanity; For Anarchy. [Audiobook] Global: AK Press.

Cohen, A. (1955) Delinquent Boys: The Culture of the Gang. Glencoe: Free Press.

Cohen, A. (1988) History, Labour, and Freedom: Themes from Marx. Oxford: Clarendon Press.

Cohen, P. (1972) 'Sub-cultural Conflict and Working Class Community' In: *Working Papers in Cultural Studies*. No.2. Birmingham: University of Birmingham.

Cohen, S. (1973) Folk Devils and Moral Panics. St Albans: Paladin.

Cohen, S. (1988) Against Criminology. Global: Transaction Publishers.

Cullen, F. & Agnew. R. (1999) *Criminological Theory: Past to Present*. Los Angeles: Roxbury Publishing Company.

Daily Variety (3rd August 1949) 'Third Dimension Films By Spring Are Forecast' In: *Daily Variety*, (175), 8, 16. USA.

D'Arcy, J. (August 1948) 'The House of Tomorrow' In: *The Technocrat*. USA. 9-13.

Derrida, J. (1988) Limited Inc. USA: Northwestern University Press.

Deutsch, D. (2012) *The Beginning of Infinity: Explanations That Transform the World*. Global: Penguin Books.

Dorling, D.; Gordon, D.; Hillyard, P.; Pantazis; Pemberton, S. & Tombs, S. (2008) *Criminal Obsessions: Why Harm Matters More Than Crime*. (Second edition). UK: Centre for Crime and Justice Studies.

Downes, D. & van Swaaningen, R. (2007) 'The Road to Dystopia? Changes in the Penal Climate of the Netherlands' In: Tonry, M. & Bijleveld, C. (eds) *Crime and Justice in the Netherlands*. Chicago: University of Chicago Press. 31-70.

Duffy, T. (2012) 'Troubled Sonae plant closes permanently with loss of up to 220 jobs'. Available: http://www.liverpoolecho.co.uk/news/liverpool-news/troubled-sonae-plant-closes-permanently-3335061. Last accessed 20th Sept 2013.

Durkheim, E. (1897) Le Suicide. France: Penguin Classics.

Ericson, R. & Carriere, K. (1996) 'The Fragmentation of Criminology' In: Muncie, J.; Maclaughlin, E. & Langan, M. (1996) *Criminological Perspectives: A Reader.* London: Sage.

Feuerbach, L. [1848] (2008) The Essence of Christianity. UK: Dover Publications Inc.

Fitzgerald, M. & Sim, J. (1982) British Prisons. UK: Wiley & Son.

Flammonde, P. (1971) 'The Wonders of Our Discontent' In: *The Age of Flying Saucers*. USA: Hawthorn Books. 33.

Foucault, M. (1973) *The Birth of the Clinic: An Archaeology of Medical Perception*. UK: Vintage Books.

Foucault, M. (1977) Discipline and Punish. UK: Penguin Books.

Fox News (6th March 2009) '7 News Features: The Venus Project'. [Television Program]. USA: WSVN.

Fox News (7th June 2012) 'Fox News 13: The Future of Earth'. [Television Program] USA: WSVN.

France, A. (1996) 'Towards a Sociological Understanding of Youth and their Rick Taking' In: *Journal of Youth Studies*, 3 (3): 317-331.

Fresco, J. & Keyes, K. S. (1969) Looking Forward. USA: Osmora Inc.

Fresco, J. (1994) The Venus Project: the Redesign of a Culture. [Film]. USA: TVP

Fresco, J. (1995) *The Venus Project: The Redesign of a Culture*. USA: Global Cyber Visions.

Fresco, J. (5th March 1999) 'Global Sustainability', *School of Art & Design Conference*. [Lecture]. USA: Michigan University.

Fresco, J. (2002) *The Best That Money Can't Buy: Beyond Politics, Poverty & War.* USA: Global Cyber-Visions.

Fresco, J. (2007) Designing the Future. USA: Osmora Publishing.

Fresco, J. (16th April, 2009) 'The Venus Project'. [Lecture]. USA: Pen State Greater Allegheny Campus.

Fresco, J. (2012) Paradise or Oblivion. [Film]. Global: Open Source.

Fresco, J. (2012a) 'Scientific Inquiry-Habits of Thought-Social & Moral Codes' in: *Jacque Fresco Classic Lecture 1973-1980*. USA: The Venus Project.

Fresco, J. (2012b) 'Resource Based Economy'. Available:

http://www.thevenusproject.com/the-venus-project/essay. Last accessed 06th Aug 2013.

Fresco, J. (28 January 2012c) 'The Immaculate Pig Experiment' In: TVP Magazine. USA.

Gazecki, W. (2006a) Future by Design. [Film]. USA: OpenEdge.

Gazecki, W. (2006b) 'Extra Scenes' In: Future by Design. [Film]. USA: OpenEdge.

Gazecki, W. (2006c) 'Bonus Scenes' In: Future by Design. [Film]. USA: OpenEdge.

Gazecki, W. (2006d) 'Behind the Scenes' In: Future by Design. [Film]. USA: OpenEdge.

Garland, D. (1997) 'Of Crimes and Criminals: The Development of Criminology in Britain' In: Maguire, M.; Morgan R. & Reiner, R. (2007) *The Oxford Handbook of Criminology,* (Second edition). Oxford: Oxford University Press.

Gore, J. (2011) 'The View from Venus' In: Orlando Weekly. USA: Orlando.

Goldberg, M. (2nd February 2011) 'Brave New World' In: *The Tablet*. USA. 4-19.

Grover, C. (2008) *Crime and Inequality*. Cullompton: Willan.

Hagan, A. (13th June 1979) 'Environmentalists Put City of Future On Display' In: *Hollywood Sun Tattler*. USA.

Harvey, D. (2010) Class 04 Reading Marx's Capital Vol I with David Harvey. [Lecture]. US: New York University.

Harvey, D. (2011) The Enigma of Capital and the Crisis of Capitalism. US: Profile Books.

Harvey, D. (2012) Class 02 Reading Marx's Capital Vol II with David Harvey. [Lecture]. US: New York University.

Hawks, X. (2010) 'Interviews Jacque Fresco. 2010'. [Video Interview]. Global: Open Source.

Hayek, F. A. [1944] (2001) 'The Road to Serfdom' In: *Routledge Classics*, (Second edition). UK: Routledge.

Hayek, F. A. (2005) *Road to Serfdom: With the Intellectuals and Socialism*. Global: Institute of Economic Affairs.

Hil, R. & Robertson, R. (2003) 'What Sort of Future for Critical Criminology' In: *Crime, Law and Social Change*, (39), 1.

Hillyard, P.; Pantazis, C.; Tombs. & Gordon, D. (2004). *Beyond Criminology: Taking Harm Seriously*. UK: Pluto Press.

Hollander, S. (2008) *The Economics of Karl Marx: Analysis and Application*. USA/UK: Cambridge University Press.

Hume, R. (1999). *Reconstructing Contexts: The Aims and Principles of Archaeo-Historicism*. UK: Open Press.

Huxley, A. (1932). A Brave New World. UK: Chatto and Windus.

IMDb. (2013) 'Zeitgeist: Addendum'. Available: http://www.imdb.com/title/tt1332128/. Last accessed 10th May 2013.

Johnson, D. K. (2004) 'The Lavender Scare: The Cold War Persecution of Gays and Lesbians in the Federal Government' In: *University of Chicago Press*. USA: UCP.

Johnson, K. (2013) "Communist" Is Still a Dirty Word in Vietnamese Immigrant Enclaves' In: *The New York Times*. Available: http://www.nytimes.com/2013/06/23/us/communist-is-still-adirty-word-in-vietnamese-immigrant-enclaves.html?pagewanted=all&_r=1&. Last accessed 06th Aug 2013.

Joseph, P. (2008) Zeitgeist: Addendum. [Film]. Global: Open Source.

Kant, I. (1785) 'Groundwork of the Metaphysics of Morals' In: Korsgaard, C. M.; Gregor, M. & Timmermann, J. (2012) *Kant: Groundwork of the Metaphysics of Morals*. UK: Cambridge University Press.

Keynes, J. (2011) *The General Theory Of Employment, Interest, And Money*. Global: Create Space Independent Publishing Platform.

Kropotkin, P. [1892] (2008) 'The Conquest of Bread' In: Working Classics. USA: AK Press.

Kropotkin, P. [1898] (1998) Fields, Factories and Workshops Tomorrow .USA: Freedom Press.

Kropotkin, P. [1902] (2006) 'Mutual Aid: A Factor of Evolution' In: *Dover Books on History, Political and Social Science*. USA: Dover Publications Inc.

Kropotkin, P. (2003) *Anarchism: A Collection of Revolutionary Writings*. USA: Dover Publications Inc.

Korzybski, A. (1941) *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics.* USA: Institute of GS.

Korzybski, A. (1995) *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*, (Fifth edition). Global: Institute of General Semantics.

Lea, J. & Young, J. (1984) 'What Is to Be Done about Law and Order?' In: *Journal of Law and Society*. 11, (3), 379-374.

Letsrecycle. (2003) 'Sonae UK fined £37,500 for polluting brook'. Available: http://www.letsrecycle.com/news/latest-news/wood/sonae-uk-fined-ps37-500-for-polluting-brook. Last accessed 20th Sept 2013.

Letsrecycle. (2007) 'Fire leads to closure of Sonae chipboard plant'. Available: http://www.letsrecycle.com/news/latest-news/wood/fire-leads-to-closure-of-sonae-chipboard-plant. Last accessed 20th Sept 2013.

Liljenberg, R. (4th February 1996) 'Designing the Future One Man's Vision' In: *The News-Sun*. USA.

Liljenberg, R. (21st June 2002) 'Venus Project founder has new book' In: *Weekend Reader*. USA. 9a.

Lemert, E. (1967) Human Deviance, Social Problems and Social Control. USA: Prentice-Hall

Lea, J. (1987) 'Left Realism: A Defense' In: Contemporary Crises, (11). USA/UK. 357-370.

Locke, J. (1690) 'An Essay Concerning Human Understanding' In: Pennsylvania State University (1974) *The Electronic Classics Series: An Essay Concerning Human Understanding*. USA: Open Source.

Locke, J. [1689] (2005) Two Treatises of Government. Global: Open Source. 37.

London Real (2nd September 2012) *London Real meets Futurist Jacque Fresco of The Venus Project*. [Interview]. Global: Open Source.

Los Angeles Evening Herald Express (25th March 1947) 'Modern "Trend Home" Shown at Studio' In: Los Angeles Evening Herald Express. USA.

Low, J. (2008) 'Structure, Agency, and Social Reality in Blumerian Symbolic Interactionism: The Influence of Georg Simmel' In: *Symbolic Interaction*, 31, (3), 325–343.

Lynch, M. & Groves, W. (1986) A Primer in Radical Criminology. New York: Harrow and Heston.

Mahoney, D. (2001) 'Austrian Business Cycle Theory: A Brief Explanation'. Available: http://mises.org/daily/672. Last accessed 20th Sept 2013.

Mackney, P. (24th May 2003) *Address by NATFHE General Secretary to Afternoon Session of Annual National Conference*. [Report]. UK: NATFHE online.

Macmillan, M. & Aggleton, J. (6th March 2011) *Phineas Gage: The man with a hole in his head.* [Audio Interview]. UK: BBC World Service.

Mann, D. (2007) *Understanding Society: A Survey of Modern Social* Theory. Toronto: Oxford University Press.

Marx, K. [1875] (1970) Critique of the Gotha Programme. Moscow: Progress Publishers.

Marx, K. [1867] (1990) Capital, Volume I. Global: Penguin Classics.

Marx, K. [1875] (1999) 'Critique of the Gotha Programme'. Available: http://www.marxists.org/archive/marx/works/download/Marx_Critque_of_the_Gotha_Programme.pdf. Last accessed 20th Mar 2013.

Marx. K. [1861-1863] (2003) 'Digression' In: *Economic Manuscripts*, (30), 306-318. Available: http://www.marxists.org/archive/marx/works/1861/economic/ch33.htm. Last accessed 20th Sept 2013.

Marx, K. & Engels, F. [1848] (2003). The Communist Manifesto. Global: Bookmark.

Mayhall, W. (1990) 'Future Man From Venus' In: Gulfshore life. May, 60-63, 82.

Merton, R. K. (1957) Social Theory and Social Structures. New York: Free Press.

Merton, R. K. (1996) On social structure and science. USA: University of Chicago Press. 248.

Merrill, K. R. (2007) *The Oil Crisis of 1973–1974: A Brief History with Documents*. USA: St. Martins.

Millie, A. (2006) 'Anti-Social Behaviour: Concerns of Minority and Marginalised Londoners' In: *Internet Journal of Criminology*. Global: Open Source.

Mills, C. [1956] (1999) The Power Elite. USA: OUP USA.

Milos, S. (2012) A Critical Reading of The Spirit Level: Why Equality is Better for Everyone, R. Wilkinson and K. Pickett, What is the Scientific Content of the Book? USA: CERES department.

Mises, L. V. [1920] (1990) *Economic Calculation in the Socialist Commonwealth*. Europe: Ludwig Von Mises Institute.

Mises, L. V. (1922) 'Socialism: An Economic and Sociological Analysis' In: Kahane, J. (1981) Socialism: An Economic and Sociological Analysis. (Sixth edition). Global: Liberty Fund Inc.

Mishkin, F. S. & White, E. N. (2002) *U.S. Stock Market Crashes and their Aftermath: Implications for Monetary Policy*. Massachusetts: NBER Working Paper Series.

Mullarkey, J. (1999) Bergson and Philosophy. Notre Dame: University of Notre Dame Press.

Muncie, J. (2000) 'Decriminalising Criminology' In: British Society of Criminology, (3). UK.

Newman, A. (10th March 2011) 'Zeitgeist and the Venus Project' in: *The New American*. USA. 22-49.

Notaro, A. (2005). 'Imagining the Cybernetic City: The Venus Project' In: *NEBULA: A Journal of Multidisciplinary Scholarship*. 2.4 (Dec/Jan), 1-21.

Nietzsche, F. (1882) 'The Gay Science' In: Kaufmann, W. (1974) *Nietzsche: The Gay Science: With a Prelude in German Rhymes and an Appendix of Songs*. New York: Vintage. 181-82.

Obrist, H. (2007) 'Futures, Cities' In: Journal of Visual Culture, 6, (3), 360.

O'Grady, W. (2011) *Crime in Canadian Context: Debates and Controversies*. Canada: OUP Canada.

Chalmers, T. (1st October 2009) 'On the Edge with Theo Chalmers'. [Television Program]. UK: Edge Media Television.

Osler, D. (2002) Labour Party: New Labour as a Party of Business. Edinburgh: Mainstream.

Oxford Dictionaries (2010) Oxford Dictionary of English. (Third edition). Oxford: OUP Oxford.

Pitts, J. (2001) "Korrectional Karaoke": New Labour and the Zombification of Youth Justice' In: Youth Justice, 1 (2): 3-16.

Pitts, J. (2003) *The New Politics of Youth Crime: Discipline or Solidarity*, (Second edition). London: Russell House Publishing.

Police Service of Northern Ireland (2013) 'Crime Definitions'. Available: http://www.psni.police.uk/index/updates/updates_statistics/update_crime_statistics/updates_crime_definitions.htm. Last accessed 10th May 2013.

Ponder, B. (2001) 'Insight: Cancer Genetics' In: Nature, 411, (1). 336-341.

Popper, K. (2002) *Conjectures and Refutations: The Growth of Scientific Knowledge*, (Second edition). Global: Routledge.

Price, W. (2013) The Value of Radical Theory: An Anarchist Introduction to Marx's Critique of Political Economy. Global: AK Press. 70.

Quine, W. (1951) 'The Two Dogmas Of Empiricism' In: Glock, H. J.; Gluer, K. & Keil & G. Grazer (2003) *Philosophische Studien: Fifty Years of Quine's 'Two Dogmas'*. USA: Editions Rodopi B.V.

Rawls, J. [1921] (2005) *A Theory of Justice: Original Edition*. USA: Belknap Press of Harvard University Press.

Reichenbach, H. (1948) 'The Verifiability Theory of Meaning' In: *The Philosophical Review*, LVII, (4). 135-50.

Robinson, J. (1971) The Mind in the Making. USA: Ayer Co Pub.

Rock, P. (2004) *Constructing Victims' Rights: The Home Office, New Labour and Victims*. Oxford: Oxford University Press.

Rolfe, L. (1998) Fat Man on the Left: Four Decades in the Underground. USA: California Classics Books. 158.

Ruggiero, V. (2011) 'An Abolitionist View of Restorative Justice' In: Justice, 39, (2). 100-110.

Ruggiero, V. (2006) *Understanding Political Violence: A Criminological Approach*. UK: Open University Press.

Russell, B.; Schlick, M.; Carnap, R.; Hempel, C.; Hahn, R.; Neurath, O.; Ramsey, F.; Ryle, G. & Waismann, F. (1959) *Logical Positivism*. Global: Free Press.

Schmadeke, S. (27th October 2002) 'Venus Before Dawn' In: Naples Daily News. USA. 1-3.

Schmitt, D.; Realo, A.; Voracek, M. & Allik, J. (2008) 'Why Can't a Man Be More Like a Woman? Sex Differences in Big Five Personality Traits across 55 Cultures' In: *Journal of Personality and Social Psychology*, 94, (1). 168-182.

Scott, D. (2008) Penology. UK: Sage.

Scraton, P. (2001). 'A Response to Lynch and the Schwendingers' In: *The Critical Criminologist*. 11 (2).

Scully, F. (1950) 'The Aerodynamic Correction' Behind the Flying Saucers. USA: Henry Holt & Co., 122–123.

Sim, J. (1990) *Medical Power in Prisons: The Prison Medical Service in England, 1774-1989 (Crime, Justice and Social Policy*). UK: Milton Keynes Open University Press.

Simic, M. (2012). A critical reading of The Spirit Level: why equality is better for everyone, R. Wilkinson and K. Pickett. France: CERES Department.

Skidelsky, R. (2010) Keynes: The Return of the Master. US: Penguin.

Skinner, Q. (2002) Visions of Politics: Volume 1. UK: Cambridge University Press.

Smart, C. (1989) Feminism and the Power of Law: Sociology of Law and Crime. UK: Routledge.

Smith, M. (31st September, 1961) 'A Look Ahead Through Frescos Window' In: *Florida Living Magazine*. 2–3. USA.

Starkey, D. (6th October 2005) Question Time. [Television program]. BBC1, UK: BBC

Steigleman, W. (20th October, 1971) "Jules Vernesque" City Shows Plans at USF' In: *The Oracle*. 9.

Stout, B.; Yates, J. & Williams, B. (2008) Applied Criminology. UK: Sage.

Sutherland, E. (1947) Principles of Criminology. (Fourth edition). Philadelphia: J.B. Lippincott.

Sutherland, E (1985) White Collar Crime: The Uncut Version. USA: Yale University Press.

Swan, R. (1st May, 2009) 'A Dream Worth Having' In: The Palm Beach Post. USA. 12a.

Tappan, P. (1947) 'Who Is the Criminal?' In: American Sociological Review, Issue 12: 96-102.

Taylor, I.; Walton, P., & Young, J. (1973) *The New Criminology: For a Social Theory of Deviance*. Global: Routledge.

King, L. (19th August 1974) 'The Larry King Show'. [Television Program]. Miami: WTVJ 4.

The Venus Project (2010) 'Relation to Academia'. Available: http://www.youtube.com/watch?v=h5-0McAzBcE. Last accessed 20th Sept 2013.

The Venus Project (2012) 'Jacque Fresco-childhood observations, school, religion'. [Video Interview]. USA: TVP

The Venus Project (2013a) 'Scientific & Technical Database'. Available: http://www.thevenusproject.com/techdb/members.php. Last accessed 6th April 2013.

The Venus Project (2013b) 'Aims and Goals'. Available:

http://www.thevenusproject.com/en/the-venus-project/aims-a-proposals. Last accessed 6th April 2013.

The Venus Project (2013c) 'Welcome to The Venus Project Online Community'. Available: http://www.thevenusproject.com/online-community. Last accessed 10th May 2013.

The Zeitgeist Movement (2013) 'Home Page' Available: http://www.thezeitgeistmovement.com/. Last accessed 6th April 2013.

The Zeitgeist Movement (2010) *Venus Project World Tour: Roxanne Meadow & Jacque Fresco Interview.* [Film]. Portugal: Lisbon.

Thompson, D. (17th December 2010) 'MP Calls for Manslaughter Probe at Tragedy Factory' In: Manchester Evening News. UK.

Time Magazine (8th September 1952) 'Books: A President's Ordeal' In: Time Magazine. USA.

Time Magazine (27th August 1979) 'To Set the Economy Right' In: Time Magazine. USA.

Tombs, S. & Whyte, D. (2003) 'Unmasking the Crimes of the Powerful' In: *Critical Criminology an International Journal*, 11, (3). 217-236.

Tombs, S. & Whyte, D. (2007) Safety Crime. UK: Willan.

Tombs, S. & Whyte, D. (2007) 'What About the Real Habitual Criminals?: A Review of the History of Habitual Offending at the Sonae Plant, Kirkby'. Available: http://www.catalystmedia.org.uk/issues/nerve3/real_criminals.htm. Last accessed 20th Sept 2013.

Tonry, M. (2004) Punishment and Politics: Evidence and Emulation in the Making of English Crime Control Policy. Cullompton: Willan.

Trade Union Congress (11th December 2010) 'Two Die at Sonae Board Factory' In: *Risk*, (486). UK: TUC Online.

Van der Putten, T. (2013) 'Now Online: The Historic Chomsky-Foucault Debate'. Available: http://roarmag.org/2013/05/chomsky-foucault-debate-full-video-subtitles/. Last accessed 06th Aug 2013.

Van Swaaningen, R. (1986) 'What is Abolitionism?' In: Bianchi, H. & van Swaaningen, R. (eds) *Abolitionism: Towards a Non-Repressive Approach to Crime*. Amsterdam: Free university Press. 8-21.

Veitch, C. (2011) 'Charlie Veitch Interviews Jacque Fresco'. [Video Interview]. USA: Open Source.

Vogel, R. (2009) Dismantling the Prisonhouse of nations: A Socialist Prison Reform Proposal. Global: From The Left.

V-Radio (3rd November 2010) 'Interviews with Roxanne Meadows and Jacque Fresco of The Venus Project: Religion'. Available: http://www.youtube.com/watch?v=NcWwBdo0U04. Last accessed 06th Aug 2013.

Ulrey, D. (1936) 'New Electronic Tubes and New Uses' In: *Journal of Applied Physics*, 7, (3). 97-106.

University of Zagreb (2013) 'Faculty of Education and Rehabilitation Sciences'. Available: University of Zagreb.com. Last accessed 10th May 2013.

U.S. Department of Justice: Bureau of Justice Statistics (2010) 'Correctional Populations in the United States'. Available: http://bjs.ojp.usdoj.gov/content/glance/tables/incrttab.cfm. Last accessed 10th May 2013.

Waismann, F. (1979) Wittgenstein and the Vienna circle: Conversations. USA: Barnes & Noble Books.

Walklate, S. (1989) Victimology. London: Unwin Hyman Walker.

Walters, R. (2003) Deviant Knowledge: Criminology, Politics and Policy. Cullomption: Willian.

Wellock, T. R. (1998) *Critical Masses: Opposition to Nuclear Power in California, 1958-1978*. US: The University of Wisconsin Press.

West, E. (2010) 'The next PM is a fan of The Spirit Level – I think I'll just use my last carbon rations to leave'. Available: http://blogs.telegraph.co.uk/news/edwest/100050077/the-next-pm-is-a-fan-of-the-spirit-level-i-think-ill-just-use-my-last-carbon-rations-to-leave/. Last accessed 10th May 2013.

Wilkinson, R. & Pickett, K. (2010) *The Spirit Level: Why Equality is Better for Everyone*. UK: Penguin.

Williams, B. & Smart, J. (1973) Utilitarianism: For and Against. UK: Cambridge University Press.

Williams, F. & McShane, M. (1998) Criminology Theory. USA: Library of Congress.

Willis, P. (1977) Learning to Labour. Westmead: Saxon House.

Winner, L. (1978) *Autonomous Technology Technics-out-of-Control as a Theme in Political Thought*. USA: MIT.

Winner, L. (1980) 'Modern Technology: Problem or Opportunity?' In: *Daedalus*, 109, (1). 121-136.

Winner, L. (4th August 1993) 'How Technology Reweaves the Fabric of Society' In: *The Chronicle of Higher Education*, 39, Issue 48. B1-B3.

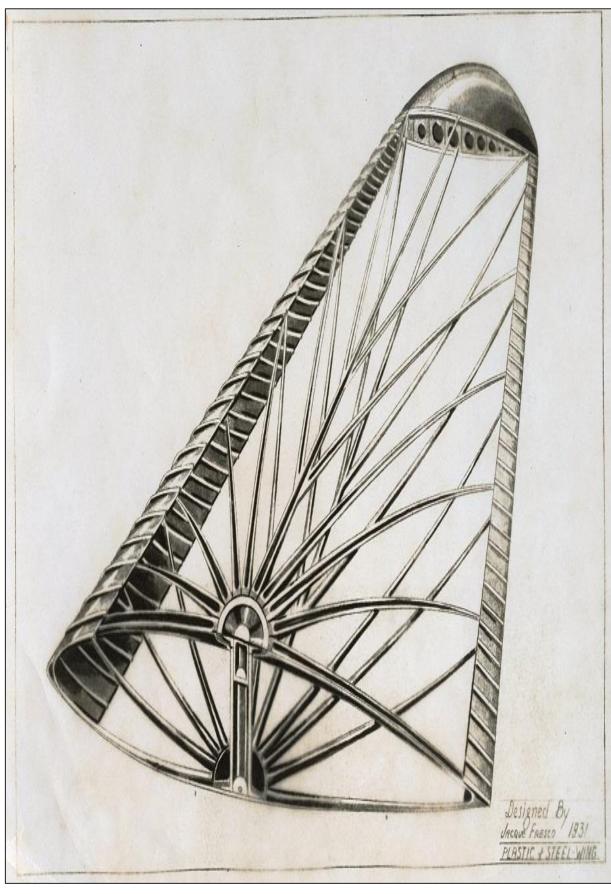
Ynclan, N. (16th July 2002) 'Futurist Holds Onto His Utopian Dream' In: *Knight Ridder*. USA: Tribune News Service. K4742.

Ynclan, N. (11 th August 2002b) 'Man is from Earth...is the future from Venus?' In: *Living and Arts*. USA: The Herald. 2e.

Young, J. (2007) The Vertigo of Late Modernity. London: Sage.

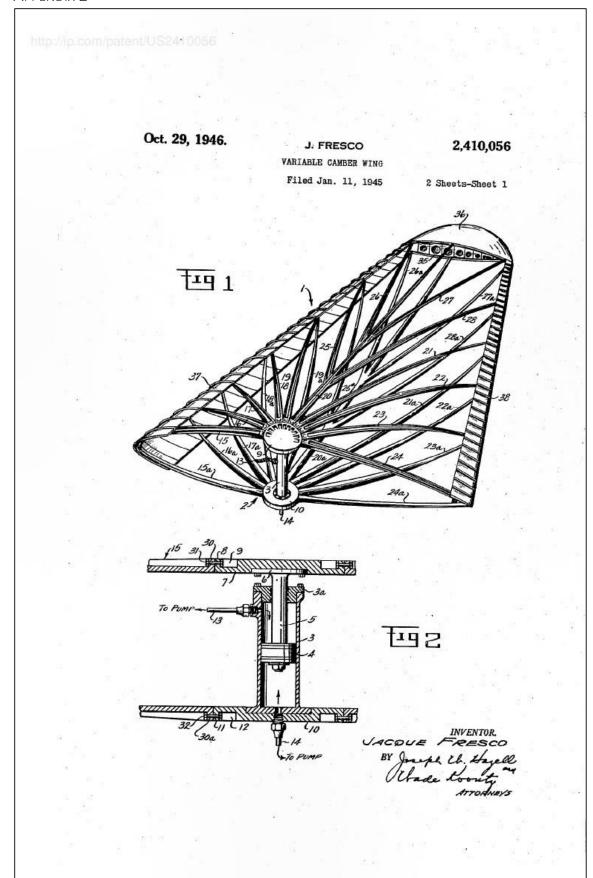
APPENDICES

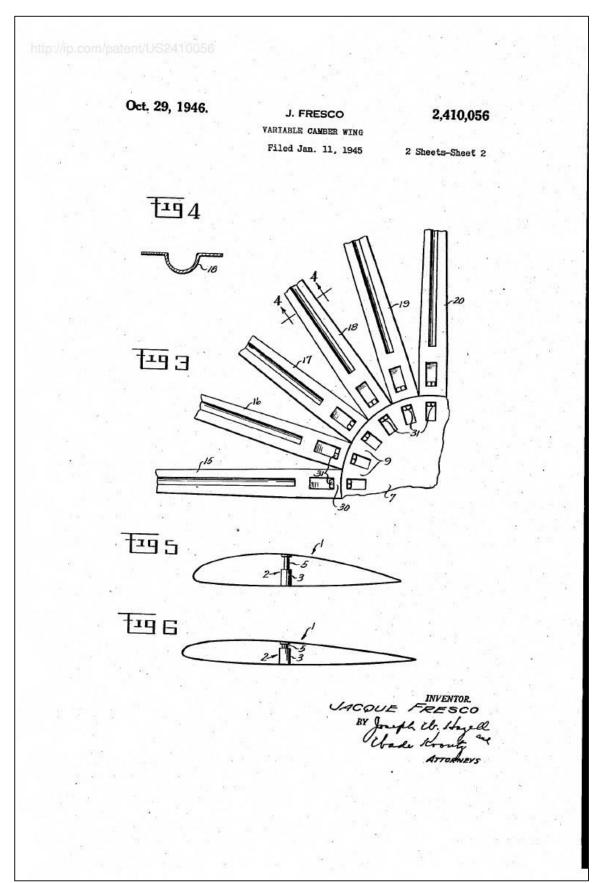
APPENDIX 1



APPENDICES

Appendix 2





Patented Oct. 29, 1946

2,410,056

UNITED STATES PATENT OFFICE

2,410,056

VARIABLE CAMBER WING

Jacque Fresco, Hollywood, Calif.

Application January 11, 1945, Serial No. 572,290

9 Claims. (Cl. 244-44)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

1

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon

me of any royalty thereon.

The present invention relates to aircraft wing 5 construction wherein the structural framework comprises spar members arranged to transmit loads from the various local wing area portions to the wing supports in a more efficient manner than in conventional constructions.

Photoelastic studies of aircraft wing models, by the present inventor, have demonstrated that the stresses and strains produced by loading the models tend to travel from various portions of the wing in substantially straight lines to the point of maximum camber of the root chord, and torsional loads tend to produce a somewhat similar phenomenon.

The results of these tests indicated that if structural members were arranged to transmit wing loads from various zones in as nearly a straight line as possible to the point of maximum camber at the root chord, a wing structure having a maximum strength with minimum weight would be attained.

In accordance with the invention, the desirable load transmission pointed out above is attained by constructing a wing with a hub structure positioned at the point of maximum camber of the root chord in the plane of symmetry and having a plurality of spar members lying in the plane of the upper and lower boundary surfaces of the wing and angularly disposed with respect to each other, the spars being connected to the hub member for transmitting load thereto. By making the spars flexible over at least a portion of their length and connecting the same at their outer ends to flexible leading and trailing edges and by arranging the hub member in two relatively movable parts, it is possible to vary both the airfoil section thickness ratio as well as the wing

It is the principal object of the invention to provide an airplane wing having a spar structure arranged to transmit the loads from the various 45 portions of the wing to the wing attachment points in an efficient manner.

It is a further object of the invention to provide a wing structure for airplanes in which the spar members are disposed so as to define the 50 upper and lower boundary surfaces of the wing, the spar members being flexible over at least a portion of their length, and the spars being connected at their outer ends in related pairs and at their inner ends to relatively moveable hub 55

members, which, upon relative displacement, causes a simultaneous variation in airfoil thickness ratio and wing area.

Other objects and features of the invention will become apparent by reference to the detailed description hereinafter given and to the appended drawings in which:

Fig. 1 is an isometric view illustrating the construction of one-half of a wing in accordance with the invention;

Fig. 2 is a side elevation illustrating in a larger scale the construction of the hydraulic camber bearing mechanism associated with the hub structure of Fig. 1;

5 Fig. 3 is a top plan view illustrating the connection of the spars to the hub structure;

Fig. 4 is a section taken on line 4—4 of Fig. 3 illustrating a typical cross section of the flexible portion of a spar;

Fig. 5 is a diagrammatic sectional view showing the wing adjusted for maximum thickness to chord ratio to develop high lift; and

Fig. 6 is a view similar to Fig. 5 showing the wing adjusted for minimum thickness to chord 25 ratio so as to be suitable to the high speed flight condition.

Referring now to Fig. 1, the reference numeral generally indicates a right-hand wing panel of an aircraft wing constructed in accordance with the invention, the wing being symmetrical about a longitudinal plane containing the root chord and the left-hand portion of the wing (not shown) being identical to the construction illustrated in Fig. 1. As seen in the figure, the wing includes a hub structure, generally indicated by the reference numeral 2 and shown in more detail in Fig. 2 as comprising a hydraulic cylinder 3 having a piston 4 axially movable therein, to which is secured a piston rod 5 having an enlarged head portion 6 at the upper end thereof and which is secured by bolts or the like to a braced disk or hub member 7 provided with a spar-attaching flange portion 8 and radially ex-tending brace webs 9. The cylinder 3 at its lower portion is preferably integrally formed with a hub or disk member 19, similar in construction to the hub member 7, and also provided with an annular spar attaching flange 11 and braced by radially extending webs 12. The cylinder 3 is provided at its upper end with a conventional cylinder head and packing gland structure 3a which permits reciprocable movement of the pis-ton rod 5 therein, and conduits 13 and 14 serve to admit fluid pressure respectively to opposite sides of the piston 4 to move the piston relative

10

to the cylinder 3. The source of fluid pressure to the conduits 13 and 14 may be, for example, a hand operated pump and valve mechanism (not shown) whereby fluid may be pumped into the cylinder 3 on either side of the piston 4 and trapped therein so that the hub member 7 may be shifted any desirable amount relative to hub member 18 to vary the wing airfoil section thickness ratio as well as the area of the wing in a

manner which will now be described.

Referring again to Fig. 1, it is seen that the hub member 7 has connected therewith a plurality of angularly disposed spar members, respectively, indicated by reference numerals 15 to 24, inclusive, and the spar member 20 being disposed in the plane of the maximum thickness of the airfoil sections of the wing and being subdivided or branched into further spar members 25 to 28, The hub structure 2 is positioned in inclusive. the plane of symmetry and at the point of maximum thickness of the root chord of the wing, and the spars 15 to 24, inclusive, are formed at their inner ends as U-shaped channel members each terminating in an end wall 30 secured by means of bolts 31 or the like (see Figs. 2 and 3) to the The spar memflange 8 of the hub member 1. bers, while rigid adjacent their points of connection to the hub member 7, have a section such as indicated in Fig. 4, outwardly thereof to provide a considerable degree of resilience.

As will be noted in Fig. 1, the spar members 15 to 28, inclusive, define the upper boundary surface of the wing structure, and similarly companion spars are positioned in the lower boundary surface of the wing and indicated by the same reference numerals with the subscript "a" appended thereto. The spar members lying in the under boundary surface of the wing cooperate with corresponding spar members in the upper surface to form related pairs of spars which are integrally or otherwise connected at their outer ends and the spars 15a to 24a, inclusive, are all secured at their inner ends by means of bolts 32 which pass through the ends walls 30a and the flange 11 of the lower hub member 10 (see Fig. 2). The lower spar member 20a is branched into branches 25a to 28a in the same manner as the upper spar member 20, the branched spar members also forming related pairs. It will be seen, by reference to Fig. 1, that the spar members lying in the upper and lower boundary surfaces of the wing and extending angularly from the hub members 7 and 10 define a wing structure without the use of conventional rib members, with the exception that the terminal portions of spars 20 and 20a and branch spar members 26 to 27 and 25a to 28a have their terminal portions rigidly interconnected by means of a transverse rib member 35 which also serves as an anchorage or support for a conventional rotatable tip aileron 36. A flexible leading edge 37 tapered in thickness is secured to those pairs of spar members whose terminal ends extend to the forward marginal boundary of the wings, the leading edge being preferably secured so as to allow the nose portion to expand and contract. In a similar manner a tapered trailing edge portion of flexible material 38 is secured to the terminal portions of those related pairs of spars which extend to the rear marginal boundary of the wing.

It will be readily understood by reference to Fig. 1 that the spars in the upper and lower boundary surfaces of the wing, being flexible over at least their outer portions, will permit the upper and lower boundaries of the wing to be moved

relative to each other by movement of the piston 4, Fig. 2, in the cylinder 3. As the piston 4 moves upward the maximum thickness of any transverse airfoil section through the wing will be increased and simultaneously the chord of such a section will be decreased so that the ratio of thickness to chord will be increased, (see also Fig. 5) and conversely a downward movement of the piston 4 within the cylinder 3, Fig. 2, will cause a decrease in thickness ratio and an increase in the wing chord at any transverse section (see also Fig. 6) so that the wing area as well as the thickness ratio will be simultaneously varied. It will be noted that substantially all areas in the boundary length of any spar between the leading and trailing edges will remain constant and variations in length will occur mainly at the connection of the related pairs of spars at the leading and trailing edges. Accordingly, the wing may be covered between the leading and trailing edges with thin sheet metal, doped fabric or suitable plastic material secured to the spar members by rivets, wire stitching, or the like. It is essential that the leading and trailing edges 37 and 38 be made of flexible material and suitably locally stiffened by corrugations, or the like, to resist shear failure.

Operation

It will be readily understood by reference to Figure 1 that movement of the hub members 7 and 10 relative to each other caused by fluid pressure acting on piston 4 will cause the spar members to yield resulting in an increase or decrease in airfoil section thickness in a manner previously described. Since, by increasing the thickness ratio of an airfoil section its lift coefficient may be increased in nearly direct proportion to the increase in thickness, it is possible to create a high lift for takeoff and landing with an aircraft constructed in accordance with the invention merely by the pilot admitting fluid under pressure to conduit 14, Fig. 2, to move the piston 4 upward, and once the aircraft is in the air fluid may be drained by the cylinder 3 from the under-45 side of the piston 4 and fluid admitted under pressure through conduit 13 to the upper side of piston 4 so that the wing thickness ratio will be decreased, causing a decrease in lift coefficient as well as drag coefficient to obtain the most 50 favorable airfoil characteristics for high speed flight. It will be readily understood that by trapping fluid in the cylinder 3, the piston 4 may be effectively locked at any point in its permissible range of movement so that the variation in thick-55 ness ratio and corresponding change in area of the wing is under control of the pilot at all times, and acrodynamic forces acting on the wing can not have any detrimental action. It is to be understood that the invention contemplates any 60 suitable means to perform the equivalent function of the hydraulic jack structure including cylinder 3 and piston 4, illustrated in Figs. 1 and 2, such as, for example, a mechanical screw jack manually or power actuated which would readily 65 serve the same function.

It will be readily seen that the spar arrange ment in the wing of Fig. 1 is such that the air loads transmitted to the spars from the wing covering, not shown, will in each instance be 70 transmitted along the spars to the point of maximum camber at the root chord so that the structure in accordance with the invention gives rise to the desirable stress transmission previously described. It should also be understood that 75 while the wing structure of Fig. 1 is illustrated

as being of variable camber, variable area type, that these latter named functions may be dis-pensed with and the spars arranged as a rigid framework. In such a case, the spars may have their upper and lower edges defining the upper and lower boundary surfaces of the wing. It will be obvious with such an arrangement that a conventional type alleron may be employed in lieu of the tip alleron such as illustrated in Fig. 1.

While one form of the invention has been illus- 10 trated and described, other modifications and variations thereof will become apparent to those skilled in the art as falling within the scope of the invention as defined in the appended claims.

I claim:

1. An airplane wing construction of double surface airfoil cross section comprising a central hub structure positioned in the plane and substantially at the point of maximum camber of the root chord, a plurality of sets of angularly dis-posed spars connected to said hub member and extending radially, one set lying in the upper boundary surface of the wing and the other set lying in the lower boundary surface of the wing, and means connecting the terminal end of each 25 spar in one set to the terminal end of a respective spar in the other set to form related pairs and also connecting said pairs to each other, the terminal ends of said pairs of spars lying in the marginal boundaries of the wing between the tip and root chord sections.

2. The structure as claimed in claim 1, in which at least certain of the spars of each set are subdivided into branched spar elements angularly

disposed with respect to each other

3. The structure as claimed in claim 1, in which each of said spars is flexible throughout at least the outer portion of its length, a flexible leading edge connected to the terminal portions of certain of said related pairs of spars and a flexible trailing edge connected to the terminal portions of other of said related pairs of spars, said hub structure including two relatively movable parts to which said sets of spars are respectively con-nected and means for moving said hub parts to simultaneously vary the thickness ratio of the airfoil sections of the wing and the projected area of the wing.

4. A variable camber variable area airplane tapered wing construction of double surface air-

foil cross section comprising a plurality of flexible spar members angularly disposed with respect to each other and respectively lying in the upper and lower boundary surfaces of the wing structure, spaced upper and lower hub members, connections between said spars and a respective hub member, the terminal ends of said spars extending to the marginal edges of the wing structure and upper and lower spars being connected at their terminal ends to form related pairs, flexible leading and trailing edges connecting the terminal portions of certain of said pairs of spars and means for moving said hub members relative to each other to thereby vary the thickness ratio and chord length of the airfoil cross sections of the wing.

5. The structure as claimed in claim 4, in which certain of said spar members are subdivided into branches angularly disposed with respect to each other.
6. The structure as claimed in claim 4, in which

one of said related pairs of spars extends from the root chord in the plane of maximum camber of the airfoil sections and each spar of said pair being subdivided into branches extending to the leading and trailing edges respectively.
7. The structure as claimed in claim 4, in which

the means for moving said hub members relative to each other comprises a fluid pressure actuated

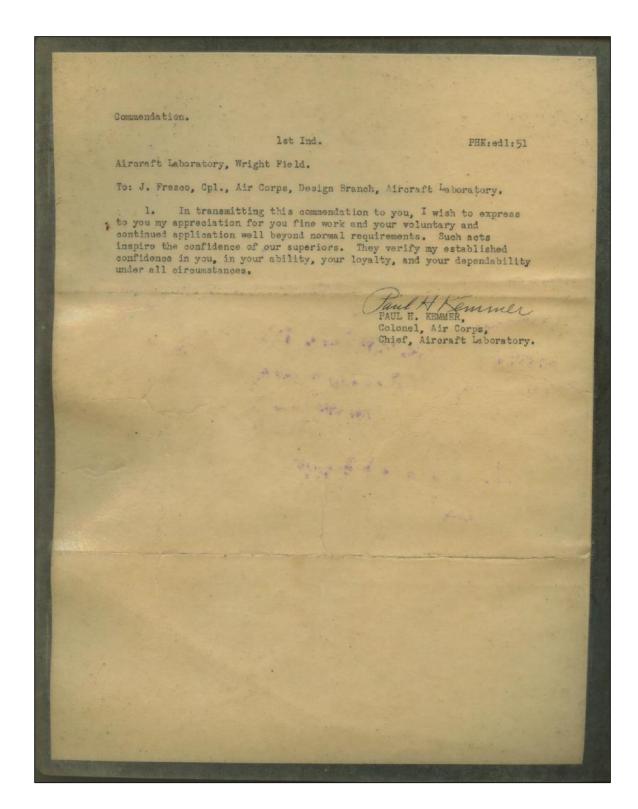
jack.

8. In a tapered double-surfaced airplane wing construction, a central anchorage means positioned at the point of maximum camber of the root chord, radially extending spar members secured at one end thereof to said anchorage means and angularly disposed with respect to each other and defining the upper and lower boundary surfaces of the wing, a leading edge secured to the free ends of certain of said spars and a trailing edge secured to other of said spar members.

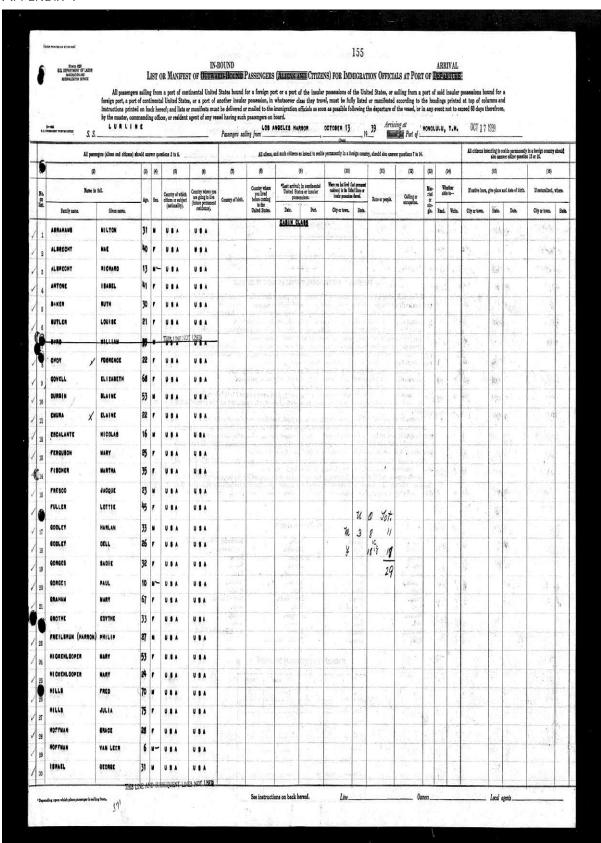
9. The structure as claimed in claim 8, in which one of said spar members extends from said anchorage means to the wing tip in the plane of maximum camber of the airfoil cross sections of the wing, and angularly disposed branch spar members secured to said last-named spar mem-

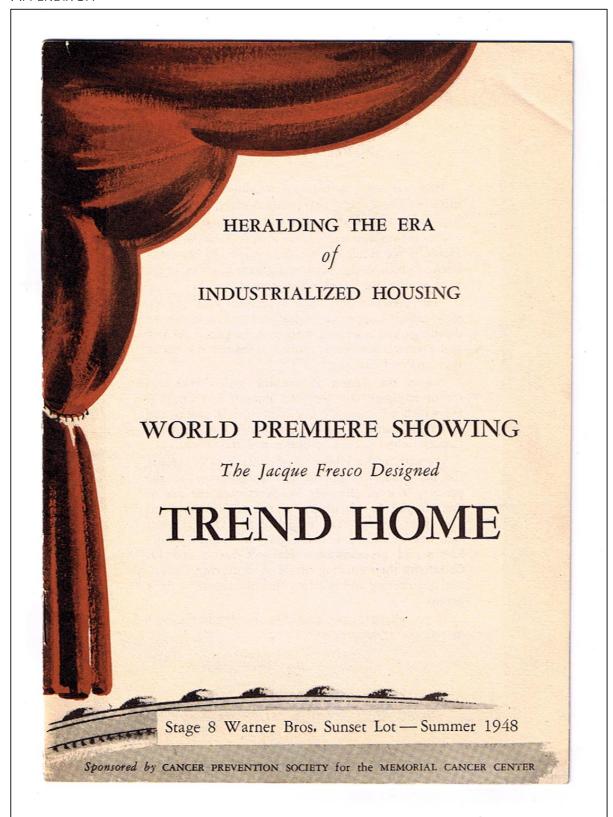
JACQUE FRESCO.

APPENDIX 3



APPENDIX 4





The TREND HOME

The present acute housing shortage has been presaged for more than a generation. The wast population shifts to industrial centers during World War II only served to bring it to a head.

Conventional architects and builders have not kept apace with the technological developments of our time. Present-day conventional building appears indeed archaic when we realize that, essentially, housing today is being conceived and constructed with very little change from that of even a hundred years ago.

This seems even more ludicrous in a day of jet propulsion, radar, highly developed electronics and atomic energy. The Trend Home is as advanced an approach to a completely functional dwelling as is possible to construct today among a people who take slowly to change.

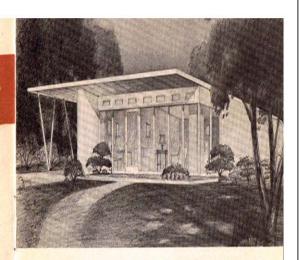
In conceiving and building the Trend Home, Industrial Engineer, Jacque Fresco, and his associates were guided by two salient factors. First, the house must be constructible of materials available today; second, it must be completely efficient and functional—yet not so radical in design and concept as to create resistance on the part of the home-hungry market.

Two years of diligent research are recorded by these men, and countless rough sketches were executed before the final design was perfected. They made a complete study of housing, housing trends, and the basic necessities inherent in the family that required a dwelling. They studied all forms of prefabrication and traveled all over America to inspect developments in prefabricated and semi-prefabricated houses.

The Trend House is not prefabricated; rather it is industrialized. It embodies materials that are new and techniques that are newer. The materials used, which are essentially aluminum and glass, lend themselves to mass production and handling. In this category alone their superiority is so marked as to make the use of conventional materials as outmoded today as the old-fashioned wooden imports.

Aluminum was chosen, first, because of its innate qualities of strength and durability, and it is in relatively abundant supply. While, section for section, it is more expensive than wood—still, the fact that it lends itself to mass handling, precision cutting, and reduces man-hours of labor, makes the over-all cost lower. A custom-built house incorporating the materials and advantages of the Trend Home would cost the consumer in excess of \$18,000.

This house is aimed at the mass market and only through mass production can it become a success. It is directed at filling the dire need for minimum



housing—houses in the 900 sq. ft. category. An excellent parallel to the production of the Trend house can be found in the automobile industry, where a profundity of units assures low cost and excellence of product.

The structure of the house is composed of patented aluminum extrusions. Each of these extrusions integrate several functions, as, for example, the hallway member which acts not only as a stud and door jamb but also provides openings for the wallboard on each side of the wall. This telescoping of various separate functions into a single member is typical of the economical and skillful design which is the backbone of the Trend Home.

Due to ingenious design and construction, the house is completely flexible in that windows can be placed anywhere throughout the structure, and additional rooms can be added with a minimum of cost and confusion.

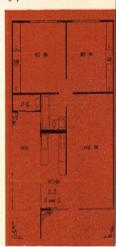
Structural specifications established by Trend Homes far exceed those exacted by local and national building codes.

Here indeed is a modern miracle in housing. It is clean and honest in design, with every possible inch devoted to living space.

The house you are viewing today is but one of a variety of floor plans that will be provided at a later date.

Present plans call for the erection of a plant in Southern California to supply units for the vast market this area represents. Additional plants in other population centers will be erected at a later time.

This, then, is the house we feel will inaugurate a new and glorious era of happy, healthy families in a more prosperous and contented America.



FLOOR PLAN

A WORD ABOUT WILDER'S

The revolutionary nature of the Trend objective—in concept, aim and product—required particular care in the selection of a Home Furnishings organization to plan and fulfill the outfitting of the model.

For, unlike the many other model home displays, Trend incorporates high level quality at unprecedented low cost. Of the scores of firms investigated, Wilder's, Inc., best exemplified this idea in the matter of home furnishings.

We sensed in the Wilder's organization that same pioneering spirit and thinking with which, we believe, the Trend Home is heavily endowed. In their huge and beautiful showrooms at 1500 West Washington Boulevard, Los Angeles, we found interesting ideas in Period, Maple and Modern — but more, we found reflected in their thirty years of advanced furniture merchandising a refreshing understanding of the low-budget problem, reconciled with inordinate quality.

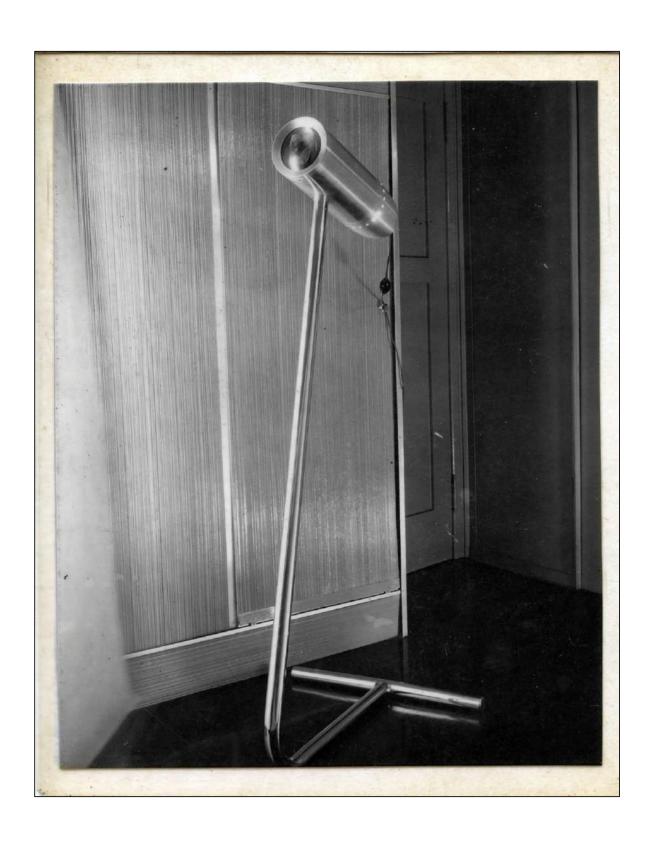
The Trend Home was designed for the low-income family. We thank and congratulate Wilder's for the good taste and good sense employed in furnishing the model to conform with and express that very aim.

MICHAEL SHORE, President, TREND HOMES, INC.



... THOSE EXCITING NEW ADMIRAL TV SETS? I wanna give 'em away But Mrs. Muntz won't let me SHE'S CRAZY!

APPENDICES APPENDIX 5B



APPENDICES
APPENDIX 5c



APPENDIX 6

Mr. Coreld V. Berron Page 2 February 26, 1960 Now for the Ford Foundation, I would think that the best-procedure would be to have him prepare a specific project which he wishes to have financed, and approach the Ford Foundation directly. I will be more than happy to fill in for the Ford Foundation people some of the background I have from you as to Fresco's capabilities and experience. Hoping to see you soon. Kindest personal regards. Sincerely yours, Hubert H. Humphrey cc: Jacque Fresco 3112 S. W. 23rd St. Miami 45, Florida

APPENDIX 7

HUNTER, LILJESTROM, GILLILAND, HUNTER & ROBINSON

HAROLD J. HUNTER ROGER LILLESTROM, JR. RICHARD M. GILLICAND CLARK MANGUM HUNTER MARK P. ROBINSON GERALD V. BARRON JOHN C. ATCHLEY ATTORNEYS AT LAW
SUITE 1030 FIDELITY BUILDING
548 SOUTH SPRING STREET
LOS ANGELES 13
MADISON 4-6421

December 1, 1960

U. S. Senator Hubert H. Humphrey U. S. Senate Building Washington, D. C.

Dear Hubert:

I am not certain at this point whether you are in Washington, D.C. or in Waverly so I am therefore sending this letter to both places.

As you will note from the enclosed letter to Steve Allen, I am still trying to help my friends.

On the subject of help, I am sorry that I was not able to take more time from my job to help you and orville in the campaign and I was of course clated with your victory and depressed as a result of Orville's loss.

I certainly hope that Orville gets a significant job in the administration and by own view is that he would be a wonderful attorney general.

Hubert, you told me in good faith, that you would talk to Fresco when you got to Miami in an effort not only to help him but ideally to start a relationship that could be as significant as the relationship between you and Mike Todd would have been, and I know that you intend to follow through on this as soon as you can.

It also appears to me that if you felt that it would be in good form that a letter from you to Steve Allen with reference not only to your getting together with him in the field of nuclear disarmament but also helping Fresco would be a good contribution.

It also occurs to me, after you have examined with Fresco the full range of his ideas, that perhaps getting Fresco and your friend Cyrus Eaton who is now attending a conference of scientists in Moscow, would be a good idea.

Hubert, it may be that you are saying to yourself that I wish that the persistent Gerry Barron would "get off my back" and this would certainly not be an unjustified response on your part. However, as you know only too well, like you, having been exposed to a social point of view, it is an obsession of mine to help make, however obliquely, a substantial social contribution and this as you truely know would be more fewerding to me than advocacy in the field of

U. S. Senator Hubert Humphrey Page Two December 1, 1960 civil litigation, and it is this that has solely animated my entreaties on my friends, behalf. When you have time would you send me one of your good responses and let me know when you will be in our area, and when you will be in the Miami area. GERALD V. BARRON

APPENDIX 8

HAROLD J. HUNTER ROGER LILIESTROM, JR. RICHARD M. GILLIAND CLARK MANGUM HUNTER MARK P. ROBINSON GERALD V. BARRON JOHN C. ATCHLEY WALTER NED POLLOCK HUNTER, LILJESTROM, GILLILAND, HUNTER & ROBINSON

ATTORNEYS AT LAW SUITE 1030 FIDELITY BUILDING 548 SOUTH SPRING STREET LOS ANGELES 13 MADISON 4:6421

December 5, 1960

Mr. Steve Allen 15445 Ventura Boulevard Sherman Gaks, California

Dear Steve:

You may recall that following a November let performance of your play "The Meeting of Minds" at the School for Mursery Years in Beverly Hills, the writer asked a question which closed the question period - which dealt with the anatomy of rejection of the individual by society (and therefore the anatomy of Takerraht sonduct) and thereafter you and I briefly chatted about Hubert Eusphrey and his myriad contributions; including his contributions to the Disarmament Subconsittee of the U.S. Senate Foreign Relations Committee (and his correlated contributions to the Same Nuclear Society).

We also discussed our curious value system in which Senator Hamphrey's contributions to the survival of 5 billion human beings on our planet was given the "Page 15 treatment" in the press (if it were mentioned at all), while at the same time Squator Jack Kennedy and his brother's contributions to the expose of Moffa was given Page 1 treatment.

You might also be interested to know, Steve, that during the Hoffa inquiry that Hubert immprrey got on the floor of the Senate to defend the decent non in the labor sovement and the many social valid things that the labor sovement had done, and how these socially valid things were not given the commensurate attention that Mr. Hoffa's vulnerable conduct was and thus the "image" of the labor movement was being adversely effected.

Humphrey was formally assailed by the conservative press and in standing up to them, and in standing up for the labor movement Humphrey gave a demonstration of what Senator Kennedy wrote about in his book "Profiles of Courage".

This may explain in part (in addition to other areas discussed in the enclosures to this letter) why I gave up my vacation from my law office and paid my own way back to west Virginia to work for Senator Eumphrey in that primary.

Buring our discussion you and I also talked about California State Senator Fred Farr (who became a good friend of mine during my years in Carmel-by-the-Sea) and his management of the Abelitionist Bill in the State Senate.

Fred informed we that one of the decisive books that influenced him was

Mr. Steve Allen Page Two December 5, 1960

Arthur Koestler's great work on the Abolotionist question in England (I met Koestler several years ago in San Francisco following a speech that he had given analyzing some of the implications of his penetrating work "Darkness at Noon" and found him a most intense, perceptive man).

It is my hope that the next time that Senator Husbert Humphrey is in the area that we can set up a session among you, Humphrey, and Fred Farr and the writer to explore social issues. Such a session we might all find to nutually re-enforcing. I know that Humphrey would like to, among other things, explore your ideas in the field of nuclear disarmament, and Farr would of course like to explore with you an in depth analysis of communication techniques that can be used in connection with the abolition question.

It is also my hope that prior to the time that such a discussion takes place that you will find time to read these enclosures which include copic of correspondence between the writer and labort Hamphrey through the year; and also material concerned with a remarkable friend of mine who formerly lived in Los Angeles but now lives in Miami, Florida, Jacque Fresco. (as you will note from Humphrey's letter of February 24th, Humphrey feels that Presco is qualified to be presented by him to the National Science Foundation in addition to other people who would be in a position to extend Presco's approach).

If you find these materials as rewarding as I think you may, then perhaps a meeting can be set up between you and Fresco, and in that manner your related social aspirations and interest in integrating information in divergent disciplines, including human engineering and communication techniques*, can be extended.

If you think that such a meeting might be productive, perhaps we can discuss setting up such a meeting when you and I meet again.

I sincerely hope that you do not think I am guilty of great temerity or imposing upon your good nature in writing to you after such a brief meeting with you. My exuberance may be attributed in part to my continuing response to you and your social message throughout the years (including your book "14 For To-night"), and especially the other night when it was my privilege to meet you.

I would greatly appreciate it, Steve, if you would kindly return all of these enclosures after you have reviewed them. Please feel free to tape the Fresco tape; photostat any of the other materials and perhaps you may be able to procure a copy of the September issue of Scientific American** from the publisher.

* - Like you, Fresco is of the view that - excellent programs as they were such programs as "Omnibus", "Conquest", "See It Now", etc. have merely scratched the surface in terms of the educational impact of this medium and your respective contributions in this area represents a whole area of possible collaboration which can be intensively explored when you and Fresco talk.

** - In addition to this material I think that you might read some penetrating works written by a former professor of mine and now in charge of

Mr. Steve Allen Page Three December 5, 1960

I fervently hope that through our communication that significant social contributions can be made since as John Donne has written, we are all "involved in mankind".

Sincerely yours,

GERALD V. BARRON

cc: Professor B. F. Skinner o/o Harvard University Psychological Laboratories Cambridge, Massachusetts

> Mr. Jacque Fresco 3112 S.W. 23rd Street Miami, Florida

U. S. Senator Hubert Humphrey U. S. Senate Building Washington, D. C.

Gov. Orville Freeman State Capital St. Paul, Minnesota

** - (Cont'd) - the Psychological Laboratories at Harvard: B. F.
Skinner's books - "Science and Human Benavior", and "The Cummulative
Record". Skinner, like Fresco, has done remarkable work in the field
of conditioning of organisms and has demonstrated the anatomy of the
learning or "re-enforcing process" as well as the processes of hostili
in a most structural manner.

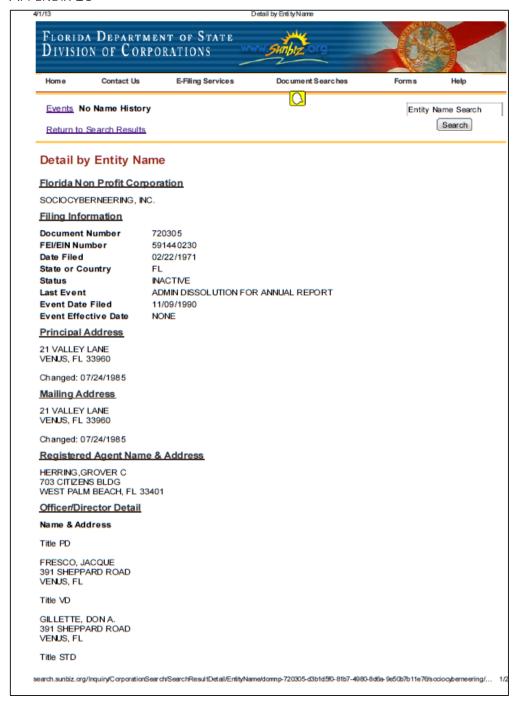
APPENDIX 9

Minited States Benate SELECT COMMITTEE ON SMALL BUSINESS MOSS, UTAH

LEWIS G. ODOM, JR., STAFF DIRECTOR
AND GENERAL COUNSEL

BLAKE O'CONNOR, ASSISTANT STAFF DIRECTOR October 29, 1963 Mr. Gerald Barron 870 Market Street San Francisco, California Dear Jerry: Thank you for the material on Jacque Fresco. When you write him tell him that he can contact us anytime and we will set up whatever appointments he needs. Best wishes. Sincerely,

APPENDIX 10



APPENDIX 11

Shaun Yates

Dear Shaun,

Referring to your requests for the following three items:

Fresco, Jacque

- 1. Sociocyberneering presents the determinants of behavior
- 2. Sociocyberneering
- 3. Introduction to sociocyberneering

Despite extensive searching for all these three items I can find no UK/Worldwide locations of libraries that hold them. I have also checked Amazon – only the last one on the list above is cited. However, it is not available to buy through them.

Although I can find mention of all three titles on Google books there are no leads as to where we may obtain them. They appear to have been published in the USA and all of them appear to be very slim volumes – almost pamphlet size, which is probably why no libraries stock them.

The British Library does not hold any of them in their stock either.

The following link gives more information about the author but I'm afraid I cannot trace any outlet to obtain the books from: http://www.tvpmagazine.com/about-us/jacque-fresco/

It does include an address where you could contact the author should you wish. I have also found the following link for openlibrary: http://openlibrary.org/subjects/sociocyberneering

Although this has all three shown on the page, there are no links to read, borrow or buy any of the books.

As we are unable to help further – your request for these items have now been cancelled. As a gesture of goodwill I will forward 3 x ILL vouchers to your home address for your future use.

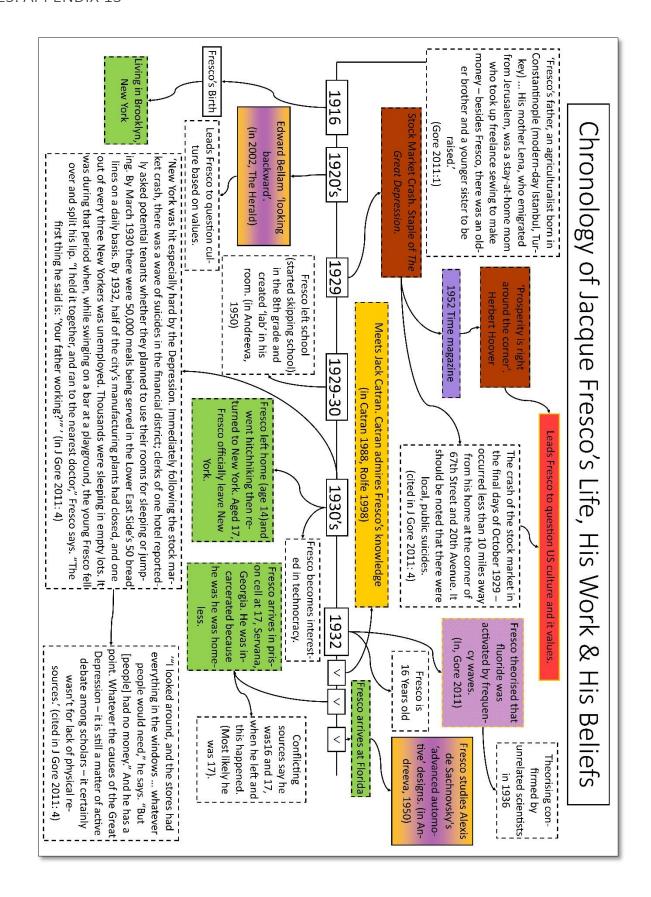
Kind Regards

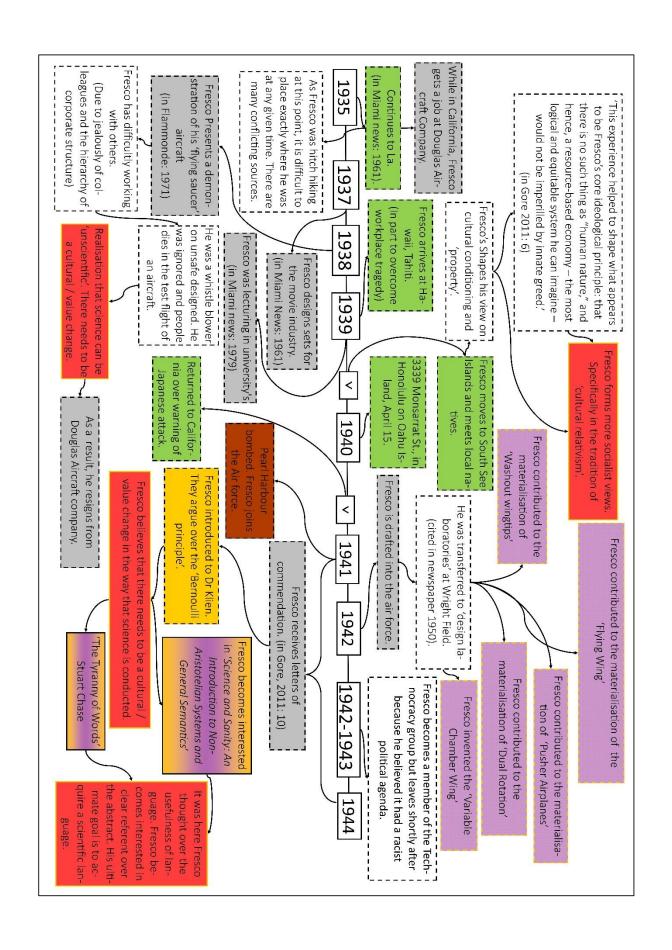
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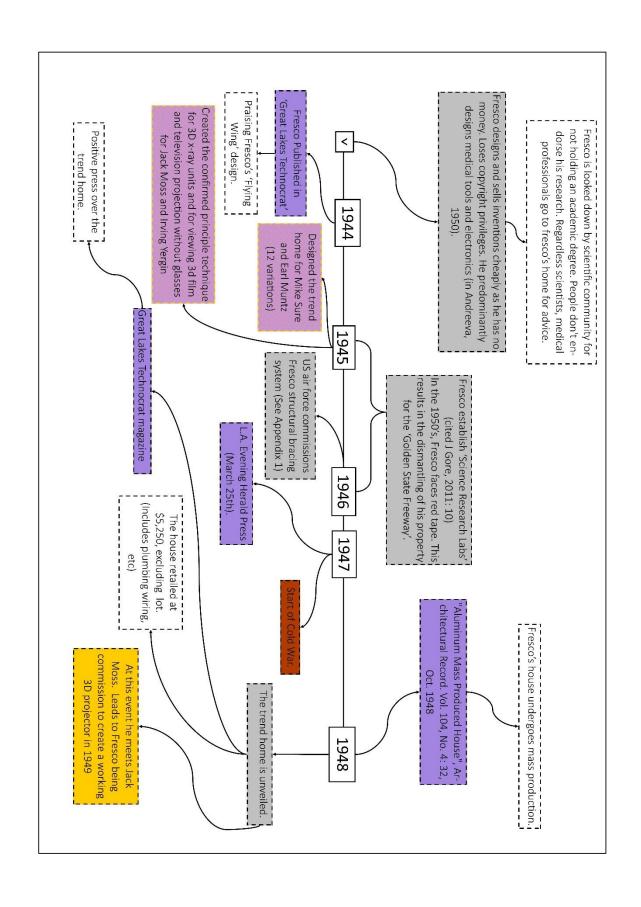
Assistant Information Officer Document Delivery Library & Information Services, University of Central Lancashire

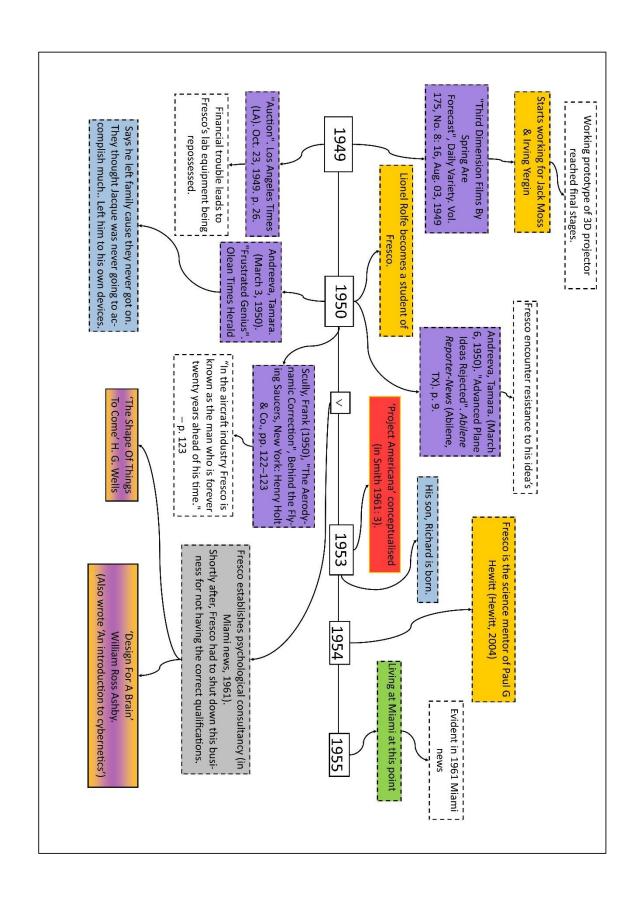
APPENDIX 12

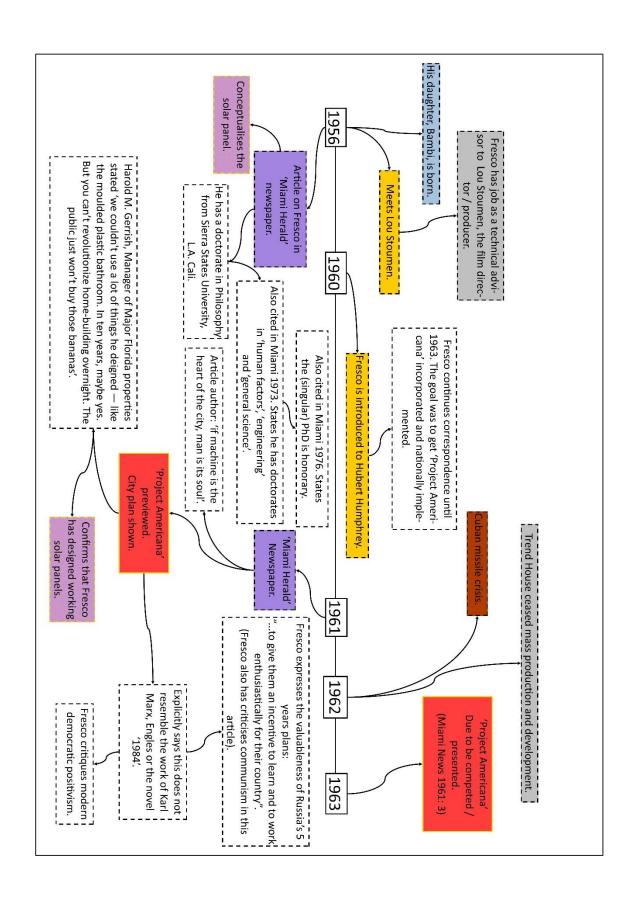
From: Roxanne Meadows Sent: 20 March 2013 13:33 To: Shaun Yates Subject: Re: Inquiry to arrange a possible interview with Jacques. The first three are out of print but we combined much of what was in there into The Best That Money Can't Buy, and the last one we didn't put out because there is a lot in there that we are using for the film we are working on. Roxanne On 3/20/13 9:24 AM, "Shaun Yates" 🦣 UrlBlockedError.aspx> > wrote: Hi Roxanne, Sorry to trouble you again, but I was wondering if you could help me with an enquiry. I've been looking everywhere for digital or hard copy of some of Jacques published works but my efforts have been unsuccessful. Is there anywhere that you know of, where I may be able to purchase or attain these items? "Introduction to Sociocyberneering, (1977)" "Sociocyberneering Presents Cities in Transition, (1978)" "Sociocyberneering Presents the Determinants of Behavior, (1978)" "The World will be one, (1997)" Being able to study these works will greatly improve my thesis. Thankyou for your time, Shaun.

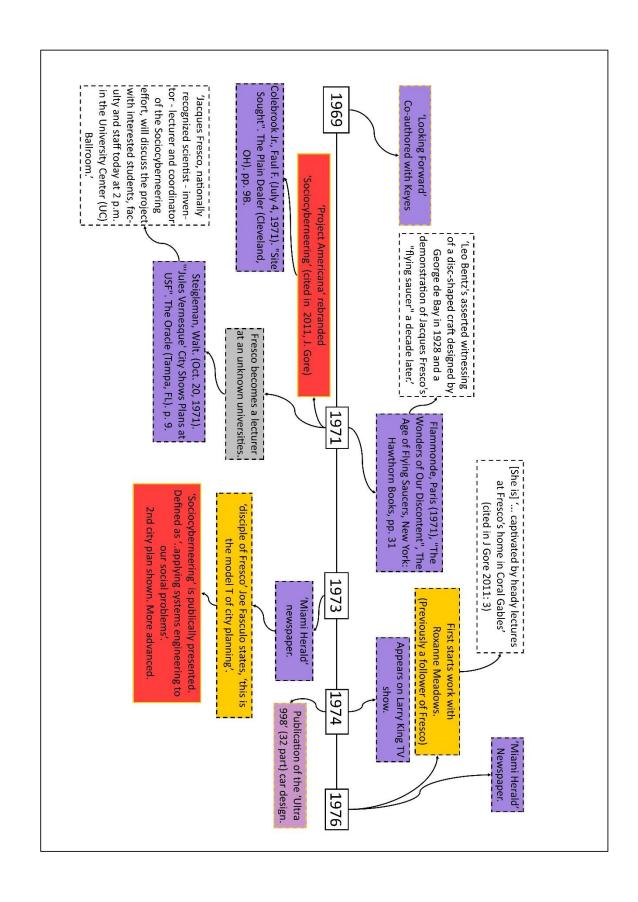


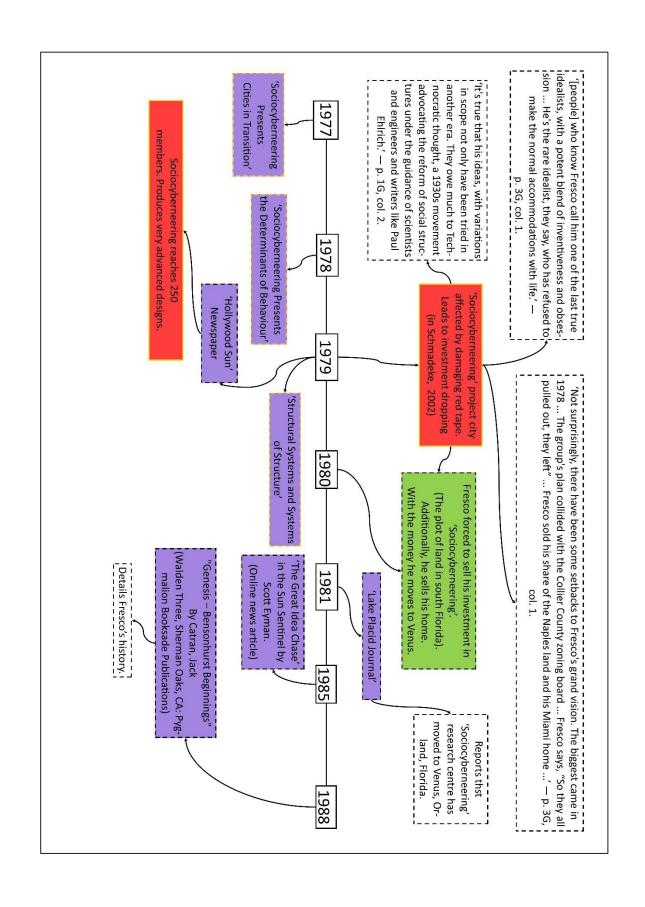


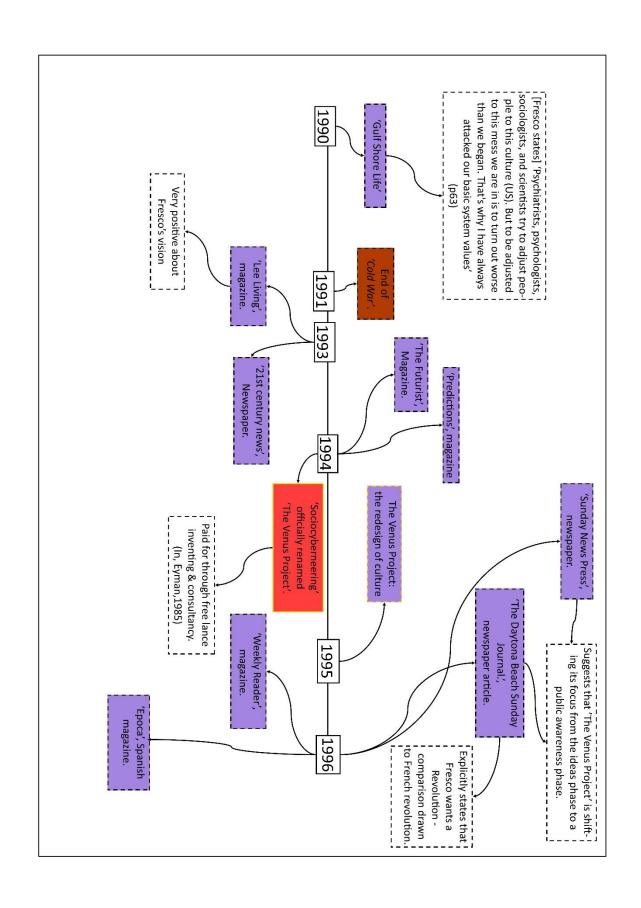


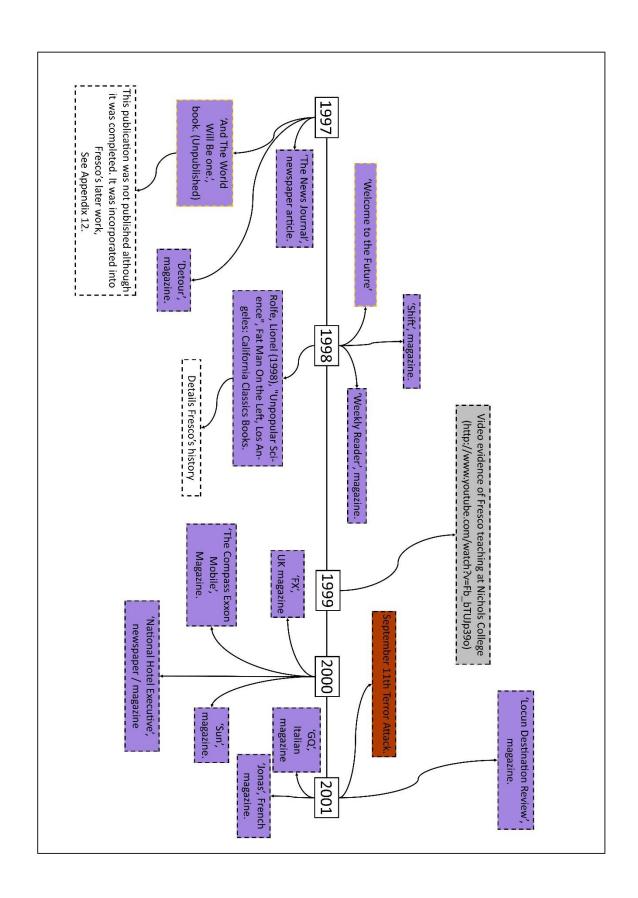


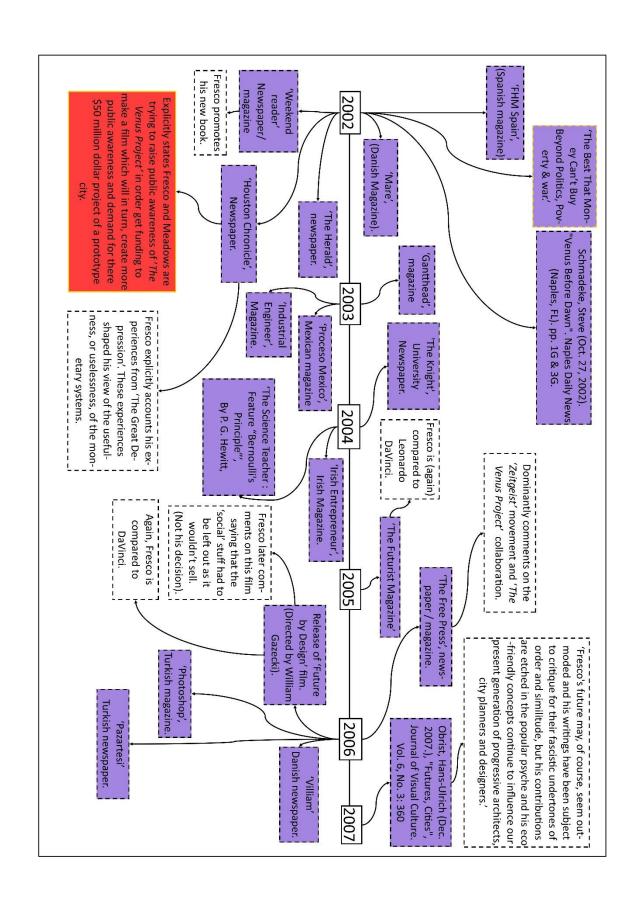


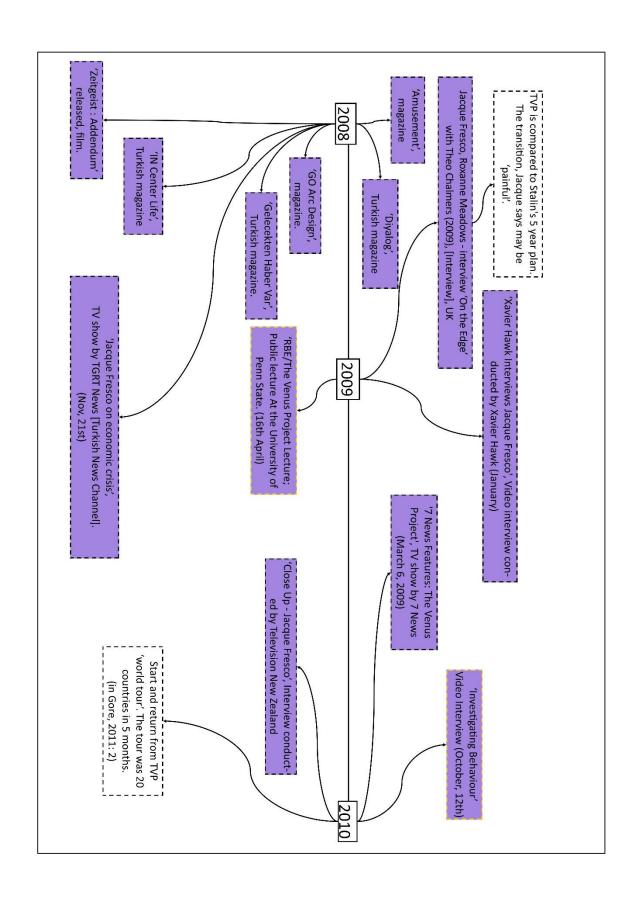


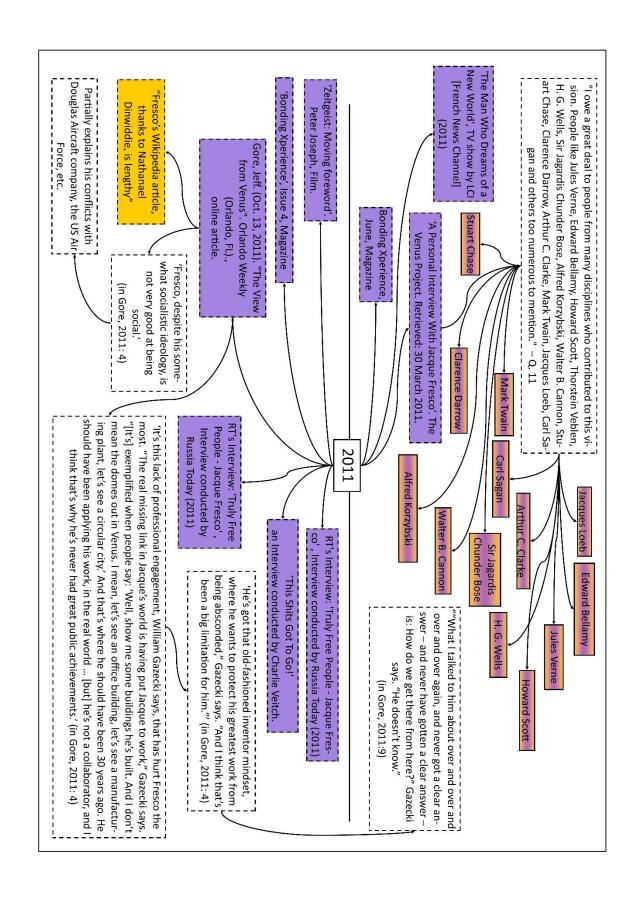


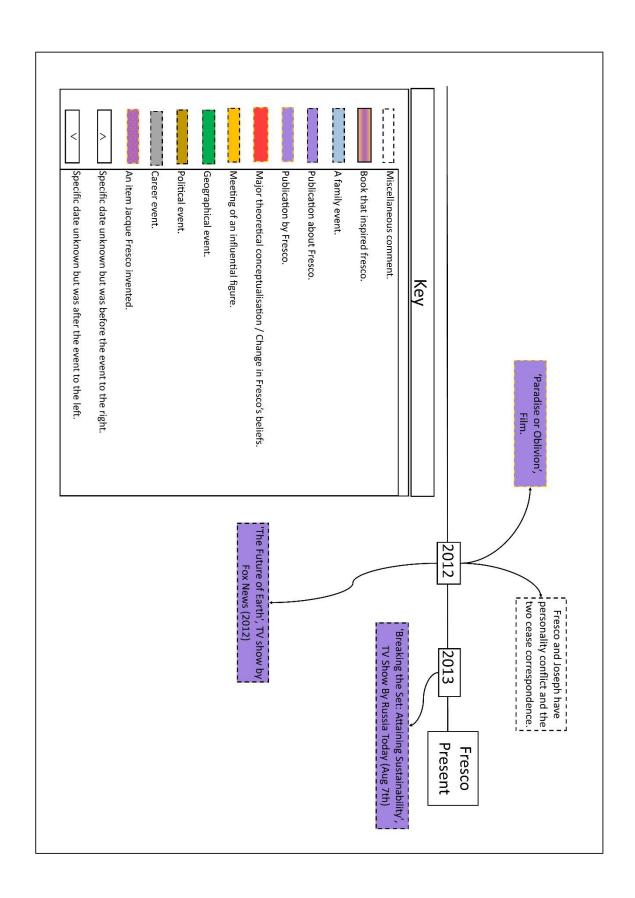












APPENDIX 14

INTERVIEW WITH J. FRESCO & R. MEADOWS, CONDUCTED BY S. YATES.

(16TH APRIL, 2013)

Roxanne: What's that?

```
1
00:00:00,000 --> 00:00:02,403
Shaun: Hello, how are you today?
2
00:00:02,403 --> 00:00:04,200
Roxanne: Good. How are you today?
3
00:00:04,200 --> 00:00:05,122
Shaun: I'm good, very good.
4
00:00:05,122 --> 00:00:11,122
[...]
5
00:00:11,760 --> 00:00:13,285
Shaun: Ah.. I think you're just out of the shot there Roxanne.
6
00:00:14,285 --> 00:00:16,285
```

7

00:00:16,000 --> 00:00:18,080

Shaun: Oh, I think your just out of the shot. ...out of the webcam.

8

00:00:18,080 --> 00:00:22,842

Roxanne: Yeah. I don't know if you need me in the

shot. It's a bit crowded tryna get two people...

9

00:00:22,842 --> 00:00:24,360

Shaun: Ah, that's fair enough okay.

10

00:00:25,481 --> 00:00:26,981

Shaun: Fantastic.

11

00:00:27,448 --> 00:00:29,448

Shaun: So, erm. I'll just jump right in.

12

00:00:30,511 --> 00:00:32,510

Roxanne: Can You hear? No, you can't hear a thing can you?

13

00:00:32,360 --> 00:00:34,360

No, he's having trouble with his accent.

14

00:00:34,042 --> 00:00:35,042

Shaun: Oh, I'm sorry.

```
15
```

00:00:36,038 --> 00:00:38,538

[Laughs] [???]

16

00:00:38,869 --> 00:00:39,869

Roxanne: Yeah, yeah.

17

00:00:39,989 --> 00:00:40,989

We'll have to do that.

18

00:00:41,476 --> 00:00:43,157

Roxanne: Do you want to start with the first question?

19

00:00:43,157 --> 00:00:44,593

Hang on wait, let me put your voice up a little louder so

20

00:00:44,594 --> 00:00:46,718

Shaun: Okay.

21

00:00:46,800 --> 00:00:48,800

Roxanne: Can you hear?

22

00:00:47,800 --> 00:00:52,638

Can you hear? All right...

```
23
```

```
00:00:52,639 --> 00:00:54,598
```

Well he's not saying anything right now. Go ahead.

24

00:00:54,598 --> 00:00:55,716

Shaun: Okay.

25

00:00:55,831 --> 00:00:57,831

erm. The first question I would like to as is

26

00:00:58,202 --> 00:01:01,431

'In reading some of your past newspaper articles it

27

00:01:01,432 --> 00:01:02,595

It suggests that Jacque has achieved a

28

00:01:02,595 --> 00:01:06,789

a doctorate degree at Sierra University, California.

29

00:01:07,082 --> 00:01:09,082

Could you describe your experiences there?

30

00:01:09,110 --> 00:01:12,310

Specifically, could you describe how these experiences shaped your view of society?

31

00:01:12,310 --> 00:01:16,592

Jacque: I taught psychology and human behaviour.

32

00:01:16,592 --> 00:01:17,994

Shaun: Uhum.

33

00:01:17,994 --> 00:01:19,272

Roxanne: And he wants to know how

34

00:01:19,272 --> 00:01:20,473

erm.

35

00:01:20,473 --> 00:01:25,069

Describe your experience there.

36

00:01:25,069 --> 00:01:28,670

Jacque: I taught there, I did not learn there.

Shaun: Oh, okay.

37

00:01:28,670 --> 00:01:35,470

Roxanne: Could you describe how these experiences shaped your view of society?

38

00:01:35,470 --> 00:01:39,545

39 00:01:39,546 --> 00:01:40,870 Experience did. 40 00:01:40,870 --> 00:01:42,400 Shaun: oh, okay. 41 00:01:43,150 --> 00:01:45,270 that's pretty specific. 42 00:01:45,271 --> 00:01:48,030 erm. I'll just jump into question number two then. 43 00:01:48,033 --> 00:01:52,910 I'm aware that Jacque was once a member of the technocracy group 44 00:01:52,912 --> 00:01:58,080 Could you define in your own words how their philosophy for social change differs from your philosophy for social change? 45 00:01:58,083 --> 00:02:04,230 Roxanne: [Coughs] How does technocracy's philosophy for social change differ from yours?

Fresco: Teaching did not shape my views.

00:02:04,233 --> 00:02:05,960

Fresco: They had no blue prints.

47

00:02:05,965 --> 00:02:08,910

They claimed they had blue prints for the new society.

48

00:02:08,910 --> 00:02:11,790

There were no blueprints that I found.

49

00:02:12,472 --> 00:02:14,470

They also had no 'blacks' in the organisation.

50

00:02:15,472 --> 00:02:18,470

I asked Scott, how come there were no black?

51

00:02:19,472 --> 00:02:21,190

Howard Scott was the chief engineer.

52

00:02:21,190 --> 00:02:24,730

He said let them start their own section.

53

00:02:24,991 --> 00:02:26,990

that bothered me

00:02:26,873 --> 00:02:28,870

Then I asked him, how come there were no orientals?

55

00:02:28,871 --> 00:02:32,990

He said the oriental mind can't grasp technology

56

00:02:32,994 --> 00:02:34,680

This was er..

57

00:02:34,684 --> 00:02:35,990

60 years ago.

58

00:02:35,992 --> 00:02:39,399

and I said you were wrong.

59

00:02:39,401 --> 00:02:41,910

Today, they lead the world in robotics.

60

00:02:41,913 --> 00:02:44,710

[???]

61

00:02:44,713 --> 00:02:46,350

Roxanne: Probably more than like 70 year ago.

00:02:46,351 --> 00:02:47,550

Jacque: So I resigned because..

Roxanne: Yeah..

63

00:02:47,363 --> 00:02:52,000

I could not support the segregation of people.

64

00:02:51,995 --> 00:02:56,840

and how Scotts view of oriental or black starting their own section.

65

00:02:56,845 --> 00:03:00,680

Roxanne: Also they never had a good understanding of hum,

66

00:03:00,680 --> 00:03:02,810

behavioural. Why people behave the way they do.

67

00:03:02,808 --> 00:03:04,400

Fresco: that's true.

68

00:03:04,076 --> 00:03:05,079

Shaun: Oh, okay.

69

00:03:05,076 --> 00:03:07,190

Roxanne: Jacque took that much further.

00:03:07,194 --> 00:03:08,040

Shaun: A-hum.

71

00:03:08,036 --> 00:03:09,070

Roxanne: An' he also..

72

00:03:09,074 --> 00:03:12,160

He also delved into so many more aspects of..

73

00:03:12,159 --> 00:03:13,519

er...

74

00:03:13,522 --> 00:03:16,000

Roxanne: ..human behavour

Fresco: ..Social design.

75

00:03:15,996 --> 00:03:17,000

Roxanne: and social design.

76

00:03:17,354 --> 00:03:18,320

...and why we behave the way we do.

77

00:03:18,322 --> 00:03:22,400

How to make people creative, how to teach kids... he really went into

```
78
```

00:03:22,396 --> 00:03:26,109

specifics were, erm, technocracy did not.

79

00:03:25,956 --> 00:03:26,959

Shaun: Oh, okay.

80

00:03:26,956 --> 00:03:29,839

Would you say that 'technocracy' was not 'humanistic'?

81

00:03:30,356 --> 00:03:31,790

but Jacques view was?

82

00:03:31,789 --> 00:03:37,000

Roxanne: would you say that technocracy was not humanistic but your view is?

83

00:03:36,996 --> 00:03:41,000

Fresco: No, I would say that they would not have an adequate view.

84

00:03:40,996 --> 00:03:42,670

... of how to change people.

85

00:03:42,674 --> 00:03:44,350

Shaun: Okay.

```
86
```

00:03:44,352 --> 00:03:48,040

Hmm, that's, hmm, thats great. I'll just move on to question number three..

87

00:03:48,036 --> 00:03:49,480

Roxanne: Can I.. ?

88

00:03:49,476 --> 00:03:54,280

Clarify that? do you.. would you say that your view is humanistic?

89

00:03:54,276 --> 00:03:55,520

Jacque: I said no.

90

00:03:55,516 --> 00:03:56,310

[...]

91

00:03:56,314 --> 00:03:57,519

Roxanne: Yeah, I never knew if that was specific enough.

92

00:03:57,516 --> 00:04:01,989

You wouldn't.. you wouldn't call his view particularly humanistic.

93

00:04:01,994 --> 00:04:04,800

Shaun: Okay.

```
94
```

00:04:04,795 --> 00:04:10,480

'Is it true that Jacque travelled to China, prior to 2010?

95

00:04:10,475 --> 00:04:14,960

And erm, what is Jacques view of the Chinese political-economy?'

96

00:04:15,157 --> 00:04:19,120

Roxanne: Did you travel to china before your world lecture tour

97

00:04:19,117 --> 00:04:20,480

..in 2010?

Fresco: Yes.

98

00:04:20,476 --> 00:04:27,239

Shaun: What did you think of the society there?

The role of politics and the role economics...

99

00:04:27,237 --> 00:04:29,700

...in that society. do you think it was 'good' or ..?

100

00:04:29,698 --> 00:04:31,070

Fresco: I dislike politics intensely.

00:04:31,072 --> 00:04:38,320

Because politicians say things people like to hear but they dont offer anything.

102

00:04:38,315 --> 00:04:40,890

They have no way out of a problem.

103

00:04:40,891 --> 00:04:42,040

Shaun: Uhum.

104

00:04:42,037 --> 00:04:43,200

Shaun: okay.

105

00:04:43,195 --> 00:04:46,130

Jacque: When I asked politicians how can you prevent war..

106

00:04:46,129 --> 00:04:51,240

They said 'I don't know' [???] 'There's always been

war there always will be war'.

107

00:04:51,235 --> 00:04:53,160

and how do you grow more food?

108

00:04:53,157 --> 00:04:54,159

...to feed people?

```
109
```

```
00:04:54,155 --> 00:04:59,929
```

'I dont know', how do you make trains and boats and transportation safer?

110

00:04:59,930 --> 00:05:01,040

'I don't know.'

111

00:05:01,035 --> 00:05:04,080

I said, 'What are you doing in politics?'

112

00:05:04,076 --> 00:05:06,200

Roxanne: He's asking about Chinese politics specifically.

113

00:05:06,197 --> 00:05:08,560

Chinese politics is the same as any other.

114

00:05:08,557 --> 00:05:13,560

Politics, its preferential advantage for a selective few.

115

00:05:13,555 --> 00:05:15,230

Shaun: uhum.

116

00:05:15,229 --> 00:05:16,560

okay.

```
117
```

00:05:16,557 --> 00:05:20,280

This is great. Okay, I'll just go onto question number four...

118

00:05:20,277 --> 00:05:28,479

'In your 2002 text, The Best That Money Can't buy,

you claim that your alternative vision is 'beyond politics'...

119

00:05:28,475 --> 00:05:29,760

...as we have just discussed...

120

00:05:30,198 --> 00:05:31,200

erm.. However...

121

00:05:31,198 --> 00:05:38,640

Some may argue that the 'scientific method' that you advocate in the book, is paradoxically a political stance in itself...

122

00:05:38,637 --> 00:05:40,640

How would you address that argument?

123

00:05:43,516 --> 00:05:44,520

Roxanne: He said, uhm..

124

00:05:43,516 --> 00:05:49,720

You claim that, Beyond Politics, Poverty and War, The best that Money Can't Buy, that its beyond politics...

125

00:05:49,718 --> 00:05:56,820

However, some may argue that the scientific method that you advocate in your book is paradoxically a political stance

126

00:05:56,819 --> 00:05:58,160

...in itself.

127

00:05:58,155 --> 00:06:01,270

Jacque: I'm sorry about that interpretation, but they are not correct.

128

00:06:01,274 --> 00:06:02,480

Shaun: Oh, okay.

129

00:06:02,477 --> 00:06:05,880

Could you elaborate, how they are not correct?

130

00:06:02,477 --> 00:06:05,880

Could you elaborate, how they are not correct?

131

00:06:05,878 --> 00:06:07,880

Roxanne: could you elaborate on how they are not correct?

```
132
```

00:06:07,877 --> 00:06:09,960

Jacque: Yes.

133

00:06:09,960 --> 00:06:13,799

erm. Politicians say things people like to hear.

134

00:06:13,795 --> 00:06:16,910

Years ago, people believed the earth was flat.

135

00:06:16,909 --> 00:06:18,880

Not round.

136

00:06:18,875 --> 00:06:25,020

Scientists did not say, its a little flat and a

little round, to get along with people.

137

00:06:25,021 --> 00:06:26,560

They said, 'Your wrong'.

138

00:06:26,555 --> 00:06:29,850

'We have evidence' and they showed their evidence to

139

00:06:29,847 --> 00:06:31,440

show that the earth was round.

00:06:31,435 --> 00:06:40,200

Politicians do not say 'believe me, we have the strongest metal

here. They give the torsional strength, the tensile strength..

141

00:06:40,201 --> 00:06:47,400

...and the compression strength, and they give information. Not opinions.

142

00:06:47,396 --> 00:06:50,560

Shaun: Alright, okay. That is very clear. Thankyou. Erm...

143

00:06:50,556 --> 00:06:51,400

Question number five...

144

00:06:51,395 --> 00:07:00,680

In your text, The Venus Project: The Re-Design of Culture, you state

that the project is '...dedicated to human and environmental concerns'.

145

00:07:00,676 --> 00:07:03,479

Specifically, could you define what this means?

146

00:07:03,477 --> 00:07:12,200

Jacque: Yes. Do not dump toxic materials into the oceans and

rivers, it will kill fish and eventually people..

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147
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00:07:12,197 --> 00:07:17,440

and stop our fishing fleet from bringing in nutritious food.

148

00:07:17,437 --> 00:07:26,300

...and we will have fish farms on the land and

in the sea to meet nutritional needs.

149

00:07:26,304 --> 00:07:28,150

Its very different. Political systems..

150

00:07:28,154 --> 00:07:34,680

do not describe how to grow food, how to

house people, how to make transportation safe.

151

00:07:34,677 --> 00:07:36,640

They do not describe those things.

152

00:07:36,639 --> 00:07:46,320

They merely talk of a better world with words,

but no description, no drawings...

Shaun: okay.

153

00:07:46,325 --> 00:07:50,159

Shaun: Would you define that as the basic human needs then?

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154
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00:07:50,157 --> 00:07:51,870

Like food, shelter, like...

155

00:07:51,866 --> 00:07:54,640

...erm. Maslows Triangle almost?

156

00:07:54,637 --> 00:07:58,360

Jacque: Free education, no fee involved.

157

00:07:58,358 --> 00:08:07,040

Roxanne: Would you define that as food, shelter, housing

erm? Like.. who was his name?

158

00:08:07,037 --> 00:08:08,840

Shaun: Paslovs Triangle.

159

00:08:09,996 --> 00:08:11,560

Shaun: ...I think it was...

Roxanne: Paslovs Triangle, was that his name?

Fresco: No..

160

00:08:11,557 --> 00:08:13,040

Shaun: Sorry I can't remember who it was now.

00:08:13,038 --> 00:08:20,640

Roxanne: [???]

Shaun: Its like the pyramid of all the social needs that people

need such as love and that sort of thing..

Jacque: Yes..

162

00:08:20,638 --> 00:08:23,419

...and they are met like the public library.

163

00:08:23,425 --> 00:08:26,320

You can go the library and get any book you want.

164

00:08:26,318 --> 00:08:33,840

Next door to the library we have the camera centre. Were you can check out a camera, just like you can check out a [???] just like the library..

165

00:08:33,835 --> 00:08:35,020

next door to that..

166

00:08:35,019 --> 00:08:36,799

We have musical instruments...

167

00:08:36,796 --> 00:08:44,280

If you make things available to people on the check out

system like the library there's no basis for crime.

00:08:44,275 --> 00:08:53,000

Shaun: Oh, okay. So, erm, you wanna provide all education and

shelter and food and all the necessities of life?

169

00:08:52,996 --> 00:08:54,240

Jacque: Without a price tag.

170

00:08:54,235 --> 00:08:54,920

Shaun: Okay.

171

00:08:54,916 --> 00:08:56,360

Jacque: ..without a price tag.

172

00:08:56,357 --> 00:09:01,780

Shaun: Cool, I've got it. That's great I'll

move on to...

Jacque: [...]

Shaun: Oh, sorry?

173

00:09:01,778 --> 00:09:07,720

Jacque: If you use money you can pay off politicians, we don't use money. We make things available to people.

174

00:09:08,267 --> 00:09:10,220

Shaun: Fantastic.

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175
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00:09:10,221 --> 00:09:13,750

er. I'll just move on to question number six.

176

00:09:13,749 --> 00:09:17,670

Erm, these questions. The next three questions are concerning 'crime' and 'criminality'...

177

00:09:17,128 --> 00:09:21,150

Question six...

178

00:09:21,150 --> 00:09:27,510

Is it true... Is it true that you believe

all behaviour is culturally defined? If so,...

179

00:09:27,510 --> 00:09:34,950

How do you explain issues such as 'criminality'? For example,

do you believe is 'criminality' is genetically determined, or..

180

00:09:34,951 --> 00:09:36,670

..culturally defined or a mix of the two factors?

181

00:09:36,669 --> 00:09:44,069

Roxanne: Is it true that you believe all

behaviour is culturally defined?

Jacque: Yes.

00:09:44,069 --> 00:09:48,670

Roxanne: If so, can you explain issue such as 'criminality'.

183

00:09:48,672 --> 00:09:49,870

Jacque: 'Criminality' is made by scarcity.

184

00:09:49,872 --> 00:09:58,120

If you have two children, and you play with this four year old and neglect the seven year old your making jealousy and envy..

185

00:09:58,118 --> 00:09:59,550

..right there.

186

00:09:59,552 --> 00:10:07,590

If you have two children and you say you can go the movies to one and you have to do your homework to the other, your making jealousy and envy.

187

00:10:07,589 --> 00:10:09,780

Its manufactured by culture.

188

00:10:09,783 --> 00:10:13,350

All criminal behaviour is made by scarcity.

```
00:10:14,751 --> 00:10:15,470
... or threat
190
00:10:15,470 --> 00:10:16,950
... of scarcity.
191
00:10:16,951 --> 00:10:23,280
Shaun: Okay. Erm, so do you not believe that genetics
plays any role in defining 'crime'?
192
00:10:23,282 --> 00:10:34,190
Jacque: Genetics has a role. It has to do with the colour of the eyes, the gene
colour of the eyes, the shape of the head and maybe a propensity towards heart disease and...
193
00:10:34,191 --> 00:10:42,990
...and other things. But other than that, every word you use
is taught (to) you; "cup" "house" "building"
"mumma" "pappa"
194
00:10:42,991 --> 00:10:49,150
every words you use, every facial expression, occurs
inn your movies, your books your novels..
195
00:10:42,991 --> 00:10:49,150
every words you use, every facial expression, occurs
```

inn your movies, your books your novels..

```
196
```

00:10:50,509 --> 00:10:53,750

..your role models. So, I don't see any individuality.

197

00:10:53,751 --> 00:11:00,350

If you were brought up as a baby, in Australia, never saw anything else you would say; "how ar' ya' mate?"

198

00:11:00,994 --> 00:11:02,990

Shaun: [Laughs] That true.

199

00:11:02,751 --> 00:11:05,120

Roxanne: Do you believe 'criminality' is genetically determined?

200

00:11:05,116 --> 00:11:13,430

Jacque: No its not. And in those cases were it is determined by brain damage I would say that they don't belong in jail...

201

00:11:13,430 --> 00:11:16,750

..they belong in a hospital and to be treated for that disorder.

202

00:11:18,501 --> 00:11:19,590

The same with aberrant behaviour...

00:11:19,589 --> 00:11:25,950

..it could be treated. Just as we are shaped by culture, it could be unshaped by culture.

204

00:11:25,949 --> 00:11:28,189

Roxanne: Its a real cop-out to blame it on the genes.

205

00:11:28,190 --> 00:11:30,590

...and to not look at society because of it.

206

00:11:30,591 --> 00:11:32,990

Jacque: they have been looking for the republican gene recently.

207

00:11:32,986 --> 00:11:37,000

...which is stupid...

Shaun: Yeah..

208

00:11:37,005 --> 00:11:42,880

Jacque: Actually, a republican is raised in a republican environment. You wannabe an air-plane pilot you go to an aviation

209

00:11:42,879 --> 00:11:48,120

.. environment. You wanna be doctor you go to medical environment. This is how you learn.

00:11:48,123 --> 00:11:58,030

Your not born anyway. Chinese baby was never born speaking Chinese.

No mater how many centuries their ancestors spoke Chinese...

211

00:11:58,030 --> 00:12:02,949

they had to learn all over again.. That's why I accept environment.

212

00:12:02,951 --> 00:12:08,950

I never saw any evidence of an American speaking English without being trained.

213

00:12:08,953 --> 00:12:10,310

..to do so.

214

00:12:10,310 --> 00:12:15,910

Shaun: Sounds good. So how would you define 'crime' in your own words?

215

00:12:15,313 --> 00:12:18,020

...Like, explicitly how would you define it?

216

00:12:18,016 --> 00:12:20,800

Roxanne: How would you define 'crime' and 'criminality'?

217

00:12:20,799 --> 00:12:29,040

Jacque: Threat of scarcity, fear of scarcity

00:12:20,799 --> 00:12:29,040

Jacque: in ability to access their needs.

219

00:12:29,040 --> 00:12:36,089

Shaun: Okay. So, In your own way, how would you address this issue of 'crime' and 'criminality' in your alternative vision?

220

00:12:38,999 --> 00:12:45,920

Jacque: I would make the public library available with all things all the necessities of life would be available..

221

00:12:45,924 --> 00:12:51,790

at the library, if we don't have an abundance, if your through using it you can bring it back to the library.

222

00:12:51,791 --> 00:12:58,310

Roxanne: Also, giving people the tools to learn and look at the world and communicate more so with one another.

223

00:12:58,810 --> 00:13:02,020

Jacque: Our language was designed hundreds of years ago.

224

00:13:02,015 --> 00:13:06,990

So we don't communicate with each other...we talk at each other...

00:13:06,992 --> 00:13:13,949

and it goes through their head and out of their relation to their background. Although you think your talking to people, your not..

226

00:13:13,954 --> 00:13:16,229

we're.. [coughs] ...

227

00:13:19,354 --> 00:13:23,310

When an individual reads the bible he says this is what Jesus meant, the second persons says 'wrong, he meant that' ...

228

00:13:24,392 --> 00:13:26,950

The third person says, 'your both wrong'

229

00:13:24,392 --> 00:13:27,750

The third person says, 'your both wrong' so you have the [???]..

230

00:13:27,752 --> 00:13:36,750

the seventh day adventist, the Catholics, because its subject to interpretation all langue is subject to interpretation. We don't want that..

231

00:13:36,753 --> 00:13:46,920

We want a scientific language, when scientists and engineers talk to each other about air-plane structures they talk in mathematical terms. They understand each other...

00:13:46,919 --> 00:13:53,550

Otherwise you couldn't build air-planes, submarines, aircraft carriers or boats.

233

00:13:53,551 --> 00:14:02,350

Shaun: So, erm, if you.. Do you believe that if we have a

scientific language we will be able to challenge 'crime' and 'criminality'?

234

00:14:02,352 --> 00:14:06,310

Jacque: There wont be any crime, because you would raise children differently..

235

00:14:06,312 --> 00:14:13,190

than they are raised today, this is a kinda of ego

centric society where children meet each other and say, 'hey...

236

00:14:13,193 --> 00:14:21,790

..you! I can run faster than you! I bet I can fight you!' They

are all aggression. They are never brought up in a co-operative system.

237

00:14:21,791 --> 00:14:27,830

Roxanne: Crime is really a by-product of the inefficiencies of the culture.

238

00:14:28,487 --> 00:14:29,579

..that people are raised under..

Jacque: Yeah..

00:14:29,582 --> 00:14:31,310

Roxanne: Not, the person

Shaun: Okay.

240

00:14:31,314 --> 00:14:40,189

Shaun: Fantastic. This is great, I'll just move onto question

number nine. And, in the transcript to this interview..

241

00:14:40,191 --> 00:14:46,550

there is an extract provided by Karl Popper, 1966, page 165.

242

00:14:46,552 --> 00:14:52,400

Erm, Jacque, how would you contrast your 'alternative vision' to that of Popper definition of the 'Utopian Engineer'.

243

00:14:52,395 --> 00:14:56,430

Roxanne: Do you want to read this or do

you remember it..

Jacque: I'm not a 'Utopian'...

244

00:14:56,432 --> 00:15:03,790

Jacque: I do not believe that we can design the ideal society.

I believe that we can design a much better society.

245

00:14:56,432 --> 00:15:03,790

Jacque: I do not believe that we can design the ideal society.

I believe that we can design a much better society.

246

00:15:03,792 --> 00:15:12,040

...I dont believe man is capable of making the best laptop, because what ever you make it is the best you know of up to now.

247

00:15:12,044 --> 00:15:18,670

...but ten years from now, it will be smaller, lighter and

do much more. There are no final frontiers.

248

00:15:18,671 --> 00:15:26,240

Roxanne: This, this person is kind of saying

you can't design rationally the whole society...

249

00:15:26,237 --> 00:15:35,079

..." what I criticise under the name of the 'utopian engineering',

erm, recommends the..." excuse me..

250

00:15:35,077 --> 00:15:43,400

"...the reconstruction of society as whole. I.E) very sweeping changes whose practical consequences

are hard to calculate owning to our limited experiences. It claims.. "

251

00:15:43,401 --> 00:15:43,959

Jacque: I get it. I can answer that..

00:15:43,957 --> 00:15:54,670

" due to limited experience equot; he should say, 'I don't know enough about human behaviour to engineer an environment to do away with crime'.

253

00:15:54,669 --> 00:15:58,890

that's the way you talk, you don't say 'You'll never be able to fly'.

254

00:15:58,888 --> 00:16:06,720

'I cant conceive of how to build a flying machine' that the way you talk. 'You think man will ever get to the moon?' I asked a lot of people..

255

00:16:06,715 --> 00:16:14,430

they said, 'not in a thousand year!'. I said, 'have you studied rockets?', 'no'. 'Have you studied space travel?', 'no'. How do you come to that conclusion?

256

00:16:14,434 --> 00:16:21,199

Cause they were brought up to believe that everyone should have aright to their own opinions. I'm against that.

257

00:16:21,196 --> 00:16:26,120

Everyone should have access to information, not their own opinion.

258

00:16:26,116 --> 00:16:28,970

Roxanne: This person is talking about their own inadequacies.

Shaun: ahum.

00:16:28,967 --> 00:16:30,420

Roxanne: Not, whats possible.

260

00:16:30,422 --> 00:16:31,170

Jacque: Yes.

261

00:16:31,171 --> 00:16:38,400

If you were honest, he's say, 'I don't know how to

build a flying machine'. Not, 'man will never fly'.

262

00:16:38,396 --> 00:16:42,500

Thats an opinion.

Shaun: That's fantastic.

263

00:16:42,475 --> 00:16:43,800

Jacque: People don't even know how to talk to each other.

264

00:16:43,841 --> 00:16:45,800

Shaun: Hmm, cool.

265

00:16:45,849 --> 00:16:53,500

Erm. this is great, this is all the questions that I wanted

to ask yourself and Roxanne. This is really good. Erm..

00:16:53,516 --> 00:16:58,199

Can I just thankyou for the inopportune that you have given me to

interview the two of you, I very much appreciate it.

267

00:16:58,154 --> 00:16:59,400

Roxanne: Sure.

268

00:16:59,354 --> 00:17:01,900

Good luck with your project, Let us know how it turns out.

269

00:17:01,869 --> 00:17:03,200

Shaun: Oh, will do.

270

00:17:03,196 --> 00:17:04,300

Shaun: Thanks again, thanks very much.

271

00:17:05,034 --> 00:17:05,800

Roxanne: Okay.

Shaun: Good bye.

272

00:17:05,794 --> 00:17:07,300

Shaun: Thankyou.

273

00:17:07,314 --> 00:17:13,400

Don't forget our language was designed hundred of years ago. And its old words with old meaning.

274

00:17:13,396 --> 00:17:17,700

Different people, have different association with the same words.

275

00:17:17,673 --> 00:17:20,400

Shaun: I will take that away with me.

276

00:17:21,076 --> 00:17:28,400

With don't have any basis of good communication except for mathematics or the sciences or chemistry.

277

00:17:28,354 --> 00:17:35,400

When a chemist writes a formula, anywhere in the worlds they understand them, they are its not subject to interpretation.

278

00:17:34,441 --> 00:17:41,700

Roxanne: you should look at semantics too, with regards to the meaning of words, I don't know if they did that at school..

279

00:17:41,677 --> 00:17:52,600

Shaun: oh like the 'Tranny of Words', like that book? Are you advocating a.. are you trying to say that we should leave all 'abstract' words and only use clear 'referents'?

00:17:52,593 --> 00:18:00,000

Jacque: Yes, We need much more emphasis on semantics and communication.

282

00:17:59,962 --> 00:18:02,900

Roxanne: He's saying, do we eliminate 'abstract' words and

only use clear referential..

Jacque: Yes.. yes...

283

00:18:02,917 --> 00:18:08,000

Shaun: oh, okay. And that will help, erm.. help challenge criminality?

284

00:18:07,959 --> 00:18:14,400

Fresco: Well, it would do away with arguments, 'cause.. [???] they would have to look into it to give you an answer..

285

00:18:14,431 --> 00:18:16,500

He doesn't give an answer right away.

286

00:18:17,000 --> 00:18:18,500

he says, 'I dont know'.

287

00:18:18,528 --> 00:18:27,600

Roxanne: If you make things available, that's the end of stealing, that's the end of jealousy, that's the end of ego in certain aspects in regards to that..

00:18:27,645 --> 00:18:29,000

Shaun: Oh, okay.

289

00:18:29,037 --> 00:18:39,000

erm, as just one final question as well. This is just a personal that i would like to ask Jacque, as was aware that you were a vegetarian..

290

00:18:38,962 --> 00:18:42,400

at one point. Could you tell me why you stopped being vegetarian?

291

00:18:42,440 --> 00:18:51,300

Jacque: Well, since I saw cows with cancer and rabbits with cancer they are all vegetarians.

292

00:18:51,280 --> 00:18:53,899

Shaun: Oh, and you think that has the same effect on the human body?

293

00:18:51,280 --> 00:18:53,899

Shaun: Oh, and you think that has the same effect on the human body?

294

00:18:53,880 --> 00:19:05,900

Jacque: I've never anything to evidence that vegetarianism or organic food, reduces the amount of cancer.

```
295
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00:19:05,874 --> 00:19:11,900

I've read about it but I've never seen

proof of it. I don't know.

296

00:19:11,870 --> 00:19:12,899

Shaun: Fair enough. I'll take that with me.

297

00:19:14,434 --> 00:19:21,200

Roxanne: there's a lot of science that has to be done without the

monetary system that hasn' ... really, humm,

Roxanne & amp; amp; Jacque: [???]

298

00:19:20,476 --> 00:19:24,400

Jacque: Or invested interests.

Roxanne: Yeah, invading the outcome of some science.

299

00:19:24,391 --> 00:19:30,800

Roxanne: Jacque does stay away from some red meats and

things like that.. we do eat organic so [Laughts]..

300

00:19:30,751 --> 00:19:42,899

..you know, there's a lot poisons on it.

Jacque: We spray poisons on all plants

today. We shouldn't do that we oughta use high pitched sound to keep certain...

00:19:42,911 --> 00:19:47,100

insects away.. but certain insects are useful for plants.

302

00:19:47,139 --> 00:19:55,399

we have to learn how to use ultra sonic methods

for support the insect population around plants..

303

00:19:55,351 --> 00:19:56,900

not, spraying poison. [coughs]

304

00:19:56,870 --> 00:20:00,000

Shaun: Yeah.

Roxanne: Water?

305

00:20:01,769 --> 00:20:05,700

Jacque: [coughs]

306

00:20:05,746 --> 00:20:14,500

Shaun: Well, this is great, this is really good for my final dissertation. So, I

would just like to thank you again. I really do appreciate this opportunity.

307

00:20:14,469 --> 00:20:15,700

Roxanne: Okay, Shaun.

Shaun: Thankyou, goodbye.

00:20:15,748 --> 00:20:17,300

Roxanne: Goodbye.

Jacque: Thankyou very much for the opportunity.

309

00:20:20,033 --> 00:20:21,300

Shaun: Thankyou.