

UNIVERSITY OF KWAZULU-NATAL

**MAPPING THE NOMOLOGICAL NETWORKS OF SUSTAINABILITY CONSTRUCTS AS
FOUNDATIONS FOR SOCIAL MARKETING PROGRAMMES**

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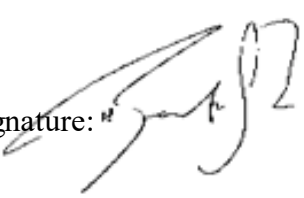
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2019

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ABSTRACT

Sustainability is thought of as one of the most complex challenges of our time; one which social marketers can contribute to achieving. However, sustainability has a complicated language that can be easily misinterpreted and misguide social marketing efforts. Two constructs contributing to sustainability's multi-faceted language that social marketers could draw inspiration from to develop sustainability programmes are sustainable development and degrowth. Yet how is it possible to develop a social marketing programme addressing sustainability when sustainability's language is complicated to understand and/or open to misinterpretation and misguidance? Five research objectives were developed to answer this question:

1. Map the basic nomological networks of sustainable degrowth and sustainable development.
2. Compare the basic networks to identify overlapping areas.
3. Identify proposed actions common to both constructs that can be used within a social marketing framework.
4. Make recommendations for social marketers developing programmes for the common actions guided by the theories underpinning social marketing.
5. Analyse existing social marketing processes and if necessary develop an appropriate social marketing process specifically intended for social marketers to tackle the sustainability challenge.

The research objectives were ascertained under a qualitative approach using an application of nomological networks to thematically map each construct's elements. In search of commonalities and differences, analyses and comparison of these elements identified several coinciding actions at surface level. The four theoretical paradigms underpinning social marketing (critical thinking, systems thinking, value and relational thinking) were applied to common actions determining the extent to which actions could reduce misinterpretation and misguidance (the higher the commonality, the greater the chance of reducing misinterpretation and misguidance). Guidelines and recommendations for developing successful programmes around each of the common actions also emerged. Through this process ecovillages, renewable energy, transforming food systems and voluntary simplicity and sustainable consumption (to some extent) were deemed more applicable to sustainability than others thus simplifying sustainability's language from a social marketer's perspective. Key contributions include guidelines for social marketers to reduce misinterpretation and misguidance, broadening

critical marketing thinking in social marketing, a most-appropriate social marketing planning process and adaptations thereof and the utility of nomological networks as a methodological tool.

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CHAPTER 1: INTRODUCTION

1.1 CHAPTER INTRODUCTION: AN ANALOGY

A person finds out they have cancer and visits a doctor recommended by a friend. The doctor examines the patient and prescribes a complex treatment, but the patient is left wondering whether the prescribed treatment is the best option – the doctor put forward some radical ideas. A different doctor is sought out by the patient to provide a second opinion. Although the second doctor recommends a different *yet also* complex treatment, there are some similarities with the first doctor's opinion. In the end the patient decides to base their treatment on where the two doctor's opinions are mutual acknowledging that the utilisation of common elements provides the best chance of beating the cancer.

1.2 SUSTAINABILITY

It is well documented that at the current rate, the earth, society and the economy cannot be infinitely sustained and a movement towards sustainability needs to be executed (R&D, 2010; Starke, 2013; UN, 2012, 2015; UNEP, 2011). But what exactly is sustainability and how can it be achieved? Or in other words, how can the patient go about overcoming their illness?

Sustainability proves to be a complicated phenomenon (Brennan and Binney, 2008; Waas, Hugé, Verbruggen and Wright, 2011). The literature is rife with varying interpretations, misappropriations and paradoxes (Giddings, Hopwood and O'Brien, 2002: 187; Jabareen, 2008: 181; Lorek and Spangenberg, 2014: 34) and many use the term interchangeably with sustainable development (Waas *et al.*, 2011: 1639). Many different ideas, actions, theories, mechanisms, strategies, constructs, ideologies etc. have been put forward in an attempt to discuss how to lead society towards a more sustainable existence (Christen and Schmidt, 2012: 401). However, the proliferation of sustainability and its ambiguities has led to its broad misuse – as one author puts it: “[w]e live today in an age of *sustainababble*, a cacophonous profusion of uses of the word *sustainable* to mean anything from environmentally better to cool” (Engelman, 2013: 3 – italics in original). Through its arbitrary conceptualisation and lack of proper grounding (including contributions from politics, business, academia, non-governmental organisations, etc.) the term has become so malleable that its ability to act as a meaningful guide to achieve sustainability has significantly weakened (Christen and Schmidt, 2012: 401).

In its traditional ecological context, sustainability refers to the potential ability of an ecosystem to subsist over time (DuPisani, 2006: 91; Jabareen, 2008: 181). Nowadays, it is a term used to describe the integration of concepts geared towards sustaining – subsisting over time – the environment¹, society and the economy (Schoolman, Guest, Bush and Bell, 2012: 67). In this research sustainability is used to describe the process and outcome of sustainable actions to live within earth's planetary boundaries (e.g. Robinson, 2004: 370) and is not used interchangeably with sustainable development as in other research (e.g. Kuhlman and Farrington, 2010; Waas *et al.*, 2011). In other words, sustainability is used to refer to an infinitely attainable medium that can be achieved by implementing sustainable actions². It will often be referred to in conjunction with improving or increasing i.e. increasing sustainability.

Sustainability is thought of as one of the most complex challenges of our time (Sachs, 2015). *State of the World* reports (2010, 2012, 2013) suggest that achieving sustainability requires a large-scale shift in the way we live; it also offers multiple benefits. In her attempt to grapple with the concept, Robinson (2004: 381) proposes that:

“Sustainability should not be conceived of as a single concept, or even as a consistent set of concepts. Rather it is more usefully thought of as [an] approach or process of community-based thinking that indicates we need to integrate environmental, social and economic issues in a long-term perspective, while remaining open to fundamental differences about the way that is to be accomplished and even the ultimate purposes involved”.

Robinson's viewpoint implies that for sustainability to prevail, individual research areas (such as environmental, social and economic issues) should be combined or integrated to formulate an approach to sustainability that is irrespective of different ways to achieve it. Tukker (2013: 278) also makes this point by concentrating his argument on the potential of alliances between research areas that are situated in the sustainability arena:

¹ Environment and ecology are used interchangeably.

²In this research, actions are proposed activities to achieve sustainability that are implemented through social marketing programmes.

“The size of the sustainability challenge is enormous and genuine successes in making a structural change to sustainability have been limited. In my view, the only productive way forward is through collaboration and learning, rather than competition between different policy agendas and related strands of sustainability research”.

Two constructs that are representative of environmental, social and economic aspects are sustainable development and sustainable degrowth³; they are also two potentially collaborative constructs that strive for sustainability, and therefore match both Robinson’s (2004) and Tukker’s (2013) viewpoint.

Concerning the analogy outlined above, the different doctors are the sustainable development and degrowth constructs that could lead society to ‘full health’ – that is achieving sustainability. Thus, by combining different opinions from the two ‘doctors’, social marketers could make use of the simpler and more easily understandable ‘treatment’ to influence behaviours that could have a positive impact on society.

The following sections briefly look at sustainable development and degrowth constructs to show how their languages came about and how each language guides each construct.

1.3 A BRIEF HISTORY AND BACKGROUND OF SUSTAINABLE DEVELOPMENT

Very briefly, sustainable development is defined as societal development that can be economically, socially and environmentally sustained now and in the long term (WCED, 1987: 43).

The historical roots of sustainable development are inextricably tied to sustainability, a concept which originated several thousand years ago (DuPisani, 2006: 84; Waas *et al.*, 2011: 1639) as throughout human history humans have wrestled with the ebbs and flows of nature to meet their needs (Strange and Bailey, 2008: 11). However, sustainable development’s formal genesis can be traced back to 1713 when the German scientist Hans Carl von Carlowitz published a paper on sustainable forest management (DuPisani, 2006: 85; Wilderer, 2007: 2). He used the term *nachhaltende nutzung* (sustainable use) to condense his thesis: the number of replaceable trees dictates the rate of extraction (DuPisani, 2006: 85; Wilderer, 2007: 2).

³ Hereon in termed simply degrowth.

Moving forward in time, many authors postulated that natural resources might not support a burgeoning population and rising living standards galvanised by economic growth (DuPisani, 2006: 87; Waas *et al.*, 2011: 1640). Noteworthy is the *Limits to growth* report (Meadows, Meadows, Behrens and Randers, 1972), which hypothesised that exponential growth would within 100 years cause an ecological crisis and an uncontrollable decline in livelihoods. Multiple works each containing similar messages provided the groundwork for sustainable development (Castro, 2004: 196; DuPisani, 2006: 91; Waas *et al.*, 2011: 1642). Reconciling environmental concerns with social and economic development issues these scholars had presented, the publication of *Our Common Future* (WCED: 1987) popularised sustainable development as a means to achieve social, economic and environmental sustainability (Boström, 2012: 3; DuPisani, 2006: 92; Kuhlman and Farrington, 2010: 3437; Robinson, 2004: 370; Waas *et al.*, 2011: 1642) and was the pretext for an augmented international research agenda (Baker, 2006: 6; Sneddon, Howarth and Norgaard, 2006: 255). After this came *Agenda 21*, an action-oriented publication guiding the implementation of sustainable development after the United Nations Conference on Environment and Development in 1992 (UN, 1992; Waas *et al.*, 2011: 1642). In 2011 the report titled *Towards a Green Economy* laid out a framework for achieving sustainable development, after which *The 2030 Agenda for Sustainable Development* (2015) further ratified the goals, objectives and rationale for achieving sustainable development.

As can be seen, the sustainable development construct⁴ is rooted in the amalgamation of environmental, social and economic concerns. Implicit to these core concerns is at a very basic level the construct's language that states its reasons for existence and shapes its actions to achieve sustainability. Such actions are manifold and assorted, any of which could be used as a basis for interventions targeting sustainability.

1.4 A BRIEF HISTORY AND BACKGROUND OF DEGROWTH

Degrowth is very succinctly defined as a decrease in economic activity that increases the welfare of people and the planet in the short and long term (R&D, no date; Schneider, Kallis and Martinez-Alier, 2010: 512). "Some of the ideas behind degrowth have been part of

⁴ While certain sub-concepts of sustainable development can be measured as they are more concrete, sustainable development itself is more abstract and cannot be measured, and is therefore, explicitly speaking, a construct (Watt and van den Berg, 1995: 11-12).

philosophical debates for centuries” (Demaria *et al.*, 2013: 19) made evident by the construct’s⁵ origins: “the critical thinking of Marx (1859), Jevons (1865), Soddy (1922, 1926), Polanyi (1944), Illich (1973), Schumacher (1973) and many others” (Andreoni and Galmarini, 2013: 65) including the oft-cited Meadows report to the Club of Rome: *The limits to growth* (Demaria, Schneider, Sekulova and Martínez-Alier, 2013: 192). These and other authors write from varied backgrounds including “ecological economics, social ecology [and] economic anthropology” (Martinez-Alier, 2012: 61).

The term ‘décroissance’, from which degrowth is literally translated (Demaria *et al.*, 2013: 192), originated after a series of works by Nicholas Georgescu-Roegen were translated and consolidated into a French book published in 1994 (Kerschner, 2010: 544; Latouche, 2010b: 519; Martinez-Alier, 2012: 61). However, it was in 2004, with the publication of the newspaper titled *Décroissance*, that this term emerged in the public sphere and gathered a modest following (Flipo, 2008: 24). Only in 2008 at the first Degrowth conference in Paris was degrowth ‘officially’ introduced in English signifying the beginnings of an international research agenda (Demaria *et al.*, 2013: 195). Nowadays, it is a term used to describe the meeting point of social movements, critical thought, political activism and academic research aimed at achieving ecological, social and economic sustainability (Andreoni and Galmarini, 2013; Bonaiuti, 2011; Demaria *et al.*, 2013; Latouche, 2010a; Martinez-Alier *et al.*, 2010: 1742).

Like sustainable development, the degrowth construct is also anchored to an intersection of the environment, society and economy. Likewise, within the construct and these intersecting areas is a language that states its reasons for existence and shapes its actions to achieve sustainability. Such actions are also diverse and numerous; institutions or individuals seeking sustainability as an outcome could use this construct’s actions as the foundation for programmes.

Using the analogy to sum up, each doctor has a different history and background that influenced their treatment methods and ‘language’ they use. Although both doctors claim to be able to

⁵ Like sustainable development, degrowth cannot be measured, is more abstract and is therefore, explicitly speaking, also considered a construct (Watt and van den Berg, 1995: 11-12).

beat cancer, neither has been fully successful in the past. Additionally, with their different histories and backgrounds, each could misguide and/or be misinterpreted by the patient wanting to overcome their illness.

1.5 RESEARCH PROBLEM

It is known that sustainability is open to misinterpretation and that this misguides sustainability efforts (Hopwood, Mellor and O'Brien, 2005: 40). It has also been proposed that the many contributions from different paradigms that make up the sustainability paradigm make it difficult to understand (Christen and Schmidt, 2012: 401). Thus, while both degrowth and sustainable development claim to be able to attain sustainability, their languages compound an already complex terrain, making understanding and consequently implementing truly sustainable actions and achieving sustainability increasingly difficult.

The difficult nature of the contributions from different paradigms are conceptualised as quantity- and dimension-related issues. The quantity-related problem is driven by the mass of activities that could be used to target unsustainable behaviours. Here, turning to sustainable development or degrowth constructs for inspiration to underwrite programmes targeting unsustainability, the sheer number of actions could lead to misinterpretation and consequently misguide solutions. That the different research lines are often in dispute and seek different directions underlies the subject of the dimensionality of actions – misinterpretation of one action could lead to misguidance, thereby also making it tough to choose the right action to underwrite interventions.

Another critical concern is the correct mechanism to persuade society to live sustainably (Starke, 2010, 2012, 2013). There exist many different means from a communications background to persuade people to shift towards sustainability inter alia public relations, corporate communications, strategic communications, corporate social responsibility, green marketing, sustainable marketing, etc. However, this study is purely concerned with social marketing, which is briefly defined as an adaptation of commercial marketing technology used to influence behaviours that benefit society as a whole (Kotler, Roberto and Lee, 2002: 8). Because certain behaviours can be problematic to society, social marketing is a means of influencing behaviours that uses a strategic mind-set to develop long-term programmes (Eagle, Dahl, Hill, Bird, Spotswood and Tapp, 2013: 116). It is therefore perceived to be well

positioned to wrestle the sustainability challenge (Gordon *et al.*, 2011: 151; Peattie and Peattie, 2011: 345). However, the crux of the matter is that social marketers find sustainability a decidedly complex topic (Brennan and Binney, 2008: 261 Conroy and Allen, 2010: 195; Frame and Newton, 2007: 578). Moreover, social marketers have had limited success in promoting aspects of sustainability (e.g. Conroy and Allen, 2010: 195; Peattie and Peattie, 2011: 355). The possible unclear and confusing language of sustainability, and specifically two of the key constructs within the sustainability paradigm, could be compounding social marketing's limited success.

For social marketing interventions aimed at influencing behaviours to improve the probability of attaining sustainability to work, they need to address the problem with the right actions – but what are the right actions (Gordon, Carrigan and Hastings. 2011: 149; Peattie and Peattie, 2011: 345)? Additionally, while previous research has tried “to surmount arbitrariness and reinforce [sustainability's] action-guiding power” by developing a formal framework for conceptions of sustainability (Christen and Schmidt, 2012: 401), the question as to how social marketers can reduce the misinterpretation and misguidance of the multitude and dimensionality of different actions from constructs operating in the sustainability paradigm is still to be answered. These are critical questions to which answers are lacking in academic literature. To fill this gap, it is predicted that investigating two constructs – sustainable development and degrowth – functioning within the sustainability paradigm will determine a set of common actions that constitute a simplified language that can be used to reduce misinterpretation and misguidance and ultimately act as foundations for social marketing programmes aimed at increasing the chances⁶ of attaining sustainability.

Thus, at the broadest level, and in response to the principle concerns of quantity and dimensionality, this research's intention is to simplify sustainability's problematic language by deconstructing and analysing sustainable development and degrowth constructs, and in the process uncover a simpler language with reduced misinterpretation and misguidance that can be used in social marketing programmes to transition toward a sustainable society. This goal contains within it two fundamental and distinct, yet overlapping processes:

1. Applying nomological networks

⁶ The researcher specifically uses the words ‘increase the chances’ because this research in no way claims to be able to achieve sustainability as a whole.

An application of nomological networks provides the framework for deconstructing and mapping degrowth and sustainable development constructs. Breaking down the two constructs according to the elements of a nomological network provides the structure for a thematic analysis of the two construct's literature to take place. The purpose of this exercise is to provide a platform for analysing and comparing the constructs to find similarities and differences in their content. Mapping each construct's nomological networks isolates certain mutual actions that could make up a simpler language to increase the likelihood of achieving sustainability within a social marketing framework.

2. Applying social marketing's key characteristics and underpinning theories.

The lens through which the researcher views the existing literature on sustainable development and degrowth is formulated by what is broadly termed here a theory of social marketing. Firstly, some of social marketing's key characteristics establish criteria through which only certain actions from sustainable development and degrowth could pass. This means that actions are filtered according to their ability to be included in social marketing programmes, making certain that actions are relevant to social marketers. Secondly, how critical thinking, systems thinking, value and relational thinking as theoretical paradigms underpinning social marketing foster successful programmes is explained and related to overlapping actions. The discussion part demonstrates why overlapping actions could reduce misinterpretation and misguidance and be more successful than others; relating theories to commonalities allow the guidelines for developing social marketing programmes based on overlapping actions to emerge. Lastly, theories underpinning social marketing are employed to determine which planning processes have greater potential to promote sustainable actions. Therefore, social marketing's theory is one of the parts used to develop a simplified language suitable for social marketing programmes that mitigates misinterpretation and misguidance, as well as identifying a process/processes with which social marketers can go about designing better programmes for sustainability.

Keeping in mind the research problem, specific research objectives have been derived and an accompanying brief description of the methods to achieve them follow:

1. Map the basic nomological networks of sustainable degrowth and sustainable development.

This is done by reviewing the literature of these two constructs and thematically extracting pertinent data that correspond to the internal elements of a nomological network.

2. Compare the basic networks to identify overlapping areas.

Comparing each construct's literature according to the internal elements as mapped out above achieves this objective.

3. Identify proposed actions common to both constructs that can be used within a social marketing framework.

By first collating all actions from the degrowth construct, actions that were similar in sustainable development's literature could be deductively searched for.

4. Make recommendations for social marketing programmes for the common actions guided by the theories underpinning social marketing.

Firstly, what makes social marketing programmes successful were extracted from each of the four paradigms underpinning social marketing. Secondly, these characteristics were associated with overlapping actions to establish how commonalities between actions could equate to better social marketing programmes. Lastly, these correlations were used to discuss the extent to which actions and their commonalities can reduce misinterpretation and misguidance and be part of more successful social marketing programmes.

5. Analyse existing social marketing processes and if necessary develop an appropriate social marketing process specifically intended for social marketers to tackle the sustainability challenge.

This objective was achieved by reviewing some of the social marketing processes and analysing them according to whether they contain the four theories underpinning social marketing and could be useful in the sustainability context as identified through this research.

1.6 CHAPTER OVERVIEWS

Chapter 2: Theoretical foundation – Social marketing

As the theoretical lens for this research, this chapter describes social marketing in detail. Since actions that are required to increase the likelihood of achieving sustainability need to be oriented around influencing behaviours, Chapter Two provides the key characteristics that filter actions from degrowth and sustainable development constructs according to whether their actions can influence behaviours. The theories underpinning social marketing as well as the some of the commonly used social marketing planning processes are also explained in this chapter.

Chapter 3: Research methodology

Chapter Three elucidates the research process in its entirety from the problem statement right through to how the research was performed. As the research required an analysis technique to deconstruct the two constructs, the chapter discusses a specific application of a nomological networks and how it is performed within this research.

Chapter 4: Analysis

Deconstructing and analysing degrowth and sustainable development's literature reveals a tentatively simpler language on which social marketing programmes could be based. Nomological maps are constructed to show the affiliation between elements/variables and uncover like actions that, by passing through certain social marketing criteria, depict why they can be included in social marketing interventions.

Chapter 5: Comparative discussion of overlapping actions

A discussing of the similarities and differences in literature between the actions common to both constructs is furnished in this chapter. It concludes with an overview of the extent to which actions overlap, which paves the way for the application of social marketing theory to guide social marketing programmes.

Chapter 6: Social marketing's paradigms applied to overlapping actions to guide social marketing programmes

Coinciding actions that were identified by mapping degrowth and sustainable development's nomological networks are related to social marketing theory in this chapter. The

recommendations from these connections are framed as guidelines as to how overlapping actions can reduce misinterpretation and misguidance and how they underwrite more successful programmes targeting sustainability.

Chapter 7: Analysing social marketing planning processes

All social marketing planning processes are again presented and then unpacked with the aim of finding a process that is most appropriate to the sustainability paradigm and that incorporates all four elements of social marketing theory. In the end one process was found to be the most applicable option.

Chapter 8: Key contributions

Some pivotal contributions that this research makes to social marketing processes, the theoretical paradigms underpinning social marketing, the methodology of applying nomological networks and sustainability are specified in this chapter.

Chapter 9: Limitations, recommendations for future research and final conclusions

Limiting factors and potential areas for future research are put forward. Structured by the research objectives, this chapter concludes the thesis by highlighting research outcomes obtained by mapping, analysing, comparing, and discussing the nomological networks and applying the social marketing framework. The chapter ends with a brief synopsis and final conclusion to the research.

CHAPTER 2: THEORETICAL FOUNDATION – SOCIAL MARKETING

2.1 CHAPTER OVERVIEW

After introducing the need to examine social marketing theory, the chapter turns to social marketing's key characteristics, which outline the basic criteria that were used to construct the filter to extract actions from the analysed constructs that could be used to underpin social marketing programmes. The outcome of this process is ultimately reflected in the set of actions that arose from the mapping of degrowth and sustainable development's nomological networks, and thus the shared actions that are used as foundations for the recommendations for social marketers whose goal is to increase sustainability. Next, as they form the theoretical lens through which the researcher views the sustainability issue, critical thinking, systems thinking, value and relational thinking as foundational pillars of social marketing are examined. These provide a theoretical view on how successful social marketing programmes are built and are later used as the underlying theoretical paradigms to justify recommendations pertaining to how common actions could power successful programmes. Thereafter, social marketing planning processes are portrayed to show the different processes that could be used to plan the social marketing programmes this research identifies. Towards the end of the chapter, social marketing is coupled with sustainability presenting some of social marketing's successes and failures, the difficult nature of sustainability for social marketers and that sustainable development and degrowth actions are not being/have not been successfully promoted. This reiterates and brings the chapter to the conclusion that a simpler language could improve the likelihood of achieving sustainability by means of social marketing programmes.

2.2 INTRODUCTION

Social marketing is widely accepted as “an innovative approach to social change” (Andreasen, 2003: 293). While sustainability is a considerable challenge for social marketers (Brennan and Binney, 2008; Frame and Newton, 2007; Hastings and Domegan, 2014), social marketing is considered a fitting means to battle the distressing nature of current unsustainable living patterns (Gordon *et al.*, 2011: 151; Hastings and Domegan, 2014: 221; Peattie and Peattie, 2011: 345), which calls for changes of great magnitude at every echelon of society (Starke 2010, 2012, 2013; UN, 2015; UNEP, 2011). Since they intend to achieve sustainability (R&D, 2010; UNEP, 2011), degrowth and sustainable development are two constructs from which social marketers could draw inspiration for their programmes. Yet, as has been outlined in the

previous chapter, the interpretable and misleading nature of these constructs, which up until now could be a reason for sustainability's unsuccessful attempts, may also misguide social marketers and therefore stunt a sustainable society from flourishing. More explicitly, the size and dimensionality of degrowth and sustainable development's languages could be making it difficult for social marketers to develop successful interventions aimed at increasing sustainability. Therefore, for social marketers to influence behaviours to increase the likelihood of achieving sustainability, a simple, common language that reduces misinterpretation and misguidance grounded in these two constructs could be helpful. The following sections begin unpacking social marketing and bring to the fore the relevant criteria and theories that were used to view the sustainability challenge i.e. delineate the social marketing lens through which this research was explored.

2.3 DEFINING SOCIAL MARKETING

According to the International Social Marketing Association (ISMA, 2016: paragraph 1)

“[s]ocial marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviours that benefit individuals and communities for the greater social good. Social Marketing practice is guided by ethical principles. It seeks to integrate research, best practice, theory, audience and partnership insight, to inform the delivery of competition sensitive and segmented social change programmes that are effective, efficient, equitable and sustainable”

Social marketing interventions are designed for the greater social good and not to profit private interests (Andreasen, 1994: 110). It is about influencing behaviours and using “data, evidence and insight to create policy, systems, environments, products and services that make the positive social choice the easy, desired and valued choice” (French, 2013: 293). What is also pertinent to the definition is that programmes are guided by ethics, informed by integrated research and theory and maintains sustainability as a defining element. These crucial characteristics will be discussed in greater detail after a brief history of social marketing.

2.4 BRIEF HISTORY OF SOCIAL MARKETING

Originating in the late 1960s (Andreasen, 2002: 3; MacFadyen, Stead and Hastings, 2003: 696), the concept of social marketing was developed in response to criticisms that marketing was

narrow-minded, involved in only the selling of goods and services (Kotler and Levy: 1969: 10). It was after this juncture that Kotler and Zaltman (1971) founded the social marketing concept applying marketing as a ‘technology’ to other areas such as social issues (Kotler and Zaltman, 1971: 3).

In its lifetime it has aggregated behaviour change techniques and strategies from a plethora of disciplines, some of which include “anthropology, social psychology, design, public health, behavioural economics and persuasive technology” (Weinreich, 2011: 4) as well as communication (Kotler *et al.*, 2002: 7), sociology and psychology (Eagle *et al.*, 2013: 116). Social marketing plans have been used to influence behaviour in a multitude of areas. Some of the major areas are “health improvement, disease prevention, accident or crime reduction or environmental responsibility” (Eagle *et al.*, 2013: 3).

2.5 KEY CHARACTERISTICS OF SOCIAL MARKETING – CRITERIA FOR FILTERING ACTIONS

Some characteristics of social marketing, as identified by other researchers, are bulleted and discussed below. The first three bullet points represent the criteria that were used in the pre-analysis phase of the research as a filter to extract actions that could increase the possibility of realising a sustainable society. These are expanded on below. The other two are not used because they could not be employed as filters.

- The ultimate goal is to influence behaviour (Andreasen, 1994: 110; Spotswood, French, Tapp and Stead, 2012: 168-169).
- Behaviour influence can be voluntary (Kotler *et al.*, 2002: 5) and/or involuntary (Andreasen, 2006: 128; Eagle *et al.*, 2013: 68; Hoek and Jones, 2011: 32).
- Programmes should create individual and societal value (French and Gordon, 2015: 23).
- Programmes have a long-term inclination (Kotler and Andreasen, 1996: 397).
- Social marketing uses marketing tools and techniques such as research, maintaining a customer orientation, segmentation, targeting and positioning (Grier and Bryant, 2005: 321; Lotenberg, Schechter and Strand, 2011: 136).

2.5.1 The ultimate goal is to influence behaviour

Social marketing is different to commercial marketing, whose purpose is increasing sales and

profit (French and Gordon, 2015: 399). Influencing behaviour is what sets the discipline apart from other marketing disciplines (Andreasen, 1994: 110; Kotler *et al.*, 2002: 10). Although social marketing's ultimate goal is to influence behaviours, ideas, attitudes, beliefs and education can be necessary precursors to behaviours (Spotswood *et al.*, 2012: 168-169). Therefore, social marketing deals with all of the aspects that culminate in influencing behaviours including interventions to change attitudes, beliefs, ideas etc. that is part of a broader strategic plan to influence behaviours (Andreasen, 1994: 110; Spotswood *et al.*, 2012: 168-169).

Implicit in this bottom line is that campaigns or programmes do not necessarily need to *change* behaviour; some social marketing efforts ask the target audience to not behave (Andreasen, 1994: 111). An example supporting this argument would be the 'Don't Drink and Drive' programme in South Africa, whose goal is for people *not* to drink and drive. Audiences can be targeted to "accept a new behaviour, reject a potential behaviour, modify a current behaviour, or abandon an old behaviour (Kotler *et al.*, 2002: 5).

2.5.2 Behaviour influence can be voluntary and/or involuntary: downstream, midstream and upstream measures

Downstream measures

Taking the traditional social marketing approach, downstream measures seek to influence behaviours voluntarily i.e. behaviours are promoted and not coerced through legal, economic or other forms of influence (Hoek and Jones, 2011: 32; Kotler *et al.*, 2002: 5). People have the choice whether to accept, reject, modify or abandon behaviour. An example of a downstream intervention is one that tries to encourage people through traditional techniques such as messages via different mediums to travel by public transport and bicycles to lessen congestion in the city.

Midstream measures

Engaging at the midstream is seen by Russell-Bennet, Wood and Previte (2013: 224-225) as an approach that uses influential individuals and groups that persuade and/or are actively involved in the behaviour-change process. Thus, midstream efforts seek to influence behaviours through influential people, groups or organisations that are close to an individual (e.g. Wood, 2016a). Remaining with the example above, a midstream intervention is one that

employs influential people, groups or organisations to try to persuade people (for example through information about their personal experience) or be directly involved in the process of influencing behaviours (for example accompanying them or showing them how to use a transport application) to use alternative transport.

Upstream measures

“Upstream influences on behaviour change are external factors such as legislation, policy or environmental factors that may facilitate, or act as barriers to, desired behaviour change” (Eagle *et al.*, 2013: 68). Social marketing’s move upstream is owed to its myopic concentration on influencing voluntary behaviours (Kennedy, Kemper and Parsons, 2018), which saw relatively little success in the past (e.g. Gordon, 2013; Wymer, 2011). Instead of targeting people and their voluntary behaviours, social marketers, “with the aim of altering environments to support and promote behaviour change” (Hoek and Jones, 2011: 32), now also target private and public institutions to develop laws, regulations etc. that coerce people into behaving in a certain way (Eagle *et al.*, 2013: 68-69, Weinreich, 2011: 93). In the example above, an upstream intervention would be a law limiting only certain cars, taxis, buses and delivery vans in the city centre such that it coerced people into seeking alternative transport.

Integrated approach

Several authors call for, depending on the situation, an integrated approach combining upstream, midstream and downstream strategies (Andreasen, 2006: 128; Hastings and Domegan, 2014: 11; Hoek and Jones, 2011: 41). Literature has shown that unique situations require different approaches and that primary research plays a key role in determining the extent of upstream, midstream and downstream measures required (e.g. French *et al.*, 2011). Using the examples before, an integrated approach could subsidise public transport tickets and bicycle prices (upstream measures), involve groups or organisations to support the target audience (midstream) and persuade commuters to use public transportation and bicycles (downstream).

2.5.3 Programmes should create individual and societal value

Contained within its definition, social marketing is about generating benefits for individuals and society. Beneficiaries can be the target audience themselves, other sectors of society or multiple combinations thereof (Jutbring, 2018: 250). This is where social marketing also

diverges from traditional marketing, where the chief beneficiary is the corporate stakeholder (Kotler *et al.*, 2002: 8).

2.5.4 Programmes have a long-term inclination

Because influencing behaviours typically takes repeated efforts from social marketers, interventions should be implemented over longer periods of time (Eagle *et al.*, 2013: 40; Kotler and Andreasen, 1996: 397). Consider, for example, smoking. Once a person has quit smoking, they need to be constantly reminded not to start again.

2.5.5 Social marketing uses marketing tools and techniques

Research, segmentation, targeting, positioning and branding are just some of the techniques and tools borrowed from marketing (e.g. Weinreich, 2011). Some of these tools and techniques will be explored in the social marketing planning process.

2.5.6 Summary of social marketing's key characteristics

Social marketing's first three key characteristics demonstrated that marketing programmes seek to voluntarily and/or involuntarily influence behaviours that create value for individuals, groups and/or society as a whole. These are the social marketing criteria used in this research to filter actions in the sampling and pre-analysis process. Other characteristics include a long-term timeframe and the liberal use of marketing practice.

As they form part of the social marketing lens through which this research was viewed, as well as the foundation for analyses, discussion and recommendations, the paradigms that offer theoretical input to social marketing are elaborated on in detail below.

2.6 THEORETICAL PARADIGMS UNDERPINNING SOCIAL MARKETING: CRITICAL THINKING, SYSTEMS THINKING, VALUE AND RELATIONAL THINKING

Seeing as the sustainability challenge is highly complex for social marketers (Brennan and Binney, 2008; Hastings and Domegan, 2014), authors propose that social marketing programmes addressing it will more likely be successful by maintaining a critical perspective (French and Gordon, 2015: 394; Hastings and Domegan, 2014: 245) and creating or co-creating value using systems and relational thinking (Brennan, Previte and Fry, 2016: 225; Domegan *et al.*, 2016: 1125; French and Gordon, 2015: 185; Hastings and Domegan, 2014: 269). The

following sections detail these paradigms respectively and in the process outline how these paradigms are integral to successful social marketing programmes. Such characteristics for success will later be applied to overlapping actions to detail how and why the extent to which actions that overlap could underwrite more successful programmes.

2.6.1 Critical thinking

2.6.1.1 Introduction

The sinister aspect of marketing and its impact on sustainability has increasingly come under scrutiny (e.g. Hastings and Domegan, 2014: Chapter 8). In general, marketing has received a bad reputation not only in terms of outcomes, but also how it achieves these outcomes (French, Russell-Bennett and Mulcahy, 2017: 285-286; Saren, 2007). For society to live sustainably within the earth's limits, marketing and social marketing will need to consider these anomalies (Peattie and Peattie, 2003: 261) by applying critical thinking to designing social marketing programmes (Gordon *et al.*, 2011: 154-155). The following section begins by framing the critical thinking discussion more broadly within the field of ethics. After this, critical thinking in social marketing is introduced and defined, and then critical marketing, critical debate and critical reflexivity, and how these are applied in critical social marketing to facilitate critical thinking, are explicitly engaged with.

2.6.1.2 Ethics

The way people behave directly and indirectly, intentionally and unintentionally impacts individuals, groups and society (Hastings and Domegan, 2014: 252). Consider a hypothetical example of a person who buys apples from a local organic farm geared towards making their operations more sustainable. Not only does purchasing from the farmer support a farming method that regenerates the environment, it also contributes to uplifting social and economic aspects in the following ways. The farm's production methods increase counts of all living species. It employs people from the local community, and because the farmer pays above-standard wages, employees can afford a high living standard. Eating organic food has positive health benefits too. By serving the local community, money circulates within the local economy and increases the local government's spending capacity to improve roads etc. The farmer buys all his/her equipment and inputs from local dealers and they in turn support the farmer by signing up for a weekly delivery box. From this example it becomes evident that with a simple action like buying apples, a variety of positive impacts can be registered.

However, as good as it may seem, it could have negative repercussions. Organic apples may be unaffordable for poorer echelons, forcing them to eat lesser quality produce that could be harmful to the environment and themselves. As a result of efforts to promote organic consumption, psychological effects and frustration may arise from now knowing the amount of chemicals that are used to produce conventional products. The high living standards that employees now maintain could be harmful to the environment, as these employees consume additional resources. These are only just some of the issues. For social marketing programmes promoting increases in organic apple production and consumption, both positive and negative aspects need to be considered. This is where ethics can assist.

As exemplified above, social marketers are confronted with a multitude of ethical issues (Brenkert, 2002), which exist throughout the social marketing planning process (e.g. Lee and Kotler, 2016). In terms of sustainability, social marketers face an enormous ethical challenge when considering the environmental impacts of reducing poverty and inequality (e.g. Brennan and Binney, 2008). Therefore, “social marketers need to consider ethics in all that they do” (French and Gordon, 2015: 41). With voluminous issues to consider, social marketers apply ethics to design programmes that as best as possible question the means, processes and ends of influencing behaviours (Brenkert, 2002: 14). As a summary of different ethical theories, French and Gordon (2015: 41) suggest that,

“a more holistic perspective may be to recognise the relevance of each of these [teleology, deontology, relativist and social contracts] ethical frameworks to build a more complete hybrid model of social marketing ethics that puts the focus on doing things with good intentions, but also being aware of the consequences of actions, and in doing so recognising the diversity of views and interpretations of ethical issues between individuals, social groups, organisations and cultures. Engaging in systems thinking, critical thinking and reflexive practice can help us adopt this bigger picture and multi-perspective view”.

Because social marketing deals with influencing behaviours that have society-wide effects, it is vital that social marketers develop a very broad understanding of the variety of ways social marketing programmes could affect individuals and society (Hastings and Domegan, 2014: 252). Discussed forthwith, as suggested by French and Gordon (2015: 41), critical thinking (and its link to systems thinking) and critical reflexivity provide crucial information for social

marketers to understand the multiple standpoints, make more informed ethical decisions and ultimately design more beneficial social marketing programmes.

2.6.1.3 Critical thinking in social marketing: an introduction to critical social marketing

Social marketing programmes applying conventional marketing wisdom have been judged to be uncritical in several ways: programmes endure underlying causal factors (e.g. Brenkert, 2002: 15; Gordon and Gurrieri, 2014: 262; Tadajewski and Brownlie, 2008: 8-9; Wymer, 2011: 25-26) reproduce unintended consequences (Gordon, 2011: 90); and register disagreeable effects on society's aggregate wellbeing (Brennan and Binney, 2008: 261; French and Gordon, 2015: 402; Gordon and Gurrieri, 2014: 267-268). The main reason given for these negative outcomes and processes to achieve them was that commercial marketing's pervasion in conventional social marketing programmes did not provide a comprehensive framework for achieving positive social change (Gordon, 2011). To ratify this, Gordon (2011: 89) proposed a definition of critical social marketing:

“Critical research from a marketing perspective on the impact commercial marketing has upon society, to build the evidence base, inform upstream efforts such as advocacy, policy and regulation, and inform the development of downstream social marketing interventions”.

In the same paper, Gordon (2011: 89) formalised the notion of a critical social marketing framework and demonstrated its utility not only in critically decomposing commercial marketing, but also in nurturing social marketing solutions to tackle marketing-created issues. Critical social marketing was therefore viewed as a means to overcome the narrow-minded approaches associated with the more traditional social marketing concept and provide a more appropriate framework (Gordon and Gurrieri, 2014: 263). Since then, other authors have extended the area of application of critical social marketing, which lead to the definition proposed by French and Gordon (2015: 394) who see critical social marketing as a “critical reflection on competitive forces, dominant concepts and ideas, and the role and influence of actors in the social marketing process”. In correspondence with the three parts of this definition, the next sections discuss the underpinnings of critical social marketing by reviewing the interrelated literature on critical marketing (critical reflection on competitive forces), critical

debate (dominant concepts and ideas) and critical reflexivity (the role and influence of actors in the social marketing process).

Critical marketing: overview and scope

Since the traditional marketing function has been fundamentally associated with generating profits (Gordon *et al.*, 2011: 154; Hastings and Saren, 2003: 313), it has been criticised for maintaining little capacity to critically engage with complex social issues and for not being able to more broadly deliver wellbeing to society (e.g. Gordon, 2011: 89; Hastings and Domegan, 2014: 246; Kilbourne, McDonagh and Prothero, 1997: 5-6). Saren (2011: 97) contends that these negative outcomes are due to a dearth of critiques of marketing i.e. the absence of critical marketing. Critical marketing is essentially a critique of the marketing function as a whole (Gordon *et al.*, 2011: 154; Saren, 2011: 89-93), which can be performed at varying levels.

1. On one level, critical marketing is about critically analysing the effect marketing has on society and how marketing activities and practices realise these outcomes (e.g. Hastings and Saren, 2003: 313; Tadajewski and Brownlie, 2008: 10).
2. On another level, critical marketing is a self-reflection of the marketing function, which looks at marketing's assumptions (Saren, 2011: 89-93), ontologies, epistemologies and methodologies (Gordon and Gurrieri, 2014: 261). It could be seen as a critique or debate about why marketing functions the way it does by analysing its theoretical underpinnings (e.g. Gordon, 2011: 90) and/or processes (e.g. Hastings and Saren, 2003: 313). For example, by employing critical theory and critical marketing in their evaluations, Gurrieri, Previte and Brace-Govan (2012: 130) demonstrate that poor social marketing solutions have been linked to neoliberal underpinnings, which emphasise individual rather than policy level responsibility.
3. By seeking to locate marketing within underlying ideologies (Saren, 2011: 89-93), systems, paradigms (Gordon *et al.*, 2011: 154) and institutions (Dholakia, 2012: 221), on a deeper level critical marketing looks to understand the forces that *allow* marketing to function the way it does i.e. establish a direct connection between marketing and the forces (McDonagh and Prothero, 2014: 1198). Analyses at this level try to uncover “the roots of the observed phenomena” (Dholakia, 2012: 221) or “antecedents and contexts” (Saren, 2011: 95-96) that *support* marketing to primarily focus on profit creation and ignore the general wellbeing of society (French and Gordon, 2015: 402-403).

4. While French and Gordon (2015: 402) also make the connection between underlying “institutions, systems and forces”, marketing and social issues, they imply that critical theory can be utilised at the most abstract level to evaluate these underlying factors as causes of problems in itself, and not necessarily via the marketing function e.g. that forces, institutions and systems in themselves underpin problems.

The goal of critical marketing

To overcome marketing's profit-centred defect, transforming the marketing function into one that can achieve social good is an essential component of critical marketing (Dholakia, 2012: 221; Fuat Firat, 2009: 833; Gordon *et al.*, 2011: 155; Lefebvre, 2011: 65; Saren, 2011: 103). Critical marketing analyses could therefore provide “guidance for regulation, control and correction of the market” when wellbeing is jeopardised (Gordon *et al.*, 2011: 154). Scrutinising marketing's profit-driven principle and the institutions, functions etc. behind the principle propagates transformational suggestions (Kilbourne *et al.*, 1997: 19), which could be used “to develop alternative frameworks” (Willmott, 2006: 34) and “promote wider understanding and trigger actions that are resistive, emancipatory, or revolutionary” (Dholakia, 2012: 221) to tackle far-reaching issues.

For example, critical marketing may uncover that the marketing function of a certain business promotes unnecessarily high volumes of product waste that negatively impact a poor community. Critical analyses may take the form of critically examining the marketing processes and activities used to stimulate hyperconsumption and underlying assumptions, methodologies etc. used in their consumer research. It may even link the broader notions of capitalism and the free market system that underly and concede this irregularity for the sake of making profit. Critical examinations may also highlight the ideological subversion of the poor's viewpoints, which gives the poor minimal democratic rights to tackle such a problem. Critical marketers may propose to transform the marketing function of such a business to market their products so that they can be more easily reused and have a longer lifespan. Engaging more broadly with the institutional forces that shape business decisions to alter the factors that cause the problem and/or develop a guiding mechanism to regulate and adjust the market, by means of taxes and policies for example, may be another activity for critical marketers. Moreover, critical marketers could seek more democratic institutions that give these people a platform to tackle problems as such.

Where social marketing is proposed to align with the reformist approach exalted by Dholakia (2012: 221), Kilbourne *et al.* (1997: 19) and Willmott (2006: 34) as one of the more appropriate means to achieve wellbeing and sustainability, applying critical marketing to social marketing contexts is highly relevant (Gordon, 2011) and concerns the first two parts of the definition of critical social marketing presented earlier: “critical reflection on competitive forces [and] dominant concepts and ideas” (French and Gordon, 2015: 394). The following sections elaborate on these respectively and show how borrowing the multi-level perspective from critical marketing affords critical social marketers an added perspective that assists them to create better interventions that overcome anomalies (Gordon, 2011).

Critical marketing and competitive analysis in critical social marketing

Problems to be addressed by social marketers are usually typified by a deficiency in what can collectively be termed wellbeing (e.g. poor health, decaying environment, high disease rate etc.). In planning and designing social marketing programmes to address this deficiency, social marketers are called upon to determine and analyse the variables that undermine wellbeing as part of the social marketing planning process (e.g. Eagle *et al.*, 2013: 42; French and Gordon, 2015: 358; Lee and Kotler, 2016: 104; Weinreich, 2011: 23). When marketing is one of the variables that cause a problem, it is seen as a competitive force in social marketing contexts requiring critical analysis i.e. the application of critical marketing’s first layer (French and Gordon, 2015: 399; Gordon *et al.*, 2011: 154; Hastings and Domegan, 2014: 214). For example, some of the obvious issues social marketing has applied critical marketing to are tobacco and alcohol use (e.g. Hoek, 2011): marketing is one of the chief causes of the destructive behaviours the use of these items brings about (Gordon, 2011: 87; Hastings and Saren, 2003: 313). Treating the marketing strategies of the companies producing and selling these products as competitive forces frames the critical analyses in such a way that prevailing research is used to develop and guide programmes to counteract their harmful ventures (Gordon, 2011: 86-89).

At the next level of critical marketing investigations, and also part of the broader competitive analysis, applying critical marketing in social marketing situations facilitates an examination of the “underlying socio-economic mechanisms, structures and relations” to which marketing is connected (Saren, 2011: 96). For example, McDonagh and Prothero (2014: 1198) argue that marketing as a concept is merely embedded within dominant macro-level forces that govern the “dominant social paradigm” in which society operates. Marketing is therefore contingent to such forces, such as capitalism and neoliberalism, which essentially authorise marketing to

seek profits ahead of social good (Fuat Firat, 2009: 833; Tadajewski and Brownlie, 2008: 8). For instance, critical marketing research revealed that weak regulatory systems pose little control over dubious marketing practices that promote heavy drinking and cause alcohol-related health problems in the developing world (Farrel and Gordon, 2012: 139-141). Such insights were used to discuss the social marketing implications and how social marketing programmes could be more effective (Farrel and Gordon, 2012: 139-140). In a sustainability context, Gordon *et al.* (2011: 155) attest that although social marketing programmes might be able to make resource consumption more efficient, meaningful and systemic change will likely be eluded as it would contradict the marketing function's connection to consumer capitalism and the dominant neoliberal ideology found in guiding institutions (such as economic policy). Recognising and acting on these forces that affect the way people behave further assists the social marketer in designing better, more ethical and more successful programmes that produce positive social change (French and Gordon, 2015: 402).

At the most abstract level, problems can be associated with competitive forces that influence behaviours via systems, institutions and other macro forces that are not necessarily connected to marketing and accentuate problems in themselves (e.g. Pfeiffer, 2004: 79; Duffy, Northey and van Esch, 2017: 336). One example could be the free-market system's privatisation of public assets, which has led to job losses (Tadajewski, 2011). In this case, a macro force in itself was the reason for the cause of unemployment and not its connection to marketing.

All in all, the agenda of critical marketing and competitive analysis is to provide valuable input to social marketing programmes and guide activities to create more beneficial social marketing programmes that invalidate underlying causes (Hoek, 2011: 248; Saren, 2011: 99), mitigate unintended consequences (Gordon and Gurrieri, 2014: 265; Gurrieri *et al.*, 2012: 130); and increase humanity's wellbeing as a whole (French and Gordon, 2015: 229; Gordon, 2011: 89).

Not only do critical social marketers apply critical marketing to identify and reflect on competitive forces, social marketers also critically scrutinise dominant marketing practices, assumptions, methodologies, theories, etc. that permeate social marketing (Gordon, 2011: 90; Hastings and Saren, 2003: 313). The next section deals with this application and looks at the debate about the social marketing concept. It is therefore concerned with the second part of critical social marketing's definition: a critical reflection on "dominant concepts and ideas" (French and Gordon, 2015: 394).

Critical marketing and dominant concepts and ideas: critical debate in social marketing

‘Traditional’ approaches to designing social marketing programmes have been slated for not embracing a more comprehensive marketing perspective (e.g. Gordon and Gurrieri, 2014; Wymer, 2011). These criticisms stem from social marketing’s reductionist adoption of marketing principles, theories, assumptions etc., which together as a framework has been questioned in regards to its capacity to instigate real and necessary changes pertinent to social marketing (e.g. Brenkert, 2002: 15; Brennan and Binney, 2008: 261-264; Tadajewski and Brownlie, 2008: 8-10).

However, as Gordon and Gurrieri (2014: 263) argue, critical social marketers distance themselves from the ‘traditional’ social marketing school, whose lack of critical introspection lies at the heart of the above criticisms. By going beyond traditional approaches, critical social marketing incorporates critical perspectives of marketing and social marketing concepts into its framework (Gordon and Gurrieri, 2014; Spotswood *et al.*, 2012). For example, one of the dominant ideas in marketing, which is connected to a central ideology that pervades society, is that consumption leads to higher quality of life (Kilbourne *et al.*, 1997), satisfies needs, and is performed at one’s own will (Brenkert, 2002: 17). Critical marketing helps marketers to identify that this is not always the case: appraising the different ideas of what constitutes as beneficial or valuable to individuals and society as outcomes of marketing and social marketing is also fundamental, and is where critical perspectives can play an important role (Spotswood *et al.*, 2012: 170; Tadajewski and Brownlie, 2008: 10)

Through critiquing the marketing concept and its undercurrents, critical marketers “challenge and perhaps influence a reshaping of the dominant positivist, managerialist construct of current marketing” (Gordon *et al.*, 2011: 154). By maintaining a wider, critical perspective such examinations of the marketing concept, and therefore social marketing, can be made (Dholakia, 2012: 221). What constitutes as beneficial to individuals and society, how critical thinking is incorporated into social marketing programmes and how to resolve the different conflicts that arise in implementing social marketing programmes, have been rightly questioned (e.g. Spotswood *et al.*, 2012).

Such reproaches about marketing and social marketing have given rise to healthy critical debate of the social marketing concept (e.g. Spotswood *et al.*, 2012). Inward reflexivity in and critiques of marketing and social marketing have matured the social marketing discipline as

well as underpinned the critical social marketing concept (Gordon and Gurrieri, 2014: 273). Critical debate is vital to “facilitate the emergence of a socially progressive model of social marketing” (French and Gordon, 2015: 409) that is “geared towards the amelioration of behavioural and social challenges and focused on value creation, mutualism, social welfare, social justice and social equality” (French and Gordon, 2015: 40). Critical marketing is therefore a project to develop a framework whereby “the focus should be on physical, mental, social and planetary wellbeing” (Hastings and Domegan, 2014: 244).

Critical debate is also associated with determining what constitutes as valuable and beneficial to different counterparts (e.g. Kennedy, 2016: 358). In this debate social marketers need to be cognisant that value is participant determined, i.e. it is “likely to differ and be contested depending on the perspectives of individuals, groups, organisations and institutions involved” (French and Gordon, 2015: 169). Thus, in order to develop effective social marketing change, critical research on target audience values is crucial. What is beneficial to people and society as a whole is also a hotly contested debate; one that social marketers alone would find difficult answering. One of the suggested ways to evaluate what constitutes as beneficial to people and society is to consult diverse and numerous parties (Andreasen, 1995: 31; Brenkert, 2002: 18; Gordon and Gurrieri, 2014: 266) as well as ideas that emanate from sources that are more progressive and/or critical⁷ (Hastings and Domegan, 2014: 220). This would effectively allow for multiple, disparate and progressive/critical perspectives to emerge to be able to critically and ethically justify a programme’s means and ends (French and Gordon, 2015: 41).

To sum this up, by critiquing the foundations of marketing and social marketing concepts, critical social marketers are advancing toward a more progressive model that maintains a greater capacity to deliver beneficial social change.

As the third and final arm contributing to the critical social marketing concept, critical reflexivity concerns evaluating “the role and influence of actors in the social marketing process” (French and Gordon, 2015: 394). Separate from critical marketing, critical reflexivity is a tool to reflect on the social marketing concept as well as the role different actors play in developing social marketing programmes (French and Gordon, 2015: 411).

⁷ Intended here as non-traditional or those that do not merely recapitulate business as usual.

Critical reflexivity and its role in critical social marketing

According to Gordon and Gurrieri (2014: 265-268), critical reflexivity in social marketing increases the vigour of critical thinking by engaging in researcher reflexivity, participant reflexivity and other stakeholder reflexivity. Critical reflexivity in these areas compels critical social marketers to reflect on the influence of their own assumptions and identify the role and influence of participants and other stakeholders in interventions respectively (Gordon and Gurrieri, 2014: 264-267). It is regarded as a means to reduce “misinterpretation and bias” in social marketing programmes (French and Gordon, 2015: 271) and a way to design better programmes (McHugh and Domegan, 2018: 137).

Researcher reflexivity

Researcher reflexivity is about critically reflecting on the process of producing research to form better-advised knowledge (Bettany and Woodruffe-Burton, 2009: 663). By practicing researcher reflexivity, critical social marketers recognise that their assumptions, knowledge, approaches, decisions etc. influence the way research is conducted and consequently filters into designing social marketing programmes (Gordon and Gurrieri, 2014: 265). For example, critical social marketers would reflect on the theories used to frame their research design or how they interpreted data (Gordon and Gurrieri, 2014: 266). Since research topics can be viewed differently from multiple researcher angles, it is important to reflect on why one method was chosen over the other (Bettany and Woodruffe-Burton, 2009: 671; Gordon and Gurrieri, 2014: 266). Critical reflexivity therefore leads to better designed social marketing programmes as it proposes that social marketers actively reflect on how their interpretations are constructed and influenced (French and Gordon, 2015: 269; Gordon and Gurrieri, 2014: 265).

Participant reflexivity

Researchers practice participant reflexivity when they facilitate participants involved in primary research to engage in self-reflection in order to look at their viewpoints from a new perspective (Yang, 2015: 453). By doing so, participants “question themselves and their behaviour” (Takhar and Chitakunye, 2012: 913). In critical social marketing scenarios, this would involve participants reflecting on how their behaviours and perceptions are influenced (French and Gordon, 2015: 411; Gordon and Gurrieri, 2014: 266). What this process allows is for researchers and participants to produce information or engage in co-research (Yang, 2015: 453), which in social marketing is about co-discovering value and ultimately using these insights to co-create value (Gordon and Gurrieri, 2014: 266; Hastings and Domegan, 2014:

273). It also promotes empowerment through trust building and identifying various ethical predicaments (Takhar and Chitakunye, 2012). It could therefore be used to calculate what participants really value and ensuring success by co-creating programmes around it.

Other stakeholder reflexivity

Certain stakeholders and their agendas can have a great influence on the production of research and therefore the information on which social marketing programmes could be based (Gordon and Gurrieri, 2014: 267). As Kennedy (2016: 362) puts it “[t]he danger of macro-social marketing becoming a form of social engineering needs to be assessed. This will require critical analysis of social interventions and larger macro-level change to uncover the power differentials and motives of those implementing the change”. This is why Gordon and Gurrieri (2014: 267-268) propose that actors within a social marketing programme reflect on each other’s viewpoints. French and Gordon (2015: 413) suggest that other stakeholder reflexivity would help to foresee likely pitfalls and ways around them, create more fruitful partnerships and in the end, more effective and ethically sound social marketing programmes. For example, urging local government to reflect on the involvement of the United Nations (UN) in social change programmes in their region (for example by reflecting on UN research, frameworks, agenda, etc.) and *vice versa* would likely facilitate greater critical understanding and in turn predict problems and offer solutions to these problems, facilitate better relationships with these stakeholders and in the end, assist in designing more effective social marketing programmes. This would need to be done for all partners involved. The utility of other stakeholder reflexivity is therefore the identification of possible negative outcomes of social marketing that affect people’s wellbeing as well as facilitation of a greater understanding of actors that leads to more effective collaborations and more successful and ethical social marketing programmes.

Summary of critical thinking

To condense the above, since social marketing programmes are not intent on creating profits, critical thinking through critical marketing, critical reflexivity and analyses of competitive forces are employed as a means to inform social marketing programmes. Such a contribution influences the design of social marketing programmes so that they are less likely to reinforce causes and reproduce unintended consequences, and in the long run are more likely to be successful in terms of genuinely improving society’s wellbeing. Thus, to design programmes for sustainability, a critical approach is highly necessary. However, what is also indispensable is looking at problems and designing solutions that take very broad forces into account. The

following description illustrates how systems thinking also contributes to designing more successful programmes and the link between systems and critical thinking.

2.6.2 Systems thinking

Social marketing interventions are characterised by processes of interactions between multiple constituents in what can be generally be called behavioural systems (Brennan *et al.*, 2016: 232). Rather than dissecting individual or groups of variables to inform the design of a social marketing programme in a silo approach, systems thinking is about understanding an interconnecting group of elements that functions as an entire unit or system (Domegan *et al.*, 2016: 1125; Dao Truong, Saunders and Dam Dong, 2018: no page). Elements or variables that make up a system could include “structures, actors, behaviours, motivations, values, activities and actions that have social, cultural, political and psychological characteristics” (Domegan *et al.*, 2016: 1125). Imperative to systems thinking is comprehending behaviours not simply as a series of “cause and effect relationships”, but rather as continuous and networked interactions (French and Gordon, 2015: 194). Analysing these interactions can surface the influential variables exerting force on behaviours (Brennan *et al.*, 2016: 232). Behaviours within systems are highly dynamic: they are the result of multiple causes; and interventions and other variables subject them to intended and unintended consequences (Brennan *et al.*, 2016: 225). Systems thinking can help shed light on both these matters and consequently produce better solutions that encourage transformational instead of incremental change (French and Gordon, 2015: 233) – something that is necessary if sustainability is to be achieved (UNEP, 2011: 14).

To identify and understand the variables, social marketing scholars have shown increasing support for examining the totality of micro, meso, exo, macro and chronosystems (e.g. Brennan *et al.*, 2016; Gordon, 2013: 1527; Wood, 2016b: 109-110). The example of teen drinking as a problem is used to illustrate these levels, which, briefly put, are:

- Microsystem: direct influences on the individual e.g. peers, family, etc. and their influence on teen alcohol consumption;
- Mesosystem: connections between various microsystems e.g. a sports club where teens hang out and drink;
- Exosystem: variables that inadvertently affect the individual and other variables e.g. lack of government capacity to enforce teen drinking laws;
- Macrosystem: broad-level environmental factors that influence all systems such as

morals and norms, socio-political environment, culture, etc. related to teen drinking; and

- Chronosystem: influential changes that occur over a lifetime e.g. drinking perceptions and habits that are formed at a young age influence behaviours over time.

Thinking on systemic levels is therefore a method to interpret how a system's variables surrounding a behaviour influence and interconnect with one another (Brennan *et al.*, 2016: 224; French and Gordon, 2015: 185).

With these sub-systems in mind, the social marketer can develop a comprehensive idea of the problem at hand and identify possible solutions to positively affect it (e.g. Lindridge, MacAskill, Gnich, Eadie and Holme, 2013). The forthcoming paragraphs address how systems thinking can help see problems and develop solutions.

Seeing problems

To understand a problem, systems thinking conceives of an issue as a system, or several systems, of variables that affect behaviours through interacting with and influencing one another at multiple levels (e.g. micro-, meso-, exosystem, etc.) (Brennan *et al.*, 2016: 225; Brychkov and Domegan, 2017: 75; Conroy and Allen, 2010: 195-196). Framing a problem in such a manner in social marketing contexts is envisioned as the foundation for better understanding the complexities of interrelated variables and how they influence behaviours (Domegan *et al.*, 2016: 1139; Lindridge *et al.*, 2013: 1400-1402; May and Previte, 2016: 262;). Therefore, to successfully alter complex behaviours social marketers need to understand how the interaction and influence of variables in multiple layers and systems affect a problem. This is especially applicable when a problem's causal factors are not directly linked to the problem behaviour (Wymer, 2011: 19), for example when poor health is linked to pollutants leaching into farmlands, which are then absorbed by crops, which are then consumed by people whose health is affected.

Vindicating solutions

The holistic and strategic perspective on compound societal issues entrenched within systems thinking is applied to social marketing in order to draft systemic solutions to such problems i.e. to co-ordinate the variables that facilitate broader social change in the long term (Domegan *et*

al., 2016: 1126; Hastings and Domegan, 2014: 269; Kennedy, 2016: 358). More specifically, the multi-storied systems thinking approach affords the strategic design of activities that correct problems, reduce inadvertent outcomes and diminish the possibility of reinforcing any causes (French and Gordon, 2015: 185; Kennedy, 2016: 357). A fundamental cog in the process of developing these solutions is to identify the different and appropriate variables (structures, actors, etc.) that will function in correcting the issue (e.g. Lindridge *et al.*, 2013: 1413-1414; Luca *et al.*, 2016: 1152; May and Previte, 2016: 272; Wood, 2016b: 112). Creating solutions that act on all relevant levels to facilitate behaviours in a holistic manner fosters greater probability to successfully influence behaviours (e.g. Kennedy and Parsons, 2011: 46) and ensure societal wellbeing (French and Gordon, 2015: 185). For example, instead of trying to create a single intervention to persuade a target audience to consume less meat, systems thinking would seek to identify influential variables and shape the entire meat consumption system and related systems in such a way that facilitates people to consume less meat, for example by educating family members and peers, imposing higher taxes on meat products, reshaping the social norm of consuming meat while at the same time subsidising vegetables and fruit so that they become cheap and accessible and promoting vegetarian or vegan diets.

Summary of systems thinking

By being able to uncover the variables that are connected to problems and those that facilitate solutions, thinking in systems in social marketing scenarios aids programme designers to avoid reinforcing underlying causes and inadvertently cause further issues and better deliver wellbeing, thus ultimately creating more successful social marketing programmes.

Critical marketing and the connection to systems thinking

Encouraging social marketers to maintain a comprehensive scope and for influential variables on these different levels to emerge, is where systems thinking connects with critical thinking (Hastings and Domegan, 2014: 246; French and Gordon, 2015: 402). Combining systems and critical thinking helps social marketers identify fundamental causes, underlying forces, and problematic outcomes of marketing as part of systemic processes (French and Gordon, 2015: 402). It is the insights from these critical analyses, that when combined with systems thinking, yield programmes better geared for systemic social change (Gordon *et al.*, 2011: 155; Hastings and Domegan, 2014: 246).

The previous focus on exchange in social marketing contexts pushed the idea that the

underlying capacity to influence behaviours was instilled in the target audience's exchange of benefits for costs, be they tangible or intangible (e.g. Bagozzi, 1975; Lee and Kotler, 2016). However, recent investigations to realise a more holistic viewpoint of the motivation for behaviour in a social marketing framework contend that value supersedes the previous exchange concept so venerated in social marketing⁸ (e.g. French and Gordon, 2015: 155). As Holbrook (2006: 715) puts it, "value serves as the foundation for all effective marketing activity". This is not to say that exchanges are no longer important in social marketing, it is more an orientation to accompany social marketing's inclusion of systems and relational thinking that together can be applied at higher levels of multiple-stakeholder sophistication (Brennan *et al.*, 2016: 221; French and Gordon, 2015: 152; Hastings and Domegan, 2014: 292). The next section introduces the third paradigm underpinning social marketing theory namely value, which is what influencing behaviours in critical and systemic social marketing programmes is founded on (Brychkov and Domegan, 2017: 83; Hastings and Domegan, 2014: 277). Its link to systems thinking is provided towards the end of the section.

2.6.3 Value

As Hastings and Domegan (2014: 270) put it, "value is in the eye of the beholder": it is a subjective perseveration of the importance of something. In marketing academia, value co-creation has come to the fore as a 'revolutionary' idea that could treat marketing not merely as a departmental function, but as an organisational philosophy (Grönroos and Gummerus, 2014: 206). Indeed, a recent definition of marketing includes value as the central objective of the marketing function (AMA, 2013) In social marketing – and other relevant social change fields – the orientation of co-creating value as a means to drive behavioural and social change has seen increased attention (Domegan *et al.*, 2013: 241; French *et al.*, 2017: 281). Value co-creation has also been reflected in social marketing as the mainstay of programmes for social change (e.g. Brychkov and Domegan, 2017: 82-84; French and Gordon, 2015: 151). The progression of value as a concept in social marketing literature is explained by discussing the different conceptualisations of value.

⁸ For a more detailed explanation of value in social marketing see for example Domegan *et al.* (2013), Zainuddin *et al.* (2013).

2.6.3.1 Conceptualisations of value

Value-in-exchange

Value-in-exchange is defined as the utility accrued from exchanging a product or service's benefits for its costs (IGI, 2017). It is deemed a useful concept for comprehending product-associated exchanges (Butler *et al.*, 2016: 146), where involvement is low i.e. where value is passive (French and Gordon, 2015: 170). Value-in-exchange is underwritten by exchange theory, which is based on the idea that individuals, acting out of self-interest, seek to behave in ways that deliver the greatest benefits in exchange for certain costs (Grier and Bryant, 2005: 321; Hastings and Domegan, 2014: 69; Hastings and Saren, 2003: 309; MacFadyen *et al.*, 2003: 700). Interventions involving exchanges therefore try to influence the behaviour of the target audience through exchanges of benefits and costs that satisfy real needs and wants (Hastings and Domegan, 2014: 69; MacFadyen *et al.*, 2003: 700) at least mutually beneficial to the person involved or society i.e. benefits must weigh up to or outweigh costs/barriers (Hastings and Saren, 2003: 309; Kotler and Lee, 2008: 161).

Nevertheless, it is argued that exchange theory is limited in wholly explaining the value participants derive from social marketing propositions (e.g. Domegan *et al.*, 2013: 245; French and Gordon, 2015: 153; Peattie and Peattie, 2003: 368-369). Thus, while exchanges can be present in social marketing programmes, the complexity of social marketing challenges such as sustainability requires a more holistic explanation of value creation. The value-in-use concept was put forward as a possible idea to reach this goal.

Value-in-use

“Value-in-use is the value for customers, created by them during their usage of resources. Value is both created and determined by the customers” (Grönroos and Gummerus, 2014: 209). By virtue of this definition, value-in-use is centred on understanding the creation (or co-creation) of value that is accumulated through the entire process of using a firm's goods and/or services. Thus, rather than accruing value from exchanges of benefits for costs, value-in-use implies that value creation is experiential (Butler *et al.*, 2016: 147). The ramifications for social marketing are a richer understanding of how value is created or co-created when a target audience uses something (usually a service) (Butler *et al.*, 2016: 148; French and Gordon, 2015: 154). Indeed, studies related to services as part of social marketing programmes have

demonstrated this deepened understanding of value creation through experiencing services (e.g. Zainuddin *et al.*, 2013).

Yet, because it is predominantly a service-based understanding of value, which are often, but not necessarily present in social marketing programmes, value-in-use is also taken as a limiting orientation when understanding how value is perceived and created (French and Gordon, 2015: 154-155). Thus, a further concept of value-in-behaviour, one that incorporates and extends the value derived from exchanges and use, has been put forward.

Value-in-behaviour

A newly conceptualised proposition that claims to more inclusively comprehend social marketing scenarios is value-in-behaviour (French and Gordon, 2015: 155). This notion of value was established to overcome the abovementioned limitations in value-in-exchange and value-in-use; and simultaneously to provide a broader conceptualisation of value to accompany the shift to systems social marketing (Butler *et al.*, 2016: 149; French and Gordon, 2015: 155). Whereas value-in-exchange and value-in-use understand exchanges of benefits and costs predominantly in goods and services respectively, value-in-behaviour builds on these two concepts by moving towards understanding the value that is perceived and created by behaving in certain ways inclusive of exchanges and services (French and Gordon, 2015: 155). Thus, this is not to say that value is no longer generated in exchanges and use, it is to add the value of behaving to these concepts (French and Gordon, 2015: 155). Value-in-behaviour understands the correlation between the individual and intricate systems and how value can be perceived and co-created by individuals within these systems (Butler *et al.*, 2016: 149; French and Gordon, 2015: 155).

The above conceptualisations of value showed the progression of value co-creation in social marketing contexts and explained the avenues through which social marketing programmes co-create value: exchanges, use and behaviours. In understanding these different conceptualisations of how value is co-created, social marketers maintain a better understanding of how to co-create such value, and therefore how to design better programmes. The following discussion on the processes of value co-creation shows how value is actually co-created.

2.6.3.2 Processes of value co-creation

Since value is perceived and created by many processes and behaviours across voluminous stakeholders within intricate systems, systems thinking in social marketing has emerged as an appropriate approach to co-create value within and between systems to effectively deal with gruelling and multifaceted social issues (Brychkov and Domegan, 2017: 84; Domegan *et al.*, 2016: 1125-1126; French and Gordon, 2015: 155; Hastings and Domegan, 2014: 283). Thus, when combined with a systems approach, creating or co-creating value is at the heart of successful programmes (Zainuddin *et al.*, 2013). According to both French and Gordon (2015: 171) and Hastings and Domegan (2014: 269), value co-creation is achieved through three interrelated processes: value co-discovery, value co-design and value co-delivery.

Value co-discovery

For programmes to co-create value, social marketers must understand what stakeholders value, how value could be co-created amongst different counterparts and why they value something (Barrutia and Echebarria, 2013: 339; Marques and Domegan, 2011: 50). By embracing dialogue and interacting *with* one another, the mutually participative process of value co-discovery between social marketer and stakeholders allows for a better understanding of the problem and what each stakeholder values, and therefore the foundation of more successful programmes (Domegan *et al.*, 2013: 242; Kennedy, 2016: 358). It has been said that the process of value co-discovery has value in itself as actors become part of the process of creating solutions (Domegan *et al.*, 2013: 242). Since each stakeholder may perceive value in different ways, there are several different dimensions of value that the social marketer could co-discover and base successful programmes on. The following section discusses six (not exhaustive) dimensions of value as provided by French and Gordon (2015: 162-169).

Dimensions of value

Functional value

Related to economic benefits and/or rational choices, functional value is seen as the performance- or quality-related value acquired from consumption (Sheth, Newman and Gross, 1991: 160). Consumption in this sense is self-serving and functions as a means to an end (Holbrook, 2006: 715-716). For example, value is derived from the outcome of improved health from drinking more water. Here improved health is self-serving and drinking more water is a means to an end – health.

Economic value

Related to functional value, yet regarded a separate construct (French and Gordon, 2015: 165), economic value is derived from the cost (in economic terms) paid for something compared to its value (Zauner, Koller and Hatak, 2015: 5). This dimension of value is also self-oriented and serves as a means to achieve an end (Holbrook, 2006: 715-716). For example, economic value could be derived from comparing the economic cost of drinking more water to its improvement on health. Here the cost-benefit ratio is self-oriented, health is the end result and drinking more water is the way to realise it.

Emotional value

Emotional value concerns the “feelings or affective states” that consumption produces (Sweeney and Soutar, 2001: 211). These self-centred consumptions are performed for the value they hold within themselves (Holbrook, 2006: 715-716). For example, the emotional value derived from drinking more water to improve health could include feelings of revitalisation and relief. In this context, emotional value stems from the feeling of being revitalised associated with drinking more water.

Social value

Social value arises from consuming things that could accompany a social setting or interpersonal engagement (Sheth *et al.*, 1991: 161) and for personal empowerment (Hastings and Domegan, 2014: 276). Social value is believed to enrich the self and things are consumed to provide a means to an end (Holbrook, 2006: 715-716). In social marketing however, behaviours are performed for personal or social congruence and/or to inspire others (Hastings and Domegan, 2014: 276; French and Gordon, 2015: 165). For instance, drinking more water to improve one’s health could be done to improve self-esteem, for positive association with a community of healthy people or to shape the behaviours of an unhealthy partner or family member.

Ecological value

Ecological value results from behaving in a way that is perceived to reduce harm on the natural environment (Koller *et al.*, 2011: 1157). Because the other four values mentioned above each have an effect on ecological value (Zauner *et al.*, 2015: 8), ecological value can be performed for the self or others, and as a means to an end or the end itself (Koller *et al.*, 2011: 1157). For example, drinking only more tap water and not from plastic bottles can make a person feel

content and/or that they are behaving in a sustainable way that positively affects the natural environment.

Societal value

This new dimension of value proposed by French and Gordon (2015: 168) is the value that ensues from behaving in ways that benefit society and not for oneself. This additional value dimension allows social marketers to identify values that create a better society (French and Gordon, 2015: 168). For example, not drinking bottled water goes beyond personal health and is done to benefit society in general such as decreasing litter and associated impacts and not supporting companies that extract precious drinking water purely for profit from communities that desperately depend on it (e.g. Morris, 2016).

Any of these dimensions of value can exist and are what will be the foundation of a social marketing programme that takes a people-centric approach i.e. co-discovering what a person/stakeholder values and developing interventions that co-create such value using multilateral collaborations of partners within and amongst systems (Hastings and Domegan, 2014: 283). Once the social marketer has co-discovered value with the target audience, the next phase is to co-design a programme to co-deliver this value.

Value co-design

This part in developing effective social marketing programmes takes what has been co-discovered and designs products, communications and services together with the audience that co-creates value (Dietrich *et al.*, 2016: 44; Domegan *et al.*, 2016: 1137). For example, primary research on off-grid renewable energy production may have indicated that a certain group of individuals prioritise the value of self-empowerment (or social value). The programme and subsequent services, products and communications should therefore be designed in a way that facilitates the co-creation of this value, for example by training the community on how to build and maintain their own off-grid renewable energy facility rather than just building one for them.

Value co-delivery

On one level, the final process in co-creating value with a target audience means their active involvement in delivering a social marketing programme (French and Gordon, 2015: 174). Such engagement could mean that the target audience themselves are service providers or

communication agents. On another, more complex level, because value is created for and dependent upon each member engaged in the process (Domegan, 2008: 137; Hastings and Domegan, 2014: 277), value co-delivery is about orchestrating networks of relationships amongst a system's variables to co-deliver value to all partners (Domegan *et al.*, 2013: 244) i.e. taking a systems approach. Linking this to large-scale social change, the characteristics of relationships and networks in one system should allow for partnering with other variables in other systems or whole systems themselves (Domegan *et al.*, 2013: 244) so that parallel social marketing programmes can be designed to support and transfer value co-delivery between systems (Hastings and Domegan, 2014: 278).

As a simplified example to ramp up renewable energy consumption at municipal level, social marketers identify that the local government seeks to reduce pollution (value) and a sector of the target audience values low prices. Social marketers, backed with their primary research on individuals, working together with the government and consumers design a new fiscal policy that offers renewable energy at prices lower than non-renewable competitors. In this case, value is co-delivered when the two parties engage with each other—when the consumers switch to a renewable energy provider. Linking to large-scale change, this renewable energy system could interact with other systems, such as increasing jobs and health, not only to reduce pollution, but also to improve people's wellbeing.

Value and the connection to systems thinking

Since variables can be influenced by other variables; obtain value through interacting with others and; influence the value gained from interactions with other variables, systemic solutions must also take into consideration how different variables are implicated in value creation for all counterparts involved. Take a few elements in an abridged version of the 'consuming meat system' for example. Beef farmers can be influenced by retailers to produce more beef; obtain value from such interaction (profit) and; influence the value governments obtain from this interaction (taxes). Government and retailers could promote the consumption of meat products, which influences people's perceived value of consuming such products. Here the consumer's value derived from consuming meat has been influenced by the value of interactions with other variables (profit for businesses and taxes for the government). Relatives' and friends' opinions, personal beliefs, structure of national economy, etc. could be other influential components to consider in such a system. Invariably, this system would also interact with other systems, for example with the 'eating healthy system': meat products are

considered a good source of protein, which is required for a healthy body. Social marketing programmes should therefore implicate all components in a top-down and bottom-up dynamic process of value creation (Domegan *et al.*, 2016: 1126).

The above discussion has briefly put forward the different conceptualisations and dimensions of value and how value can be co-created. Nevertheless, since systems that are designed to influence behaviours are understood as interconnecting networks of relationships designed to co-create value (Domegan *et al.*, 2016: 1126; Hastings and Domegan, 2014: 283), a closer examination of how value is perceived and (co-)created (through co-discovery, co-design and co-delivery) by processes and constructs evident in relational thinking is imperative (Brennan *et al.*, 2016). In other words, if value co-creation is considered the ultimate intention of developing relationships in social marketing programmes (Marques and Domegan, 2011: 49), then it is essential to unpack some of the processes and constructs behind relational thinking to contribute to a better understanding of value co-discovery, co-design and co-delivery.

2.6.4 Relational thinking

Relational thinking draws on relationship marketing, which is about developing and maintaining long-term relationships with customers and not simply viewing value creation as a short-term transactional process (Kerin, Hartley and Rudelius, 2015: 12). Some of the reasons relational thinking has been praised as a foundation for social marketing stems from the applicability of relational thinking's characteristics to social marketing: the nonexistence of profit as a motive; a focus on high-involvement decision making; dealing with complex behaviours and social structures; long-term inclination; the importance of trust; and a focus on benefitting needy societal groups (Hastings, 2003: 7). Furthermore, relational thinking is postulated to be more capable of dealing with the challenges of today's complex society (Marques and Domegan, 2011: 44). Basically, since social marketers want to create value and influence behaviours that are repeated indefinitely, developing strong relationships with them is a core aspect (Eagle *et al.*, 2013: 29; Hastings and Domegan, 2014: 43; MacFadyen *et al.*, 2003: 699; Russel-Bennet *et al.*, 2013: 229). Because value co-creation is often done with multiple actors (Domegan, 2008: 137; Russel-Bennet *et al.*, 2013: 229; Beall *et al.*, 2012: 113), social marketers employ relational thinking to understand and continuously link the value co-creating stakeholders and networks thereof necessary for complex behaviours to be influenced (Brennan *et al.*, 2016: 232; Hastings and Domegan, 2014: 288; Luca *et al.*, 2016: 201). Brennan

et al. (2016: 221) suggest that the advantage of a relational perspective is the illumination of the processes and interactions underpinning and useful in co-creating value within behavioural systems. Therefore, for social marketing programmes to achieve their intended outcomes, understanding how creating and sustaining (often complex) relationships with the target audience generates value for all stakeholders involved, is essential (Barrutia and Echebarria, 2013: 339; Marques and Domegan, 2011: 50). To enlighten the reader as to how understanding and developing programmes can be achieved with a relational approach, there is a need to elaborate on the underlying processes and their constituents that are at the core of this approach: the key processes and key constructs in relational thinking⁹.

2.6.4.1 Key processes in relational thinking

Relationship marketing's key processes (dialogue and interaction) refer to the nexus of reiterative activities that promote value co-discovery, co-design and co-delivery thus driving value co-creation in social marketing (Hastings and Domegan, 2014: 273; Marques and Domegan, 2011: 48-50).

Dialogue and interaction

The dialogue process in relational thinking involves creating multiple communication flows between stakeholders so as to understand their values and maintain relationships (Baron *et al.*, 2010: 34; Marques and Domegan, 2011: 48). Interaction is concerned with being actively involved in relationships with a target audience (Grönroos and Gummerus, 2014: 209) to assist the process of influencing behaviours (Luca *et al.*, 2016: 1158). Because dialogue and interaction are done iteratively with a counterpart (Marques and Domegan, 2011: 49), discovering value and designing and delivering successful programmes to create value is intrinsic to dialogue and interaction. This is discussed in more detail below.

Concerning understanding value, interacting and creating dialogue with stakeholders creates the space for “new shared language, norms and values to emerge” ensuring that programmes are successful by being relevant (Domegan *et al.*, 2016: 1137). In terms of programme design, by interacting with and exploring “the dynamics of collaboration and the sociocultural processes involved in negotiating mutual value”, social marketers can use relational logic to

⁹ Relational thinking is the term used here to describe the approach that is based on the concept of relationship marketing.

illuminate favourable stakeholders to facilitate value co-creation and more successfully influence behaviours (Luca *et al.*, 2016: 1150). Additionally, because perceptions and behaviours are dynamic, interacting and creating dialogue with the target audience allows the design and delivery of customised, value-oriented offerings (Grönroos and Gummerus, 2014: 220; Luca *et al.*, 2016: 1158). Customisation may refer not only to a *set* of behaviours that can be drawn from when interacting with a target audience, but also a *series* of behaviours that can be introduced over time. Concerning the series of behaviours, the social marketer can ‘up sell’ or ‘cross sell’ behaviours (e.g. Hastings, 2003: 8) to for example move the target audience from easy, but not so beneficial behaviours to more difficult, but more advantageous ones (in terms of impact) as time passes (e.g. May and Previte, 2016: 262). On the value co-creation side, seeing as interactions between many components influence people’s behaviour (Hastings, 2003: 9; Hastings and Domegan, 2014: 43; Luca, Hibbert and McDonald, 2016: 1164), co-creating value and successfully influencing behaviours also requires facilitating the target audience to interact with the right influential variables (Peattie and Peattie, 2003: 370; Brennan *et al.*, 2016: 232; Grönroos and Gummerus, 2014: 210). By means of interaction and dialogue, social marketers can find out what is valuable for the parties involved and design better programmes that establish and support networks of relationships that co-create value for and/or with other stakeholders (Domegan *et al.*, 2013: 242; Marques and Domegan, 2011: 48; Wood, 2016a: 288-288).

To summarise the ties between these key processes: dialogue and interaction are seen as indispensable in a social marketing context as it is these processes through which value emerges and is co-created and behaviours are influenced (Grönroos and Gummerus, 2014: 224; Luca *et al.*, 2016: 1158). Therefore, in terms of successful programme design and delivery, the processes of dialogue and interaction illuminate critical factors for successful programmes (Sheth and Parvatiyar, 2002: 10; Zainuddin, Russel-Bennett and Previte, 2013: 1517) and are the means with which social marketers can understand, build and maintain value co-creating, behaviour-influencing relationships (e.g. Forbus and Snyder, 2013; Wood, 2016a) and customise offerings (Grönroos and Gummerus, 2014: 220; Hastings, 2003: 7; Hastings and Domegan, 2014: 32; Luca *et al.*, 2016: 1158).

Now that the key processes have been outlined, which are on-going throughout value co-discovery, co-design and co-delivery stages (Hastings and Domegan, 2014: 273-278), some of the key constructs underpinning relational thinking relative to social marketing warrant

discussion as they describe underlying constituents driving continuous and fruitful dialogue and interaction (Marques and Domegan, 2011: 52). The chosen key constructs are relationship quality, trust, commitment, satisfaction and cooperation. After they are briefly examined with specific examples given for each key construct, an encompassing example is given to demonstrate how they all function within a social marketing programme as a driver of the above-mentioned key processes.

2.6.4.2 Key constructs in relationship marketing theory

Relationship quality

Social marketing has moved from a transactional to a relational focus (Brychkov and Domegan, 2017: 83) in which relationship quality drives value (co-)creation (Palmer, 2002: 90). The quality of a relationship is an evaluation of the intensity of the bond between parties (Marques and Domegan, 2011: 52). As Wood (2016a: 282) notes and Zainuddin *et al.* (2013: 1516) demonstrate, the quality of relationships amongst stakeholders is a determinant of programme success – the higher the quality of relationships amongst stakeholders, the higher the chances of co-creating value and influencing behaviours are. Relationship quality is generally measured in terms of trust, commitment and satisfaction (Baron, Conway and Warnaby, 2010: 33; Gummesson, 2002: 42; Marques and Domegan, 2011: 57). Co-operation in addition to these three key constructs is discussed below.

Trust

Trust is considered “the ultimate requirement and product of a successful, continuing relationship” (Peppers and Rogers, 2011: 41), which is why Hastings and Domegan (2014: 46) see it as a defining element of social marketing. Several factors motivate the target audience to trust a relationship: 1) if trust is about reliable stakeholders (Moorman, Zaltman and Deshpande, 1992: 315), a continuing relationship depends on the trustworthiness of the partner(s) involved (Grönroos, 1997: 327; Luca *et al.*, 2016: 1158); 2) the credibility of the source of communications can influence trust (Eagle *et al.*, 2013: 302; Maibach, 1993: 216; Weinreich, 2011: 113-114; Wood, 2016a: 281); 3) the social marketer also plays a role in developing trust with a target audience (Hastings and Domegan, 2014: 46); and 4) if trust is the outcome of perception versus performance (satisfaction), promises need to be kept to sustain relationships (Baron *et al.*, 2010: 32; Egan, 2004: 103).

In general, social marketing is said to be founded on trust (Hastings 2003: 9) and is highly applicable due to its influence on relationship commitment (McHugh and Domegan, 2017: 148), satisfaction (Egan, 2004: 103) and relationship quality (Marques and Domegan, 2011: 57) i.e. trust builds on initial satisfaction and provides the foundation for the commitment to sustain a long-term relationship (Baron *et al.*, 2010: 32; Egan, 2004: 103; Morgan and Hunt, 1994: 23; Peppers and Rogers, 2011: 41). Therefore, developing trust with the target audience can lead to more effective value creation and therefore better social marketing programmes (e.g. McHugh and Domegan, 2017: 148; Wood, 2016a: 289).

Commitment

Commitment is also a key construct driving dialogue and interaction and is important in building and maintaining successful relationships (Egan, 2004: 103-104; Morgan and Hunt, 1994: 31). Due to the long-term and complex nature of influencing behaviours through social marketing programmes, commitment from all parties involved (target markets, businesses, volunteers, media, local or national government, international organisations etc.) in creating value is required (Baron, *et al.*, 2010: 32; Hastings and Domegan, 2014: 47; Marques and Domegan, 2011: 55; Morgan and Hunt, 1994: 23). In terms of people's behaviours, commitment and its connection to trust (Egan, 2004: 104) aids people in resisting competing and appealing short-term offerings (Baron, *et al.*, 2010: 32). Furthermore, commitment and trust lead to co-operation (Morgan and Hunt, 1994: 26). Thus, social marketing programmes that foster commitment are more likely to succeed (Marques and Domegan, 2011: 55). For example, one social marketing campaign to promote the breast-awareness code was successful because women were committed to checking their breasts every day, and health-care professionals were also committed to the cause (French *et al.*, 2011: 108 & 111).

Satisfaction

According to Hastings and Domegan, (2014: 43) satisfaction – the extent to which performance meets expectations (Baron *et al.*, 2010: 33) – is another major priority for social marketing. Not only does it encourage trust (Egan, 2004: 103), satisfaction also leads to enduring relationships (Hastings and Domegan, 2014: 43). However, it is heavily influenced by the most recent experience – known as the ‘recency effect’ – which may overshadow previous experiences (Baron *et al.*, 2010: 33). Creating satisfying experiences is a challenge for social marketers as the outcome is often invisible or ambiguous (Hastings and Domegan, 2014: 70; Marques and Domegan, 2011: 54) i.e. it is difficult for someone to gauge the extent to which

doing something meets expectations. It is nevertheless proposed that the extent to which social marketing programmes provide satisfaction will impact the success of the programme (e.g. Zainuddin *et al.*, 2013: 1516).

Co-operation

Also an outcome of trust and commitment, co-operation is about aligning efforts to achieve mutual objectives (Morgan and Hunt, 1994: 34). To facilitate co-operation and drive interaction and dialogue, multiple co-operations between other stakeholders is necessary to co-create value (Grönroos and Gummerus, 2014: 209; Marques and Domegan, 2011: 56; Peppers and Rogers, 2011: 40). Such collaborations may be on multiple levels (Domegan, 2008: 137; Peattie and Peattie, 2011: 154) such as between individuals, NGOs, government, businesses and international organisations. In a review of several social marketing case studies, Saini and Mukul (2012: 307) find that “partnership is one of the major elements in all [social marketing programmes]”. For example, to decrease the prevalence of smoking in Canada, the Canadian government co-operated with “local governments, physicians, community groups and schools” to facilitate the target audience’s value co-creation with stakeholders to decrease the smoking prevalence (Kennedy and Parsons, 2011: 46). Therefore, the extent to which collaboration between social marketers and the various target audiences co-creates value for all involved influences the success of the social marketing programme (e.g. French *et al.*, 2011: 220; Lindridge *et al.*, 2013: 1413).

One example that demonstrates the interrelationship between relationship marketing’s key constructs and processes is one that made fishing more sustainable in southwest England: “Project 50 per cent” (French *et al.*, 2011: 209-216). Social marketers, in cooperation with national and local government, the media, the fishermen, and several other stakeholders, devised a plan to reduce fish discarding by 50 per cent. Initial dialogue and interaction helped the project team understand the fishermen’s perspectives. The social marketing team developed trust with the local fishermen, which led them to be satisfied with the offering and gained their commitment. Cooperation was achieved because efforts from both parties created unidirectional value. Overall, fishermen were extremely satisfied and, in the end, demonstrated a higher relationship quality with the fishing authorities. All of these key constructs underpinned the continuous and favourable interaction and dialogue with stakeholders and ultimately co-created value for the government and fishermen: the government lowered discard

rates and the fishermen could catch the fish they discarded at a later stage leading to a more stable income.

2.6.4.3 Summary of relational thinking

Relational thinking is underpinned by several key constructs, each of which drives better interaction and dialogue (as key processes). Through these key processes and underlying constructs, adopting a relational thinking approach to social marketing programme design facilitates a deeper understanding of the target audiences and thus better means to design and deliver more beneficial programmes. Before summarising the theories underpinning social marketing and turning to the social marketing planning process, some connections are discussed.

2.6.4.4 Linkages between relational thinking, value and systems thinking

“The value of a relational logic perspective is its capability to focus social change strategy and planning on the intangible aspects of social offerings, inclusive of the interactions and processes of value creation (and/or destruction) within a broader social marketing system” (Brennan *et al.*, 2016: 221). To unpack this statement a little, as stakeholders form part of the variables that make up a system, relational thinking and its intrinsic logic allows social marketers to firstly concentrate on broadening their *understanding* of the value-creation process to the systems level (Brennan, Previte and Fry, 2016: 221; Wood, 2016b: 110) and secondly to actually design programmes that co-create value through relationships that operate within and amongst greater systems (Brennan, Previte and Fry, 2016: 221; Domegan *et al.*, 2013: 250). In this sense, relations that operate on a basic (direct) level, such as between a participant in a social marketing programme and a service provider (e.g. Russel-Bennet *et al.*, 2013: 227); relations that function on more complex (indirect) level with multiple stakeholders (Peattie and Peattie, 2011: 154; Wood, 2016b: 110); and relations within and amongst greater systems (Brennan *et al.*, 2016: 221; Domegan *et al.*, 2013: 250; Luca *et al.*, 2016: 207) are bundled into the reasoning behind creating social marketing programmes geared for generating value for long-term social change using a systems approach (Domegan *et al.*, 2016: 1128; French and Gordon, 2015: 59; Hastings and Domegan, 2014: 48). Furthermore, because value is created for and dependent upon each member engaged in the process (Domegan, 2008: 137; Hastings and Domegan, 2014: 277), value co-creation is about arranging the correct

relationships with a system's variables to produce value for all partners (Domegan *et al.*, 2013: 244).

2.6.5 A summary of the theoretical paradigms underpinning social marketing

The general implications from the four paradigms (critical thinking, systems thinking, value and relational thinking) that contribute to social marketing theory have shown that they are relevant in designing more successful programmes. By focussing on value creation and entrenching critical, systems and relational thinking in designing programmes, social marketers are more likely to establish interventions that are beneficial, systemic and geared for long-term success. The paradigms and key elements thereof discussed above make up the backbone for discussing why coinciding actions are in theory better suited to create efficacious social marketing programmes, which as a result underwrite the recommendations for social marketers to improve the likelihood of achieving sustainability.

When designing social marketing programmes targeting sustainability, social marketers might draw upon the social marketing planning processes that are tools for designing interventions. However, which of these tools, or which components thereof, are best suited for sustainability? Moreover, do they contain within them the four paradigms underpinning social marketing, which have been shown above to increase the success of complex programmes such as ones that will be designed to tackle sustainability. The purpose of this section is thus to describe each of the common planning processes, which will later be assessed as to whether they contain all of the theories underpinning social marketing.

2.7 SOCIAL MARKETING PLANNING PROCESSES

A social marketing planning process is a tool used to design social marketing programmes comprising a series of steps. Planning processes are designed to assist the social marketer in systematically going about finding the causes of a problem and developing tailored solutions to alleviate these problems that benefit individuals, groups and/or society. A number of social marketing planning processes have been developed to tackle problematic behaviours; seven of which are common are discussed here. These include planning processes by Andreasen (2004), Eagle *et al.* (2013), Hastings and Domegan (2014), Lee and Kotler (2016), McKenzie-Mohr (2011), The NSMC (2016) and Weinreich (2011).

2.7.1 Andreasen (2006)

Step 1 Listening
Step 2 Planning
Step 3 Pretesting
Step 4 Implementation
Step 5 Monitoring
Step 6 Revising

Figure 1 Andreasen's (2004, 2006) social marketing planning process

Beginning with listening as the first step, Andreasen (2004, 2006) places great importance on attaining comprehensive knowledge of the target audience to find out what they see as benefits and costs, what competes with the proposed behaviour and what other factors influence their behaviour (Andreasen, 2004: 61). The next step concerns planning the social marketing programme based on insights from Step 1, which should involve a behavioural proposal that minimises costs and maximises benefits, relevant communications, the right partnerships and systems that can facilitate behaviour (Andreasen, 2004: 61). Pretesting this draft plan with a portion of the target audience is the core focus in Step 3 (Andreasen, 2004: 61). Implementing (based on product, place, price and promotion strategies), monitoring and revising the social marketing programme conclude the planning process, and allow for changes to accordingly be made as the programme progresses by cycling through the entire planning process if necessary (Andreasen, 2004: 61).

2.7.2 Eagle *et al.* (2013)

Step 1 Scope the problem and plan and implement primary research
Step 2 Situation analysis
Step 3 Asset map
Step 4 Plan the evaluation
Step 5 Develop the intervention
Step 6 Implement the intervention
Step 7 Evaluate and follow up

Figure 2 Eagle *et al.*'s (2013: 42) social marketing planning process

Step 1 in Eagle *et al.*'s (2013) planning process is about deepening the knowledge of the behavioural issue by examining secondary research, previous social marketing programmes, behavioural motivation and context, and antecedents, all of which are useful to identify the underlying causes of a problem (Eagle *et al.*, 2013: 42-47). The complexity of the problems social marketers try to address is why the authors consider this step crucial (Eagle *et al.*, 2013: 42). During this step it is also possible to identify segments in which the behaviour is occurring (Eagle *et al.*, 2013: 42). Additionally, if secondary research does not surface all the required information, the authors recommend to plan and implement primary research to bring about a clear understanding of the target audience and problem behaviours (Eagle *et al.*, 2013: 42). Once secondary and primary data have successfully cultivated a solid background understanding, the behavioural problem and intervention aims are defined (Eagle *et al.*, 2013: 47) and segmentation takes place (Eagle *et al.*, 2013: 50). The authors interject with ethical implications of selecting groups that have the greatest possible chance of success and those that need it the most (Eagle *et al.*, 2013: 50-51).

In the situation analysis conducted in Step 2, macro- and microenvironments are analysed

(Eagle *et al.*, 2013: 42): macroenvironment referring to understanding the environmental factors that could influence the intervention whereas the microenvironment concerns the organisational factors influencing the outcome of the programme (Eagle *et al.*, 2013: 53). In Step 3, because social marketing often relies on multiple stakeholders, mapping assets that exist external to the organisation identifies potential partners that could assist in influencing behaviours (Eagle *et al.*, 2013: 57). Certain organisations could have existing relationships with a target audience and therefore their resources could be important to influence behaviours (due to trust, knowledge, etc.) (Eagle *et al.*, 2013: 57). The authors stress that ethical considerations be adhered to when partnering with commercial organisations (Eagle *et al.*, 2013: 58). Pinpointing baseline figures and types of evaluations are integral in Step 4 (Eagle *et al.*, 2013: 42). In step 5, Eagle *et al.* (2013: 61) emphasise the need for co-creation principles when developing social marketing programmes. 4Ps (product, place, price and promotion) and exchange theory are used in this step as a framework for developing the intervention (Eagle *et al.*, 2013: 62). The focus at this stage is to ‘develop’ a behaviour that exchanged for something has considerable value to a target audience (Eagle *et al.*, 2013: 62). The implementation step includes piloting the programme and, once feedback has guided any necessary changes, full-scale implementation of the programme (Eagle *et al.*, 2013: 42). In Stage 7, feedback from evaluation is fed back into the intervention (Eagle *et al.*, 2013: 42).

2.7.3 Hastings and Domegan (2014)

Step 1 Situation analysis
Step 2 Stakeholder, competitive and harm chain analysis
Step 3 Segmentation and targeting
Step 4 Objectives
Step 5 Formulating the offer
Step 6 Implementation
Step 7 Monitoring and evaluation

Figure 3 Hastings and Domegan's (2014: 83) social marketing planning process adapted from Hastings and Elliot (1993)

In Steps 1 and 2 Hastings and Domegan (2014: 86) propose several analyses to take into account many of the different forces that influence behaviours: situation, stakeholder, competitive and harm-chain. In particular, a competitive analysis is provided as a means to consider the far-reaching implications of competitive forces that shape undesirable behaviours, for example not just that fast food brands play a role in obesity, but that the entire industry is so intertwined with socio-cultural and political spheres that they are allowed to make a profit often at a cost to society's wellbeing (Hastings and Domegan, 2014: 205–211). As a further breakdown of which stakeholders are producing virtuous or adverse outcomes, a harm-chain analysis gives social marketers "further insight into the forces to be contended with and the pathways to the root of the problem" (Hastings and Domegan, 2014: 91). Stakeholders in this sense take on a more general meaning and can refer to "policy makers...governments...the media, and many others" (Hastings and Domegan, 2014: 88). After these analyses, the population is partitioned into like segments and the most viable, accessible and responsive audiences are chosen to target (Hastings and Domegan, 2014: 93-95). Barriers and benefits are important to keep in mind (Hastings and Domegan, 2014: 97). Once objectives have been set

in Step 4, the authors propose to create an offer using the 4Ps marketing mix and positioning strategy (Hastings and Domegan, 2014: 107-108). Steps 6 and 7 respectively concern implementing the plan and monitoring and evaluating it, which allows for feedback to continually advance the social marketing programme.

2.7.4 Lee and Kotler (2016)

Step 1 Social issue, background, purpose and focus
Step 2 Situation analysis
Step 3 Target audiences
Step 4 Behaviour objectives and target goals
Step 5 Target audience, barriers, benefits and motivators; the competition; and influential others
Step 6 Positioning statement
Step 7 Marketing mix (4Ps)
Step 8 Plan for monitoring and evaluation
Step 9 Budget
Step 10 Plan for implementation and sustaining behaviours

Figure 4 Lee and Kotler's (2016: 51-52) social marketing planning process

The first step in Lee and Kotler's planning process seeks to define the social problem, demonstrate its severity and describe its potential causes and contributors (Lee and Kotler, 2016: 104). Primary or secondary data can be collected, but Lee and Kotler (2016: 76) recommend reviewing the literature in order to better understand and consequently address the

issue at hand. After understanding the social issue and its background, the purpose frames the behaviours in terms of benefits for the target audiences. Purpose statements are driven by the causes and contributors of the problem (Lee and Kotler, 2016: 105) while focus or foci highlight one or several alternatives for campaigns that could contribute to achieving the campaign's purpose and have the greatest capacity across several criteria (Lee and Kotler, 2016: 105-106). Step 2 is to conduct a situation analysis, which looks at the microenvironment to identify strengths and weaknesses and the macroenvironment to surface any opportunities and threats, in other words a SWOT analysis (Lee and Kotler, 2016: 105-108). The authors also propose to look at current alliances and partners that could contribute to the success of the programme (Lee and Kotler, 2016: 108) and more exploratory research (Lee and Kotler, 2016: 113). All information gathered in Steps 1 and 2 is intended to nurture the social marketing's ethical understanding (Lee and Kotler, 2016: 115). Step 3 comprises segmenting, evaluating and selecting target audiences (Lee and Kotler, 2016: 128-129), employing a variety of models and research techniques to do so (Lee and Kotler, 2016: 147). The next step in Kotler and Lee's (2016) process is drafting behaviour objectives and target goals (Lee and Kotler, 2016: 171). In Step 5, target audience barriers, benefits, motivators, the competition and influential others are examined (Lee and Kotler, 2016: 177). This could be a primary or secondary research activity, as long as all inferences are based on rigorous understanding of the target audience (Lee and Kotler, 2016: 193). Exchange theory is introduced here, which is offered as a framework within which all social marketing exchanges take place (Lee and Kotler, 2016: 184-5). The positioning statement (Lee and Kotler, 2016: 239) and marketing mix (4Ps) (Lee and Kotler, 2016: 280) outline how to achieve behaviour change. Step 8 involves continuously inspecting whether the social marketing programme is functioning as it was intended to (monitoring) and finally developing a critical report on the programme once it has ended (evaluation) (Lee and Kotler, 2016: 423). The final step in Lee and Kotler's social marketing planning process refers to realising the strategies and plans that have emerged from completing steps 1-9, which details all the required actions of the different stakeholders and elements in the social marketing plan (Lee and Kotler, 2016: 476).

2.7.5 McKenzie-Mohr (2011)

Step 1 Selecting behaviours
Step 2 Identifying barriers and benefits
Step 3 Developing strategies
Step 4 Piloting
Step 5 Broad-scale implementation and evaluation

Figure 5 McKenzie-Mohr's (2011) Community-based social marketing planning process

McKenzie-Mohr's community-based social marketing planning process begins with choosing appropriate behaviours for the target audience to adopt that can have the best outcome in terms of impact, penetration and probability (McKenzie-Mohr, 2011: 12-15), and assumes that there is already an "area of interest" (McKenzie-Mohr, 2011: 12-15). Step 2 begins with reviewing the literature concerning the behaviours identified in Step 1. Primary research activities such as observations, focus groups and surveys discover the barriers to and benefits of behaviours and refine the most important ones, which is fundamental to designing successful programmes (McKenzie-Mohr, 2011: 15-38). Based on the knowledge attained from Steps 1 and 2, strategies to influence behaviours are developed in Step 3 and piloted in Step 4 (McKenzie-Mohr, 2011: 40-44). In Step 5, the refined plan that has been brought about through Steps 1 to 4 is put to work and constantly evaluated according to benchmark criteria (McKenzie-Mohr, 2011: 143).

2.7.6 The NSMC (2016)

Step 1 Getting started
Step 2 Scoping
Step 3 Development
Step 4 Implementation
Step 5 Evaluation
Step 6 Follow up

Figure 6 The NSMC's (2016) social marketing planning process

The getting started Step 1 in The NSMC's (2016: Planning Guide and Toolkit) process probes the issue with a core team and identifies the problem statement (The NSMC, 2011: 80). In Step 2, the social marketer collates individuals integral to the success of the programme, reviews previous research, examines both internal (microenvironment) and external (macroenvironment) factors affecting the issue and collects primary and secondary research, of which finding "key influences, incentives and barriers" of particular interesting segments are essential (The NSMC, 2011: 82). Costs, benefits and competitor analyses are also considered vital (The NSMC, 2016: Scoping). The development step includes engaging stakeholders, developing the marketing mix using the 7Ps (4Ps plus people, process and physical evidence), developing an evaluation plan, testing the initial programme and revising accordingly (The NSMC, 2016: Development). Step 4 applies what has been learned throughout the process, while Steps 5 and 6 gather running information and feed it back into the programme.

2.7.7 Weinreich (2011)

Step 1 Analysis
Step 2 Strategy development
Step 3 Programme and communication design
Step 4 Pretesting
Step 5 Implementation
Step 6 Evaluation and feedback

Figure 7 Weinreich's (2011: 23) social marketing planning process

In Step 1 analyses are performed to understand: the problem, which helps determine the background and scope of the issue; setting, which seeks to identify challenges and opportunities existing in the greater context in which the programme will take place; target audiences and their behaviours, which provides detail to the actual people and their behaviours (Weinreich 2011: 23-37). These analyses will determine the direction of the programme (Weinreich 2011: 33). Both literature reviews and primary research are important tools in this step (Weinreich, 2011: 33). The next step is to create a blueprint for success by selecting appropriate target audiences in terms of their payoff and/or readiness to change (Weinreich 2011: 69-72). Here the social marketer should consider the 8Ps (4Ps and publics, partnership, policy and purse strings) (Weinreich 2011: 81-82). Step 3 comprises of designing the programme and communication strategy, which uses research gathered in Steps 1 and 2 to create an approach that will persuade the target audience to behave in the intended way (Weinreich 2011: 91). Actions within this step include designing environments to influence behaviours, creating the right messages and choosing suitable communication channels (Weinreich 2011: 91). Different behavioural theories such as the health belief model, theory of planned behaviour, social cognitive theory, stages of change model, diffusion of innovations model and the extended parallel process model are introduced in this step to assist the social marketer with developing effective programmes (Weinreich 2011: 105-106). The next phase in Weinreich's (2011) social

marketing planning process is pretesting, which importantly tests the programme on a small section of the target audience to gather feedback (Weinreich 2011: 159). In Step 5 the programme is rolled out after which evaluation and feedback provides information on efficacy and for making adjustments (Weinreich 2011: 257).

2.7.8 Summary of social marketing planning processes

As can be seen above, the seven common social marketing planning processes have some similarities and differences. However, other than French and Gordon's (2015) comments on some of these processes, no formal analysis on these planning processes has been performed. As such a more extensive discussion in relation to the theoretical paradigms underpinning social marketing and the common actions identified takes place in the contributions chapter.

As social marketing will be applied in the context of sustainability, the next section refers to this connection outlining some of the failures and successes and social marketing's application to sustainable development and degrowth

2.8 SOCIAL MARKETING AND SUSTAINABILITY

2.8.1 Introduction

Social marketing is not a new ally to sustainability (Peattie and Peattie, 2011: 345) as it has been used to influence behaviours connected to environmental and social sustainability in the past (e.g. Eagle *et al.*, 2013: 7; Peattie and Peattie, 2009: 262; Weinreich, 2011: 5). Although literature in regards to the application of social marketing theory to sustainability as an entire phenomenon is unavailable, some examples of where social marketing has contributed to specific elements therefore nevertheless exist and will be referred to below. As the critical element of social marketing suggests, changes in society could entail adapting current institutions (e.g. Gordon *et al.*, 2011: 154) or replacing them with different ones (Dholakia, 2012: 221; Kilbourne *et al.*, 1997: 19; Willmott, 2006: 34). An undisputable fact is that sustainability requires substantial changes in human behaviour and the systems that shape it, and this is where social marketing can play a significant role (French and Gordon, 2015; Gordon *et al.*, 2011; Hastings and Domegan, 2014: 220; Peattie and Peattie, 2011: 345; McKenzie-Mohr, 2000: 544).

2.8.2 Failures and successes

The predominant application of rational choice models to developing social marketing programmes has been one of the discipline's major criticisms (e.g. Brennan, Binney, Parker, Aleti and Nguyen, 2014: 2). Evident within the context of sustainability, to their demise social marketing efforts in the past relied heavily on information and economic benefits to influence behaviours (Jackson, 2005: 121; McKenzie-Mohr, 2000: 544-5). It was thought that 1) information-intensive messages would change the attitudes and thus the behaviour of the receiver; and 2) that the economic benefits of sustainability would influence behaviour (Jackson, 2005: 121; McKenzie-Mohr, 2000: 544-5). Disappointingly, these and other kinds of social marketing campaigns and programmes aimed at improving sustainability did not live up to expectations (Burgess *et al.*, 2003 cited in Hargreaves 2011: 80; Jackson, 2005: 121). In general, authors argue that social marketing interventions fail because they lack the understanding of the complexity of human behaviours and how these behaviours are affected by many different variables (e.g. Andreasen, 2006: 96-97).

Some success stories do however exist. Social marketing has been used to tackle certain elements of environmental and social sustainability (e.g. French *et al.*, 2011; Kotler *et al.*, 2002; McKenzie-Mohr, 2000; The NSMC, 2016: ShowCase). To name a few, positive outcomes include increased recycling rates, reducing electricity consumption, reducing the level of consumption to constitute only what we need (e.g. CBSM, 2010), reducing car use (e.g. French *et al.*, 2011: 68-74, The NSMC, 2016: In Motion), combatting salmon decline (e.g. Kotler *et al.*, 2002: 36-37), health-related areas (e.g. Grier and Bryant, 2005; PSI, 2015, Wood, 2016a; Zainuddin *et al.*, 2013) and reducing waste (e.g. McKenzie-Mohr, 2000: 549).

Although such pockets of effectiveness do exist, the sustainability challenge remains at large (UNEP, 2015). In spite of a better understanding of the reasons why social marketing interventions fail, social marketers find sustainability a complex field (Brennan and Binney, 2008: 261; Conroy and Allen, 2010: 195; Frame and Newton, 2007: 578). It is foreseen that one of the contributing issues adding to the multifarious nature of sustainability is the unclear, complex and confusing language of sustainability – thus making it open to misinterpretation and misguidance. More overtly, social marketers designing programmes that seek to improve an aspect of sustainability are likely to come across a plethora of different actions, broad and specific, each located within one or several constructs claiming to be able to achieve

sustainability. Which of these actions to choose is one of the difficult questions that need answering.

For social marketing programmes to succeed, it is not only recommended to develop a sound understanding of actions, propositions or offerings that could create value for the target audience and ensue the necessary changes (e.g. Hastings and Domegan, 2014: 101; Kotler *et al.*, 2002: 35; The NSMC, 2016: Identify intervention options), and to confer with different and multiple viewpoints (Andreasen, 1995: 31; Brenkert, 2002: 18; Gordon and Gurrieri, 2014: 266; Hastings and Domegan, 2014: 273), but it is equally imperative that actions proposing to deliver value to society as a whole “emanate from progressive sources”, which would as a result “facilitate a move towards more equitable, sustainable, healthier and happier societies” (French and Gordon, 2015: 169). This could, as Dholakia (2012: 222) puts it, offer insights from a combination of perspectives, rather than from just one or another.

Taking these suggestions into consideration, what might help social marketers to reduce the confusing and complex nature of the sustainability paradigm is not to look at ‘progressive’ constructs individually, but to look for common actions amongst different and progressive constructs. This may surface a set of activities that are less likely to be misinterpreted and misguide sustainability, which could constitute a set of useful foundations for social marketing programmes to be successful in realising more sustainable lifestyles. As discussed in Chapter 1, sustainable development and degrowth represent two such constructs, which individually aim to improve sustainability.

2.8.3 Sustainable development, social marketing and sustainability

Couched within sustainable development are numerous actions that seek to influence behaviours that benefit individuals and/or society (Baker, 2006). However, with some exceptions, successful implementation of these actions and/or sustainable development as a whole has been woeful (e.g. Castro, 2004; Mellor and O’Brien, 2005; Sneddon *et al.*, 2006; Wallenborn, 2008). In spite of 30 years of sustainable development, humanity’s ecological footprint has steadily inclined, with no signs of slowing or reaching the capacity of one planet (GFN, 2017). Moreover, there are still many socio-economic calamities around the world. Nevertheless, sustainable development as a construct has been pitted to be reformist in nature (Hopwood *et al.*, 2005: 45), meaning that the changes it proposes are often profound, yet should

be enacted within the prevailing systems and institutions (Hopwood *et al.*, 2005: 43). Thus, like Lorek and Spangenberg's (2014: 33) view, it is seen as progressive. Sustainable development can therefore be useful in designing better social marketing programmes.

2.8.4 Degrowth, social marketing and sustainability

Containing many different actions, degrowth also proposes multiple solutions to the sustainability problem. Conversely, degrowth, or actions thereof, is/are not being considered on a large-scale (Fournier, 2008: 528; Nelson, 2012: 1) with even the wealthy countries extending their quest for economic growth in their political agendas (e.g. OECD, 2015). In terms of Hopwood *et al.*'s (2005) classification, since degrowth proposes more radical changes, it would likely align with a more transformational approach, which seeks changes in the predominant structures that govern society (Hopwood *et al.*, 2005: 45). It is therefore also seen as progressive and is thus justified to be used in social marketing programmes targeting sustainability.

Alone these two constructs could be misinterpreted and misguide social marketing efforts to achieve sustainability. However, dissecting these constructs to find a common language to be used in successful social marketing initiatives could provide social marketers with a set of actions that can usher in radical changes (whether reformist or transformational) that are beneficial to society. Such actions combined with the right methodology to analysing them and the right approach for implementation may make them less likely to be misinterpreted and misguide programmes and thus more likely to succeed in realising sustainability. In this chapter, social marketing has been shown to be an appropriate approach to deliver these changes as its definition, key characteristics (long-term inclination, create value for individuals and society, influence behaviours) and underpinning theories (critical thinking, systems thinking, value and relational thinking) are geared for tackling the sustainability challenge. One methodology that could rationalise making the language of sustainability more understandable and concrete is mapping the two constructs' nomological networks, which would break up each of them into discernible chunks (Byrne, 1984: 428) and facilitate the emergence of overlapping actions on which a common language can be based. Such analyses, comparison and discussion when related to the theories underpinning social marketing could be particularly fruitful. It is therefore proposed to analyse the sustainable development and degrowth constructs and map their nomological networks with the aim of determining a set of actions that constitute a

common, simpler language that is less prone to misinterpretation and misguidance on which social marketing programmes targeting sustainability can be based.

Actions to bring society back onto a more sustainable path are required. In this case, because sustainable development and degrowth are representative of social marketing's critical thinking's characteristics (diverse, multiple and critically acclaimed viewpoints), actions could be derived from analysing sustainable development and degrowth literature to look for commonalities between the two constructs.

Actions common to both constructs could thus demystify sustainability's complexity with the aim to give social marketers a greater chance of influencing behaviours to increase sustainability.

2.9 CHAPTER SUMMARY

As the research's theoretical framework, this chapter discussed the key characteristics that were used to filter actions from degrowth and sustainable development, which are later compared, analysed and discussed according to the paradigms underpinning social marketing. Thus, as an important part of the research's lens and the theory on which recommendations are later based, the four theories underpinning social marketing were discussed in detail, from which several elements of successful social marketing programmes emerged. The commonly available social marketing planning processes were also discussed as any of these could be used to plan social marketing interventions to tackle the sustainability challenge. Thereafter some of social marketing's failures and successes were shown. While the general complexities of behavioural change have been crowned as the causes of failure of sustainability programmes (e.g. Frame and Newton, 2007: 579), the interpretable and misguiding nature of the language of sustainability is also a concern that drives the overarching need for a simpler language that is less open to misinterpretation and misguidance to underpin social marketing programmes that can effectively influence behaviours to increase the possibility of attaining sustainability. This underlined the need to map sustainable development and degrowth's nomological networks to find common actions to develop a simpler language that decreases misinterpretation and misguidance. These common actions could be the basis of social marketing programmes to better the prospect of realising sustainability as represented by these two constructs. The following methodology chapter discusses how the research process took place.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 CHAPTER OVERVIEW

The lead up to the study's specific research objectives reiterates the problem statement and defines the research questions. Thereafter, the research approach, philosophy and paradigm are briefly presented. The core of the chapter is the presentation of the nomological network as the method that enabled the researcher to analyse sustainable development and degrowth constructs to achieve the research objectives. Then the research design details how and why data was sampled, collected and analysed. The chapter ends with an explanation of the research procedure per research objective.

3.2 INTRODUCTION

Previous chapters have outlined the motivations for this research and briefly introduced the notion of nomological networks (e.g. sections 1.5 and 2.8.4). However, a detailed explanation of this form of applying nomological networks is required to afford the reader a better understanding of the research methods used in this dissertation.

3.3 PROBLEM STATEMENT

Sustainability is a complex construct fed by a myriad of research areas, two of which are sustainable development and degrowth. These research areas maintain similar definitions, components, antecedents, actions, strategies, outcomes, and supporting evidence. Yet there is still a confusing and complicated language that may be the reason why sustainability is being misinterpreted and misguided. Given this, how is it possible to develop social marketing programmes for sustainability when some of the constructs that could be used to develop the programmes speak different languages and/or are complicated to understand and/or are open to misinterpretation and misguidance?

3.4 RESEARCH QUESTIONS

By constructing the basic nomological networks of degrowth and sustainable development, the overarching research questions are: where do these constructs overlap; what proposed actions could form the foundations of a simpler, common language on which social marketing programmes aimed at achieving sustainability could be built; and which social marketing planning processes could better facilitate implementing these actions?

3.5 RESEARCH OBJECTIVES

To answer the research questions, five research objectives were developed:

1. Map the basic nomological networks of sustainable degrowth and sustainable development.
2. Compare the basic networks to identify overlapping areas.
3. Identify proposed actions common to both constructs that can be used within a social marketing framework.
4. Make recommendations for social marketing programmes for the common actions guided by the theories underpinning social marketing.
5. Analyse existing social marketing planning processes and if necessary, develop an appropriate social marketing process specifically intended for social marketers to tackle the sustainability challenge.

3.6 QUALITATIVE RESEARCH

“Qualitative research methods are often used when the scientist is interested in obtaining detailed and rich knowledge of a specific phenomenon” (Salkind, 2002: 143). This non-empirical, secondary data study used qualitative research strategies and techniques to review and analyse the extant literature on degrowth and sustainable development to develop detailed know how of the two constructs. It used this comprehensive knowledge as the backbone for analysing, mapping the construct’s nomological networks, comparing them and making recommendations.

3.6.1 Advantages

On the whole, qualitative research allows the positioning of an organising framework around a set of data to better understand the data (Braun and Clarke, 2013: 20) i.e. to be able to develop a sound understanding of data. The benefits are plentiful. Qualitative research has the advantage of providing a useful framework for the analysis of relationships and illuminating these relationships or phenomena that might otherwise go undetected (Maxwell, 1996: 33). Qualitative methods are more flexible; as the research unfolds the researcher is allowed to explore emergent phenomena (Creswell, 2003: 181-182). It also offers broad perspectives and lends itself to systematic analyses, complex reasoning and simultaneous concern with the problem statement, research questions and analyses (Creswell, 2003: 182-183). Furthermore, it is a useful design to gather detailed knowledge of the research area (Creswell and Maietta,

2002: 143) and can be used to make a difference in the real world (Barbour, 2014: 29). All of these were maximised in this research.

3.6.2 Characteristics

Creswell (2007: 37-39) proposes that the following characteristics emerge from all qualitative research: multiple sources of data are used, there is an emergent research design, a theoretical lens is used, knowledge is interpreted/constructed in specific contexts and research is done holistically. These will be addressed throughout this chapter in their respective sections.

3.7 RESEARCH APPROACH

A qualitative approach carries with it many different philosophies, paradigms, designs etc. (Ormston, Spencer, Barnard and Snape, 2014: 19). One significant feature of this research on the approach level is that it considered the methods over the philosophy/paradigm; something that other authors also support (e.g. Barbour, 2014: 40; Creswell, 2007: 22-23; Ormston *et al.*, 2014: 19; Patton, 2002: 76-77). This is not to say that certain philosophical traditions were not represented, it is only to say that these were not used as a strict research guideline. In other words, a pragmatic approach was used (Ormston *et al.*, 2014: 22). Nevertheless, because they are still key to a qualitative research methodology, the philosophies are discussed below.

3.8 RESEARCH PHILOSOPHY AND PARADIGM

A qualitative research design carries with it certain philosophical assumptions (Creswell, 2007: 16-17). Two crucial philosophical undercurrents in qualitative research are: 1) the nature of reality (ontology) and; 2) the nature of knowledge (epistemology) (Barbour, 2014: 29; Braun and Clarke, 2013: 27-28; Ormston *et al.*, 2014: 4). These are discussed separately.

3.8.1 Ontology

Ontology, or the nature of reality, is the extent to which researchers perceive reality as real – reality exists independent of human inquiry – or relative – reality is dependent on human inquiry (Braun and Clarke, 2013: 27; Ormston *et al.*, 2015: 4-5). In qualitative research it is generally accepted that multiple realities exist (Braun and Clarke, 2013: 27; Creswell, 2007: 17-18). The ontological theory of critical realism recognises that because knowledge has been socially constructed relative to time and place (Braun and Clarke, 2013: 27; Patton, 2002: 100), research can only access parts of that constructed reality and never actual reality (Braun and

Clarke, 2013: 27-28). In other words, and relating to this research, the researcher accepted that because the knowledge upon which the research has been based was created in a specific social context at a specific time, only that created knowledge, and not actual reality, could be accessed and assessed. The implication of this critical realist standpoint is that the research at hand was influenced by documented knowledge in a specific context and cannot be taken as real or a truthful reflection of reality itself.

Because knowledge plays a key role in determining reality, it is essential to comb over the influence the nature of knowledge (epistemology) has in guiding qualitative research.

3.8.2 Epistemology

The basis or nature of knowledge and how we perceive reality are the primary debates in epistemology (Barbour, 2014: 35; Braun and Clarke, 2013: 28; Ormston *et al.*, 2014: 6). The two ends of the scale deal with whether knowledge is determined by an objective view of reality (positivism) or is a result of how we come to understand it (constructivism/interpretivism). Somewhere between these opposing theories of knowledge lies contextualism, which assumes that knowledge is constructed/interpreted through certain contexts, hence also maintaining elements of constructivism (Braun and Clarke, 2013: 30-31). This research adopted a contextualism epistemological approach. It assumed that the knowledge on which research was based was constructed and contextualised in the sustainability paradigm with specific ideologies and socio-cultural contexts. From this position, the knowledge on which the research has been based is not the truth, but rather information that has been constructed/interpreted in specific contexts. From this perspective, the researcher saw reality as something only partially accessible through already existing knowledge, which was constructed in specific contexts (Braun and Clarke, 2013: 27-28; Ormston *et al.*, 2014: 4-8).

Before moving to the research design, it is thought indispensable to familiarise the reader with what nomological networks are and how and why they were used in this study in relation to each research objective.

3.9 NOMOLOGICAL NETWORKS

3.9.1 Definition

A nomological network is defined as an “interlocking system of laws which constitute a theory...[t]he laws in a nomological network may relate (a) observable properties or quantities to each other; or (b) theoretical constructs to observables; or (c) different theoretical constructs to one another” (Cronbach and Meehl, 1955: 290). In its broadest sense, a nomological network is a way of looking at a construct in terms of what influences it and what the outcomes of the construct are considering those influences (Chapman and Zweig, 2005: 679). It is also a means to predict the outcomes of a construct more accurately by establishing construct validity (Crede, Chernyshenko Stark, Dalal and Bashshur, 2007: 515-516).

3.9.2 Nomological networks in connection with the research objectives

Nomological networks are predominantly used to measure construct validity (e.g. Cronbach and Meehl, 1955: 290-291), which usually involves quantifying the relationship between variables or theories and their variables (Crede *et al.*, 2007: 515-516; Peterson and Zimmerman, 2004: 130) i.e. parts (a) and (b) above. However, examining the theoretical relationships between construct’s components at a more abstract level is of primary importance to this research. Thus, this dissertation’s research methodology concerns, somewhat atypical of nomological networks, only point (c) above: the relation of “different theoretical constructs to one another” (Cronbach and Meehl, 1955: 290). However, to better facilitate a comparison between constructs, each construct’s nomological network needs defining in terms of their internal structure (Byrne, 1984: 428) i.e. their definitions, components, antecedents, actions, strategies, outcomes and supporting evidence (explained in more detail in section 3.9.3).

Therefore, this dissertation used an application of nomological networks to map two constructs in order to compare their multiple constituents with each other and ultimately identify overlapping actions to be used in social marketing programmes. Analysing the two constructs’ nomological networks through a social marketing lens simplified sustainability’s language and provided a better foundation for social marketing programmes aimed at increasing the likelihood of achieving sustainability.

Byrne (1984: 428) states that “[n]omological research involves internal and external examinations of the construct. Analysis of the relationships among the differentiable facets of

a construct enables the researcher to examine its internal structure” (Byrne, 1984: 428). Thus, according to Byrne (1984), nomological research is dealt with in two phases: firstly, examining a construct’s internal structure – in the case of this research, mapping it’s nomological network and; second, examining a construct’s relationship with another construct – in the case of this research comparing the two construct’s nomological networks and identifying overlapping actions.

Looking firstly at mapping the internal structure of a construct’s nomological network, Wymer (2013) demonstrates how a basic conceptual nomological network may look in visual form i.e. a basic conceptual map of a nomological network (Figure 8below).

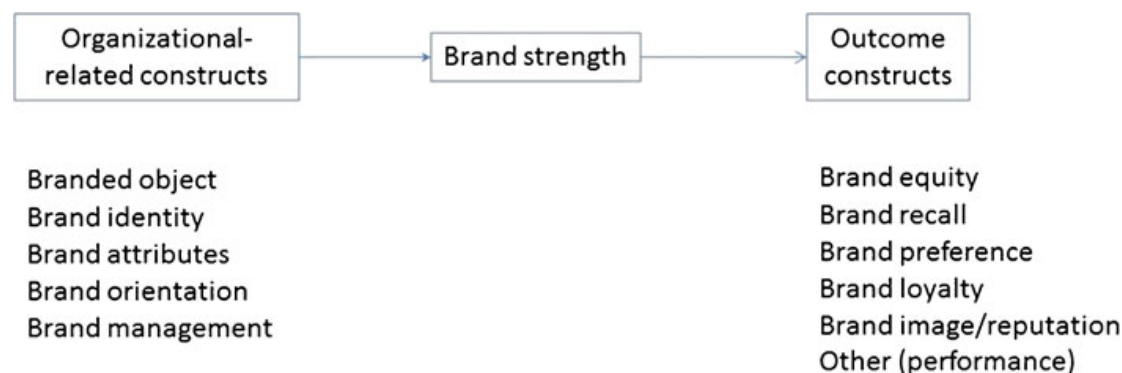


Figure 8 The brand nomological network (Wymer, 2013: 9)

What is important to keep in mind here is the basic categorisation of a construct’s variables and the relationship of these variables within the construct. Here Wymer (2013) has organised them in such a way that shows which variables theoretically contribute to formulating brand strength (antecedents) and which variables could be the result of brand strength (outcomes) demonstrated by the linear progression. In this case, organisational-related constructs hypothetically influence brand strength. Moreover, outcome constructs are what the outcome of brand strength could be in real behavioural terms (Wymer, 2013: 6-7). Therefore, mapping the nomological networks of constructs should categorise and determine the relationship amongst its structural elements – in the case of this research, it’s definitions, components, antecedents, actions, strategies, outcomes and supporting evidence.

Secondly, when looking at relationships to other constructs, Byrne (1984: 428) uses the internal structure of a construct to compare specific categories found in both constructs with one another. Therefore, for the purpose of this research, categorising and establishing relations

among variables (i.e. mapping its nomological network) within a construct makes each construct easily comparable with the other. This is performed to compare basic nomological networks and to identify and discuss actions common to both constructs to be used in social marketing programmes. Therefore, together these processes provide the foundation for uncovering a better social marketing language that could assist in realising a more sustainable society.

Now that a basic overview of how nomological networks are used in this research has been given, elements of a nomological network are defined and explained.

3.9.3 Elements of a nomological network

To apply the use of nomological networks to this study, which maps and in the end relates theoretical constructs to one another, it is important to examine a construct's internal structure (Byrne, 1984: 428). The following section firstly identifies internal elements of a nomological network and secondly provides an explanation of these elements as they are key terms in this dissertation.

3.9.3.1 Internal structure

Purely relating to this study, the following elements of a nomological network's internal structure have been identified in accordance with previous research:

- Definitions (Cronbach and Meehl, 1955: 290; Byrne, 1984: 428);
- Components (Ackerman, Beier and Boyle, 2005: Cronbach and Meehl, 1955: 290);
- Antecedents and consequences (Chapman and Zweig, 2005; Spitzmuller, Van Dyne and Ilies, 2008: 106) and;
- Linkages between theoretical and empirical evidence (Jowett, 2009: 35).

3.9.3.2 Explanations

- Definitions: these are brief definitions of the construct often indicating key outcomes/consequences (e.g. Wymer, 2012: 5). In this research, principles are included here as they help explain definitions and the construct in general.
- Components: these are parts of constructs that have a specific theme (e.g. Ackerman *et al.*, 2005; Crede *et al.*, 2007).

- Antecedents: these are the causes of a construct i.e. why degrowth or sustainable development arguments exist and what could affect behaviours and outcomes (e.g. Spitzmuller *et al.*, 2008: 110; Wymer, 2013: 7). In this research they are linked to certain components by means of analyses that reveal that they are highly related to such components.
- Consequences: these are normally what the construct affects (Chapman and Zweig, 2005; John, Caspi, Robins, Moffit and Stouthamer-Loeber, 1994: 160). In this research, however, the consequences of a construct are both the strategies, and proposed actions recommended and used to achieve the desired outcomes, and the outcomes themselves. Thus, for clarity, consequences are adapted from its normal usage and split into two further elements:
 - Actions and strategies: these relate to the proposed actions to achieve desired outcomes within a certain strategy. As the constructs being analysed are broadly considered movements, many of the actions presented in the analysis chapter are proposals to increase the likelihood of achieving sustainability as part of a guiding strategy. Actions particularise the link between a constructs antecedents and outcome, while strategies are used to guide the placement of actions and supporting evidence into degrowth's detailed nomological networks.
 - Outcomes: these are the goals or desired outcomes themselves.
- Linkages between theoretical and empirical evidence: because this research does not aim to quantify the relationship between variables or theories and constructs, this element provided in the literature on nomological networks is not being used. However, empirical evidence is provided (where possible) that supports the implementation of a proposed action i.e. to link an action with a specific outcome. It is therefore termed supporting evidence. This is done because substantiated actions are more likely to be included in social marketing programmes as they have been shown to achieve an aspect of sustainability; they can also be researched by social marketers.

Using the above explanations, a nomological network that represents the interrelations among a construct's variables (i.e. the internal structure of a construct) this research deals with is presented in visual form below.



Figure 9 A construct's nomological network

Working backwards through the nomological network, it is theorised in this context that a construct's outcome is a result of the actions taken to achieve the outcomes. Supporting evidence supports the implementation of an action as it contains evidence of the action's success in real terms. Actions are guided by a construct's strategies, which are found within a construct's component. Lastly, although antecedents are the reason why a construct exists, in this research antecedents are linked to a construct's components as analyses reveal that they are and are largely related to such components. A construct's definition (and principles) is not included in the diagram because a definition is an overview of a construct and therefore could not be specifically inserted. Definitions are nevertheless analysed and compared in the forthcoming chapter.

3.10 RESEARCH DESIGN

3.10.1 Emergent design flexibility

As recommended by Ormston *et al.* (2014: 22) and Patton (2002: 40), the strategy of the researcher was to remain open and flexible as a rich understanding of the two phenomena developed. This open and flexible design strategy connects to the pragmatic approach stated in section 3.7 because it considered the research objectives over sticking to a strict research philosophy: rigidity has been documented to obfuscate sampling, collection and analysis (Barbour, 2014: 40; Creswell, 2007: 22-23; Ormston *et al.*, 2014: 19; Patton, 2002: 76-77).

3.10.2 Applied and descriptive

“Applied researchers seek knowledge that can be used to solve pressing social and organisational problems. This knowledge...should be valid, descriptive, and informative as to how change may be accomplished” (Miller and Salkind, 2002: 5). The aspiration of the research was to create a simple language that can be used to guide an urgent matter: economic, social and environmental sustainability. Therefore, characteristics with applied research design are shared; the proposed outcomes of the study are designed to be applicable for real-life use (Miller and Salkind, 2002: 63; Patton, 2002: 217). It is concerned with the application of theory

and knowledge to tackling significant societal problems (Patton, 2002: 217). And because it is problem orientated, applied research transcends disciplinary boundaries to tackle the problem at hand and can therefore draw upon several research areas (Patton, 2002: 217) tying into the flexibility discussed the section above.

Because applied research needs to be descriptive and informative for it to be useful (Miller and Salkind, 2002: 5), a descriptive design was also employed. This type of research describes the phenomena at hand providing depth to the variables (Sekaran, 2003: 121). In this case, degrowth's nomological network was built around a sound description of its variables. Additionally, looking at the sustainable development elements in more depth provided the justification for where it traversed degrowth and therefore also catalysed discussions and recommendations.

3.10.3 Sampling strategies

Qualitative research lends itself towards purposive sampling, which maintains that data is sampled with a specific purpose according to certain criterion (Braun and Clarke, 2013: 56; Creswell, 2007: 125; Ritchie, Lewis, Elam, Tennant and Rahim, 2014: 113). For this investigation secondary data was purposefully sampled and thus information-rich literature was chosen decisively, and with certain criteria, to answer the research questions (Barbour, 2014: 67; Patton, 2002: 230). The criteria referred to here are made up of the elements of a nomological network as discussed in section 3.9.3 (definitions, components, antecedents, actions, strategies, outcomes and supporting evidence). For objective 3, relating to the application of the social marketing framework, actions were purposefully chosen to meet the social marketing criteria that they were able to influence behaviours towards sustainable outcomes, that could influence behaviours either voluntarily or involuntarily through downstream and upstream measures and that they could benefit individuals, groups and/or society as a whole.

Snowball sampling is an approach that starts with resources containing a wealth of information and accumulates further data possibilities (Patton, 2002: 237). Relating to this study, information rich books and articles were initially sampled, which provided further possible sources of information the researcher accessed, creating a snowball effect (Braun and Clarke, 2013: 57; Patton, 2002: 235-240). For example, books and special issues on degrowth and core

references in sustainable development were the starting point of further data collection and analysis. Where appropriate, data was sampled until all elements of a nomological network had been saturated – no further information was required to understand and describe it (Braun and Clarke, 2013: 56; Creswell, 2007: 240).

Both degrowth and sustainable development constructs are constantly evolving. Thus, although the bulk of the data were collected until December, 2015, both constructs were constantly monitored for any major new developments that should be included in the dissertation.

3.10.4 Iterative data collection and analysis

Secondary data is seen by Lewis and McNaughton Nicholls (2014: 53) as “an opportunity to bring a new perspective to existing data”. Data collection kept to this statement, with the secondary data making up this study’s core data being collected with the aim of providing a fresh understanding of the sustainability paradigm.

Before explaining the collection and analysis procedures, it is necessary to state that data was analysed and collected iteratively. This implied that after a certain document was analysed, further articles were gathered and analysed to “saturate” the topic/component at hand (Creswell, 2007: 240). For example, when looking at the bioeconomics component of degrowth, some data was analysed, which led to further data being collected and further analysis, until the component was saturated (Braun and Clarke, 2013: 56; Creswell, 2007: 240).

Data collection and iterative analysis procedure

As most secondary data consisted of journal articles and documents, data was collected using search engines and databases such as Google Scholar, Proquest and Ebscohost. Keywords including ‘degrowth’ and ‘sustainable development’ were searched. For degrowth literature, Research and Degrowth’s website (degrowth.org) was used. For sustainable development, websites from the UN and implementing programmes and organisations e.g. UNDP, UNEP, UNIDO, FAO, ILO, etc. were used to source literature. Publications were then preliminarily analysed (purposively sampled) to see whether they could be used to map the nomological networks. Specifically concerning the actions in each construct, literature was preliminarily analysed to see whether proposed actions met the social marketing criteria i.e. whether they could voluntarily and/or involuntarily influence behaviours that benefit individuals, groups

and/or society as a whole. Additionally, actions were also preliminarily analysed to see if they could link to a construct's outcome, strategy and antecedents.

Degrowth literature was analysed for two reasons: 1) because its literature had not been consolidated into anything resembling a nomological network most likely because it was a relatively new concept in the international research agenda (Demaria *et al.*, 2013: 195) and; 2) because its actions were used to develop categories with which overlapping actions in the sustainable development literature were deductively searched for. For example, if a certain degrowth action claimed to contribute to achieving sustainability, then that action was searched for in sustainable development's actions. From this body of literature, definitions, components, antecedents, actions, strategies, outcomes and supporting evidence were identified and coded for further analysis.

The large-scale promotion and adoption of sustainable development was preceded by thorough documentation on which numerous actions in different countries around the world are grounded (e.g. UN, 1992, 2012; UNEP, 2011; WCED, 1987). To analyse the plethora of actions and map the nomological network of sustainable development was not possible. However, this was not a hindrance, as sustainable development has the advantage of retaining existing documentation from which it was relatively easy to infer elements of a nomological network. Thus, data was collected for mapping its basic nomological network (definitions, components, antecedents, strategies and outcomes). However, due to the sheer size, sustainable development's actions were limited and collected according to whether they overlapped with degrowth's.

3.10.5 Data analysis

Pertinent to this study was a qualitative analysis method namely thematic analysis. This type of analysis is discussed below after which the research procedure is elaborated on per research objective. Data analysis, collection and sampling techniques are mentioned where applicable.

3.10.5.1 Thematic analysis

Defined as “a method for identifying, analysing and reporting patterns (themes) within data”, thematic analysis is an approach to analysing data that fits within many, but not all, philosophies (Braun and Clarke, 2006: 81). It operates with theoretical freedom (within limits)

and is a flexible analysis tool for many qualitative studies (Braun and Clarke, 2006: 78). This study used thematic analysis to identify, analyse and report themes within degrowth and sustainable development scholarship. Themes in this sense were the elements of a nomological network.

Thematic analysis as a data analysis technique dictates two ways of analysing data: inductive and theoretical/deductive (Braun and Clarke, 2006: 83, 2012: 175). Inductive analysis purely sees the data without trying to fit it into a pre-existing coding framework, while theoretical/deductive analysis looks at data with the aim of fitting it into certain pre-established codes and research questions (Braun and Clarke, 2006: 84, 2012: 175; Patton, 2002: 453). More details to how the thematic analysis was performed are provided per research objective in the upcoming sections.

3.10.6 Validity and reliability

Generally speaking, validity is concerned with the accuracy of a chosen type of assessment (Sekaran, 2003: 203). Reliability on the other hand refers to whether the outcomes of certain analyses are inferable with great certainty i.e. whether outcomes can be reproduced using the same methods (Krippendorff, 2004: 413).

Validity

According to Guest, MacQueen and Namey (2011: 85), to properly validate a method (to ensure that the methods used to analyse data produced results that are in line with what was intended to be assessed) in qualitative inquiry a “truth yardstick” is required for comparison. In the case where no existing yardstick can be found in thematic analyses, it is possible to verify the validity of a given method by comparing data within individual themes (Braun and Clarke, 2006: 91). To be more precise, only once all literature has been grouped into themes can the validity of individual themes be verified since at this stage the data can be assessed in relation to the data set as a whole so as to reflect on the meaning of their content within a more objective understanding (Braun and Clarke, 2006: 91). Thus, to verify the validity of nomological networks as the chosen methodology, once all data had been analysed and hence all themes had been saturated, the researcher re-read all data within themes in relation to other data and themes to determine the method’s accuracy. As the data from the first round of analysis maintained few errors i.e. little information needed to be moved, the validity of the

chosen method was deemed to be high. Where data was required to be moved, data from other themes were re-read to check for the same inconsistencies.

Reliability

To ensure that outcomes of analyses were reliable to the highest possible degree i.e. that the outcomes would be the same if the research were to take place again, the researcher adhered to an analysis protocol (e.g. Sinkovics, Penz and Ghauri, 2008: 702) consisting of only extracting the themes (elements of a nomological network) from the data and cross-checking that the data fit into their correct themes. More details of the analysis protocol for each research objective are provided below.

3.10.7 Research procedure

Each stage in the research process used different analyses and is therefore discussed per objective below. How data collection and analyses took place is included.

3.10.7.1 Research objective 1: Map the basic nomological networks of sustainable degrowth and sustainable development.

In the early stages of data collection and analysis, the elements of a nomological network, excluding actions, were used as codes to iteratively collect and briefly analyse data. Deductive analysis was used here because pre-established codes in the form of elements of a nomological network guided data collection and analysis. After a preliminary analysis and snowball sampling technique had collected sufficient data, more extensive analyses took the form of dissecting each construct's definitions, components, antecedents, strategies and outcomes. These analyses were performed inductively because more detailed themes were developed by means of scrutinising the literature and not through pre-established data categories (e.g. Braun and Clarke, 2006: 84, 2012: 175; Patton, 2002: 453). For example, in the deductive phase, all antecedents to a construct were extracted and grouped into the theme 'antecedents' i.e. data was collected according to pre-established codes. In the inductive phase, more specific themes or categories of antecedents emerged from the literature as a result of data analysis i.e. literature was extracted and analysed without fitting it into any pre-established codes.

When developing degrowth's basic nomological network, antecedents and strategies were extracted from the degrowth literature and, by means of analysis, connected by the researcher

to a specific component according to whether the literature demonstrated some relation to the component. Thus, components were essentially the starting point of the analyses that allowed degrowth's antecedents and strategies to be connected to a certain component. In contrast, the starting point for analysing the sustainable development literature was the construct's strategy, from which certain components were identified. By analysing these components and the strategy, the researcher could tether certain antecedents to a component and include them in the basic nomological network.

The outcomes of these processes were basic maps of nomological networks for each construct, consisting of definitions, components, antecedents, strategies and outcomes. Strategies were additionally used in Research objective 3 to assist the researcher in grouping certain actions and supporting evidence into degrowth's detailed nomological networks.

Mapping a basic nomological network for degrowth delineated the boundaries within which detailed degrowth nomological networks were mapped—where actions connected to the other elements. Thus, the basic map allowed the researcher to go from simple to more complex mapping techniques. This is the reason why, as will be seen in the analysis chapter, presentation and analyses of elements used to map degrowth's basic nomological network contains a generous amount of literature in contrast to sustainable development where detailed nomological networks were not mapped.

3.10.7.2 Research objective 2: Compare the networks to identify overlapping areas.

Since mapping each construct's nomological networks provided a standardised framework, the constructs and elements of their nomological networks could be easily compared to identify the extent to which they related on a basic level i.e. where their definitions, components, antecedents, strategies and outcomes were similar and different. Comparisons of analyses, which had been deduced from the literature in each construct, disclosed where their languages were similar or different. These comparisons allowed the researcher to further simplify the language of common actions in order to make recommendations for a simpler language per action.

3.10.7.3 Research objective 3: Identify proposed actions common to both constructs that can be used within a social marketing framework.

A combination of processes was used to achieve this objective. Firstly, actions from degrowth's literature were deductively collected and grouped into the theme 'actions'. Thereafter, actions as a theme were inductively analysed through which more specific themes of degrowth actions surfaced. Simultaneously, actions were briefly analysed to distinguish whether they could voluntarily and/or involuntarily influence behaviours towards more sustainable outcomes that were of value to individuals and society. Actions were also briefly analysed according to whether they could be linked to degrowth's antecedents, components, strategies and outcome. Therefore, it was within this research objective that the social marketing criteria were applied. To elaborate on this point: so although a pre-existing social marketing *approach* was used to include data, actions were still inductively analysed as no pre-existing *themes* were used to extract data – themes of actions were developed *after* analysing the literature (e.g. Braun and Clarke, 2006: 84, 2012: 175; Patton, 2002: 453). At this stage, certain actions were not included in the analysis procedure as they did not meet the social marketing criteria.

In general sustainability is seen as interlocking social, environmental and economic pillars (Boström, 2012: 3). A map for economic sustainability was not provided because, from a degrowth and sustainable development standpoint, the economy is only a means to achieve social and ecological sustainability (detailed in section 4.4.2). Therefore, all actions that are technically economic in nature (for example taxes) maintain a higher purpose to achieve social and/or environmental sustainability and are therefore represented in either or both of these nomological networks. Therefore, actions were guided by component's strategies and divided according to whether they could influence behaviours towards primarily achieving ecological or social sustainability. Since actions provided more specific links between degrowth's antecedents, outcomes and supporting evidence, and were guided by degrowth's strategies, actions provided the finer details of more extensive nomological networks to achieve ecological and social sustainability from a social marketing perspective. Thus, actions were a particularly relevant element of specific nomological networks because they are the behaviour-changing set of actions that could underwrite social marketing programmes to increase the likelihood of achieving sustainability.

Secondly, due to the multitude of diverse and dynamic proposals of actions from a sustainable development perspective (Baker, 2006), it was beyond the scope of this research to develop detailed nomological networks for sustainable development. However, because ecological and social sustainability nomological networks had been mapped for degrowth, certain actions to achieve either ecological or social sustainability established themes of actions. Thus, the themes of actions that had been inductively collected and analysed from the degrowth literature were used as the pre-established themes with which sustainable development's literature was deductively collected and analysed. In other words, if an action had been identified in degrowth, it was specifically searched for in sustainable development's actions. Social marketing criteria were also adhered to when extracting sustainable development's actions as they had to also maintain the ability to influence behaviours towards increasingly sustainable outcomes that benefit individuals, groups and/or society. Moreover, like in degrowth's preliminary analyses, sustainable development actions were also briefly analysed to ascertain whether they linked to sustainable development's outcomes, strategies and antecedents. As a further step, sustainable development's actions were tentatively compared at the surface-level with degrowth's actions to ensure that some level of commonality was present. This excluded for example actions that had a similar name, but very little in common. Searching for actions was made possible by sustainable development's documents, which maintains elements similar to a nomological network (e.g. UN, 1992, 2012, 2015; UNDP, 2014; UNEP, 2011; WCED, 1987).

3.10.7.4 Research objective 4: Make recommendations for social marketing programmes for the common actions guided by the theories underpinning social marketing.

Before recommendations could be made, the extent to which actions overlapped were categorised from low to high based on a comparison of each action and its links to the nomological network of which it is a part. As an additional preface to recommendations, the characteristics for successful social marketing programmes taken from the four paradigms underpinning social marketing (critical thinking, systems thinking, value and relational thinking) were connected to the extent to which actions overlap illustrating why greatly overlapping actions can lead to the creation of more successful social marketing programmes. After these formulations, overlapping actions were related to each paradigm underpinning

social marketing from which guidelines for successful programmes with minimal misinterpretation and misguidance based on the actions were developed.

3.10.7.5 Research objective 5: Analyse existing social marketing planning processes and if necessary, develop an appropriate social marketing process specifically intended for social marketers to tackle the sustainability challenge.

To recommend or develop a social marketing planning process that both encapsulates the paradigms underpinning social marketing and deemed to be useful in the sustainability context, existing social marketing planning processes were firstly described in Chapter 2. These planning processes were collected from prominent social marketing textbooks and websites. Secondly, as no critique of these processes exists, the reflection of these processes in the contributions chapter identified where the processes aligned or were misaligned with the paradigms underpinning social marketing. This was done by identifying whether critical thinking, systems thinking, value and relational thinking were embedded within the steps of each planning process. Whether processes could foster critical thinking was important to determine first as it was identified as crucial to the success of reducing misinterpretation and misguidance of actions. If indeed processes could engender critical thinking, processes were scrutinised in the same manner with the remaining paradigms. By doing so, an appropriate planning process to implement the overlapping actions identified in this research to pursue sustainability in accordance with social marketing theory was put forward.

3.11 A NOTE ON REFLEXIVITY

It has already been acknowledged that the data on which this enquiry was based was subject to a specific ontology and epistemology (sections 3.8.1 and 3.8.2 respectively). However, here the perspective of the researcher is brought to attention. Although natural subjective forces are apparent and valued in qualitative studies (Braun and Clarke, 2013: 36), it is important for researchers to remain reflexive throughout the research process and critically reflect on their role in the research process (Barbour, 2014: 37; Braun and Clarke, 2013: 37; Patton, 2002: 64). Thus, it is imperative to state that the researcher critically reflected at all stages of the exploration and remained self-aware of his role in the research. Using the same analysis procedures and protocol for both constructs aided the researcher to neutralise the unintended effects of subjectivity. Additionally, the process of mapping each construct's basic

nomological network and digging deeper to find common actions assisted in developing a holistic view of the constructs, which allowed the researcher place content in the most appropriate category.

3.12 ETHICS

Ethical clearance for this study was obtained from the University of Kwa-Zulu Natal and can be found in Appendix 1. All documentation that was used is available in the public domain.

3.13 CHAPTER SUMMARY

This chapter itemised why and how degrowth's and sustainable development's nomological networks were mapped. It began with the research problem, from which specific research questions and objectives were drawn. The research approach, philosophy and paradigm alluded to the researcher's underlying assumptions of reality and knowledge. A detailed explanation of nomological networks and their elements provided insight into the method used to extract and organise data and the reasons why it was deemed useful. Thematic analysis was adopted as the core of the research design, which was discussed in connection to how and why data was sampled and analysed. Validity and reliability were also discussed, after which the specific methods utilised in each research objective was discussed in detail. The following chapter presents the outcomes of research objectives one to three.

CHAPTER 4: ANALYSIS

4.1 CHAPTER OVERVIEW

In terms of the analogy described at the beginning of Chapter 1, this chapter analyses the two different and complex treatments with the aim of finding commonalities in diet, medicine, exercise, sleep routine, etc. that will give the patient a better chance of shaking the disease and returning to full health. Such an option is rationalised to be less open to misinterpretation and not easy to misguide the treatment. The sustainability debate at the start of the chapter illustrates some underlying reasons to investigate degrowth and sustainable development literature. To identify the overlaps between the two sustainability constructs this research is grappling with, this chapter proceeds to map two basic nomological networks: one each for degrowth and sustainable development constructs. These basic nomological networks are mapped to consolidate and compare their content for similarities and differences, in particular the extent to which the constructs' definitions, components, antecedents, strategies and outcomes relate on a basic level. Secondly, two comprehensive nomological networks from a degrowth standpoint are mapped. These two maps provide themes of actions that could be deductively searched for in sustainable development's literature.

4.2 INTRODUCTION

When looking for specific actions to implement that could achieve sustainability, a plethora of options exist amidst several constructs. Social marketers might choose some of these as the foundation for programmes, each of which could be misinterpreted and mislead and/or misguide efforts to increase sustainable living patterns. This creates the first language-related complication for social marketers, which is essentially an issue of quantity. The second reason why sustainability's language could perplex social marketers is the fact that streams of thought often contend with one another. Thus, if options pull in different directions, social marketers might find it demanding to choose the correct one, as chosen options could be misinterpreted and mislead and misguide programmes. In this case the principle issue is the dimensionality of each option. What could be useful in facing such a challenge is a simplified language of sustainability that tends to the dual problems of quantity and dimensionality. To this end, by enclosing the research within a social marketing lens and mapping the nomological networks of two constructs operating to achieve sustainability, any options shared by sustainable development and degrowth constructs are contended to be a noteworthy start to simplify (in terms of quantity and dimensionality) sustainability's language therefore providing solutions

to these two issues. Commonalities between actions mean that there is agreement as to what actions social marketers can use as foundations for social marketing programmes to increase society's sustainability and that are less likely to be misinterpreted and misguide such attempts.

4.3 MAPPING THE BASIC NOMOLOGICAL NETWORKS

This section begins with an introduction to the sustainability debate. After showing the need to map nomological networks, degrowth's definition and some key literature is presented and analysed. The same procedure is followed for sustainable development, after which each construct's definition and key literature are compared. Thereafter, each construct's components, antecedents, strategies and outcomes are similarly presented, analysed and compared for similarities and differences. Once this is completed, basic nomological networks of degrowth and sustainable development are presented.

4.3.1 The sustainability debate

Sustainable development has been the 'poster girl' of integrated economic, environmental and social concerns since the 1970s (DuPisani, 2006; Hopwood *et al.*, 2005; Waas *et al.*, 2011). Since then it has amassed considerable documentation that identify its definitions, components, antecedents, actions, strategies, outcomes and supporting evidence (e.g. Strange and Bayley, 2008; UN, 1992, 2012, 2015; UNEP, 2010, 2011; UNDP, 2014; WCED, 1987). In theory, sustainable development claims to be able to achieve social and ecological sustainability on a global scale (UN, 2015). Additionally, supporting evidence shows that implemented actions appear to be successful (UNEP, 2010). Then why are some scholars (e.g. Castro, 2004; Engelman, 2013; Giddings *et al.*, 2002; Hopwood *et al.*, 2005; Robinson, 2004; Sneddon *et al.*, 2006; Waas *et al.*, 2011; Wallenborn, 2008), not to mention the lengthy list from the degrowth camp, critical of sustainable development? The above-mentioned critics offer three interlocking reasons:

1. The language of sustainable development is vague and ambiguous and is therefore open to interpretation.
2. The language being used to promote sustainable development actions is akin to greenwashing¹⁰ i.e. it is misleading.

¹⁰ Greenwashing is "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service (Greenpeace, no date).

3. That the concept itself is oxymoronic and is leading society down the wrong path.

These critics point out that sustainable development is vague enough for politicians, the private sector, etc. to interpret and use sustainable development to suit their agendas. Solutions to sustainable development are promoted in a way that seems environmentally and socially beneficial, but often are not. In the end, the debate about the social and ecological limits to economic growth remains a main critical concern.

As a more recent¹¹ entry into the sustainability paradigm, degrowth has not collated the depth and breadth of information as sustainable development. Additionally, it is not without criticisms relating to the language it uses (e.g. Brownhill, Turner and Kaara, 2012; Tokic, 2012; van den Bergh, 2011; Wallenborn, 2008). Degrowth discourse could be seen as a shock to the system (Wallenborn, 2008: 228). It could also be misleading and open to interpretation by governments and businesses, which could have dire consequences such as a “leaner and meaner capitalism” (Brownhill *et al.*, 2012: 94), political, economic and societal resistance to anything resembling an economic slowdown (van den Bergh, 2011: 542) and possibly an economic implosion (Tokic, 2012: 49).

Considering the interpretable, challenging and possibly misleading language these two constructs use, it might be difficult for social marketers (and others) to navigate their territory. Thus, using a social marketing lens, it is postulated that by analysing and comparing their basic nomological networks and identifying coinciding actions from each construct, a simplified and collaborative language that it is not easily misinterpreted and is not misleading can be formulated. Social marketing programmes to better the prospect of realising sustainability can use this simplified language to make more progressive changes.

Tukker (2013: 278 – *italics added*) confirms this research agenda:

“The size of the sustainability challenge is enormous and genuine successes in making a structural change to sustainability have been limited. In my view, the only productive way forward is through *collaboration* and learning, rather than competition between different policy agendas and related strands of sustainability research”.

¹¹ Mentioned in terms of international following or uptake.

In order to distinguish, analyse and discuss the collaborative language on which social marketing programmes can be based, degrowth and sustainable development must be thoroughly examined. One way to achieve this is to map each construct's basic nomological network as well as degrowth's more detailed nomological networks and compare it with sustainable development's literature. Such processes comprise of the next section.

4.3.2 Elements of a nomological network

In the context of mapping degrowth and sustainable development's basic nomological networks, the following conversation and analysis of their theory taken from their bodies of literature is used to deepen the understanding of their languages concerning their definitions, components, antecedents, strategies and outcomes. Degrowth takes the lead in each section and sustainable development is presented afterwards. Comparisons are then made.

4.3.2.1 Definitions

Degrowth

Formally expressed, degrowth is “an equitable downscaling of production and consumption that increases human wellbeing and enhances ecological conditions at the local and global level, in the short and long term” (Schneider *et al.*, 2010: 512).

To fully analyse this definition, it is partitioned and substantiated by more detailed literature.

The emergence of degrowth is attributed to the existence of unsustainable social, ecological and economic conditions as a result of relentless economic growth (Bauhardt, 2014: 62; Fournier, 2008: 531; Latouche, 2010b: 520; Sekulova *et al.*, 2013: 5). Therefore, in developed nations where high levels of consumption already exist, degrowth implies reducing production and consumption to sufficient levels in order to increase wellbeing (R&D, 2010: 523-524). However, and not mentioned in its definition, in nations where poverty and inequality exist, degrowth implies increasing economic growth and a redistribution of wealth from richer nations to uplift people out of poverty and inequality to a level required for a decent life (R&D, 2010: 523-524). In regards to reducing production and consumption, degrowth implies improving (not just stopping the damage of) the environment until a sustainable medium has been reached (R&D, 2010: 523-524).

To sustain degrowth's vision in the long term i.e. triple sustainability (Fournier, 2008: 532; Martinez-Alier, 2012: 54; Nierling, 2012: 240; O'Neill, 2012: 222; R&D, 2010: 524) a quasi steady-state economy has been proposed (Kerschner, 2010: 548; O'Neill, 2012: 221; R&D, 2010: 524; Ott, 2012: 572). A quasi steady-state economy is loosely defined as a dynamic and permanently sustainable (economic, social and ecological) economy in overall equilibrium (Kerschner, 2010: 548; Martinez-Alier *et al.*, 2010: 1744).

By analysing these statements, it is deduced that the ideas of degrowth surfaced from unsustainable environmental, social and economic conditions fertilised by relentless economic growth. To reverse these trends, a degrowth economy intends to balance out social and environmental unsustainability by increasing or reducing economic activity where necessary based on the principle of sufficiency¹² (R&D, no date). This leads to an equalised (steady-state) economy where its economic activities can be infinitely pursued without social and environmental degradation.

Sustainable development

Using the classical and most widely used definition (DuPisani, 2006: 93) provided by the World Commission on Environment and Development (WCED, 1987):

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it, two key concepts:

- The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs” (WCED, 1987: 43).

Additional literature is drawn upon to analyse this definition in the depth similar to that of

¹² Only what is necessary to maintain a high level of well-being (Alcott, 2010: 553; Kallis, 2011: 875; R&D, 2010: 524). The principle of efficiency is embedded within the principle of sufficiency (e.g. Lorek and Fuchs, 2013: 38-39)

degrowth so that adequate comparisons can be made.

Sustainable development arose out of ecological, social and economic trepidations in an around the 1970s (DuPisani, 2006). Authors postulated that sustainable development emerged firstly out of ecological anxieties consequential to the predicted amount of natural resources required to nourish progress and development's rising living standards underwritten by economic growth used to achieve them (e.g. Castro, 2004: 196; DuPisani, 2006: 87; Meadows *et al.*, 1972; Waas *et al.*, 2011: 1640) and; secondly, economic growth, progress and development's history of social injustice and poverty (UN, 1992: paragraph 3.1; Baker, 2006: 20; DuPisani, 2006: 91; Waas *et al.*, 2011: 1640).

To facilitate a type of development that could continue infinitely (Boström, 2012: 3; Kuhlman and Farrington, 2010: 3437), sustainable development sewed together environmental concerns with social and economic development issues and developed economic and policy initiatives that would improve social equality and operate within the finite boundaries of the biosphere (Sneddon *et al.*, 2006: 256; While, Jonas and Gibbs, 2010: 76) while pursuing economic growth in the right areas (UNEP, 2011: 16; WCED, 1987: 44). A green economy is both a key catalyst from which a socially and ecologically sustainable society will emerge and the method to sustain triple sustainability (UNEP, 2011: 195-453). A green economy is defined as a process of reorienting the economy to: respect ecosystem limits through increasing efficiency; mitigate poverty; improve social inclusion and wellbeing and; create employment and opportunities for all (UN, 2012: 9). The link between a green economy and sustainable development is clear: the green economy and green growth are seen "as specific pathways that can assist countries to achieve sustainable development" (UNEP, 2015: 11). In developing nations, rapid short-term growth is proposed as the means to reduce poverty and inequality; long-term economic growth for developed nations is also considered imperative (UN, 2015).

Since they are used in the literature to discuss sustainable development, three terms are presented below.

Our Common Future, known as the grand footings of the sustainable development agenda (Baker, 2006: 6), sits between strong and ideal sustainable development (Baker, 2006: 34). These two terms are explored below and contextualised by a third paradigm namely weak sustainable development.

Strong sustainable development¹³

Concerned about environmental preservation, strong sustainable development/sustainability implies that natural capital is largely non-substitutable (Baker, 2006: 33; Dietz and Neumayer, 2007: 618; DuPisani, 2006: 93-4; Kuhlman and Farrington, 2010: 3443; Neumayer, 1999: 26-7). For example, profits from mining should be used to develop products that will no longer require mining and not to increase human capital. Trees are not substitutable as they provide other environmental benefits such as homes for birds.

Ideal sustainable development

In its purest form, sustainable development proposes a transformation in our views towards nature where natural capital has value in itself, is not substitutable and has strict limits on extraction (Baker, 2006: 30). Returning to the examples above, in the case of ideal sustainable development mining is not permitted or is strictly limited.

Weak sustainable development¹⁴

Aiming to integrate capitalist and ecological ideals, weak sustainable development/sustainability prescribes that other forms of capital (such as technology or human capital) can replace natural capital (Baker, 2006: 32; Dietz and Neumayer, 2007: 618; DuPisani, 2006: 93; Kuhlman and Farrington, 2010: 3443; Neumayer, 1999: 23). For example, profits from mining (natural capital) in undeveloped nations are used to educate local communities (human capital). Another example is that technological advances will replace trees (natural capital) to sequester carbon.

To analyse these points, scholars writing about sustainable development were weary of economic growth to achieve progress and development because of the negative environmental and social externalities these processes had and would assert. Sustainable development proposed a shift in the *quality* (type) of economic growth that would produce socially uplifting and environmentally favourable outcomes i.e. economic growth in the right areas to develop the whole of society to a minimum level while operating within the confines of earth's ecological carrying capacity (strong or ideal sustainability). Efficiency¹⁵ is one of the major

¹³ Often referred to in the literature as strong sustainability.

¹⁴ Often referred to in the literature as weak sustainability.

¹⁵ Efficiency is a guiding principle that maximises resource use (UNEP, 2011: 24).

reference points for sustainable development to ensure an ecological and social sustainability, which is then maintained by a green economy. The principle of sufficiency, although barely referred to in explicit terms, could be implied by the term ‘sustainable’ e.g. that consumption patterns should meet the givings of nature and no more (e.g. UN, 2015: 35), but would also depend on what is defined as ‘needs’ (from sustainable development’s definition).

Comparing definitions and key literature

The background to defining these constructs are inherently similar as they both arose out of the unsustainable conditions at a (present and/or future) point in time. Both constructs’ definitions include people’s wellbeing, although they maintain other differences. What degrowth fails to mention in its definition though, which could be a leading cause of its possible misinterpretation and misleading actions, is increasing economic growth in some areas where necessary, for example in poorer nations where good economic growth would be beneficial. This part strongly pervades the construct elsewhere, but would mean that people would need to read deeper into the construct. Thus, by being called degrowth yet proposing growth in some areas may be confusing and allow the construct (in the future) to be misinterpreted and misguide sustainability efforts.

Echoed by other researchers (e.g. Hopwood *et al.*, 2005: 40; Robinson, 2004: 373) sustainable development’s definition is also vague and allows for interpretation and therefore could misguide sustainability actions: for example, the concept of ‘needs’ varies according to different cultures, people, nations etc. Additionally, human wellbeing from degrowth is a case where ambiguity can also permeate. The outcome of both constructs is ecological, social and environmental sustainability. The means to achieve alleviating poverty are also somewhat similar: both constructs seek to increase economic activity in the right areas. Both constructs propose an economy that works according to the finiteness of earth’s resources.

Similarities aside, there are some fundamental differences. Quite obviously, degrowth implies decreasing economic activity in some areas whereas sustainable development proposes a change in the type of economic growth, but a blanket of economic growth nevertheless. Growth has been pitted as a large concern from the degrowth camp, especially the type of unchecked growth that has pervaded development economics over the past 30 years (Asara, Otero, Demaria and Corbera, 2015: 375). Degrowth puts forward a steady-state economy as a means to sustain triple sustainability, which is an economy in dynamic equilibrium i.e. where society

and economy can continue eternally (R&D, 2010). A green economy is proposed by sustainable development to maintain sustainability, which seeks to change the type of economic system to achieve sustainability (UN, 2012: 9). If, however, green growth and sustainable development were to be ultimately sustainable and decoupled from resource extraction and wellbeing, then it could be as equally formidable as degrowth. This would depend on the interpretation of “the type of economic growth” as put forward by sustainable development, which to date is said to have been inadequate due to misinterpretation of the construct (e.g. Giddings *et al.*, 2002: 187; Jabareen, 2008: 181; Lorek and Spangenberg, 2014: 34). If ideal or even strong sustainable development were adhered to for example this might drive clearer and more progressive changes (Lorek and Fuchs, 2013: 41).

Additionally, while degrowth operates on the principle of sufficiency, sustainable development opts primarily for efficiency to increase the likelihood of achieving sustainability with reductions in key sectors as proposed by degrowth not being explicitly referred to, but rather interpretable to the onlooker. Therefore, this is another area of possible misinterpretation and misguidance from sustainable development, for example pursuing consumption and production systems that are ‘sustainable’ would likely require reducing consumption in the wealthy nations, although reduction is not mentioned. Efficiency is conceptualised as a principle that is embedded within the term sufficiency. However, because sufficiency is a guiding principle, degrowth might be seen as a more radical approach to sustainability (Demaria *et al.*, 2013: 192; Tokic, 2012: 49; van den Bergh, 2011: 542) as it proposes widespread changes in behaviours, such as decreasing economic growth in some areas – almost considered taboo in international politics with even the wealthiest nations extending their quest for economic growth in their political agendas (OECD, 2015). It could thus also be misinterpreted for the wrong means.

As can be seen, this comparison validates some harmonies of the two constructs at definition, principle and key literature levels, and shows that there are also some differences.

4.3.2.2 Antecedents, components, strategies and outcomes

The forthcoming analyses are specifically concerned with the fully outlined elements of a construct’s nomological network depicted in the figure below.



Figure 10 Specific elements analysed to map basic nomological networks

Degrowth

Taken from Demaria *et al.* (2013) who added justice to the French text of Flipo (2007), the following sections review degrowth's components, which are ecology, bioeconomics, critiques of development and praise for anti-utilitarianism, meaning of life and wellbeing, democracy and justice. Each component and its strategy and outcomes are analysed to be incorporated into degrowth's basic (and later more detailed nomological networks). Antecedents are extracted from the degrowth literature and by means of analysis are connected to a specific component according to whether it relates to the component's definition and strategy.

Sustainable development

Though not categorically stated, the components below have been construed from the article by DuPisani (2006), which outlines the historical roots of sustainable development. Components include ecology, wellbeing and equity. Each component is defined from the perspective of sustainable development, and then antecedents relating to each component are discussed and analysed. Sustainable development's overarching strategy and outcome is also provided.

Section structure

In the ensuing sections, elements of degrowth's nomological network are analysed first followed by sustainable development's. The section starts with a discussion of elements relating to ecological sustainability followed by a discussion of the elements from a predominantly social perspective. As the number of components vary between constructs, in some cases only a degrowth component is discussed. Components that are similar between degrowth and sustainable development constructs are analysed and compared. Thus, for example, the ecology component from both constructs are analysed and compared. The bioeconomics component from the degrowth construct is analysed and, due to their similarity, also compared with the analysis of sustainable development's ecology component. Degrowth's critiques of development and praise for anti-utilitarianism component is analysed and no comparison is made with the sustainable development construct as no similar component

exists. The meaning of life and wellbeing component of degrowth is analysed. Sustainable development's wellbeing component is also analysed and then compared with degrowth's meaning of life and wellbeing component. Democracy as a component from degrowth is then looked into – again no comparison is made with sustainable development as no similar component exists. Finally, justice and equity, which are degrowth and sustainable development components respectively, are analysed and compared due to their similarity. Antecedents extracted from the literature are placed under certain components as analyses reveal that they largely relate to such components. It is important to note that these elements are interdependent and that the antecedents, strategies and outcomes may overlap in some cases.

Comparisons are made after each component has been analysed separately in an attempt to look for similarities and differences in their languages. These comparisons will also be used at a later stage when each construct's actions are analysed and social marketing guidelines and recommendations are made.

The ecology component of the degrowth construct

The reader is reminded that components are parts of constructs that have a specific theme. In analysing the degrowth construct, components allowed the researcher to connect certain antecedents to certain components.

As an important element in the basic and ecological sustainability nomological networks, it is critical to analyse ecology as it will shed light on why degrowth maintains a certain standpoint and how the strategies seek to achieve sustainability. In turn, these analyses will clarify the antecedents, strategies and outcomes to be incorporated into degrowth's basic nomological networks.

Defining the ecology component of degrowth

Of great interest to ecology as a component of degrowth is the value of ecosystems and all living things (Demaria *et al.*, 2013: 196; Flipo, 2008: 27). According to degrowth theory, ecosystems support all life forms, are not substitutable, and therefore should have rights as they not only afford humans with useful biological services, but also other living creatures that occupy earth (Constanza *et al.*, 2013: 252; Demaria *et al.*, 2013: 196; Jabareen, 2008: 183).

Antecedents of ecology for the degrowth construct

To rephrase what was stated in the methodology chapter (section 3.9.3), antecedents are the causes of a construct i.e. the reasons for the need for degrowth. Antecedents have been extracted and linked to certain components as part of the analysis of the degrowth literature.

Exceeding limitations

The first antecedent extracted from the literature and linked to the ecology component of degrowth is the argument that economies are exceeding the earth's ecological limitations. This is supported by the following discussion in the degrowth literature. As early as the 1970s, Meadows *et al.* (1972) warned of the ecological limitations of economic growth. The imbalance between ecology and production and consumption continually stimulates research from credible institutions (Demaria *et al.*, 2013: 196; Kallis, 2011: 875), which unequivocally state that human-economic activity unsustainably exploits the environment (e.g. Tukker, Huppes, Guinée, Heijungs, de Koning, van Oers, Suh, Geerken, Van Holderbeke, Jansen and Nielson, 2006; GFN, 2014; UNEP, 2011, WWF, 2010). Two telling figures are often referred to:

- 1) the carrying capacity of the earth's ecosystem has been exceeded by roughly 50% as we currently use approximately 1.5 planet earths to sustain our lifestyles (WWF, 2010: 34); and therefore
- 2) by August 19, 2014 we had already used 2014's environmental allowance (GFN, 2014).

The result is an imbalance between ecology and economy with the potential for hard-hitting ecological, social and economic ramifications (Jackson, 2009: 12; Meadows, Randers and Meadows, 2005; Princen, 2010: 3; Rockström, Steffen, Noone, Persson, Chapin, Lambin, Lenton, Scheffer, Folke, Schellnhuber, Nykvist, de Wit, Hughes, van der Leeuw, Rodhe, Sörlin, Snyder, Costanza, Svedin, Falkenmark, Karlberg, Corell, Fabry, Hansen, Walker, Liverman, Richardson, Crutzen and Foley, 2009).

Thus, because human behaviour is currently unsustainable in ecological terms, exceeding earth's limitations (by roughly 50%) is an important antecedent in degrowth's basic and ecological sustainability nomological networks.

Expanding population

An expanding population is another antecedent construed from degrowth's literature and

connected to the ecology component. The antecedent is represented by the upcoming viewpoints in degrowth literature.

Over the last fifty years, increases in population and affluence have equally been the central protagonists of economic growth (Jackson, 2009: 77). Given the ill-effect economic growth has on the environment, an expanding population reported to reach nine billion by 2050 will only further intensify the ecological overshoot (Alexander and Ussher, 2012: 68). Furthermore, it compounds the problems of other antecedents, such as the rebound effect. This is put well by the WWF (2010: 24):

“the ‘Business-As-Usual’ scenario – which is based on the UN’s most moderate estimate of growth in the world’s population, consumption and climate change – shows that if policies remain unchanged, then by 2050 we will need 2.8 planets to provide for our consumption and to store the carbon we generate from the combustion of fossil fuels, land use change and chemical processes”.

What degrowth protagonists maintain here is that an expanding population multiplies the negative social and ecological consequences the current economic system creates. Due to the unsustainable ecological implications that an expanding population has, it is therefore seen as another antecedent in basic and ecological sustainability nomological networks.

Development, culture and ecology

The final antecedent that has been extracted from the degrowth literature and linked to the ecology component of degrowth is the dispute that development, by means of encouraging consumerist cultures, has undesirable ecological consequences. Literature from a degrowth standpoint is presented and analysed.

Aries (2009: 41 cited in Bauhardt, 2014: 62) states that “[t]he ecological breakdown is a consequence of the symbolic and institutional breakdown of society”. In direct conflict with ecological sustainability, the pursuit of development and growth, which has endorsed profits and high-consumption lifestyles, has allowed the continued pillaging of the planet’s resources (van Griethuysen, 2010: 590; Jackson, 2009: 15; Kallis, 2011, 874; Martinez-Alier, 2012: 64; R&D, 2010: 523; Schneider *et al.*, 2010: 516). “[Development] understands the exploitation of the natural world as not just a right but virtually a duty” (Hamilton, 2010: 573).

In other words, as supposed by degrowth adherents, ecological unsustainability is partially caused by a culture of consumerism inherited from pursuing development and growth policies. It is thus considered an antecedent in the basic and ecological sustainability nomological network.

The antecedents to degrowth that were taken from the ecology component of degrowth have been analysed to demonstrate the reason why degrowth upholds that certain things cause ecological unsustainability. Its strategy and then outcomes are now scrutinised.

Degrowth's strategy for the ecology component

Strategies are guiding principles that allow actions to be placed into either ecological or social sustainability nomological networks. Here the strategies discussed in the degrowth literature are extracted.

Degrowth argues that certain ecological strategies are required to achieve ecological sustainability (outcome). They are important to present and analyse because they guide the placement of actions and supporting evidence into the ecological sustainability nomological network. Such strategies are extruded from the ecology component of degrowth and analysed after literature on the topic has been put forward.

The strategy that has been put forward to reduce the ecological impact humans have on the earth's resources is to acquire a new affiliation with nature (Demaria *et al.*, 2013: 196; Flipo, 2008: 27) "based on respect and coevolution" (Flipo, 2008: 27). This implies that the environment is shared and cared for by everyone to avoid unequal accumulation and giving nature constitutional rights (Demaria *et al.*, 2013: 196). Additionally, the advent of a culture with deep environmental concerns depends on a re-evaluation of the concept of the self and its relation to the environment (Demaria *et al.*, 2013: 196; Flipo, 2008: 27; Hamilton, 2010: 571; Latouche, 2010a: 44). Furthermore, that we live sustainably within the confines of the carrying capacity of the earth's ecosystems is another strategy that has been found in the literature (Andreoni and Galmarini, 2013: 65; Lietaert, 2010: 577). More specifically, this entails the reduction of the collective negative impact humans have on the planet's natural resources (Demaria *et al.*, 2013: 196; Flipo, 2008: 27; Latouche, 2010b: 520, Martinez-Alier *et al.*, 2010: 1743; Schneider *et al.*, 2010: 512; Sekulova *et al.*, 2013: 5).

Thus, degrowth protagonists envision a new, re-evaluated culture with a strong ecological concern where people are custodians of the environment and where sharing plays an important role. After analysing this strategy, certain actions and supporting evidence can be deemed appropriate to fit into the ecological sustainability nomological network.

Proposed outcomes of degrowth's ecology strategy

Outcomes reflect the purpose of a component's strategy. From the analysis of the degrowth literature, the following are the outcomes proposed for the ecology strategy.

Outcomes are an element of the basic and ecological sustainability nomological networks and are therefore vital to discuss. As an outcome of the ecological strategies, in theory degrowth claims to achieve ecological sustainability. Below are some extracted pieces that support this view.

The strategy of living according to the carrying capacity of one planet is said to be able to reduce the harmful impact society has on earth's natural resources to the extent that society can infinitely live in harmony with nature (Flipo, 2008: 27; Martinez-Alier *et al.*, 2010: 1743; Sekulova *et al.*, 2013: 5).

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From these extracts it can be said that the outcome from degrowth's ecology component is ecological sustainability. However, because socio-economic systems are a sub-component of the biosphere, ecological sustainability implies social sustainability as well (Jackson, 2009: 141; Kallis *et al.*, 2009: 15; Klitgaard and Krall, 2012: 247). Additionally, social and ecological sustainability are the basis of economic sustainability¹⁶, and are therefore all linked together. This means that economic, ecological and social sustainability are self-reinforcing. The outcome of ecological degrowth is therefore triple sustainability (ecological, social and economic), which is planned to be maintained by a steady-state economy.

Summary of degrowth's ecology component

From the presentation of literature and analyses done in this section, degrowth theory claims that development and consumerist cultures, population and exceeding the limitations of planet

¹⁶ More depth to this link is provided in section 4.4.2.

earth contribute to ecological unsustainability and therefore are the underpinnings of degrowth's antecedents i.e. its stance on ecological sustainability. As a strategy, degrowth aims to develop an ecological culture to avoid its unequal accumulation and for ecology to have rights in itself. Ultimately, ecology is part of attaining triple sustainability and contributes to the foundations of a steady-state economy.

The ecology component of the sustainable development construct

Ecology is also a component in sustainable development's basic nomological network and is therefore vital to analyse. Antecedents, strategy and outcomes linked to this component will show why ecology is key to sustainable development's environmental pillar. Consequently, these, analyses will be used to discuss overlapping areas with degrowth.

Defining the ecology component of sustainable development

Sustainable development claims to be largely focused on ecology where – because it is said to be positioned between strong and ideal sustainability – natural capital is largely not substitutable (Dietz and Neumayer, 2007: 618; DuPisani, 2006: 93-4; Kuhlman and Farrington, 2010: 3443; Neumayer, 1999: 26-7), may have strict limitations (Baker, 2006: 30) and has value in itself (Baker, 2006: 30). Ecosystems support all life on earth and are therefore integral to society's wellbeing (UN, 1992: paragraph 1.1; WCED, 1987: 45). Because the *2030 Agenda for Sustainable Development* (UN, 2015) references ecology throughout, ecology is considered a vital component.

Antecedents of ecology for the sustainable development construct

Excessive exploitation

Ecology as a component is connected to the first antecedent to sustainable development theory, which is the argument that unchecked economic growth has led to the excessive exploitation of earth's resources (UNEP, 2011: 14; WCED, 1987: 2-4). Literature is exhibited and analysed.

In 1972, the *Limits to Growth* report cautioned the public of the ecological limitations of economic growth (Meadows, Meadows, Behrens and Randers: 1972). Fifteen years later, it was postulated that the quest for development, fuelled by economic growth, could trigger an ecological disaster (WCED, 1987: 44). More recently, studies confirm that society is still excessively degrading natural resources (EEA, 2012; Tukker *et al.*, 2006; GFN, 2014). Indeed, “[i]nterest in sustainable development is driven by the concern that economic development

may be leading to rapid accumulation of physical and human capital at the expense of excessive depletion and degradation of natural capital” (UNEP, 2011: 17).

Thus, the ecological burden that has been placed on earth’s natural resources as a result of excessive exploitation is unsustainable (Baker, 2006: 20; DuPisani, 2006: 89; Sneddon *et al.*, 2006: 255). Excessive exploitation is therefore an antecedent in sustainable development’s basic nomological network.

Expanding population

Another antecedent that surfaces in the sustainable development literature that has ties with the ecology component of sustainable development is an expanding population. Why it is a factor impacting on ecological degradation is outlined below and then analysed.

Due to higher living standards, which are consequential of development and excessive consumption in highly developed nations, the world population’s aggregate consumption practices are environmentally unsustainable (DuPisani, 2006: 89; EEA, 2012). Add a larger population, expected to reach 9 billion by 2050 (UNEP, 2011: 14), to the equation and it quickly becomes clear that increasing population acts as a multiplier effect on environmental unsustainability (UN, 1992: paragraph 5.3).

It can be seen from these arguments that an expanding population multiplies the use of ecological resources to sustain human life. Thus, because an expanding population at current levels of resource use is unsustainable, it is considered an antecedent in sustainable development’s basic nomological network.

Development, growth and ecology

The third antecedent extracted from the sustainable development literature that can be joined to the ecology component of sustainable development is the view that development and economic growth cause ecological stress. Literature is presented and analysed.

Rising ecological scarcity is an indication that we are irrevocably depleting ecosystems too rapidly (UNEP, 2011: 14). “The major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries” (UN, 1992: paragraph 4.3). This is underwritten by development and

growth strategies that overlook the finite amount of natural resources available (UNEP, 2011: 14). For example, since the early 1990s, strategic investments have been largely made in unsustainable areas such as “property, fossil fuels and structured financial assets with embedded derivatives” (UNEP, 2011: 14). On the flip side of this coin is the lack of investment in areas such as “renewable energy, energy efficiency, public transportation, sustainable agriculture, ecosystem and biodiversity protection, and land and water conservation” (UNEP, 2011: 14), which are considered more sustainable.

To interpret this, sustainable development scholars realise that one of the primary causes of ecological unsustainability are the lifestyles of people living in developed nations, which has in the past been driven by ecologically unsustainable development and growth strategies. Therefore, development, growth and ecology is seen as an antecedent to the sustainable development construct and can be incorporated into its basic nomological network.

Sustainable development’s strategy for the ecology component

Dissimilar to degrowth, where each component’s strategy is detailed because it is used to guide the placement of actions and supporting evidence into ecological or social sustainability nomological networks, the strategies for each of sustainable development’s components are not analysed by the researcher because actions and supporting evidence are not provided for sustainable development. Additionally, strategies specific to each component are not unequivocally given in sustainable development literature. An overarching strategy is used in most cases as it contains within it strategies that relate to sustainable development’s components.

Because sustainable development is primarily implemented through policies, laws and enabling conditions (UN, 1992: paragraph 1.3; UN, 2012: paragraph 10; UNEP, 2011: 16; WCED, 1987: 11), strategies will always combine policies and laws with a component to achieve the intended outcome. Thus, sustainable development’s overarching strategy is to create a political and socio-economic system (with laws, policies, enabling conditions, etc.) that obeys the earth’s ecological limits, diminishes poverty and inequality and improves quality of life (UNEP, 2010: 5). This is the definition of a green economy (analysed in section 4.3.2.1), which has been adopted by sustainable development as an important tool to achieve sustainable development’s overarching strategy.

The overarching strategy extracted from the analysis of the literature seems to incorporate sustainable development's three components: ecology, when referring to earth's ecological limits; wellbeing, when referring to improving quality of life and; equity, when referring to diminishing poverty and inequality. Thus, this strategy relating to sustainable development's components will be used in comparison with degrowth's specific strategies. In other words, while not stated in the sustainable development literature, specifying the strategies at component level should be beneficial for comparative purposes.

Therefore, sustainable development's strategy for the ecology component is to create a political and socio-economic system (with laws, policies, enabling conditions, etc.) that obeys the earth's ecological limits (UNEP, 2010: 5).

Proposed outcomes of sustainable development's ecology strategy

"If there is one realisation that seems to have taken hold since the advent of sustainable development, it is that the environment, the people who inhabit it, and the economies and cultures they thrive on depend on each other" (Strange and Bayley, 2008: 61). In other words, triple sustainability is the outcome of sustainable development, because all three areas of sustainable development (economic, ecological and social) are intimately interwoven (UN, 2012: paragraph 3; UNEP, 2011: 16; WCED, 1987: 4-8).

Summary of sustainable development's ecology component

Analysing this component made apparent that the sustainable development literature argues that natural resources are being excessively used, that a population set to expand to between 9 and 10 billion will put additional pressure on the biosphere and that economic growth and development are principal driving forces of ecological exploitation. Currently these are unsustainable and are therefore antecedents in sustainable development's basic nomological network.

Comparison of degrowth and sustainable development's ecology component

Both constructs' literature refers to the non-substitutability of ecosystem services, that ecosystems support life on earth and deliver wellbeing to humans, as well as the value of ecosystems themselves in their definitions. All antecedents have very similar headings and content. Firstly, exceeding limitations (degrowth) and excessive exploitation (sustainable development) antecedents both uphold that socio-economic activity is the cause of an excessive

exploitation of ecological resources that exceeds the limits of planet earth. Secondly, expanding population as an antecedent is shared by both constructs, and both conclude that a growing population coupled with higher living standards will lead to further overstepping earth's ecological limitations. The third antecedent existing in both constructs is development, culture and ecology. Degrowth and sustainable development use the same content as they speak of development and consumerist cultures being the cause of the ecological predicament.

The difference in the two constructs' ecology component can be seen in their strategies. Degrowth seeks to create a culture of ecology while sustainable development seeks to implement a system that obeys the earth's ecological limits (while diminishing poverty and improving quality of life). Here is where sustainable development has been criticised for placing social and economic development, for example reducing poverty by increasing economic growth, ahead of environmental stewardship (e.g. Engelman, 2013: 10) or in other words, interpreting the concept to favour weak sustainable development and therefore misguiding efforts to realise (triple) sustainability. A culture of ecology could also misguide efforts as it may be seen as too ecocentric – a viewpoint giving precedence to ecological concerns (Baker, 2006: 28). At the outcome level, there is a direct overlap in the form of triple sustainability.

The bioeconomics component of the degrowth construct

Because ecological, economic and scientific analyses are fused together in bioeconomics to formulate a more technical understanding of how and why there is a need to achieve ecological sustainability, it is deemed another important element in the basic and ecological sustainability nomological networks and therefore is critical to analyse. Analyses aim to reveal where bioeconomics contributes to degrowth theory and how it proposes to achieve sustainability.

Defining the bioeconomics component of degrowth

Degrowth supporters uphold that bioeconomics, which is also described as the basis of the field of ecological economics (Kallis *et al.*, 2009: 15; Schneider *et al.*, 2010: 512), relates to the *economic and scientific* understanding of the biophysical limits of natural systems and resources (Andreoni and Galmarini, 2013: 66; Bonaiuti, 2011: 171; Demaria *et al.*, 2013: 198; Flipo, 2008: 28; Kallis *et al.*, 2009: 15; Klitgaard and Krall, 2012: 247; Latouche, 2010b: 520). From the perspective of this component, the economy is intertwined with the biosphere and the biosphere is therefore a key factor in economic analysis (Bonaiuti, 2011: 171-172; Demaria *et*

al., 2013: 198; Jackson, 2009: 141; Kallis *et al.*, 2009: 15; Klitgaard and Krall, 2012: 247). Bioeconomics can be understood in terms of social metabolism, within which two important terms are contained: thermodynamics and entropy.

Social metabolism

The works of Andreoni and Galmarini (2013), Bonaiuti (2011, 2012a; 2012b), Fournier (2008), Garcia (2012), Latouche (2010a; 2010b) and Martinez-Alier *et al.* (2010) provide a general consensus that social metabolism is one of degrowth's important components and is thus a vital component requiring analysis. From the literature emerge the following arguments.

The formal development of social metabolism can be traced back to the work of Georgescu-Roegen (1970), who introduced the concept of entropy, based on Carnot's second law of thermodynamics, to economics (Bonaiuti, 2011: 52; Latouche, 2010: 520). Very basically, entropy asserts that energy and resources are irreversibly degraded by transformations through productive activity (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Daly, 1995: 151; Kallis *et al.*, 2012: 173) i.e. that energy cannot be recycled and other products can only be recycled on a limited basis (Kallis *et al.*, 2012: 173; Martinez-Alier, 2012: 51). For example, "only 40 to 60 percent of commodities like copper, aluminium, steel, and paper can be salvaged for use in recycling" (Martinez-Alier, 2012: 58).

Based on the law of thermodynamics and the concept of entropy, social metabolism is a tool used to analyse material and energy flows within socio-economic systems (Andreoni and Galmarini, 2013: 66; Martinez-Alier, 2012: 52; Sorman and Giampetro, 2013: 81). It equates the socio-economic system to that of any living system that produces waste and requires continuous inputs (energy, raw materials) to function (Andreoni and Galmarini, 2013: 66; Kallis *et al.*, 2012: 173; O'Neill, 2012: 222). Social metabolism analyses explain that once resources (energy and matter) are used there is limited capacity to recycle them and they therefore become permanently unavailable (Bonaiuti, 2011: 181; Kallis *et al.*, 2012: 173; Martinez-Alier, 2012: 51). Additionally, systems produce unfavourable waste (Bonaiuti, 2011: 181; Daly, 1995: 151; Latouche, 2010: 520; R&D, 2010: 523) and deplete biodiversity (Andreoni and Galmarini, 2013: 65). Thus, as economic systems grow, they require more newly available resources to keep them performing and they produce unusable waste.

Social metabolism, entropy and thermodynamics maintain that economic activity, over time, depletes the total sum of resources and produce unusable waste. Economic activity is therefore unsustainable. Consequently, bioeconomics literature contains certain antecedents to degrowth.

Antecedents of bioeconomics for the degrowth construct

Technology, growth and the rebound effect or Jevons Paradox

The first antecedent that is inferred from the degrowth literature and associated with the bioeconomics component of degrowth is the belief that economic growth will always lead to an increase use of the total sum of resources. The following literature is particularly relevant.

Decoupling, which generally refers to rearranging goods, services and production systems to use resources more efficiently while maintaining economic growth (Jackson, 2009: 67), has proven ineffective in absolute terms meaning that although processes, products and services have become more efficient, the (absolute) sum of resources used has still increased over time (Demaria *et al.*, 2013: 196; Jackson, 2009: 69; Lorek and Fuchs, 2013: 38; Peattie and Peattie, 2009: 262; Schneider *et al.*, 2013: 512; Jevons; 1865 cited in Victor, 2010). This is known as the rebound effect or Jevons Paradox. The theoretical implications of this paradox from a degrowth standpoint are that technological advancements cannot outstrip resource use in a growth scenario (Fournier, 2008: 532; Jackson, 2009: 67-86; Moriarty and Honnery, 2012: 890; Schneider *et al.*, 2010: 511). Furthermore, because technological innovation is locked in by growth (Bonaiuti, 2012a: 527; R&D, no date; Lorek and Fuchs, 2013: 36), growth is the motor for technological advancement. In other words: “not only does technological progress sustain growth, but growth also becomes the source of further innovations, in a recursive, self-expanding spiral” (Bonaiuti, 2012a: 527).

Although efficiency has improved over the last 17 years, carbon emissions have nevertheless increased by 40% (Jackson, 2009: 79). Thus, considering the forecasted increases in population and upscaling in development that increases resource use, Jackson (2009: 79-80) calculates that by 2050 we need to reduce carbon emissions 21-fold.

Growth, and the myth that technology can curb environmental depletion (Fournier, 2008: 532; Jackson, 2009: 67-86; Moriarty and Honnery, 2012: 890; Schneider *et al.*, 2010: 511), cannot relinquish the strain on natural resources while supporting increased entropy. In this manner,

the consumption of resources will always outrun efficiency i.e. maintain a rebound effect or Jevons Paradox.

To this end, degrowth maintains that if the absolute sum of resources used to sustain economic growth increases in spite of technological advances, the rebound effect inhibits any transition to ecological sustainability when the focus is still on economic growth and technological innovations (e.g. Nørgård, 2013: 65). Thus, because growth and efficiency measures only perpetuate ecological unsustainability, the rebound effect or Jevons Paradox is considered an antecedent in degrowth's basic and ecological nomological network.

Neoclassical and neoliberal economics and the growth of systems

This antecedent from the degrowth literature that is related to the bioeconomics' component contains the argument that neoclassical and neoliberal economics and the growth of systems is ecologically unsustainable. Degrowth's supporting literature is presented below.

By continuously finding new markets in which to sell new goods, growth, as fostered by neoclassical and neoliberal economics, amplifies the expansion of socio-economic systems (Bonaiuti, 2012a: 527-528). However, socio-economic systems are bound by the ecological limitations of planet earth and therefore adhere to the principles of thermodynamics and entropy outlined above (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Latouche, 2010b: 520). Thus, ever-increasing socio-economic systems produce greater entropy i.e. they increase the dilapidation of natural resources (e.g. Jackson, 2009: 15). As a result of these links between growth, the size of systems and the biosphere, the irreversible degradation of energy and matter creates a paradox for neoclassical and neoliberal economics and perpetual growth (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 172; Latouche, 2010a: 15; Kallis *et al.*, 2012: 173). Continuous economic growth and the subsequent use of limited resources to propel its organism will, in theory, at some point meet the entropic limits of planet earth (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Latouche, 2010b: 520).

To sum up, degrowth supporters uphold that neoclassical and neoliberal economics nurtures a type of economic growth that increases socio-economic systems and therefore unsustainable natural resource use. Thus, this is an antecedent in basic and ecological sustainability nomological networks.

Now that these analyses have highlighted bioeconomics's antecedents, its strategy and outcomes are discussed and interpreted.

Degrowth's strategy for the bioeconomics component

For ecological sustainability to be achievable, degrowth proposes that certain bioeconomic strategies are required. They are important to present and analyse because they guide the placement of actions and supporting evidence into the ecological sustainability nomological network mapped later. Such strategies are analysed after a discussion of the literature.

From a bioeconomic understanding, degrowth advocates maintain that it is not possible for our planet to sustain infinite economic growth (e.g. Andreoni and Galmarini, 2013: 66; Baykan, 2007: 513; Bonaiuti, 2012a: 528; Lietaert, 2010: 577; Nekola, Allen, Brown, Burger, Davidson, Fristoe, Hamilton, Hammond, Kodric-Brown, Mercado-Silva, and Okie, 2013). The planet's allotted resources as a variable should guide quantitative reductions in socio-economic systems (Andreoni and Galmarini, 2013: 66; Spangenberg, 2010: 566). Bioeconomics methods could be used as a guide to illustrate exactly what, where and how much needs to grow and degrow (Martinez-Alier *et al.*, 2010: 1744; O'Neill, 2012: 228). Put simply, bioeconomics rationalises a period of non-technical, situation-dependant economic contraction or expansion followed by a quasi steady-state economy (Kerschner, 2010: 549; Martinez-Alier *et al.*, 2010: 1744; R&D, 2008: 524).

Therefore, to non-technically decrease entropy, the bioeconomics strategy is 'right-sizing' national and international economies (Kallis, 2011: 874; R&D, 2010: 523-4) in which certain aspects are scaled up (for example renewable energies, developing countries' economies) or down (for example non-renewable energy, developed countries' economies) depending on the economic and ecological situation (Kallis, 2011: 875; Kerschner, 2010: 549; Martinez-Alier *et al.*, 2010: 1744; R&D, 2010: 524). Another term that has been used to describe this process is absolute decoupling between economy and ecology: reducing the absolute/total consumption of resources while maintaining sustainable economic activity (Jackson, 2009: 67).

In other words, degrowth supporters endorse a situation-dependant increase or decrease in economic activity that is representative of the ecological limitations of earth's biosphere. This

implies some level of flexibility according to the situation of national and international economies, ecologies and societies¹⁷.

Proposed outcomes of degrowth's bioeconomics strategy

As an outcome of the bioeconomics' strategies, in theory degrowth claims to achieve ecological sustainability. Some evidence from degrowth protagonists supports this view.

A fundamental outcome of socio-metabolic analyses is that economic systems should operate within the finite ecological confines of planet earth (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Latouche, 2010: 520) i.e. ecological sustainability. Thus, as was demonstrated in degrowth's ecology component, ecological sustainability equates to triple sustainability. Therefore, the outcome of bioeconomics is ecological, social and economic sustainability.

Summary of degrowth's bioeconomics component

By analysing this component, it is clear that degrowth uses thermodynamics, entropy and social metabolism as a starting point to develop their arguments that technology and growth have an ecologically unsustainable rebound effect and that neoclassical and neoliberal economic models lead to ecologically unsustainable systems. To counteract these damaging influences, and with the aim of achieving triple sustainability, degrowth from a bioeconomics perspective propositions right-sizing economies with solutions that are mostly non-technical. It therefore also contributes to the beginnings of a steady-state economy.

Comparison of degrowth's bioeconomics and sustainable development's ecology components

Analysis of the literature from the bioeconomics (degrowth) and ecology (sustainable development) components reveals that at surface level both constructs seem to overlap in terms of their strategies: degrowth proposing to right-size the economy according to national and international ecological and economic boundaries (Kallis, 2011: 875; Kerschner, 2010: 549; Martinez-Alier *et al.*, 2010: 1744; R&D, 2010: 524), and sustainable development wanting to create an economic system that obeys earth's ecological limits (WCED, 1987: 43; UNEP,

¹⁷ Thus, a culture of ecology can still be present where social sustainability is also highly important. It purely depends on the situation of the region at hand.

2011: 16). In terms of their content, they therefore both seek to create an economic system that uses only one planet's resources, which seemingly looks like they coincide. However, seeded within these strategies is a fundamental contradiction between the two constructs. Sided with sufficiency, bioeconomics upholds that economic growth, even if very efficient, will always deplete resources and produce unfavourable waste and is therefore impossible to sustain. Sustainable development's ecology strategy maintains that efficiency is a key path to respecting ecosystem limits (and diminishing poverty and inequality and improving wellbeing). However, efficiency has been criticised on the lines of leading to the rebound effect (e.g. Renner, 2012: 8) and therefore might be a possible cause of misguidance in sustainable development efforts to achieve sustainability. Sufficiency too has been criticised as it could lead to socio-economic collapse (Tokic, 2012), a concentrated form of capitalism (Brownhill *et al.*, 2012: 94) and societal resistance (van den Bergh, 2011: 542) and could therefore also be misinterpreted and misguide attempts at sustainability. Again, the concern from ecology surfaces here: the criticism of prioritising development over sustainability.

Although antecedents show no overlapping features between these components, antecedents from sustainable development's ecology component have been demonstrated to be similar to degrowth's ecology component. Thus, although differences are present within these components, their differences are unlikely to misguide sustainability efforts as they have been found to be similar with another component.

Both constructs do share triple sustainability as an outcome.

The critiques of development and praise for anti-utilitarianism component of the degrowth construct

Like social metabolism, a number of authors agree that critiques of development is another of degrowth's important components (e.g. Andreoni and Galmarini, 2013; Bonaiuti, 2011, 2012a, 2012b; Fournier, 2008; Garcia, 2012; Latouche, 2010a, 2010b; Martinez-Alier *et al.*, 2010). It therefore plays an important role in basic and social sustainability's nomological networks, and is buttressed by the following literature.

Defining the critiques of development and praise for anti-utilitarianism component of degrowth

Critiques of development and praise for anti-utilitarianism as a component is central to social sustainability from a degrowth perspective. Defining and discussing this component is made

easier by splitting it into two: 1) critiques of development and 2) praise for anti-utilitarianism (e.g. Demaria *et al.*, 2013: 196-197).

Defining critiques of development

To arrive at a definition, some literature is presented first.

“In theoretical terms degrowth implies a radical critique to the western notion of growth- and technology-led development as a single overarching path of organizing social and economic life” (R&D, no date). Degrowth in this form “represents a means of taking the opposite course to development” (Flipo, 2008: 27). It is seen as a “missile word” that opposes development (Demaria *et al.*, 2013: 196) and “a conceptual or ideological weapon ... a symbolic challenge” to growth (Fournier, 2008: 532). Within this component, degrowth is a critique of development’s influence on culture, which in basic terms has proliferated western models of consumerism to more and more nations (Bonaiuti, 2012a: 528; Demaria *et al.*, 2013: 196; Latouche, 2010a: 13; Martinez-Alier *et al.*, 2010: 1742-3). Additionally, because the unsustainable predicaments society faces today are said to be a direct result of the dogmatic quest for limitless economic growth under the veneer of development, degrowth is a critique of this quest for development proposed by neoclassical and neoliberal economists (Andreoni and Galmarini, 2013: 65; Demaria, Schneider, Sekulova and Martínez-Alier, 2013: 192; Fournier, 2008: 531; Johannisova *et al.*, 2013: 7; Martínez-Alier, Pascual, Vivien and Zaccai, 2010: 1741; Martinez-Alier, 2012: 54).

Therefore, from the analysis of this literature, critiques of development can be defined as the negative social influences that western-style development, which focuses on growth, consumerism and technology, have on people’s cultures. This kind of development depreciates wellbeing, is seen as unsustainable and is therefore important to understand in terms of the elements that contribute to mapping degrowth’s nomological networks.

Defining praise for anti-utilitarianism

Anti-utilitarianism is essentially an apprehension towards the economy’s increasing influence on human relationships (Bayon *et al.*, 2010 cited in Sekulova *et al.*, 2013: 2; Latouche, 2010a: 13). In the anti-utilitarian tradition, degrowth is a critique to the central role of economic (monetary, or market-based) transactions in human relations and society (Bayon *et al.*, 2010 cited in Sekulova *et al.*, 2013: 2; Latouche, 2010a: 13). Self-interest, and therefore the view

that humans purely exist to produce and consume, is a negative by-product of the growth rhetoric (Demaria *et al.*, 2013: 197; Fournier, 2008: 531; Hamilton, 2010: 574).

To interpret these viewpoints represented in the literature, degrowth enthusiasts are sceptical of utilitarianism because it primarily considers humans as self-interested producers and consumers as result of growth's following. The end product of utilitarianism is unsustainable social circumstances where the wellbeing of the population is not a central concern of economic output (Hamilton, 2010: 574; Latouche, 2010a: 13).

Antecedents of critiques of development and praise for anti-utilitarianism for the degrowth construct

Defining these two aspects of one component has indicated that development and utilitarianism are a possible cause of social unsustainability. Their antecedents therefore require further analyses after reviewing the degrowth literature.

Development and uniform cultures

Degrowth defenders retain the belief that development, as instrumented by mainstream contenders, westernises cultures and neutralises social and ecological concerns. As it is an antecedent to degrowth in the basic and social sustainability nomological networks and is connected to this component, pertinent literature is included here and then analysed.

The focus on development and not sustainability is seen as one of the causes of sustainable development's negative effects: "[I]t is argued that the main problem with the idea of sustainable development is not with the idea of sustainability but with that of development itself" (Martinez-Alier *et al.*, 2010: 1743). From a degrowth standpoint, sustainable development is an oxymoron (Demaria *et al.*, 2013: 196; Georgescu-Roegen, 1993 cited in Martinez-Alier *et al.*, 2010: 1743) as development generates uniform cultures embedded in western models based on growth in production, consumption and technology (Martinez-Alier *et al.*, 2010: 1745; Demaria *et al.*, 2013: 196; Jackson, 2009: 15). Development has created a culture that allows us to continue living unsustainably by disassociating ourselves with the harmful ecological and social effects of development (Latouche, 2010a: 35). A major problem that dominates the current paradigm of thought is the widespread backing of sustainable development by corporations and international decision-makers that want western-style development and growth to continue, affecting the ability to change (Fournier, 2008: 530).

To summarise, the analysis of the literature reveals that this antecedent of degrowth is harshly critical of sustainable development because it believes that sustainable development prioritises development ahead of sustainability. This prioritisation creates a false interest in ecological and social sustainability and concurrently produces a culture of western-style production and consumption agenda, allowing people to disconnect from sustainable development's negative outcomes. Thus, because (sustainable) development is seen to be unsustainable in social terms, it is perceived as an antecedent in the basic and social sustainability nomological networks.

Development, growth and consumerism

Another antecedent to the degrowth construct found in the literature is the belief of degrowth advocates that development, growth and consumerism, as proposed by neoclassical and neoliberal economics, depreciates wellbeing. Literature relevant to this argument is presented and discussed.

Neoclassical and neoliberal economics asserts that 1) consumption is the key to development (Andreoni and Galmarini, 2014: 78; Curtis, 2003: 92; Vergragt, 2013: 124) and 2) efficiency gains accommodate increased consumer expenditure while reducing ecological pressures in a win-win situation (Spangenberg, 2010: 562). This stream of thought that underwrites economic growth has created a system that locks consumers into the continual consumption of ever-changing (through advertising and shifting cultural values) symbolic goods in an attempt to satisfy wants and desires that can never be fully satisfied (Jackson, 2009: 88; Latouche, 2010: 17; Nørgård, 2013: 65; Tammilehto, 2012: 83). This leads to a host of psychological issues (Hamilton, 2010: 572), generally diminishes societal wellbeing (Cattaneo and Gavalda, 2010: 582; Hamilton, 2010: 575; Vergragt, 2013: 124) and creates a vicious cycle that drives continuous consumption (Bauhardt, 2014: 64; R&D, no date) and therefore continuously depreciates wellbeing. Degrowth supporters argue that the proliferation of “economic growth, materialism, individualism, competition and monetary valuation” has shaped social and cultural life (Hamilton, 2010: 572) to the extent that to find happiness, one must be richer (Andrews and Urbanska, 2010: 178; Hamilton, 2010: 573). This goes hand in hand with the indoctrination that economic growth, through increasing amounts of individual consumption, is the key to happiness and wellbeing (Hamilton, 2010: 573; Matthey, 2010: 567).

Here it is clear that from degrowth's viewpoint, development and growth, and the consumerist lifestyle they promote, are forces that in the end develop socially unsustainable societies

characterised by lower levels of wellbeing. This sub-component is therefore an antecedent in the basic and social sustainability nomological networks.

Development, growth and commodification

From the analysis of the degrowth literature, a further antecedent linked to critiques of development and praise for anti-utilitarianism component is derived. It contends that development and growth have reduced needs to monetary exchanges. Degrowth arguments are put forward and then analysed.

The degrowth literature argues that commodification of needs has been rerouted from the non-monetary to the monetary sector i.e. needs are now satisfied by markets and monetary exchanges rather than people and relationships (Bonaiuti, 2012a: 529; Johanisova *et al.*, 2013: 11). For example, instead of being cared for in old age by a sibling or a loved, the need for care is now a monetary transaction (hiring a carer). “[T]he main culprit is not growth itself but the ideology of growth, a system of representation that translates everything into a reified and autonomous economic reality inhabited by self-interested consumers” (Fournier, 2008: 529). Commodification is seen to dissolve social relations, which in turn depreciates wellbeing (Bonaiuti, 2011: 190); invalidates social resilience (Bonaiuti, 2011: 190); promotes individualistic behaviour and a self-increasing spiral of consumption (Hirsch, 1976 cited in Bonaiuti, 2012a: 530) and further growth (Johanisova *et al.*, 2013: 8); and incites a wealthy elite and widespread poverty (Johanisova *et al.*, 2013: 12).

Supporters of degrowth declare that commodifying needs, as a result of development and growth, maintains an overall negative influence on wellbeing and is therefore socially unsustainable. Due to this it is an antecedent in the basic and social sustainability nomological network of degrowth.

To summarise all of these antecedents, the degrowth literature argues that growth under the guise of development allows the market system to pursue profit and shift needs satisfaction from relational to monetary exchanges at the expense of individuals, society and the environment (Bonaiuti, 2011: 182; Jackson, 2009: 15; Johanisova and Wolf, 2012: 563; Kallis *et al.*, 2012: 173; Schneider *et al.*, 2010: 516). Thus, from the perspective of degrowth, development, economic growth and utilitarianism contribute to spreading socially unsustainable societies. Antecedents connected to critiques of development and praise for anti-

utilitarianism are therefore included in basic and social sustainability nomological networks.

From analysing critiques of development and anti-utilitarianism, the above sections made apparent degrowth's antecedents. Forthcoming is a discussion and interpretation of critiques of development and praise for anti-utilitarianism's strategy and outcomes.

Degrowth's strategy for the critiques of development and anti-utilitarianism component

Certain degrowth strategies are indicative of how to achieve social sustainability. Critiques of development's strategy is separated from anti-utilitarianism for ease of explanation.

Critiques of development

In this part of the component, degrowth literature is predominantly concerned with re-evaluating and reconceptualising human existence external to development and growth. Supportive literature is presented and then analysed.

“[D]egrowth is not merely about consuming and producing less, it is first and foremost about providing a critique of the economy and its colonising effect, and pointing to escape routes” (Fournier, 2008: 541). These escape routes are wide-ranging solutions based on the reorganisation of society and economy asymmetrical to economic growth and development (Bauhardt, 2014: 64; R&D, no date; Fournier 2008: 536; Hamilton, 2010; Kallis, 2011: 878 and 2013: 95; Latouche, 2010b: 520; Muraca, 2012: 536). “Above all, degrowth brings forward the need for a debate on the political project of society, and especially on the need to break away from the technological and psychological lock-ins placed by the growth and capital accumulation imperative” (R&D, no date). Strategically speaking then, degrowth, from the critiques of development perspective, is primarily centred on individual and collective re-imagination of existence outside the fixation to development and growth (Bonaiuti, 2012a: 530; Flipo, 2008: 27; Fournier, 2008: 532; Latouche, 2010: 8). Its advocates envision changes happening through a grass-roots cultural revolution (Kallis, 2013: 95) to liberate politics and economics from the shackles of growth and development (Bauhardt, 2014: 63; R&D, 2010: 524). This could be achieved by connecting those who share similar visions of consuming and producing less (Fournier, 2008: 536; Latouche, 2010: 9) i.e. creating a social grass-roots movement (Martinez-Alier *et al.*, 2010: 1743).

Upon analysing these statements, the way degrowth aims to circumvent development is to create a large-scale movement of people whose actions revolutionise the current development hegemony into a system that is free from the binds of growth and consumerism.

Anti-utilitarianism

Within this part of the component, degrowth is also a means to re-evaluate and reconceptualise human existence, however here the focus is on returning to an economy concentrated on human relations. Below are some relevant extracts from the degrowth literature.

Degrowth is proposed as the route to a revolution that delimits our conviviality¹⁸ and refutes utilitarianism (Bayon *et al.*, 2010 cited in Demaria *et al.*, 2013: 197; Fournier, 2008: 537; Hamilton, 2010: 571; Latouche, 2009: 32; Nekola *et al.*, 2013: 129). Anti-utilitarianism yields a simpler existence (e.g. Alexander, 2011; Martinez-Alier *et al.*, 2010: 1743-5; Trainer, 2012) where social relationships, rather than the maximisation of utilities driven by self-interest, are principle (Demaria *et al.*, 2013: 197; R&D, no date). “It implies revisiting the role of monetary and market-based transactions in society and searching for a way to bring back its human, emotional, non-utilitarian or gift-based traits” (R&D, no date).

This evidence shows that degrowth’s strategy from an anti-utilitarianism angle stresses a return to an economic system where human relations, and not a commodification thereof, are of key importance.

Analysing these separate terms of this component has highlighted their strategies, both of which converge on reconceptualisation and revolution, but ultimately diverge into 1) systems that are not bound by development and growth and 2) that are more relationship-based. Critiques of development and anti-utilitarianism’s outcome is now presented and analysed.

Proposed outcomes of degrowth’s critiques of development and anti-utilitarianism strategy

As previously explained, social and ecological sustainability are intertwined. Additionally, an economic system that enshrines social and ecological sustainability is also economically

¹⁸ Conviviality is denoted as “a system of social relationships based on community support, reciprocity, voluntary work, favour, and community exchange” (Andreoni and Galmarini, 2013: 67-68).

sustainable. Thus, if the outcome of critiques of development and praise for anti-utilitarianism is social sustainability, then, as a result of its interconnected nature, the outcome is also proposed to be triple sustainability.

Summary of degrowth's critiques of development and anti-utilitarianism component

Based on critiques of development and praise for anti-utilitarianism literature, degrowth advocates within this component state that development and growth have created uniform, consumerist and commodity-based cultures. Using this as a springboard, degrowth theorists offer re-evaluation and reconceptualisation of society peripheral to development and growth as strategies to achieve social and consequently triple sustainability.

The second component predominantly seen in degrowth's social sustainability nomological network is forthwith presented and analysed to extract similar elements that are used in mapping degrowth's nomological networks.

The meaning of life and wellbeing component of the degrowth construct

Similar to the previous section, an important starting point is to define the component to gain insight into why it exists to achieve social sustainability. Thereafter this section analyses antecedents, then looks into strategies to define which actions and supporting evidence can be included in degrowth's social sustainability nomological network, and finally analyses meaning of life and wellbeing's outcome.

Defining the meaning of life and wellbeing component of degrowth

From the analysis of the degrowth literature, it is evident that central to meaning of life and wellbeing as a component of degrowth, is questioning the capacity of materialistic lifestyles to deliver wellbeing (Bauhardt, 2014: 64; Latouche, 2010b: 521; Martinez-Alier *et al.*, 2010: 1743; Vergragt, 2013: 124), including the focus on consumption and the peripheral objectives required to satisfy materialistic lifestyles, such as increased incomes and working time (Cattaneo and Gavalda, 2010: 589; Demaria *et al.*, 2013: 197). In degrowth theory, wellbeing transcends materialism and can be found in the search for the meaning of life (Fournier, 2008: 536; Martinez-Alier *et al.*, 2010: 1743).

Antecedents of meaning of life and wellbeing for the degrowth construct

The analysis of the literature indicates that the meaning of life and wellbeing component has

two antecedents namely critiques of Gross Domestic Product (GDP) as a measurement tool and wellbeing, neoclassical and neoliberal economics and consumerism, the latter of which is empirically underwritten by the Easterlin Paradox (e.g. Bechetti *et al.*, 2009; Easterlin *et al.*, 2010; Jackson 2009: 40).

Critiques of GDP

GDP as a measurement tool is thought by degrowth advocates to inadequately include wellbeing in its measurement. Reinforcing literature is cited and analysed.

Critiques of GDP as a tool to measure overall economic activity cite its inability to comprehensively measure wellbeing as their main argument (e.g. Dawson, 2010: 186; Jackson, 2009: 40; Kosoy, Brown, Bosselmann, Duraiappah, Mackey, Martinez-Alier, Rogers and Thomson, 2012: 77; Latouche, 2010b: 521; Martinez-Alier, 2012: 62; Nørgård, 2013: 62). The “physical and biological aspects of the economy” (Martinez-Alier *et al.*, 2010: 1744) as well as loss of wellbeing, due to the extraction of resources on which many lives depend (water, land), is not calculated in GDP accounting (Martinez-Alier, 2012: 62). Not only does GDP provide inaccurate measurements in terms of wellbeing, but (striving to achieve) GDP growth exerts excessive pressure on humans and the biosphere (Martinez-Alier, 2012: 62; R&D, 2010).

An analysis of these statements indicates that degrowth proponents call for a more complete tool to measure economic activity and, more importantly, economic activity’s effect on society’s wellbeing and the resources they depend on to thrive. Thus, degrowth advocates maintain that GDP causes social sustainability to be falsely measured and therefore critiques of GDP is an antecedent in basic and social sustainability nomological networks.

Wellbeing, neoclassical and neoliberal economics and consumerism

Pro-degrowth viewpoints also dispute neoclassical and neoliberal economics and consumerism on the grounds that they do not justify wellbeing. Analysis is given after material strengthening this argument is laid out.

Neoclassical and neoliberal economic theory and the resulting economic analyses suggest that wellbeing is determined by the opportunity to consume (Andreoni and Galmarini, 2014: 78; Cattaneo and Gavaldà, 2010: 582; Masferrer-Dodas *et al.*, 2012: 213). However, wellbeing

constitutes diverse aspects (Andreoni and Galmarini, 2013: 67; Jackson, 2009: 16; Wallenborn, 2008: 230), including objective (e.g. water, shelter, which everybody needs) and subjective (e.g. happiness, which is subjective for different people) needs and individual preferences (Andreoni and Galmarini, 2014: 79; Wilkinson and Pickett, 2010: 8). In general, wellbeing then, according to the degrowth theory, is dependent on a nexus of environmental, social and economic factors and not only consumption possibilities (Andreoni and Galmarini, 2013: 67; Bechetti, Trovato and Andres Londono Bedoya, 2009: 273; Jackson, 2009: 47; Martinez-Alier, 2012: 62-3; Wilkinson and Pickett, 2010: 8).

Thus, because neoclassical and neoliberal economics and consumerism undermine wellbeing, which, as stated by degrowth theorists is contingent to a host of social, economic and ecological factors, neoclassical and neoliberal economics and consumerism are seen as socially unsustainable and therefore is incorporated into the basic and social sustainability nomological networks as an antecedent.

The Easterlin/happiness-income paradox

Another antecedent to the degrowth construct that emerges from analyses of its literature is the perspective that income above certain levels does not achieve parallel increases in happiness. This perception is fleshed out below and analysed.

Because consumption is a driver of economic growth (Bauhardt, 2014: 63), and consumption in neoclassical and neoliberal economics is said to determine wellbeing (Andreoni and Galmarini, 2014: 78; Cattaneo and Gavalda, 2010: 582; Masferrer-Dodas *et al.*, 2012: 213), economic growth should in theory increase wellbeing by delivering higher levels of income for the purpose of consumption. However, some striking empirical evidence to refute growth and favour degrowth in terms of happiness and income is the Easterlin Paradox (Demaria *et al.*, 2013: 197) – growth’s Achilles heel according to Kallis (2012: 3) – as well as other studies on income, growth and happiness (e.g. Bechetti *et al.*, 2009; Easterlin *et al.*, 2010; Jackson 2009: 40). These studies are presented below then analysed.

Substantiated by compelling empirical evidence taken from “17 Latin American countries ... 17 developed countries, 11 countries transitioning from socialism to capitalism, and 9 developing countries, 4 of which are also in the Latin American dataset” (Easterlin *et al.*, 2010: 22466), researchers found that higher economic growth through increased levels of income

does not stimulate similar increases in levels of happiness in the long term. “[A]t a point in time happiness and income are positively related, but over time within a country, happiness does not increase as income goes up” (Easterlin *et al.* 2010: 22467). This phenomenon has come to be known as the Easterlin paradox (Andreoni and Galmarini, 2013: 66).

Jackson (2009: 40) found that when earning above USD 15,000 per annum, Americans’ “life satisfaction score barely responds at all even to quite large increases in GDP”. Furthermore, in developed countries, where per capita income in some cases has more than doubled (UK) and even tripled (USA), actually report a decrease in the number of people who deem themselves ‘very happy’ (Jackson, 2009: 40).

Armed with over 100 000 responses from individuals in 82 countries, Bechetti *et al.* (2009: 286-8) conclude that although income is in general a predictor of happiness, earning higher incomes subtracts time from pursuing relational life, which is seen as a significant determinant of happiness.

The increase of emotional disorders parallel to increases in materialism support degrowth’s argument against consumption as a determinant of wellbeing (Demaria *et al.*, 2013: 197; Hamilton, 2010: 572; Wilkinson and Pickett, 2010). This directly relates to what some refer to as a loss of meaning that is plaguing today’s society (Bonaiuti, 2012a: 533; Wallenborn, 2008: 229; Wilkinson and Pickett, 2010).

Scrutinising these arguments leads to the conclusion that, according to degrowth protagonists, income above a certain level does not improve a person’s happiness or wellbeing. Thus, the Easterlin/income-happiness paradox is a key argument against levels of income over certain thresholds that stagnate or decrease wellbeing as measured by happiness. Therefore, because it is socially unsustainable, it is an antecedent in the basic and social sustainability nomological network.

Degrowth’s strategy for the meaning of life and wellbeing component

A meaning of life and wellbeing strategy is one way to achieve social sustainability as argued from a degrowth standpoint. Presenting and analysing this strategy will provide reason why certain actions and supporting evidence are placed into the social sustainability nomological network.

Degrowth in theory, aims to increase wellbeing by re-evaluating a future extrinsic to economic growth and materialism (Hamilton, 2010; Kallis, 2011: 879; Latouche, 2010: 521; R&D, 2010: 524). This should include an economic system measured in terms of wellbeing and not materialism i.e. an economy of reciprocity¹⁹ measured by multi-factor indicators (R&D, 2010: 524). Such an approach is parallel to a transition away from economics intended to augment profit (*chrematistics*) towards an economy of wellbeing, what Aristotle called *oikonomia*: the “management of a household – or a community – aimed at maintaining or sustainably increasing use values over the long run” (Martinez-Alier, 2010: 61). The *oikonomia* strategically guides the wellbeing of the population, the manifestation of which is referred to as *buen vivir* (Kallis *et al.*, 2009: 22; Martinez-Alier, 2012: 66), *joie de vivre* (Cattaneo and Gavalda, 2010: 582; Martinez-Alier *et al.*, 2010: 1744), *sumak kawsay* (Kallis *et al.*, 2012: 178; Martinez-Alier *et al.*, 2010: 1744; Martinez-Alier, 2012: 66), prosperity (Jackson, 2009) or frugal abundance (Latouche, 2010a) – all referring to living a good/meaningful life. For example, increasing wellbeing by means of relationships, political participation and environmental quality for example will in theory substitute negative outcomes such as utilitarianism and high levels of entropy due to socio-economic activity (Andreoni and Galmarini, 2013: 67; Ariès, 2005 cited in Andreoni and Galmarini, 2014: 78; Jackson, 2009: 47; Kallis, 2011: 879; Schneider *et al.*, 2010: 512).

Thus, this strategic arm of degrowth aims to achieve high levels of wellbeing by engendering an economy that promotes and more accurately accounts for wellbeing in its activities (*oikonomia*). Specifically, this could be achieved by abandoning neoclassical and neoliberal economics and GDP measurement, forgoing consumerism and by developing more effective wellbeing indicators.

Proposed outcomes of degrowth’s meaning of life and wellbeing strategy

Like in previous sections, the outcome of meaning of life and wellbeing is proposed to be triple sustainability.

¹⁹ An economy of reciprocity is thought of as an economic system that combines conviviality, which has been addressed in footnote 4, and narrowing the distance between production and consumption (Andreoni and Galmarini, 2013: 67-68).

Summary of degrowth's meaning of life and wellbeing component

These sections confer that while certain levels of income, consumption and growth are important, above a certain threshold they no longer improve wellbeing. Furthermore, it has been posited that GDP as a measurement tool is not well-equipped to measure wellbeing and that neoclassical and neoliberal models of consumption are not primarily a prefix to wellbeing. These provided the backdrop against which strategies were developed with the aim of achieving triple sustainability.

The wellbeing component of the sustainable development construct

Wellbeing is considered a valuable feature of sustainable development theory and therefore needs to be presented and analysed. Analyses will demonstrate why certain antecedents, overarching strategy and outcomes are important to the formulation of the sustainable development construct.

Defining the wellbeing component of sustainable development

As outlined in *Agenda 21* (1992), key to wellbeing as a component of sustainable development is the provision of basic needs such as food, shelter, health, education, etc., some of which are satisfied by natural resources (UN, 1992: paragraph 1.1). However, because wealthy regions exploit poor regions' natural resources, impeding them to satisfy basic needs, an important concern for wellbeing is the unsustainable consumption patterns in relatively wealthier regions of the world (UN, 1992: paragraph 3.1 – 3.2).

Antecedents of wellbeing for the sustainable development construct

Wellbeing, economic growth and development

Wellbeing's first antecedent is the argument that economic growth and development erodes wellbeing. Taken from UNEP (2011: 14) and WCED (1987: 31-32), literature to back this up is provided then analysed.

Sustainable development reports mention that principal to economic growth is the availability of natural resources and that economic growth fuels development (UNEP, 2011: 14; WCED, 1987: 31-32). Thus, development's success relies on the availability of natural resources. However, economic growth to date has excessively depleted natural resources, many of which are found in developing countries and are required for their basic wellbeing (UNEP, 2011: 14; WCED, 1987: 31-32). Consequently, development has mostly benefited those in developed

nations and has also depreciated wellbeing of many poor people (UNEP, 2011: 14; WCED, 1987: 31-32).

To analyse these points, sustainable development literature argues that economic growth and the quest for development undermines developing nation's capacity to achieve higher levels of wellbeing because the basic resources that could be used to generate such higher levels of wellbeing are used to satisfy consumers in developed nations (UNEP, 2011: 14; WCED, 1987: 31-32). Thus, because economic growth and development cause unsustainable situations, it is an antecedent in sustainable development's basic nomological network.

Critiques of GDP and/or Gross National Product (GNP)

Sustainable development advocates argue that GDP and/or GNP are not worthy indicators of sustainability. Because it is another antecedent that has been derived from the literature and linked to the wellbeing component of sustainable development, literature is presented and analysed.

GDP as a measurement of economic performance does “not provide adequate indications of sustainability” (UN, 1992: paragraph 40.4). Many of the indicators used do not account for ecosystem services, resource loss, climate change etc., which are imperative to society's wellbeing (UNEP, 2011: 16). “Other factors, such as access to good health care and education, can be equally or more important to creating wellbeing, life satisfaction and health over the long term, both for the current and the future generations” (Strange and Bayley, 2008: 103).

These statements indicate that sustainable development recognises GDP's inability to successfully measure sustainability, including indicators of people's wellbeing. Therefore, because it incorrectly measures environmental and societal wellbeing, it is not seen as a sustainable indicator. Thus, it is considered an antecedent in sustainable development's basic nomological network.

Sustainable development's strategy for the wellbeing component

Sustainable development's wellbeing strategy is to create a system that improves quality of life (WCED, 1987: 43; UNEP, 2011).

Proposed outcomes of sustainable development's wellbeing strategy

As has been identified in previous sections, the outcome of wellbeing is proposed to be triple sustainability (UN, 2012: paragraph 3; UNEP, 2011: 16; WCED, 1987: 4-8).

Comparison of degrowth's meaning of life and wellbeing and sustainable development's wellbeing component

Similarities between the two constructs' literature can be seen in the consumption patterns of wealthier societies and how it diminishes wellbeing. However, whereas degrowth maintains the view that materialism erodes the wellbeing of those living materialistic lifestyles, sustainable development focuses instead on the point that excessive consumption in wealthier regions lowers poor people's wellbeing. In both situations, wealthier societies erode the wellbeing of themselves or others. Critics of GDP overlap at the antecedent level and therefore there is common agreement that GDP as a measurement of wellbeing should be disposed of. Sustainable development and degrowth's strategies wholly intersect as they both look to establish an economy that improves society's quality of life/wellbeing. Abandoning neoclassical and neoliberal economics, which is a specific strategy of degrowth, could lead to economic collapse (Tokic, 2012) and therefore may misguide social marketers. However, sustainable development offers no comment on consumption in developed societies and the impact it has on their wellbeing. Degrowth claims that consumption only diminishes wellbeing. Therefore, by not including materialism's side effects in sustainable consumption, sustainable development could be misleading sustainability efforts. However, future efforts might be misguided by degrowth as degrowth could mean an economic collapse, in which case wellbeing would likely also diminish (Tokic, 2012). Triple sustainability is a common outcome.

The democracy component of the degrowth construct

The next component as part of degrowth's basic nomological network is democracy. Using this component, antecedents will show why democracy is critical to degrowth theory.

Defining the democracy component of degrowth

The lack of deeper democracy and democratic discourse are the core of this component of the degrowth theory (Demaria *et al.*, 2013: 199). It is from this angle that degrowth signals a need to stimulate a far-reaching political debate (Flipo, 2008: 27; Martinez-Alier *et al.*, 2010: 1742;

Muraca, 2012: 536; R&D, 2010: 524; Sekulova *et al.*, 2013: 5). Literature on democracy's antecedents is presented and analysed.

Antecedents of democracy for the degrowth construct

Democracy and economic growth

From the analysis of the degrowth literature the first antecedent related to the democracy component of degrowth is democracy and economic growth, which maintains that economic growth precedes a lack of democracy. Applicable literature is shown and analysed in terms of the nomological networks.

Degrowth theorists claim that society has been organised in a way that feeds the growth machine with “endless accumulation”, and is “condemned to grow” (Latouche, 2010: 16). This is owed to the fact that economic growth and modern democracies are intricately intertwined in a two-pronged effort to achieve growth and development (Bonaiuti, 2012: 532; Deriu, 2012: 554). Government's decisions are heavily influenced by corporations and world markets (Alexander, 2011: 242; Boillat *et al.*, 2012: 600-60; 532; Deriu, 2012: 556; Johannisova and Wolf, 2012: 563) who defend the core tenets of consumerism (Blühdorn, 2007: 25). As has been demonstrated in the section on meaning of life and wellbeing, consumerism driven by economic growth is socially unsustainable. Thus, these systems are not democratic (and sustainable) at all as they do not govern on behalf of their people (Deriu, 2012: 556).

To summarise: according to this cohort of degrowth theorists, one of the reasons why society is socially unsustainable is that democratic institutions govern for economies, where the focus is on consumerism and growth, and not for its people. Therefore, as an explanation for social unsustainability, democracy and economic growth is an antecedent in the social sustainability nomological network.

Democracy, economic growth and scale

The next antecedent that surfaces in the degrowth literature is the idea that economic growth creates democratic systems that in actual fact diminish democracy. Some depth and an analysis are provided.

Due to the sheer size of democratic systems, which increase in congruence with economic growth (Bonaiuti, 2012a: 532), people have to trust a represented elite (politicians and

governments) to make decisions on their behalf (Andreoni and Galmarini, 2013: 69; Demaria *et al.*, 2013: 199). These representatives determine the boundaries of governance i.e. they confine decisions to the role of experts (Cattaneo *et al.*, 2012: 516). This does not permit the citizenry to directly contribute to democratic proceedings, and therefore facilitates a loss of democracy (Bonaiuti, 2012a: 532; Cattaneo *et al.*, 2012: 516).

To summarise this degrowth argument, economic growth preordains democracy to diminishing citizen participation as it negatively affects the scale of democratic institutions as well as its governance (Bonaiuti, 2012a: 532; Cattaneo *et al.*, 2012: 516). Thus, when people cannot directly contribute to democracy, their views and desires are left up to representatives to decide. However, as has been documented in the section above, governments favour economies and side-line the population's wellbeing, which leads to social unsustainability. Therefore, because democracy, economic growth and scale explains why social unsustainability exists, it is incorporated as another antecedent in social sustainability's nomological network.

Now that the antecedents have been identified, it is necessary to look at democracy's strategy.

Degrowth's strategy for the democracy component

Taken from democracy as a component of degrowth theory, democracy's strategy outlines how to achieve social sustainability. This strategy provides the justification for certain actions and supporting evidence to be placed into basic and social sustainability nomological networks. Literature to back up democracy's strategy is advanced and subsequently analysed.

The systemic revitalisation that is necessary for sweeping changes in the social, environmental and economic domains can be instituted as the result of deeper democracy (Cattaneo *et al.*, 2012: 517; Deriu, 2012: 556; Orr, 2002: 1458; Schneider *et al.*, 2010: 512). To institute deeper democracy, degrowth protagonists claim that the primary democratic strategy of degrowth is to create a social movement out of which deeper democracy can materialise outside of growth (Bauhardt, 2014: 64; Fournier 2008: 536; Hamilton, 2010; Kallis, 2011: 873; Kallis *et al.*, 2009: 23; Latouche, 2010a: 32). "The objective is not just to consume and produce less, but to do so in a socially emancipatory and democratizing way" (Cattaneo *et al.*, 2012: 517). To create this movement, degrowth supporters aim to connect a throng of stakeholders (Demaria *et al.*, 2013: 191; Martinez-Alier, 2012: 60; Martinez-Alier *et al.*, 2010: 1742) to form a 'cultural revolution' (e.g. Flipo, 2008: 27; Fournier, 2008: 537; Hamilton, 2010: 571; Latouche, 2009:

9; Martinez-Alier *et al.*, 2010: 1742; Wallenborn, 2008: 230) i.e. a social movement consisting of many stakeholders that form at grass-roots level. Therefore, degrowth espouses increases in social participation and democracy (Andreoni and Galmarini, 2013: 69; Flipo, 2008: 27; Fournier, 2008: 539; Jackson, 2009: 168). This is summed up by Fournier (2008: 539): “[f]or degrowth to be inclusive, it cannot be left in the hands of local or direct participation but needs to be articulated at broader levels, it needs to become a mass movement”. A comment by Cattaneo *et al.* (2012: 516), based on the works of Illich (1973, 1974 and 1977), reckons democracy starts at the local level:

“[O]nly small systems can be democratically and collectively controlled. Complex systems can only be known and managed by experts, and this erodes democracy as the population at large has to trust the knowledge and will of these experts, who accordingly concentrate immense power in their hands”.

The above statements reveal that degrowth theory champions increases in social and democratic participation through exercising democracy on a much larger scale than is currently practised, most likely at the local and grass-roots level. These actions will create the ‘space’ mentioned by degrowth advocates to transform the democratic system through which sustainability can succeed. In regards to mapping the basic nomological network and one for social sustainability, this strategy allows the researcher to pick out certain actions and supporting evidence and place them into degrowth’s social sustainability nomological network.

Proposed outcomes of degrowth’s democracy strategy

Acting as a catalyst to influence changes in all three areas, the outcome of the democracy component is, like in other sections, is proposed to be triple sustainability.

Summary of degrowth’s democracy component

The analysis of democracy shows that degrowth arguments for deeper democracies stem from the lack of democracy in societies adhering to economic growth. To stimulate political debates, and to achieve social and triple sustainability, degrowth advises large-scale democratic participation at the local and/or higher levels.

The last of degrowth’s components is justice, which makes up the next section.

The justice component of the degrowth construct

To map the nomological network for social sustainability, justice's antecedents, strategies, outcomes and some supporting evidence are important to display and analyse. Analyses will determine which actions and supporting evidence can be included in the social sustainability nomological network of degrowth.

Defining the justice component of degrowth

According to degrowth theorists, of central concern is justice. "Justice here is understood as a concern for a fair distribution of economic, social and environmental goods and bads at all time-lines (i.e. intra-generational and inter-generational)" (Demaria *et al.*, 2013: 200). Degrowing injustices or inequalities while simultaneously growing sustainability are thus at the heart of this component (Demaria *et al.*, 2013: 199). This equates to fulfilling basic needs for all and ensuring high wellbeing standards while growing or degrowing (Fournier, 2008: 532; Martinez-Alier, 2012: 54; Research and Degrowth, 2010: 524). It "implies resource and wealth redistribution both within and between North and South economies" (Demaria *et al.*, 2013: 200).

Antecedents of justice for the degrowth construct

Economic growth, development and injustice

Extracted from the degrowth literature, the economic growth, development and injustice antecedent that is connected to the justice component is centred on growth and development's role in fostering injustice. The following discussion from a degrowth standpoint is presented and an interpretation is provided afterwards.

As stated in the degrowth literature, the present arrangement of economy, environment and society is the underlying cause of economic, environmental and social injustices (van Griethuysen, 2010: 590). Under the veneer of development, growth and capitalism maintain unequal power and wealth distribution (Blüdhorn, 2007: 251; Fournier, 2008: 530; Latouche, 2010a: 16; Tammilehto, 2012: 82). These arguments flow contrary to the trickle-down effect regularly referred to by sustainable development practitioners (Bonaiuti, 2011: 184; Fournier, 2008: 541; Muraca, 2012: 540).

Driven by competition and individualism (Trainer, 2012: 592), and the assumption that only growth can bring about justice and sustainability (Demaria *et al.*, 2013: 199; Hueting, 2010:

528), the actual effects of growth, injustice and social unsustainability are exemplified in the findings of Fuentes-Nieva and Galasso (2014 cited in UNDP, 2014: 39): “The 85 richest people in the world have the same wealth as the 3.5 billion poorest people”. Additional findings from the 2014 Human Development Report (HDR) include: “In 104 developing countries 1.2 billion people had an income of \$1.25 or less a day” (UNDP, 2014: 41). And lastly, “[a]ccording to the [Multidimensional Poverty Index] MPI, which was introduced in the 2010 HDR to measure deprivations in the three Human Development Index dimensions—health, education and living standards—2.2 billion people live in multidimensional poverty or near-poverty” (UNDP, 2014: 41).

Hence, degrowth followers make the case that growth and development only endures injustice and therefore social unsustainability. Since it explains why social unsustainability exists, economic growth, development and injustice is an antecedent in mapping the basic and social sustainability nomological network.

Inequality and society and the environment

The second antecedent obtained from degrowth’s literature and joined to the justice component is the view that inequality is linked to social and environmental adversities. This association is expressed below and then examined by the researcher.

Inequality provides the opportunity for wealthy economies to extract ever-increasing amounts of resources from poorer economies to poorer economies’ ecological, economic and social detriment in the long run (Johanisova *et al.*, 2013: 7-8; Martinez-Alier, 2012: 65; Muraca, 2012: 540). In ecological terms, poorer economies are held responsible for disposing production-related waste (Martinez-Alier, 2012: 65; Muraca, 2012: 540), something Attac (2006 cited in Latouche, 2010a: 37) refers to as the ecological debt – externalising ecological costs to poor countries. Social problems exist too as production costs are also kept to a minimum in poor countries (Johanisova and Wolf, 2012: 563). An example is the ecological and social degradation as a result of unsustainable industries that produce cheap food, clothes, phones etc. for rich countries (Latouche, 2010a: 37).

“Systemic income inequalities increase anxiety, undermine social capital and expose lower income households to higher morbidity and lower life satisfaction (Jackson, 2009: 181). Furthermore, inequality is tethered to positional consumption (Jackson, 2009: 181), which is

seen as the value of goods according to its relative scarcity and not its use (Bonaiuti, 2012b: 41) for example diamonds. Diamonds are relatively scarce and, outside of industry, are not that useful in real terms. However, diamonds are deemed valuable, with their value being derived from its relative scarcity and not from its use. Because positional consumption is relative to the ways others behave (Bonaiuti, 2012b: 41), people will continually seek new goods to be unique (scarce), which accordingly increases resource use (Bonaiuti, 2011: 186; Jackson, 2009: 181). Not only is it said to motivate consumption, positional goods are seen by Bonaiuti (2011: 186) as the fuel for economic growth as they provide the means for continual innovation and unlimited consumer demand so long as societies are unequal. Thus, as has been shown throughout this dissertation, economic growth and the injustice it cultivates has negative social effects.

Evidence to support this theoretical antecedent of justice comes from Wilkinson and Pickett (2010) who document the augmented bond between equality and many indicators of wellbeing such as life expectancy, income, trust, health, lack of crime and violence and social mobility. They found that equal societies have higher levels of wellbeing i.e. are more socially sustainable (Wilkinson and Pickett, 2010). Additionally, the Human Development Report (2014: 220) and Jackson (2009: 37) indicates an inverse relationship between inequality and development (wellbeing) indicators such as education, income, health, social situation, the environment.

Consequently, an analysis of these antecedents in basic and social sustainability nomological networks reveals firstly that growth and development fuels injustice and secondly that inequality has a high price tag: social and ecological detriment as well as lower wellbeing. Thus, the lack of justice is seen to be socially unsustainable and therefore provide certain antecedents in the basic nomological network.

Degrowth's strategy for the justice component

Justice's strategy taken from the degrowth theory advises that creating an equal and just society will lead to social sustainability. It is therefore useful as it validates the placement of certain actions and supporting evidence into the basic and nomological network for social sustainability.

Degrowth's justice strategy is to reduce injustice and inequality (Demaria *et al.*, 2013: 200)

through, for example, depreciating materialism (Demaria *et al.*, 2013: 200; Hamilton, 2010; Kallis, 2011: 879) and “adapting the productive apparatus and social relations to changing values” (Latouche, 2010: 36), i.e. moving beyond economic growth (Latouche, 2010: 36).

As a result, degrowth protagonists claim that reducing inequality and injustice through certain initiatives will, through emancipating from western lifestyles, lead to an equal and just society.

Proposed outcomes of degrowth’s justice strategy

Similar to all outcomes, degrowth proponents suggest that triple sustainability is the outcome of justice.

Summary of degrowth’s justice component

According to the analyses above, degrowth theory argues that economic growth and development exacerbates inequality, which has an overarching negative effect on both the environment and society’s wellbeing. Equal societies are shown to have higher levels of wellbeing, which is why degrowth’s justice strategy aims to make societies more equal. This will in turn lead to social sustainability, which could have a knock-on effect on ecological and economic sustainability.

The equity component of the sustainable development construct

To map a basic nomological network for sustainable development, equity also needs to be considered. The forthcoming sustainable development literature and analyses thereof look at why sustainable development maintains its viewpoint on equity and therefore add more antecedents, a strategy and outcome to sustainable development’s nomological network.

Defining the equity component of sustainable development

Equity from a sustainable development perspective can be seen as meeting basic needs and improving living standards for all and both now and in the future (UN, 1992: paragraph 1.1; WCED, 1987: 44). Reducing inequality and poverty (UN, 2012; UNEP, 2011; WCED, 1987) and democracy, good governance and the rule of law²⁰ (Waas *et al.*, 2011: 1646; UN, 2015:

²⁰ “A principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally

paragraph 9) are core features of this component. Additionally, because reducing poverty and inequality and democracy, good governance and the rule of law are central themes throughout the sustainable development literature (e.g. UN, 1992; UN, 2015; UNEP, 2011; WCED, 1987), equity is also considered a key component.

Antecedents of equity for the sustainable development construct

Poor economic growth, development and inequity

The analysis of the sustainable development literature reveals that the first antecedent associated with the equity component of sustainable development is the thinking that poorly executed economic growth and development strategies created social injustices and poverty-ridden sectors of society and undermines democracy, good governance and the rule of law. This is supported by sustainable development literature stating that contrary to the belief of the thinking in the post world war two years, economic growth and the promise of development did not translate into more equitable societies characterised by reduced levels of poverty (Baker, 2006: 20; DuPisani, 2006: 91; Waas *et al.*, 2011: 1640) and better democracies (UNDP, 2014: 39).

Findings in the Human Development Report (UNDP: 2014) illustrate the extent to which poor economic growth and development strategies have impacted on equity:

- “[t]he 85 richest people in the world have the same wealth as the 3.5 billion poorest people” (Fuentes-Nieva and Galasso, 2014 cited in UNDP, 2014: 39)
- “In 104 developing countries 1.2 billion people had an income of \$1.25 or less a day” (UNDP, 2014: 41).
- “[a]ccording to the [Multidimensional Poverty Index] MPI, which was introduced in the 2010 UNDP to measure deprivations in the three HDI dimensions—health, education and living standards—2.2 billion people live in multidimensional poverty or near-poverty” (UNDP, 2014: 41).
- “Large income disparities can even undermine democratic values, if wealthy individuals influence political agendas (say, by securing tax breaks for top income earners and cutbacks

enforced and independently adjudicated, and which are consistent with international human rights norms and standards” (UNSC, 2004: paragraph 6).

in social services) or try to shape social perceptions (through the media)” (UNDP, 2014: 39).

- “Even in democracies elite capture of political systems can narrow the scope of public discussion and reduce opportunities for critical examination of a society’s values and priorities” (UNDP, 2014: 56-57).
- “Inequality is linked to lower growth, undermines democracy, increases social friction and erodes trust” (UNDP, 2014: 85).
- Political actors from wealthier echelons may not understand the poor’s situation and might not even have their interests in mind, therefore lowering good governance and democracy (UNDP, 2014: 102).

Thus, due to the socially unsustainable conditions poor economic growth and development produced, and because it helps to explain why sustainable development maintains a certain viewpoint in regards to equity, poor economic growth, development and inequity is considered an antecedent in sustainable development’s nomological network.

Inequity, society and the environment

As a second antecedent, sustainable development protagonists argue that environmental exploitation and society and inequality are linked.

Sustainable development activists contend that the world’s poor are subjected to producing goods to satisfy mostly highly developed nations (UN, 1992: paragraph 3.1). Thus, by impeding poor nations from satisfying their own basic needs, environmental exploitation of poor nations exacerbates inequality and poverty. And because poor nations are often in a weak position to negotiate good trade deals, they become reliant on selling off their abundant natural resources succumbing to the strength of market forces that undermines democracy, good governance and the rule of law (UNEP, 2011: 163).

To analyse this paragraph, poor nations are locked into inequity by developed nations’ consumption patterns. Therefore, because these patterns are unsustainable, inequity, society and the environment is another antecedent in sustainable development’s basic nomological network.

Sustainable development's strategy for the equity component

The changes that are required to shift to sustainable development require the inclusion of all society including the “international community, national governing bodies, civil society and individuals” (UN, no date: Democracy) The analysis reveals that sustainable development's equity strategy is to create a system that diminishes poverty and inequality (WCED, 1987: 43) and to promote “democracy, good governance and the rule of law, as well as an enabling environment at the national and international levels” (UN, 2015: paragraph 9).

Proposed outcomes of sustainable development's equity strategy

Like in previous sections, the proposed outcome of sustainable development's equity strategy is triple sustainability (UN, 2012: paragraph 3; UNEP, 2011: 16; WCED, 1987: 4-8).

Comparison of degrowth's justice and sustainable development's equity component

From analysing both constructs' content, meeting basic needs for all and improving wellbeing by eradicating poverty are common concerns at the definitional level. All antecedents are also very similar as their names and content are highly alike. For example, growth, development and injustice (degrowth) and poor economic growth, development and inequity (sustainable development) both refer to economic growth and development's contribution to inequality and injustices in society. Additionally, inequality and society and the environment (exactly) represented in both constructs mention that inequality is associated with the exploitation of society and the environment. Strategies between constructs are also comparable: degrowth's justice strategy is to reduce injustice and inequality (Demaria *et al.*, 2013: 200) and sustainable development's equity strategy is to create a system that diminishes poverty and inequality (WCED, 1987: 43;) and promote democracy, good governance and the rule of law (UN, 2015: paragraph 9). Thus, both strategies refer to reducing inequality and injustice/poverty, which is one in the same thing (Demaria *et al.*, 2013: 199).

However, the very foundation of sustainable development is economic growth for all countries, which has been criticised on the grounds that it only reinforces inequalities and poverty (e.g. Bonaiuti, 2011: 184; Fournier, 2008: 541; Muraca, 2012: 540; Renner, 2012: 5). Thus, there is a possible contradiction between economic growth as sustainable development's core driver and the ability for it to reduce poverty and inequality. Additionally, although not represented in this degrowth component, the kind of democracy each construct refers to is also very different (bottom-up approach from degrowth vs. top-down approach from sustainable

development). However, the possibility that degrowth may lead to a socio-economic collapse (Brownhill *et al.*, 2012: 94; Tokic, 2012; van den Bergh, 2011: 542), is also relevant criticism. A blanket economic growth across all nations may therefore be misguiding sustainability to achieve reductions in poverty and inequality. Degrowth could however also misguide sustainability efforts by leading society into a dire situation. Components nevertheless share triple sustainability as their outcomes.

4.3.3 Degrowth's basic nomological network summary

Subjecting ecology, bioeconomics, critiques of development and praise for anti-utilitarianism, wellbeing and the meaning of life, democracy and justice to some basic analyses revealed degrowth's stance on sustainability. Analyses illuminated antecedents to the degrowth construct, each component's strategy and outcome and authenticated which actions and supporting evidence could be embraced in either ecological or social nomological networks. A language of sustainability from degrowth's viewpoint was uncovered within these discussions and analyses and compared with sustainable development to underline parallels and inconsistencies. Below is the map of degrowth's basic nomological network as a result of these analyses. A discussion is provided after the map.

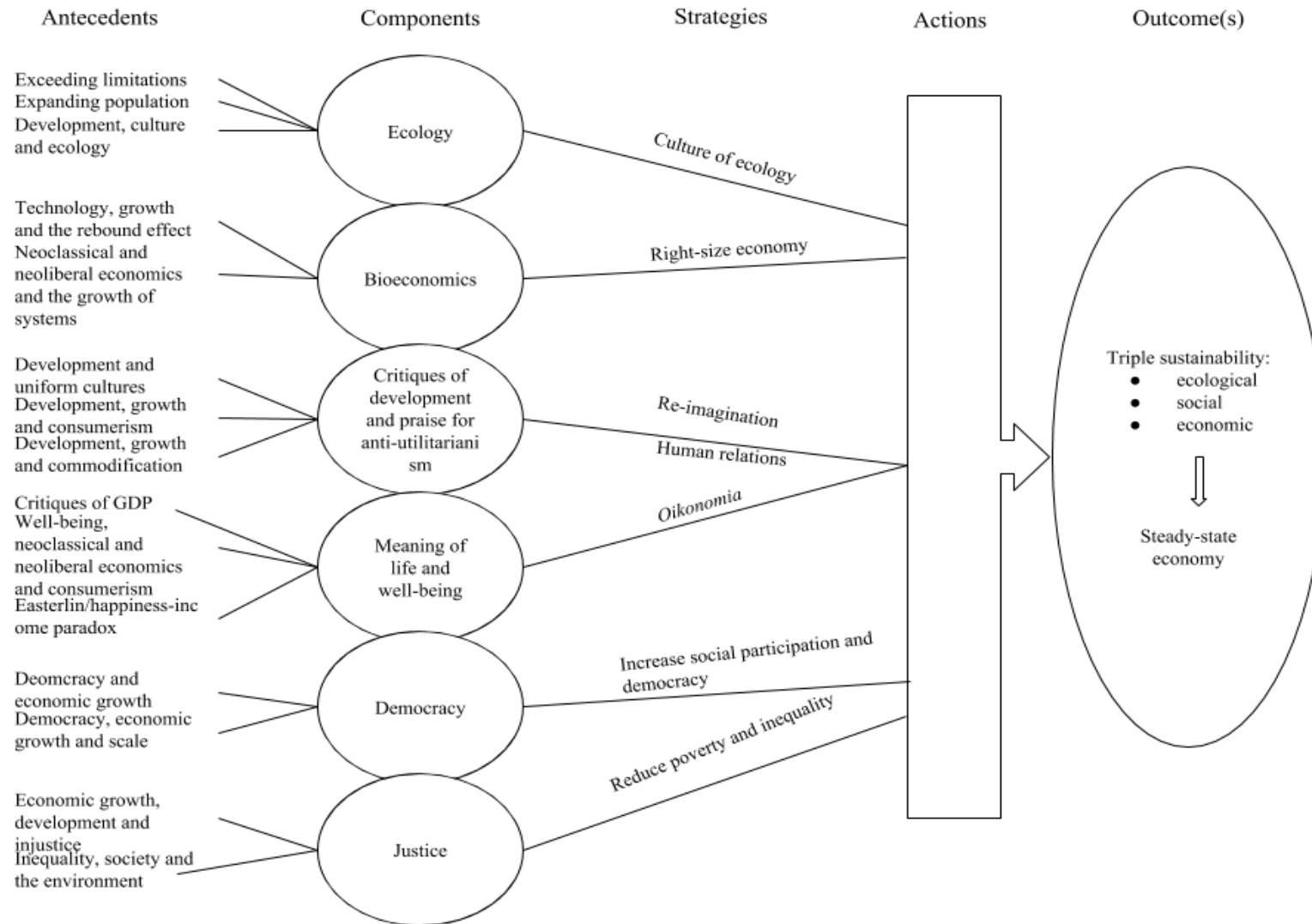


Figure 11 A basic nomological network of the degrowth construct

Degrowth's basic nomological network depicts the elements of a nomological network in map format. It shows the link between antecedents and components. It also shows each component's strategy to achieve the outcome of triple sustainability and ultimately a steady-state economy. Because some antecedents could connect to other components, components are drawn with overlapping areas to display their interconnectivity. The nomological network shows the degrowth construct in its entirety from the roots (antecedents) to the potential fruits (outcomes) of its labour, as well as how to sustain the outcomes (steady-state economy). Although degrowth's definition is also part of its nomological network, it is not included in the map as it is considered too abstract to add.

4.3.4 Nomological network summary: sustainable development

Through exploring and evaluating ecology, wellbeing and equity components of sustainable development, several antecedents to be incorporated into sustainable development's basic nomological network have been identified and analysed. An overarching strategy and sustainable development's outcome was also incorporated into its basic nomological network. Scrutinising these elements of a nomological network brought into light a language of sustainability from a sustainable development perspective, which was compared with degrowth's to highlight matches and variances.

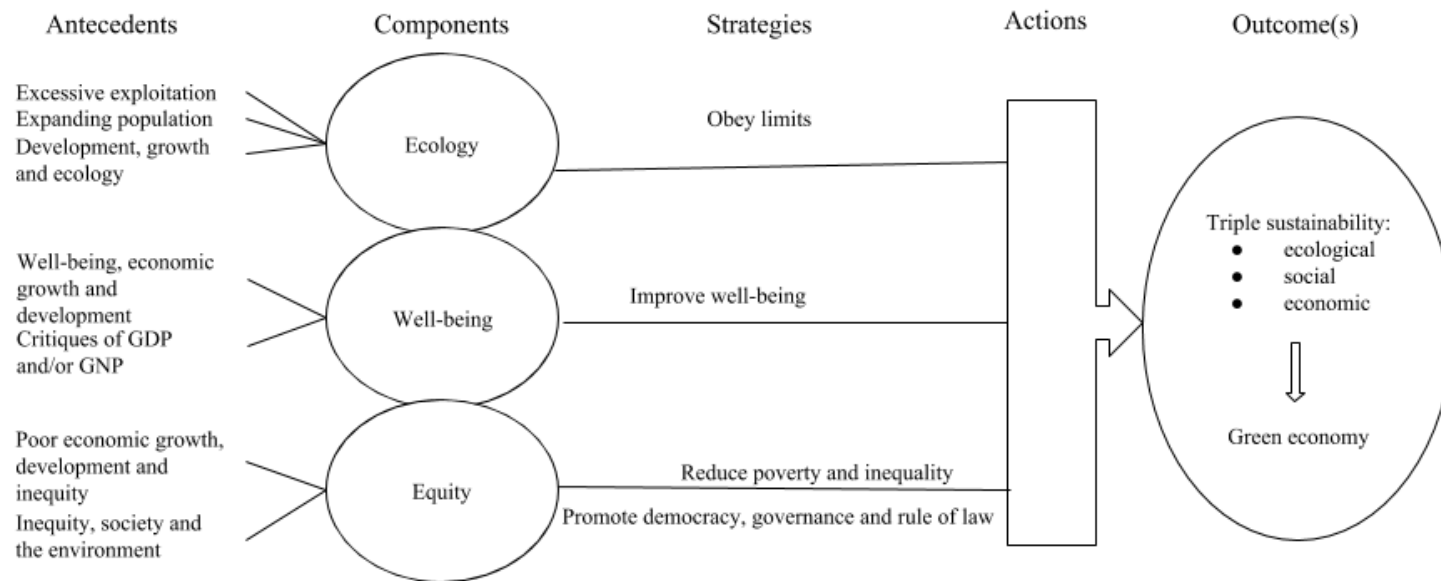


Figure 12 A basic nomological network of the sustainable development construct

This map of sustainable development's nomological network shows the relationships between the construct's antecedents, components, strategies and outcomes. Components are drawn to overlap because the antecedents taken from sustainable development's components could be connected to several other components. How to sustain triple sustainability is also included in the basic nomological network. Although sustainable development's definition is also part of its nomological network, it is not included in the map as it is considered too abstract to add.

A summary of the similarities and differences between basic nomological networks

From the above analyses and interpretations, degrowth and sustainable development share similarities but also have some differences in both their internal structure and language used. Similarities and differences are summarised in terms of the construct's definition, components, antecedents, strategies and outcomes.

Similarities

Due to the unsustainability of current or future socio-economic activity, the two constructs are similar at the definitional level sharing people's wellbeing and one-planet living as a central focus. In terms of components, constructs maintain similarities in ecology, meaning of life and wellbeing (degrowth) and wellbeing (sustainable development) and justice (degrowth) and equity (sustainable development) components. All antecedents associated with ecology components are shared and therefore represent a large overlap. From the similar wellbeing components, critiques of GDP is a common antecedent. Antecedents connected to the justice and equity components are also analogous. On the whole, degrowth's bioeconomics, meaning of life and wellbeing and justice strategies seem to coincide with sustainable development's ecology, wellbeing and equity strategies respectively, as the terms used to describe their strategies are similar. Outcomes are largely homogeneous as both constructs seek triple sustainability.

That the outcomes are the same is particularly important to this research. The implication of this finding is that if an action is common to both constructs then this action is theoretically more likely to achieve the outcome – triple sustainability. This builds the case for the following section to look at each construct's specific actions in more depth. However, before this, the differences between constructs are discussed.

Differences

From their definitions the two constructs are divided on their viewpoints on economic growth: degrowth seeking to grow and degrow where necessary whereas sustainable development prefers growth and a change in the type of growth. Guiding principles are also dissimilar: degrowth operates on the principle of sufficiency – use only what is necessary – while sustainable development functions under the guidance of efficiency – to maximise resource use. Each construct's important components are also dissimilar in that degrowth's are social metabolism and critiques of development whereas sustainable development's are ecology and equity. Apart from the antecedents and strategies mentioned above, their antecedents and strategies do not intersect or only intersect at a minor level. Additionally, the mechanisms used to perpetuate sustainability once it has been reached differ: degrowth proposes a steady-state economy to do this, while on the other hand sustainable development offers a green economy as a means to maintain triple sustainability.

These differences are a key finding at this stage of the research as they have several implications. Firstly, contradictions between the two constructs mean that one construct's actions may not achieve sustainability, as an individual construct's actions might be open to misinterpretation causing sustainability to be misguided. Secondly, the differences also compound the already difficult field of sustainability and make it challenging for social marketers to pursue the right endeavours. However, although a fair degree of polarisation exists at the more abstract level in some aspects of each construct's *elements* of their nomological network, these differences are also seen as largely advantageous when elucidating *common actions*. This is because social marketing programmes are more likely to benefit society when they consider *diverse and multiple* perspectives to formulate programmes (Andreasen, 1995: 31; Brenkert, 2002: 18; Gordon and Gurrieri, 2014: 266; Hastings and Domegan, 2014: 220). Thus, if the basic content of the elements of each construct's nomological network differ to some extent, then actions that overlap in spite of these differences (at the more abstract level) are those that are more likely to deliver beneficial social change. Common actions will in theory be less likely to be misinterpreted and misguide sustainability and therefore could simplify the language of sustainability for social marketers.

Thus, to determine further overlaps from which a simpler social marketing language that maintains a greater possibility of achieving sustainability can be developed, actions that sustainable development and degrowth propose require further analysis.

4.4 ACTIONS IN DEGROWTH'S DETAILED NOMOLOGICAL NETWORKS

It is here that the analysis chapter departs from mapping degrowth and sustainable development's basic nomological networks to more specific ecological and social sustainability nomological networks for degrowth. Before this voyage, it must be reiterated why more specific maps for sustainable development are not provided. The main reason is that sustainable development comprises abundant actions (Baker, 2006; UN, 1992: paragraph 1.6). Thus, unlike degrowth where fewer actions exist, it is beyond the boundaries of this work to map two detailed nomological networks for social and environmental sustainability for the sustainable development construct. This was also a reason why a detailed description and analysis of sustainable development's component strategies were not provided because strategies are used to determine which actions and supporting evidence are placed into detailed nomological networks.

With regards to degrowth's detailed nomological networks, analysing actions and supporting evidence makes it possible to place them into either ecological or social sustainability nomological networks that stem from degrowth's basic nomological network. Ecological and social sustainability nomological networks are mapped individually because the detail and size of each network could not be condensed into one nomological network. Economic sustainability's nomological network is not mapped because the ultimate outcome of any economic measure is either social or ecological, and therefore economic measures fit into either of these two nomological networks²¹.

With regards to a construct's nomological network, this part of the analysis deals specifically with the dotted elements in the figure below.



Figure 13 Specific elements analysed to map detailed nomological networks

The goal of mapping these detailed nomological networks is to provide a list of actions from which similar actions in the sustainable development literature can be deductively searched

²¹ Further detail as to why ecological sustainability is not mapped is given in section 4.4.2.

for. Analyses provide a means to compare the two constructs, this time in terms of their actions. Analysing and discussing actions determine a simpler language in order to make it easier for social marketers to develop programmes that positively influence behaviours for society's benefit. The language here refers to a set of actions that are common to both constructs that are in theory clearer and less misleading and are better able to achieve sustainability.

4.4.1 Procedures and criteria for this analysis

Degrowth's outcome is to achieve triple sustainability. However, because actions have specific ecological or social outcomes, and not necessarily both, this section is structured by outcome (ecological or social sustainability). The analysis works backwards through the nomological network (ecological or social sustainability) to link actions to a component's strategy and then to the previously identified antecedents.

For the purpose of this analysis, certain criteria have been formulated to determine the applicability of actions operating in degrowth's ecological and social sustainability nomological networks. These criteria were applied to screen out actions as part of the iterative data collection and analysis phase i.e. criteria were applied in the preliminary analysis phase. The criteria are as follows:

- Actions must be capable of voluntarily and/or involuntarily influencing behaviours that benefit individuals, groups and/or society as a whole (applying the social marketing framework);
- Actions must claim to achieve degrowth's outcome i.e. triple sustainability;
- Actions must adhere to component's strategies in either ecological or social sustainability nomological networks and;
- Actions must link to a component's antecedents.

Attention must be given to the fact that these actions are not necessarily implemented by a degrowth organisation, political party, etc. These are purely practical applications of certain degrowth concepts that validate the possibility of achieving degrowth.

Precise justification of the possible impact these actions may have on sustainability is provided by Videira, Schneider, Sekulova and Kallis's (2014) Causal Loop Diagrams (CLDs), which depict a set of variables and their hypothetical impact on ecological, economic and social

sustainability. For the purposes of this research these variables are discussed in relation to actions functioning under degrowth that could lead to ecological and social sustainability.

The next sections analyse degrowth's actions within ecological and social sustainability fields, with the goal to provide a platform for comparing sustainable development's overlapping actions. Firstly, economic sustainability is discussed to refute developing its nomological network. Secondly, using the process outlined above, a nomological network for ecological sustainability is mapped. Thirdly, a second nomological network is mapped for social sustainability using the same process.

4.4.2 Economic sustainability

The economy is a conceptual touch point for many of degrowth theory's discussions (e.g. Andreoni and Galmarini, 2013: 65; Demaria *et al.*, 2013: 191; Flipo, 2008: 27; Martinez-Alier *et al.*, 2010: 1742; Muraca, 2012: 536; Nierling, 2012: 240; Sekulova *et al.*, 2013: 5; R&D, 2010: 524). Demonstrating the link between the economy and society and the environment, it is shown that degrowth's economic sustainability outcome actually addresses social and environmental sustainability as its core outcomes. The following section presents degrowth literature that supports the incorporation of economic actions into ecological and social sustainability nomological networks and hence the decision not to develop a separate nomological network for degrowth's economic sustainability outcome. It rounds off with an analysis.

Borne of the idea that the economy contains only two elements namely humans and natural commodities (Daly, 1977: 7), ecological economics maintains that, albeit in extremely succinct terms, economic sustainability is about sustainably using the ultimate means to achieve an ultimate end: enhancing the wellbeing of the world's population by satisfying their needs, many of which depend on the sanctity of natural resources (Common and Stagl, 2005: 9; Costanza, Alperovitz, Daly, Farley, Franco, Jackson, Kubiszewski, Schor, and Victor, 2013: 242; Kosoy *et al.*, 2012: 78). Indeed, something similar was suggested by the founder of bioeconomics: "Georgescu-Roegen [1979] insisted on the importance of the enjoyment of life as the real output of the economic process" (Cattaneo and Gavalda, 2010: 581). Corresponding to Aristotle's *oikonomia* (Cattaneo and Gavalda, 2010: 581; Curtis, 2003: 86; Martinez-Alier *et al.*, 2010: 1744), inherent in this stance is that the economy is embedded in society, which is

subsequently embedded within the biosphere (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Common and Stagl, 2005: 1; Constanza *et al.*, 2013: 246).

Sharing similar attributes, degrowth's economic sustainability strategy is to de/grow until a dynamic equilibrium has been reached that can extend into eternity i.e. to use ecological economics, which is the modern counterpart of bioeconomics (Kallis *et al.*, 2009: 15; Martinez-Alier, 2010: 1743; Schneider *et al.*, 2010: 512), as the rationale behind what should de/grow to develop a quasi steady-state economy that is dynamic and sustainable over time in using the ultimate means to achieve the ultimate ends (Kerschner, 2010: 549; Martinez-Alier *et al.*, 2010: 1744; O'Neill, 2010: 222; R&D, 2008: 524). Here it can be seen that in actual fact, from a degrowth standpoint, the economy is merely the mechanism to deliver social and environmental sustainability (Constanza *et al.*, 2013: 245; Demaria *et al.*, 2013: 209; R&D, 2010: 524; Schneider *et al.*, 2010: 512).

Hence, for an economy to be sustainable, it must simply (in the vernacular sense) ensure that its processes produce high levels of wellbeing for the world's population while being able to use one earth's amount of natural resources: a steady state economy in dynamic equilibrium (Daly, 1977).

Some concrete economic initiatives discussed in the degrowth literature demonstrate the above-mentioned statements. Economic-related actions that could influence behaviours, such as initiating progressive taxes, local monetary systems and 100% reserve banking; sharing work and; curbing financial speculation etc., all ultimately impact people's wellbeing and the environment on which they depend for life. Specifically, taxes on, for example, petrol are an economic tool that could be used to theoretically limit its consumption²² (Alcott, 2010: 553; Jackson, 2009: 173; Spangenberg, 2010: 564; Videira *et al.*, 2014: 67). Keeping means and ends in mind, such an economic mechanism ultimately impacts the resources (human and natural) used to produce it. From a social perspective, a tax on petrol could be used to redistribute wealth or help to improve the wellbeing of others. From an environmental perspective, petrol taxes could decrease its use, which will lower the negative environmental effects associated with using petrol.

²² For more detail please visit Appendix 2

For these reasons, ecological and social sustainability are important to degrowth where certain economic actions maintain the ultimate impact. Therefore, a focus on ecological and social sustainability is justified by the fact that economic actions in the end impact ecological or social sustainability. Thus, actions should be included in ecological and/or social sustainability nomological networks. The ensuing section analyses degrowth's actions to achieve ecological and social sustainability with the aim to provide details to ecological and social sustainability nomological networks.

4.4.3 Ecological and social sustainability and the strategies to achieve them

In addition to ecological or social sustainability as primary outcomes, as well as the antecedents from the preceding analyses, the following strategies are important to consider as they guide the placement of actions and supporting evidence into either ecological or social sustainability nomological networks for degrowth.

According to degrowth theory discussed thus far, to achieve ecological sustainability economics and society needs to reconsider the planetary boundaries in which it operates and therefore should elaborate on efforts to lessen environmental burden (Jackson, 2009: 143; R&D, 2010: 524; Spangenberg, 2010: 566). Thus, the strategies taken from ecology and bioeconomics components that are vital to achieving ecological sustainability from a degrowth perspective are creating a culture of ecology and creating a right-sized economy adhering to earth's ecological limitations (Andreoni and Galmarini, 2013: 66; Kallis, 2011: 874; Kerschner, 2010: 549; Martinez-Alier *et al.*, 2010: 1744; R&D, 2010: 523-4; Spangenberg, 2010: 566) achievable through non-technical solutions (Demaria *et al.*, 2013: 198).

Not only does degrowth support ecological sustainability; one of its major territories is the necessity for social sustainability (Andreoni and Galmarini, 2013: 65; Bauhardt, 2014: 62; Demaria *et al.*, 2013: 195; Fournier, 2008: 532; Latouche, 2010: 520; Martinez-Alier, 2012: 54; Nierling, 2012: 240; R&D, 2010: 524; Sekulova *et al.*, 2013: 5). According to degrowth theory, social sustainability revolves around high life quality and increased wellbeing as a result of democratic, reciprocal and convivial institutions conceptualised separately from growth, development and materialism (Bauhardt, 2014: 64; Bonaiuti, 2012a: 530; Flipo, 2008: 27; Fournier 2008: 532; Hamilton, 2010; Kallis, 2011: 878 and 2013: 95; Latouche, 2010: 520; Muraca, 2012: 536; R&D, 2010: 524). Thus, taken from the remaining components, to realise

social sustainability, degrowth strategies include re-imagining human existence, increasing human relations, an *oikonomia*, creating a social movement and reducing injustice and inequality.

4.4.4 Explanation of actions in degrowth's detailed nomological networks

In this section of the analysis, actions are propositions by other authors to primarily, but not exclusively, achieve ecological or social sustainability. However, due to the length of the analyses, a table with all degrowth actions is presented below (**Error! Reference source not found.**) while detailed analyses are provided in Appendix 2. Each action has an overview, which briefly describes the action and defines key terms and any specific actions. Actions are then threaded backwards through the basic nomological network linking them to ecological or social sustainability as an outcome, which shows that the action fits the social marketing framework criteria²³. All actions also link to each component's strategy and one or several antecedents. Models and supporting evidence provides, where available, evidence (hypothetical or real respectively) to support the action's argument i.e. that a certain aspect of degrowth can be or has been attained. Note that actions are limited to degrowth scholarship i.e. authors supporting a degrowth outcome. This does not however mean that they are being/have been implemented by degrowth protagonists. These are purely theoretical and practical applications as espoused in the analysed literature, that validate the possibility of achieving a part of degrowth. Only actions with enough background information to incorporate into the nomological network were evaluated i.e. those that fit the criteria working backwards through the nomological network.

The reader is reminded that degrowth's actions are important to assess for this research as they provide the set of actions that were used to deductively extract similar actions from sustainable development's literature. These similar actions are postulated to be the key to social marketing's success in realising a sustainable society – they are the simplified language this research aims to develop.

²³ For more detail on how actions fit social marketing criteria please see Appendix 2.

4.4.5 A table of degrowth's actions

Error! Reference source not found. below is a summary of degrowth's actions. From left to right, it identifies the action and provides some basic information about the action relating to the elements of a nomological network. If the action can influence behaviours towards both ecological and social sustainability, the action is split by outcome (ecological or social sustainability). Important features of this table are firstly to demonstrate which actions fit within which detailed nomological network (ecological or social sustainability). It also comprises the group of actions used to deductively search for similar actions in the sustainable development literature. Lastly, the table provides actions and an overview of their make up in terms of the strategies, antecedents, supporting evidence and models that ground them in degrowth theory, which are used at a later stage when compared with sustainable development's actions.

Action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Models	Key authors
Caps, ranges and taxes	Ecological sustainability						
	Policies that ration and tax resources respectively.	Caps and Pigouvian taxes, ecological taxes, ecological caps, income taxes and caps and income limits.	Right-size economy.	Rebound effect and systems growth; exceeding limitations.	Swiss Forest Law of 1876; Britain; aquifer levels; Ireland; Cuba.	Victor (2012).	Alcott (2010), Borowy (2013), Daly (1977), Jackson (2009), Kallis (2010).
	Social sustainability						
	Policies that control, limit and provide a basic income. Used to redistribute money.	Income taxes and caps, and a basic income.	Oikonomia, re-imagination, reduce injustice and inequality.	Easterlin paradox; wellbeing, neoclassical and neoliberal economics and consumerism; economic growth, development and injustice.			Alexander (2011), Constanza <i>et al.</i> (2013), Daly (1977), Jackson (2009), Latouche (2010a).
Cohousing	Combined private and common facilities.	Ecological sustainability			Cohousing projects.		Lietaert (2010).
			Culture of ecology, right-size economy.	Development, culture and ecology.			
		Social sustainability					
			Human relations.	Wellbeing, neoclassical and neoliberal economics and consumerism; development, growth and commodification; development, growth and consumerism.			
Ecological rights	Constitutionally enforced rights that protect nature.		Culture of ecology, right-size economy.	Neoclassical and neoliberal economics; exceeding limitations; technology, growth and the rebound effect; development, culture and ecology.	Ecuadorian court ruling (2011).		Cullinan (2010), MacDonald (2012), Martinez-Alier (2012), GARN (2015).

Action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
Changing employment	Sharing jobs, increasing unpaid work guaranteeing jobs.	Ecological sustainability				Andreoni and Galmarini (2014), Alcott, 2013, D’Alisa and Cattaneo (2013), Knight <i>et al.</i> (2013), Nierling (2012), Nørgård (2013), Pullinger (2014) Victor (2012)
		Share jobs, increase unpaid work.	Right-size economy.	Development, culture and ecology; neoclassical and neoliberal economics and the growth of systems.	Unpaid work; lower working time.	
		Social sustainability				
		Share jobs, increase unpaid work, job guarantee.	<i>Oikonomia</i> , reduce injustice and inequality, re-imagination, human relations.	Development, growth and consumerism; wellbeing, neoclassical and neoliberal economics and consumerism; economic growth, development and injustice; Easterlin paradox.	Unpaid work; Switzerland.	
Voluntary simplicity	Ecological sustainability					Alexander (2011, 2013), Alexander and Ussher (2012), Andrews and Urbanska (2010), Bilancini and D’Alessandro (2012), Cattaneo and Gavalda, (2010), Hamilton, (2003), Hamilton and Mail (2003), Trainer (2012).
	Resist high-consumption lifestyle.	Socially constructed laws, ecovillages.	Right-size economy, culture of ecology.	Exceeding limitations; technology, growth and the rebound effect; neoclassical and neoliberal economics and the growth of systems.	Rurban squatting; downshifting; ecovillages.	
	Social sustainability					
	Higher quality of life with fewer possessions.	Socially constructed laws, ecovillages.	Re-imagination, <i>oikonomia</i> .	Wellbeing, neoclassical and neoliberal economics and consumerism.	UK and Australian downshifters; Bolivian Amazon rural dwellers; Rurban squats.	

Action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
(Re)localise economy	Ecological sustainability				Findhorn Ecovillage.	Andreoni and Galmarini (2013), Curtis (2003), Kallis and Norgaard (2010), Latouche (2010), Trainer (2012).
	Self-sufficient communities.	Transition towns, ecovillages, local currencies.	Right-size economy, culture of ecology.	Development, culture and ecology; expanding population; exceeding limitations; neoclassical and neoliberal economics and the growth of systems.		
	Social sustainability					
	High life quality for local population.	Transition towns, ecovillages, local currencies.	<i>Oikonomia</i> , human relations.	Wellbeing, neoclassical and neoliberal economics and consumerism; Easterlin paradox.		
Transforming food systems	Minimise environmental impact of producing and consuming food.	Localising/regionalising food systems, organic production, consuming less meat and more vegetables.	Right-size economy.	Exceeding limitations; expanding population; development, culture and ecology; technology, growth and rebound effect; development and uniform cultures.	Permaculture Jordan valley; organic production; Finnish and Swiss studies; Findhorn Ecovillage; Cuba.	Andreoni and Galmarini (2013), Barling <i>et al.</i> (2012), EEA (2012), Infante Amate and Gonzalez de Molina (2013), Latouche (2010a).
Limiting advertising	Reducing or banning advertisements.	Ban or limit advertising.	Right-size economy, culture of ecology.	Neoclassical and neoliberal economics and the growth of systems; exceeding limitations; technology, growth and the rebound effect; development, culture and ecology.	Advertising bans Norway (1975).	Assadourian (2012), Mattar (2012), Latouche (2010).

Action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
Remodelling property: legally redefining property rights	Ecological sustainability					van Griethuysen (2010, 2012).
	Redefining property rights to place ecology before economic growth.		Right-size economy, culture of ecology.	Neoclassical and neoliberal economics and the growth of systems; exceeding limitations; development, culture and ecology; inequity, society and the environment.	Collaborative ownership.	
	Social sustainability					
	Redefining property rights to place society's wellbeing before economic growth.		Re-imagination, <i>oikonomia</i> , reduce injustice and inequality.	Wellbeing, neoclassical and neoliberal economics and consumerism; economic growth, development and injustice; inequality and society and the environment.		
Remodelling businesses and the economy/Redistributing the ownership of capital: non-market capitals, social enterprises and economic democracy.	Items are controlled locally and democratically; Locally owned and democratically governed organisations with an environmental or cultural priority; The right to economic participation.	Ecological sustainability: remodelling businesses and the economy			Mexico; Cuba.	Boillat <i>et al.</i> (2013), Johanisova and Wolf (2012), Johanisova <i>et al.</i> (2013).
		Non-market capitals, social enterprises and economic democracy.	Right-size economy, culture of ecology.	Exceeding limitations; development, culture and ecology.		
		Social sustainability: redistributing the ownership of capital				
		Non-market capitals, social enterprises and economic democracy.	Re-imagination, social movement, reduce injustice and inequality, <i>Oikonomia</i> .	Wellbeing, neoclassical and neoliberal economics and consumerism; economic growth, development and injustice; democracy, economic growth and scale.		

Action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
Renewable energy	Transition to renewable, preferably decentralised, energy production.	Ecological sustainability				Demaria <i>et al.</i> (2013), Meadows <i>et al.</i> (2005) Sorman and Giampietro (2013), Victor (2012).
			Right-size economy.	Neoclassical and neoliberal economics and the growth of systems; exceeding limitations; technology, growth and the rebound effect.	Findhorn ecovillage; United States renewable production.	
		Social sustainability				
			<i>Oikonomia</i> , reduce inequality and injustice.	Economic growth, development and injustice.	Rural communities in Nepal.	
Self-managed/autonomous democratic systems	All citizens participate in creating laws, policies etc.		Re-imagination, <i>Oikonomia</i> , deeper democracy.	Democracy and economic growth; democracy, economic growth and scale.	Cuba autonomy; Rurban squatting	Boillat <i>et al.</i> (2013) Bonaiuti (2012a), Borowy (2013), Cattaneo and Gavalda (2010), Deriu (2012).
Ecovillages	A community centred on sustainability.	Ecological sustainability			Findhorn, Dancing Rabbit, Ithaca, Earthaven and Sirius ecovillages.	Boyer (2016), Dawson (2009), GEN (no date), Jackson (2004), Sherry (2014).
		Ecological dimension of sustainability	Right-size economy	Exceeding limitations; development, culture and ecology; neoclassical and neoliberal economics.		
		Social sustainability				
		Social and cultural dimensions of sustainability	<i>Oikonomia</i> , re-imagination, human relations, increases in social participation and democracy	Re-imagination and human relations; oikonomia; increase social participation and democracy; reduce poverty and inequality		

Table 1 A summary of degrowth actions

Now that degrowth's actions have been analysed (see Appendix 2 for details) and the analyses represented in table form above, degrowth's nomological network can be articulated after a brief discussion.

4.4.6 Degrowth's ecological sustainability nomological network

The map of degrowth's ecological sustainability nomological network shows the link between the construct's antecedents, strategies and outcomes and specific actions. A line represents each action, and if supporting evidence relates to that action, a * is drawn next to the action. Actions were incorporated into this nomological network if they could influence behaviours towards ecological sustainability, adhered to degrowth's ecological and/or bioeconomics strategies and maintained antecedents primarily from ecology or bioeconomics components. Supporting evidence was also included within this nomological network if it adhered to degrowth's ecological and/or bioeconomics strategies. A brief discussion is provided after the map.

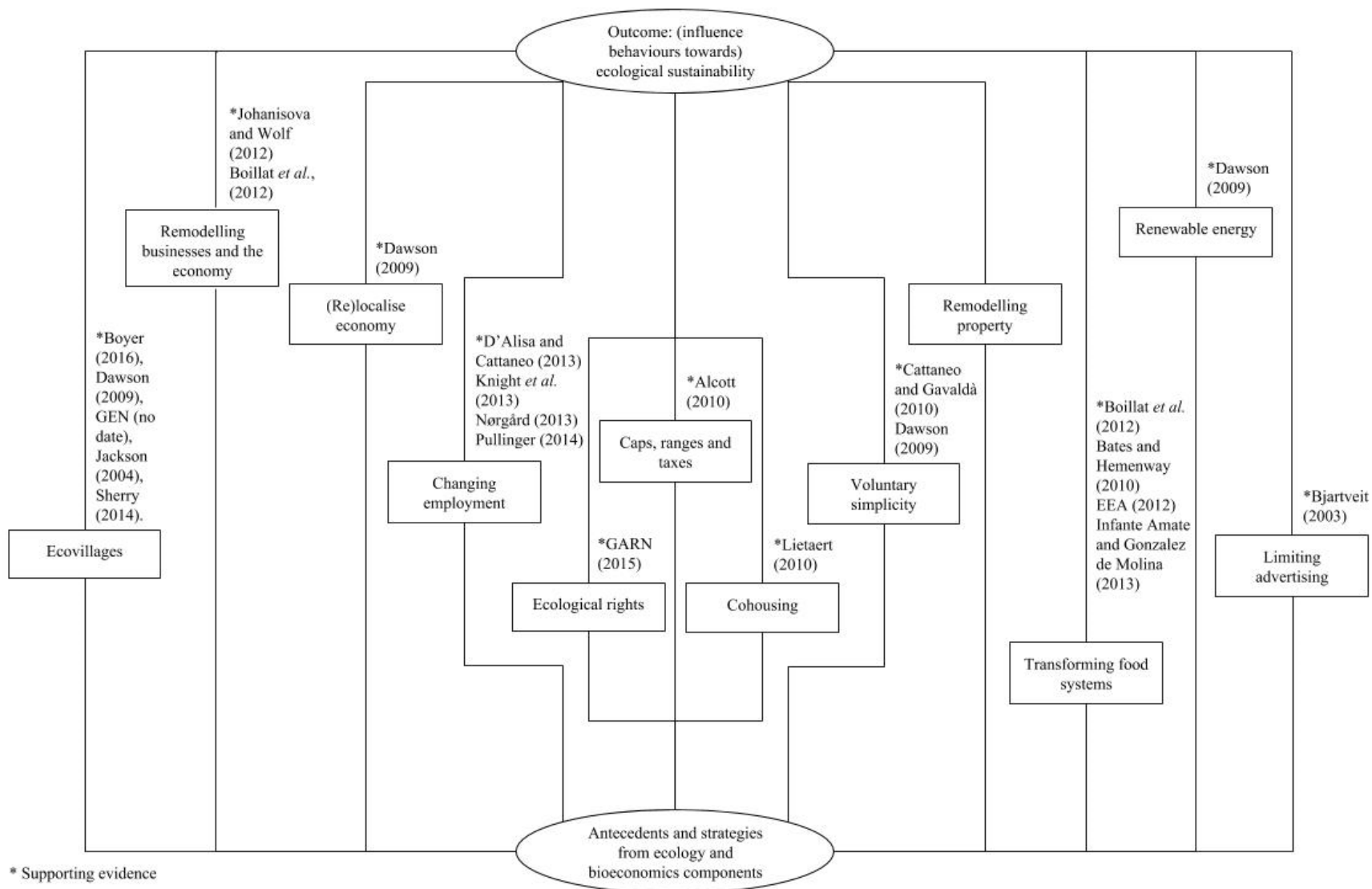


Figure 14 Degrowth's ecological sustainability nomological network

The map of degrowth's ecological sustainability nomological network is a visual representation of the actions (and their origins) that could influence behaviours to achieve ecological sustainability. The visual aspect of a map represents the linkages among a construct's elements arguably better than a table does. On a single page it is possible to see all of degrowth's actions operating in its ecological sustainability nomological network. For social marketers, it might be easier to see which actions influence behaviours towards ecological sustainability. Supporting evidence linked to these actions (denoted by a *) also provides social marketers with evidence of the action's implementation and thus that the action can influence behaviours towards ecological sustainability in real terms.

4.4.7 Degrowth's social sustainability nomological network

The links between degrowth's actions and its antecedents, strategies and outcomes are represented in the map of degrowth's social sustainability nomological network below. A line represents each action. Actions were incorporated into this nomological network if they could influence behaviours towards social sustainability, adhered to degrowth's critiques of development and praise for anti-utilitarianism, meaning of life and wellbeing, democracy and/or justice strategies and maintained antecedents primarily from the above-mentioned components. Supporting evidence was also included within this nomological network if it also aligned with the strategies from the above-mentioned components. A discussion follows the map.

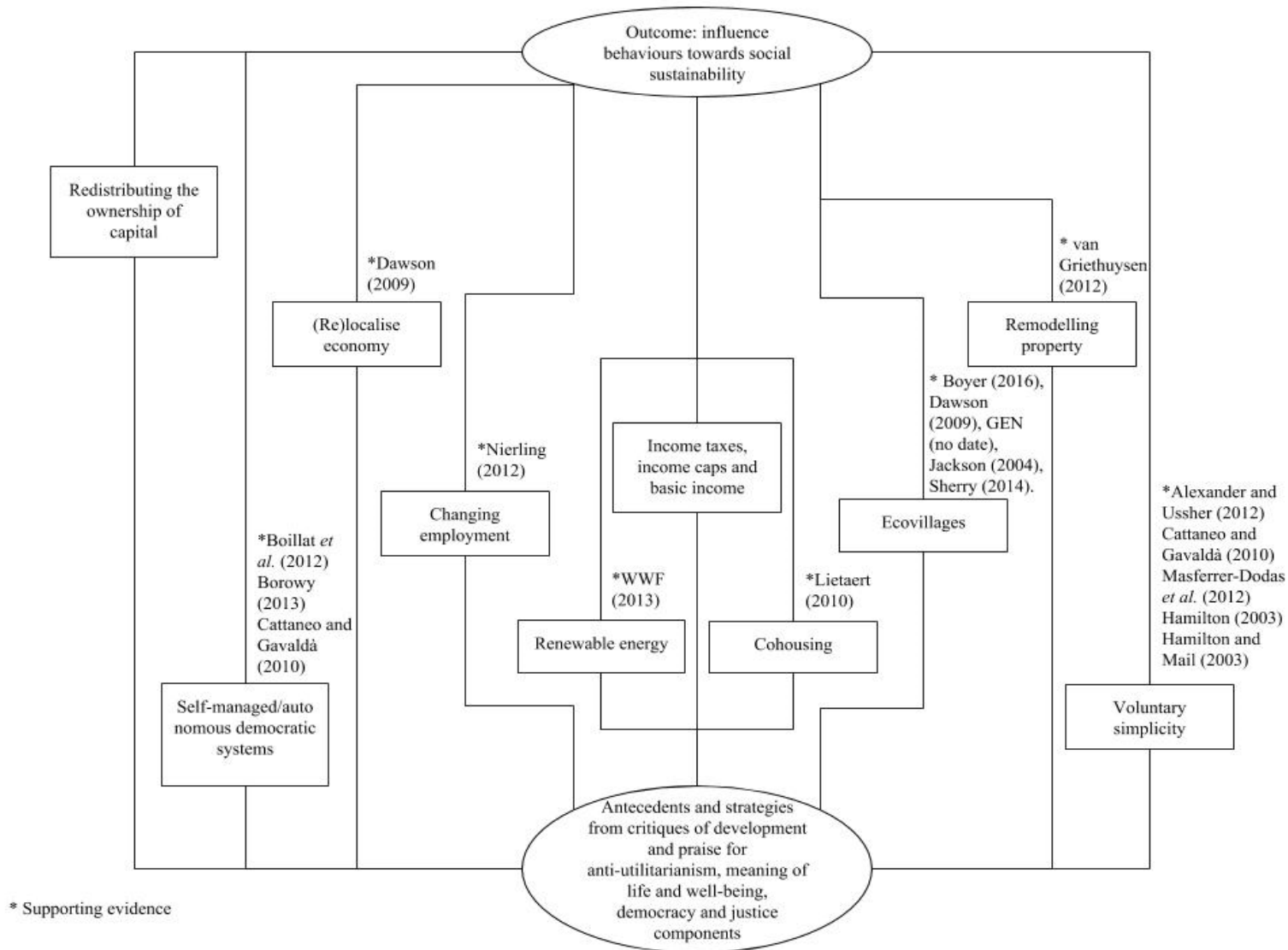


Figure 15 Degrowth's social sustainability nomological network

As indicated with the previous map, the map of degrowth's social sustainability nomological simplifies Table 1 and possibly better depicts the relationships between the elements of degrowth's nomological network. All of degrowth's actions operating in its social sustainability nomological network are visible therefore making it easier for social marketers to see which actions influence behaviours towards social sustainability, and after looking at both of degrowth's nomological networks, which actions could influence behaviours towards ecological and social sustainability i.e. which actions could pay a double dividend. Supporting evidence linked to an action (denoted by an asterisk *) also provides social marketers with evidence of the action's implementation and thus that the action can influence behaviours towards social sustainability in real terms.

This section has presented the different degrowth actions pertaining to ecological and social sustainability and has been responsible for adding to its nomological network by connecting the actions to outcomes, strategies and antecedents identified in previous sections. It also presented some supporting evidence for some actions. Now that a set of actions has been identified, actions in sustainable development scholarship that are similar were deductively searched for.

4.4.8 Overlaps with degrowth: sustainable development actions with ecological and social sustainability as outcomes

To reiterate, the emphasis placed on ecological and social sustainability in the sustainable development body of work creates an obvious overlap with degrowth. However, with so many actions at hand, to map a detailed nomological network for sustainable development is beyond the bounds of this dissertation. Thus, only actions that overlap to some degree with degrowth's ecological and social sustainability actions have been identified based on sustainable development's large body of literature. The reader is reminded at this point that these actions were also preliminarily analysed according to the social marketing criteria and according to whether they had enough information to link them to outcomes, strategies and antecedents. The length of these analyses means that the full version is provided in Appendix 3 and a table is supplied here. With regards to influencing behaviours towards ecological sustainability, the following coinciding actions were identified from the sustainable development literature:

- Caps and taxes
- Transforming food systems

- Sustainable consumption
- Ecovillages
- Renewable energy

Concerning influencing behaviours in a socially sustainable direction, the following mutual actions were found in the sustainable development literature:

- Caps and taxes
- Sustainable consumption
- Ecovillages
- Renewable energy
- Increasing employment

Democracy was one action in the sustainable development literature that had a similar name, but upon brief examination was not included as an overlapping action. From a degrowth perspective, democracy seeks self-managed/autonomous democratic systems that are recreated from the bottom up through grass roots democracy and that are controlled by individuals and groups (Boillat *et al.*, 2012: 602; Bonaiuti, 2012a: 525). On the other hand, sustainable development seeks to increase democracy through existing institutions and structures (e.g. UN, no date) i.e. a top-down, expert-led approach. The differences in these two were seen as too large to include in the discussion of overlapping actions.

4.4.9 A table of sustainable development's overlapping actions

Table 2 below is a summary of actions that were deductively found in the sustainable development literature and are therefore common amongst the two constructs (deeper analyses can be found in Appendix 3). Similar to the table for degrowth actions, from left to right, it identifies the action and provides some basic information about the action. If the action can influence behaviours towards both ecological and social sustainability, the action is split by outcome. The table also shows the actions and their construction in terms of sustainable development's strategies, antecedents, supporting evidence and models, which supports comparing them with degrowth's actions.

Overlapping action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
Caps and taxes	Ecological sustainability					UNEP (2011)
	Means to control the flow of resources.	Environmental taxes.	Obey earth's ecological limits.	Excessive exploitation; development, growth and ecology	Fuel taxes; plastic bags; emissions quotas.	
	Social sustainability					
	Means to invest in sustainable development actions.	Taxes.	Improve wellbeing and mitigate poverty and inequality.	Poor economic growth, development and inequality; inequity, society and the environment.	Many projects.	
Transforming food systems	Minimise environmental impact of producing and consuming food.	Permaculture, favouring small-scale farms, increasing organic food production, respecting seasonality and lowering meat and dairy consumption while increasing fruit and vegetable intake.	Obey earth's ecological limits.	Excessive exploitation; expanding population; development, growth and ecology.	Uganda	Barling <i>et al.</i> (2012), EEA, (2012), Herren <i>et al.</i> (2012), Scherr, <i>et al.</i> (2012), UN (1992).
Sustainable consumption	Lower aggregate consumption.	Ecological sustainability				Lorek and Fuchs (2011), UN (1992).
		Produce efficiently.	Obey earth's ecological limits.	Excessive exploitation; development, growth and ecology.		
		Social sustainability				
			Improve wellbeing and mitigate poverty and inequality.	Inequality and society and the environment; wellbeing, economic growth and development.		

Overlapping action	Brief overview	Specific actions	Link to strategies	Antecedents	Supporting evidence	Authors
Ecovillages	A community centred on sustainability.	Ecological sustainability			Findhorn, Dancing Rabbit, Ithaca, Earthaven and Sirius ecovillages.	Boyer (2016), Dawson (2009), GEN (2014), Jackson (2004), Sherry (2014), Kirby (2016).
		Ecological dimension of sustainability.	Obey earth’s ecological limits.	Excessive exploitation and development, growth and ecology.		
		Social sustainability				
		Social and cultural dimensions of sustainability.	Improve wellbeing.	Poor economic growth, development and inequity; Inequality and society and the environment.		
Renewable energy	Transition to renewable energy production.	Ecological sustainability				IPCC (2012), UN (1992), UNEP (2011),
		Efficiency.	Obey earth’s ecological limits.	Excessive exploitation Development, growth and ecology.		
		Social sustainability				
		Reduce energy poverty.	Improve wellbeing, mitigate poverty and inequality.	Poor economic growth, development and inequity; Inequality and society and the environment.		UNEP (2010).
Increasing employment	Policies to provide full employment.	Equity, poor economic growth and development.	Improve wellbeing, mitigate poverty and inequality.	Poor economic growth, development and inequity		UNDP (2014), UNEP (2011).

Table 2 A summary of sustainable development's overlapping actions

4.5 CHAPTER SUMMARY

The aim of this chapter was to converge on some common actions and discuss their differences and similarities in language used. It achieved this by firstly mapping the basic nomological networks of degrowth and sustainable development and discussing the differences and similarities in constituents thereof. Secondly, once the basic overlap had been identified, two detailed nomological networks (ecological and social sustainability) for degrowth were mapped particularising the connections between actions and their supporting evidence and antecedents, components, strategies and outcomes. These also adhered to the social marketing criteria (actions that influence behaviours that benefit individuals, groups and/or society as a whole and can be accepted voluntarily and/or involuntary) outlined in Chapter 2. Extracted from the thematic analysis, the themes of actions from the two detailed nomological networks for the degrowth construct were used as a deductive tool to collect actions from sustainable development's literature thereby honing in on mutual actions that have the potential to influence behaviours within a social marketing setting. Before a simplified language can be found, it is important to discuss the common actions in greater depth to specify their overlaps or lack thereof.

CHAPTER 5: COMPARATIVE DISCUSSION OF OVERLAPPING ACTIONS

5.1 CHAPTER OVERVIEW

Comparing the overlapping actions found in the previous chapter in more detail is the primary concern of this chapter. The evaluations attempt to categorise the level of commonality between actions by discussing the similarities and differences between the elements of their nomological networks. In general, these comparisons provide part of the foundation for a simplified language for social marketing programmes aimed at improving the likelihood of realising sustainability, which are presented in the next chapter. Mutual actions relating to ecological sustainability are covered first followed by those connected to social sustainability. Some actions are listed in both sections as they have both ecological and social implications.

5.2 INTRODUCTION

In the previous chapter, degrowth actions were analysed and used to augment degrowth's ecological and social sustainability nomological networks²⁴. Additionally, these networks provided a number of actions from which similar actions were deductively searched for in the sustainable development literature. The research has thus far fulfilled up to Research Objective 3. The next objective is to make recommendations to social marketers. To do so firstly requires an understanding of the extent to which actions overlap because, as will be demonstrated, actions with higher overlap maintain greater propensity to succeed. The following sections examine actions' degree of commonality through comparing each interrelated action in an effort to discuss their common and uncommon characteristics and interpret where the actions could be misinterpreted and misguiding sustainability. In some cases, the language they use is also compared.

²⁴ More detailed analyses of each action and the connections to elements of their basic nomological network can be found in Appendices 2 and 3.

5.3 COMMON ACTIONS IN ECOLOGICAL SUSTAINABILITY

5.3.1 Caps and taxes

The similarities at the action's definitions/overviews of taxes for both constructs are apparent as they both propose taxes as a means to control the flow of natural resources. They also align at strategy and outcome level as they seek to shape consumption to within earth's boundaries and ecological sustainability respectively.

One of the areas where the two constructs sub actions show commonalities is environmental taxes. Environmental taxes are proposed to internalise negative externalities i.e. incorporate the environmental cost in monetary terms into a product or service, which would increase prices of ecologically degrading products and services (Daly, 1977: 62; Latouche, 2010a: 74; UNEP, 2011: 559; Videira *et al.*, 2014: 65). Digging deeper into the degrowth literature surfaces that environmental taxes would entail depreciating economic throughputs until an environmentally sustainable medium i.e. a steady state is reached (Spangenberg, 2010: 566). This proposal is predominantly catered to the developed world.

From the sustainable development side, environmental taxes would also decrease natural asset as well as use them more efficiently (Strange and Bayley, 2008: 94; UNEP, 2011: 559). Here degrowth's calls for reducing resource use are in theory met by sustainable development, which centres their argument on promoting efficiency and reducing resources in both production and consumption aspects (Strange and Bayley, 2008: 94; UNEP, 2011: 559). Degrowth's antecedent concerning rebound effects, which is represented under the umbrella of sufficiency that pervades the construct, is taken into consideration in the sustainable development literature (e.g. UNEP, 2011: 559) and therefore resemblances are present.

Another specific action common to both constructs is caps on pollution (cap-and-trade from sustainable development and caps to reduce emissions from degrowth). In this case, once a physically defined cap on pollution or emissions has been exceeded, compensation either to other businesses or the overseeing body is required. However, while there is high agreement on the definition of these measures from both constructs, the analysis below renders their connection obsolete.

The most obvious and starkest contrast between the two actions and the constructs to which they are connected is the growth and degrowth agenda. Because economic growth is considered critical to sustainable development, taxes and caps from a sustainable development perspective should spur, not slow economic progress (UNEP, 2011: 559). They should also increase the amount of funding available to sustainable development initiatives. Until a sustainable medium is reached, degrowth naturally considers economic downscaling in the developed world an imperative; the construct's mandate in developing nations is to grow where necessary (R&D, 2010: 523; Spangenberg, 2010: 566). The ecological argument from degrowth is that economic growth overconsumes the resources allocated to earth and that it is impossible to decouple this. Sustainable development indeed bases their entire argument on the capacity to decouple growth with resource use: that the right growth, characterised by the series of interconnecting actions the construct proposes, will decrease resource consumption and eventually reach a sustainable point (UN, 2015). They thus possess very different means, arguments and permanent states. One point of agreement could however be proposals of environmental taxes in developing nations. However, very little information on environmental taxes in the developing world is present in the degrowth construct.

Another area of dissimilarity is degrowth's proposal of additional tax and cap schemes, for example income caps and taxes and some of the Pigouvian taxes and caps on resource extraction. These would essentially degrow and right size the economy in areas where necessary (Alcott, 2010: 553; Daly, 1977: 61-62; Jackson, 2009: 173; Spangenberg, 2010: 564; Videira *et al.*, 2014: 67).

Concerning actual implementation, when environmental taxes have been shown to slow economic progress, they have been diluted to suit the economic growth agenda and not implemented to their full potential (e.g. Kohler, 2015: 21). Again, the pursuit of weak sustainability or favouring social elements is the main criticism (Kohler, 2015: 21). Thus while entities promoting sustainable development do seek to implement tax agreements, no meaningful instruments have been instituted (Kohler, 2015: 21).

The similarities and differences discussed above indicate that caps and taxes from both constructs overlap to a low extent. This is because even though surface-level parallels

between environmental taxes and emissions caps as specific actions are visible, the contrast between taxes in the developed world that also have to promote economic growth and degrowth is too large.

Transforming food systems

Transforming food systems share definitions/overviews between constructs: to minimise the environmental impact of producing and consuming food. All of the environmental benefits of transforming food systems are represented in both constructs and include reducing the ecological impact of all variables within the food system. Obey limits and right-size the economy as strategies for degrowth and sustainable development respectively also highly correspond as they both engender living within earth's carrying capacity i.e. environmental sustainability, which they both share as outcomes. Overlap at specific action level is high amongst organic food and consuming less meat and dairy and more vegetables and fruit as their content is very similar. Localising or regionalising food systems from a degrowth perspective needs to be compared to favouring small-scale farmers and respecting seasonality from the sustainable development camp to ascertain further similarities or differences.

Degrowth's localising or regionalising thesis is to create a food system that does not heavily rely on imports and exports and thereby reduce the amount of resources associated with these processes (transport, packaging, etc.) (Andreoni and Galmarini, 2013: 67; Infante Amate and Gonzalez de Molina, 2013: 32). It would therefore entail consuming products that can be grown locally and with a low environmental impact. Additionally, seasonality and small-scale production are embedded within this specific action; people should consume what is available in their region and farmers should move to small-scale operations (Infante Amate and Gonzalez de Molina, 2013: 32). Respecting seasonality (Barling *et al.*, 2012: 32) and favouring small-scale farms (Scherr *et al.*, 2012: 48) are also reflected in sustainable development's sub actions respectively.

The Food and Agriculture Organisation, which is also an organisation of the United Nations, also explicitly favour localising food systems and diets as one of their actions to reverse the unsustainability of the current food system (e.g. Lairon, 2012: 31). However, the United Nations Environmental Programme promotes exporting from

small farmers in developing nations to achieve triple sustainability (UNEP, 2013: 49-80). Thus, conflicting opinions from two organisational bodies that contribute to actions for sustainable development exist. This contravention could be underpinned by the fact that sustainable development has in the past given preference to social development (poverty reduction etc.) rather than environmental sustainability (Lang, 2012: 22) i.e. preferred weak sustainable development/sustainability. It has also been noted that localising food systems breach free trade agreements (e.g. Barling *et al.*, 2012: 32). However, since sustainable development's ecological strategy is to obey earth's limitations, this would seemingly act as an overarching guideline to make sure that food systems do not exceed earth's biocapacity.

On the degrowth side, while authors obviously caution that localised production does not mean sustainability (Andreoni and Galmarini, 2013: 67), the action focuses on returning to a regional and seasonal diet, which would entail that only foods that can be produced without ecological harm to the region should be consumed (e.g. Infante Amate and Gonzalez de Molina, 2013: 32). Degrowth are however quiet on the aspect of exporting food produce from developing countries to decrease poverty and inequality – one point that gains considerable attention in the sustainable development literature (e.g. UNEP, 2013: 49). What has also not been examined in degrowth are the cases in which food cannot be produced locally (e.g. Gomiero, 2018: 1827). This is likely because degrowth has focused its attention on developed nations.

On the issue of localising or globalising food chains, sustainable development conflicts degrowth to some extent, with the actualities not being clear to discern. Not only is there disagreement within each construct, but there is also misalignment between constructs. Therefore, this *could* be a point of misinterpretation. It is consequently estimated that the specific actions found within each action also coexist to a medium to large extent, with the degree of overlap between localising/regionalising and small-scale farms sub-actions difficult to discern.

5.3.2 A comparison between voluntary simplicity and sustainable consumption

Sustainable production and consumption is a large, multifaceted action that incorporates many aspects for example taxes, energy, etc. (UNEP, 2015). In comparison, while consumption reduction is a universal strand woven throughout the degrowth construct, there is however very little articulation of sustainable consumption as an encompassing action – sustainable consumption patterns are articulated within the construct's voluntary simplicity action, which is what will be compared to corresponding parts of the sustainable consumption action.

Voluntary simplicity, which is synonymous with simplifying and downshifting, is considered a social movement of people voluntarily choosing lifestyles that disintensifies resource consumption (Alexander and Ussher, 2012: 66). Based on degrowth's overarching principle of sufficiency, voluntary simplicity explicitly favours *reducing* overall consumption in developed countries and moving away from materialism and growth to right-size the economy with non-technical solutions to achieve ecological sustainability (e.g. Demaria *et al.*, 2013: 202; Hamilton and Mail, 2003: vii). The principle of sufficiency entails consuming what is necessary to maintain a high quality of life (R&D, 2010: 523), which in developing nations implies that consumption should increase only to a certain level that ensures wellbeing and not beyond into overconsumption (R&D, 2010: 523-524). It is also strongly connected to the rebound effect—a phenomena explaining that efficiency gains are often outstripped by increased consumption as a result of the savings accrued (e.g. Alcott, 2005; Victor, 2012). Where voluntary simplicity links to the broader agenda of large-scale change is its bottom-up capacity – as a social, grassroots movement – to influence people's behaviours that in the end could reconstruct the laws and policies that will shape society (Alexander, 2013: 3).

Sustainable development views sustainable production and consumption in the following way:

"[T]he use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and

toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations” (UNDESA, no date: paragraph 3).

Based primarily on the principle of efficiency, the sustainable consumption (and production) action in the sustainable development literature primarily proposes top-down changes in consumption (and production) patterns that are sustainable by one planet; it does however also intend to disseminate information about sustainable consumption choices to facilitate change from the bottom up (UN, 2015: paragraph 12.8). Thus while definitions are very different, it is in this aspect of bottom-up change that the highest overlaps between constructs occur.

Sustainable consumption and production’s key principles are to decouple resource use from economic growth, safeguard wellbeing and ensure that the rebound effect does not occur (UNEP, 2015: 10). Efficiency and technological progress pervade this action as well as other references to sustainable consumption (e.g. Strange and Bayley, 2008: 76; UN, 1992: paragraph 4.15; UN, 2012: paragraph 4; UN, 2015: paragraph 28). One unambiguous mention of consumption reduction is found in UNEP (2015: 125): “[s]ustainable consumption does not necessarily mean shopping for more sustainable alternatives; it sometimes means not shopping at all”.

Thus, while the explicit reference to sufficiency has a low appetency rate compared to that of degrowth’s, sustainable development’s reference to overconsumption or unsustainable consumption as a driver of resource scarcity (e.g. UN, 2012: 11; UN, 2015: declaration number 28), reducing overconsumption (UNEP, 2015: 35) and to tackle the rebound effect would essentially mean that both efficiency and sufficiency principles are represented in the sustainable consumption action and therefore this aspect of the action concurs to a high extent with degrowth’s. Taking these into account, a similarity exists only in bottom-up actions to be implemented in developed nations where consumption is already high enough and where stopping overconsumption is necessary. Further similarities are that both actions’ strategies are consumption that is sustainable by one planet and outcomes are ecological sustainability. Thus, in spite of vernacular differences at definition/overview level, voluntary simplicity (degrowth)

and sustainable consumption (sustainable development) offer some common characteristics.

Unfortunately what is said by sustainable development is contrasted by their lack of rigorous implementation. Although it has been known for some time that consumption patterns in developing nations are unsustainable (e.g. UN, 1992: paragraph 4.18), after 25+ years of “changing consumption patterns” more resources than ever are required to satisfy our needs and wants (e.g. GFN, 2017). This has led to what some authors refer to as the difference between weak and strong sustainable consumption, with the former being adopted more often than the latter (Lorek and Fuchs, 2013: 34). Thus while strong sustainable consumption has been said to align well with degrowth (e.g. Lorek and Fuchs, 2013: 38), sustainable consumption, because it has traditionally leaned towards the weak end of the spectrum, has been misinterpreted and misguiding efforts (Lorek and Spangenberg, 2014: 34).

5.3.3 Ecovillages

Ecovillages is an action adopted by degrowth (Demaria *et al.*, 2013: 203) and sustainable development (GEF, 2011) and is represented as supporting evidence for ecological sustainability in degrowth’s voluntary simplicity, renewable energy, transforming food systems and (re)localising the economy actions. Therefore, it was deemed necessary to provide more detail on ecovillages i.e. connect it to elements of degrowth’s nomological network.

At antecedent level, the ecovillage action has been linked to exceeding limitations, development, culture and ecology and neoclassical and neoliberal economics from degrowth’s components. From a sustainable development perspective, excessive exploitation and development, growth and ecology have been linked to the reasons why ecovillages came about. The principle of sufficiency within which efficiency is embedded is known to exist in ecovillages (e.g. Jackson, 2004).

Links between degrowth’s right-sizing strategy and sustainable development’s obey earth’s ecological limits were also found. Both constructs’ strategies – right-size the economy (degrowth) and obey earth’s ecological limits (sustainable development) – are

very similar in content, which is an economy based on one planet's resources. An ecological benefit of ecovillages is reduced natural resource use, which is also seen in both constructs' literature.

In general, because ecovillages are an action adopted by both constructs, it automatically maintains a high 'overlap' – in this case the action is one action adopted by both constructs.

5.3.4 Renewable energy

The action for renewable energy systems is seen in both constructs. Excessive exploitation (sustainable development) and exceeding limitations (degrowth) antecedents have similar content between constructs. Additional antecedents that are not common include development growth and ecology (sustainable development) and technology, growth and the rebound effect and neoclassical and neoliberal economics and the growth of systems (degrowth). Ecological benefits and strategies from both constructs are reduced resource use that obeys the finite amount of earth's natural resources. At definition level, although degrowth prefers decentralised energy production, one of the construct's key ideas is right-sizing economies depending on their situation (R&D, 2010). Sustainable development echoes this rationale calling for solutions according to specific conditions at local, national and global levels (UNEP, 2011: 202). Therefore, concerning the geospatial characteristics of renewable energy, sustainable development is highly alike to degrowth as both constructs seek ecologically sustainable economies through either centralised or decentralised renewable energy production.

On the consumption side of renewable energy, degrowth protagonists add another layer to their argument by connecting the energy consumption debate to the Jevons Paradox/rebound effect. The paradox states that any energy savings as a result of decreasing renewable energy consumption would be consumed somewhere else (holiday, new devices, etc.) and consequently increase total energy consumption i.e. causing a rebound (Alcott, 2010: 559; Moriarty and Honnery, 2012: 890; Sorman and Giampietro, 2013: 91). This is compounded by the fact that renewable energy will require substantial investment to produce enough energy for society (Sorman and

Giampietro, 2013: 89), which still needs natural and human resources to produce (UNEP, 2011: 207-208). This effectively explains why degrowth propose a principle of sufficiency calling for people “to live well off less” (Herring, 2006: 19) i.e. to not consume material objects that would result in rebounds occurring. The repercussion of consuming goods sufficiently and increasing renewable energy production translates into a greater chance of creating an equilibrium where lifestyles are within the carrying capacity of earth’s ecosystems (Demaria *et al.*, 2013: 202; Sorman and Giampietro, 2013: 92; Victor, 2012: 208).

Comparable to that of degrowth’s sufficiency principle and the connection to renewable energy, sustainable development also has a reduction side to it: energy conservation and efficiency measures (e.g. OECD/IEA, 2016: 73); and is also linked to a consumption element: sustainable consumption (UNEP, 2015: 10). Not only does sustainable development acknowledge the implications of the Jevons Paradox/rebound effect (UNEP, 2011: 269), the sustainable consumption action actively seeks to nullify it by decoupling economic growth from resource use, most notably in the way in which energy is produced (UNEP, 2011: 204) and consumed (UNEP, 2015: 10). Thus, the two constructs exhibit overlaps at the theoretical level i.e. at the level at which actions are *proposed*.

While it has been suggested that efficiency options tend to stimulate economic growth thereby recapitulating the vicious cycle of resource use and economic growth (Lorek and Spangenberg, 2014: 36), sustainable development seeks to counter this by estranging economic growth from resource use (UNEP, 2015: 10).

Concerning the *implementation* of the renewable energy action by the stakeholders that seek to achieve sustainable development, Freire-González and Puig-Ventosa (2015: 69-70) reason that the rebound effect is almost never considered when developing energy policies. Additionally, in a review of different approaches to energy policies, Sorrell (2015: 81) also concludes that interventions to reduce energy consumption to the degree necessary and to avoid rebounds are both insufficient and ineffective. Therefore, although “[m]any countries have programmes that encourage consumers to reduce consumption by changing behaviour” (OECD/IEA, 2016: 73), by not considering the wider implications of the rebound effect, governments implementing sustainable

development's renewable energy action might have misinterpreted it and consequently might be misleading sustainability activities.

Nevertheless, renewable energy as a common action intersects to a high extent at the theoretical level. Where misinterpretation has occurred could be the fault of governments/companies trying to suit their needs, agenda etc.

To summarise, this section has alluded (with full details provided in Appendices 2 and 3) to the sustainable development actions that overlap with degrowth's in the ecological sustainability paradigm. These intersecting actions were discussed to show their similarities and differences, and where they could be misleading and/or misguiding sustainability efforts through being misinterpreted. The next section focuses more on the social aspects of sustainability.

5.4 ACTIONS TOWARDS SOCIAL SUSTAINABILITY

The nomological network for degrowth's social sustainability contains a number of actions from which similar actions were deductively searched for in the sustainable development literature. These similar actions are presented and discussed relative to degrowth in the sections below.

5.4.1 Sustainable consumption vs. voluntary simplicity

Voluntary simplicity in social terms is a social movement of people with a goal of attaining a high quality of life while reducing their consumption levels (Alexander and Ussher, 2012: 66; Andrews and Urbanska, 2010: 178; Trainer, 2012: 594). It is primarily a bottom-up action adopted by and targeted at people living in developed wealthy nations where a high quality of life already exists.

Like degrowth, sustainable development acknowledges that overconsumption, primarily in the global north, plays a pivotal role in environmental degradation and consequently the effect on social aspects of people's lives (UNEP, 2015: 118-119). The sustainable consumption action also induces a bottom-up approach providing information to introduce steps to alleviate unsustainable consumption that transpires amongst people with the means to do so the world over i.e. those above a certain level

of economic prosperity who can afford to consume things at an unsustainable rate (UNEP, 2015: 35). Yet outside of a quote in UNEP (2015: 125), there is scant reference to explicit consumption reduction in wealthier countries from sustainable development. On this note, sustainable development acknowledges that “fundamental changes in the way societies consume and produce are indispensable for achieving global sustainable development” (UN, 2012: paragraph 224), which in theory could *imply* reduction. Sustainable development primarily refers to the social benefits of sustainable consumption (and production) being *dependant* on the positive environmental effects i.e. better quality of life as a result of better environmental conditions (e.g. UNEP, 2015: 36).

In order to disentangle economic growth and ecological stress, sustainable consumption and production proposes a reduction in resource use to produce goods and promoting lifestyles that do not harm the environment while at the same time do not jeopardise a person’s quality of life thus leading to increasing levels of wellbeing i.e. the outcome of social sustainability (UNEP, 2015: 10). However, in the degrowth literature the benefits of consuming only what is necessary to have a good life are not only framed in interconnected environmental and social terms, but also in terms of the positive social and psychological associations of sufficient consumption in itself (e.g. Cattaneo and Gavalda, 2010: 582; Hamilton, 2010: 572; Lietaert, 2010: 578; Vergragt, 2013: 124). To do so, degrowth suggest reducing materialism endorsed by western development models, changing values and forgetting about economic growth as more specific actions (Alexander and Ussher, 2012: 66; Andrews and Urbanska, 2010: 178; Cattaneo and Gavalda, 2010: 588; Jackson, 2009: 148; Trainer, 2012: 594). Thus, degrowth puts forward additional benefits of simplifying one’s lifestyle and specific actions to achieve social sustainability that are not represented in sustainable development. This is because sustainable development perceives social sustainability to be reliant on the link between ecological sustainability and sustainable consumption and not a direct link in itself (e.g. UNEP, 2015: 36).

Improved wellbeing is a shared benefit, and degrowth’s *oikonomia* strategy overlaps to some extent with sustainable development’s strategy of improving wellbeing and mitigating poverty and inequality as these strategies both aim to improve society’s wellbeing. Where voluntary simplicity is lacking content is in the consumption patterns

in developing nations, something which sustainable consumption and production pays close attention to.

The antecedents found in both constructs are: wellbeing, neoclassical and neoliberal economics and consumerism; exceeding limitations; technology, growth and the rebound effect; neoclassical and neoliberal economics and the growth of systems (degrowth) and excessive exploitation; development, growth and ecology; inequality and society and the environment; wellbeing, economic growth and development (sustainable development). Like in the environmental sustainability section, the environmentally and therefore socially unsustainable patterns of consumption have only endured over the past three decades (e.g. GFN, 2017). Thus, the same conclusion is that sustainable consumption in the past has been misinterpreted and misguided efforts to realise social sustainability.

In summary, these two actions from either construct are seen to coincide in general at a medium level, with high alignment in the need to address overconsumption in developed nations via bottom-up approaches.

5.4.2 Caps and taxes

Sustainable development seeks to achieve positive social outcomes through using taxes generated from economic activity to invest in sustainable development projects focussed on (at strategy and benefit levels) mitigating poverty and inequality and enhancing wellbeing and quality of life. There is also a strong focus on redistributive policies that seek to more evenly spread income-generating assets, and this is where taxes play a central role (Kohler, 2015: 1-3). Kohler (2015: 27-35) further suggests that progressive tax structures targeting wealthy individuals and corporations need to be implemented for direct redistribution of wealth and income to be possible.

Tax revenue can also have direct implications for example revenue from ecological taxes and caps can be used to lower labour costs by substituting for social security contributions made by companies, which could potentially create roughly 14 million jobs (ILO, 2009: 1).

Degrowth proposes progressive taxes on – and limits to – income to directly redistribute wealth within and between nations to reduce injustice and inequality and improve wellbeing and quality of life (R&D, 2010: 523-524). Therefore, degrowth and sustainable development propose very similar benefits and strategies, as well as their means of reducing poverty and inequality and improving wellbeing.

One of the starkest areas that do not overlap is the predominant principles of green growth and degrowth from sustainable development and degrowth respectively. Other disparities can be observed between the constructs with regards to the caps and taxes actions. Firstly, degrowth proposes an income cap, which would effectively limit income beyond a certain level. This part of the action is connected to the Easterlin paradox antecedent (Bechetti *et al.*, 2009; Easterlin *et al.* 2010; Jackson 2009: 40; Wilkinson and Pickett, 2010). This antecedent states that income over a certain ceiling does nothing to improve people's wellbeing (Bechetti *et al.*, 2009; Easterlin *et al.* 2010; Jackson 2009: 40; Wilkinson and Pickett, 2010). Additionally, wellbeing, neoclassical and neoliberal economics and consumerism has been cited as an antecedent (e.g. Bechetti *et al.*, 2009; Daly, 1977: 54; Easterlin *et al.* 2010; Jackson 2009: 40; Wilkinson and Pickett, 2010) not represented in sustainable development literature. Furthermore, human relations and re-imagination strategies are found in degrowth and not in sustainable development literature. Numerous tax sub actions that do not overlap with degrowth can be found within the sustainable development literature: the number of global tax treaties alone stands at around 3000 (OECD, 2017: 12).

The constructs possess one (out of a possible two) similar antecedent with economic growth, development and injustice (degrowth) and economic growth, development and inequality (sustainable development) maintaining similar content. This antecedent refers to economic growth and development's contribution to inequality and injustice.

It has been noted that sustainable development's redistribution policies up to 2015 have inadvertently increased poverty and inequality gaps (Kohler, 2015: 1). Changes proposed after 2015 seek to better this (IMF, 2015). Therefore, misinterpretation and misguidance of sustainability has occurred in sustainable development. This is likely due to the approach, which is co-operative in nature as national entities work together with sustainable development practitioners, who position themselves as

assistors/facilitators/capacity builders (e.g. UN, 2015: paragraphs 17.1-17.5). There is therefore room left for countries to make their own decisions, and thus the fiscal instruments countries implement could be different to the original propositions.

When looking at the actions as a whole, there is therefore only some shared content between the two constructs. The major differences in the growth degrowth dichotomy are that degrowth seeks to shrink the economy and only grow in some cases where absolutely necessary whereas sustainable development seeks long-term economic growth, and rapid short-term growth in developing nations. There are also many different taxes proposed by both sides.

5.4.3 Ecovillages

As mentioned above, the ecovillages action is adopted by degrowth (Demaria *et al.*, 2013: 203) as well as sustainable development (GEF, 2011). The reader is reminded that since ecovillages is a neutral action i.e. it has merely been adopted by both constructs as a means to achieve their ends, all content essentially flows from the action itself as envisaged by the GEN. The connections made to each construct's nomological network are what will be used to discuss the 'overlaps', which will later be used in the recommendations section when relating ecovillages to the theories of social marketing.

Links were established between ecovillages and degrowth's re-imagination and human relations; *oikonomia*; increase social participation and democracy; and reduce poverty and inequality strategies and sustainable development's improve wellbeing and reduce poverty and inequality strategies. Large similarities occur between degrowth's *oikonomia* and reduce poverty and inequality strategies and sustainable development's improve wellbeing and reduce poverty and inequality strategies respectively. In terms of the overlaps between the former, both constructs are focussed on people's wellbeing. The latter is considered to highly overlap as they refer to the same content. The social benefits they claim to achieve include high quality of life and are found in the literature on both constructs. The principle of sufficiency within which efficiency is embedded are known to exist in ecovillages (e.g. Jackson, 2004).

On the whole, because ecovillages as an action is adopted by both constructs, and similar strategies, outcomes and benefits exist between constructs, large similarities are present.

5.4.4 Renewable energy

Both degrowth and sustainable development share similar antecedents (economic growth and development and their link to injustice and inequality) and outcomes. Degrowth strategies (*oikonomia* and reduce inequality and injustice) are alike to sustainable development's improve wellbeing and mitigate poverty and inequality strategies. Concerning the social benefits of producing renewable energy, sustainable development overlaps greatly with degrowth as they both engender improved health standards, better energy distribution, job creation and improved living standards.

Similar to the renewable energy action from an environmental standpoint, from a degrowth perspective sufficiency is argued for due to the idea that energy efficiency will produce rebounds, (Alcott, 2010: 559; Herring, 2006; Jackson, 2009: 95; Moriarty and Honnery, 2012: 890), which in social terms, could mean a deterioration in wellbeing due to the link between people's wellbeing and the biosphere on which they depend to live (Jackson, 2009: 47; Martinez-Alier, 2012: 62-3; Wilkinson and Pickett, 2010: 8). In other words, because of the rebound, more renewable energy will be required, which will mean using additional raw materials, land, water, etc. to produce the necessary amount of renewable energy thus threatening people's livelihoods (Alcott, 2010: 559; Moriarty and Honnery, 2012: 890; Sorman and Giampetro, 2013: 91). Similar to the debate about renewable energy in the ecological sustainability section, sustainable development actively pursues to invalidate the rebound effect by simultaneously ramping up renewable energy production (UNEP, 2011: 204), promoting energy conservation and efficiency (OECD/IEA, 2016: 73) and promoting sustainable production and consumption that decouples green growth from resource extraction i.e. decreases environmental decay (UNEP, 2015: 10).

Nevertheless, researchers have indicated that the implementation of renewable energy policies to achieve sustainable development place little emphasis on the Jevons Paradox (e.g. Freire-González and Puig-Ventosa, 2015: 69-70). Additionally, energy

consumption reduction policies have also been criticised to take a laissez-faire approach to the rebound effect (Sorrell, 2015: 81). Sustainable consumption has also yet to reach any sustainable threshold. Such misinterpretations can misguide social sustainability efforts as increased resource use will affect people's wellbeing.

Thus, like in ecological sustainability, while misinterpretation and misguidance has likely occurred from a sustainable development standpoint, the renewable energy action to deliver social sustainability is found to exhibit a high level of overlap at the theoretical level.

5.4.5 Increasing employment vs. changing employment

Changing employment from the degrowth construct has specific actions relating to expanding employment options to job sharing, decreasing working time and increasing non-paid work (Andreoni and Galmarini, 2013: 67-68; Assadourian, 2012: 31; Jackson, 2009: 180; Kallis, 2013: 95; Latouche, 2010: 38). These actions are connected to the principle of sufficiency, which translates to the mindset that people should only work and earn as much income as necessary for a good life, and that the time not working should be spent (D'Alisa and Cattaneo, 2013: 78; Kallis, 2013: 96; Nierling, 2012: 245). Sustainable development lists no specific actions and operates under the umbrella phrase of "the creation of more and better green jobs" (ILO, 2016) which is justified on the basis that investment in the green economy will bring about large swathes of job opportunities (UNEP, 2011: 16) when combined with the right mix of support structures (ILO, 2012: ix).

There is no reference to any of degrowth's specific actions. This is one of the largest disparities between constructs.

The other large difference is that degrowth's proposal for the specific actions has a direct connection to not only increasing wellbeing and social sustainability, but also lessening environmental degradation. The connection between employment type and environmental anomalies in sustainable development literature is more indirect as the construct proposes that other actions will foster environmental sustainability and not employment *per se* i.e. that by investing in, for example, renewable energy as an action

to achieve environmental sustainability will provide jobs and not that jobs in renewable energy will realise environmental sustainability. This is in contrast to degrowth, which proposes that the type and nature of jobs will also reduce environmental pressure.

Both constructs offer social sustainability as outcomes and both claim to be able to achieve as close to 100% employment as possible. Through modelling a best-case green economy scenario, sustainable development predicts that 54% of the world's population will be employed by 2050 (UNEP, 2011: 518). Taking into account the population projections for 2050, which forecasts that roughly 57.2% of the population will be likely eligible to work (aged 15-59), sustainable development therefore predicts an approximate employment rate of 94.4%, which is very close to 'close to 100% as possible' proposed by degrowth.

The antecedents proposed by degrowth relate to development, growth and consumerism; wellbeing, neoclassical and neoliberal economics and consumerism; economic growth, development and injustice; and the Easterlin paradox. From the sustainable development literature, only poor economic growth, development and inequity antecedent was found, which is highly alike to the growth development and injustice antecedent from degrowth.

Increasing employment from a sustainable development perspective has been connected to the improve wellbeing and mitigate poverty and inequality strategies. These are highly similar to the *oikonomia* and reduce injustice and inequality and human relations strategies found in the degrowth construct: both of their employment-related actions seek to provide ample job opportunities for people to improve their quality of life and ascend out of poverty and disparity. Additional links between changing employment action and degrowth's re-imagination and relationships strategies also exist, which are not found in the sustainable development literature.

To summarise: the employment-related actions proposed by both constructs overlap at strategy and outcome levels. However, due to their dissimilarity at definition and principle levels, the fact that they propose different specific actions to achieve social sustainability, and the fact that degrowth seeks to achieve social and environmental sustainability, the actions are said to overlap to a low/moderate extent.

5.5 CHAPTER SUMMARY

Sustainable development actions that overlap with degrowth in ecological and social sustainability fields have been discussed and compared showing their shared and individual features. From the comparisons of actions aiming to realise ecological and/or social sustainability, which have been grounded in the detailed analyses of degrowth's and sustainable development's literature found in Appendices 2 and 3, it is evident that some actions coincide to a greater extent than others. More specifically, and with regards to ecological sustainability, the two actions that represent the largest overlap are ecovillages and renewable energy. Transforming food systems overlap to a slightly lesser extent in ecological sustainability. Others such as voluntary simplicity and sustainable consumption still maintain shared content, but only to a moderate extent; although high in specific cases. In social sustainability, the common actions that are largely homogenous are ecovillages and renewable energy. Voluntary simplicity/sustainable consumption overlap to a lesser extent, but are again highly common in specific features. Increasing employment/changing employment and caps and taxes possess the largest contrast between the constructs.

A table is used to summarise these findings. It shows all overlapping actions between the constructs and their level of overlap in ecological and social sustainability.

Overlapping action	Degree of overlap in ecological sustainability	Degree of overlap in social sustainability
Caps and taxes/taxes	Low	Low/moderate
Transforming food systems	Moderate/High	N/A
Voluntary simplicity/sustainable consumption	Moderate	Moderate
Ecovillages	High	High
Renewable energy	High	High
Increasing employment	N/A	Low/moderate

Table 3 A summary of overlapping actions

Comparisons showed that actions existing in both constructs, are naturally, but not prohibitively, different and that they maintain promising similarities. Nevertheless, because these common actions are intended for social marketers, they need to be discussed in terms of the theoretical paradigms underpinning social marketing. The

following chapter uses these intersecting actions as a platform for discussing how critical thinking, systems thinking, value and relational thinking is applied to the common actions and how social marketers can use these overlaps to reduce misinterpretation and misguidance and design more successful programmes.

CHAPTER 6: SOCIAL MARKETING'S PARADIGMS APPLIED TO OVERLAPPING ACTIONS TO GUIDE SOCIAL MARKETING PROGRAMMES

6.1 CHAPTER OVERVIEW

In Chapter 5, actions were analysed to determine the extent to which they coincide and where they were similar and different. This chapter applies the theoretical paradigms underpinning social marketing (critical thinking, systems thinking, value and relational thinking) to the common actions illuminated in the previous chapter. By showing how each paradigm's contribution to more successful social marketing programmes relates to commonalities, guidelines as to how social marketers can reduce misinterpretation and misguidance are proposed. Furthermore, this provides the reason why common actions can act as the foundations for social marketing programmes for sustainability.

6.2 INTRODUCTION

Despite their differences, degrowth and sustainable development maintain several common and interrelating actions that have been uncovered and characterised. These coinciding actions could be a sound platform for social marketers to lead society down a more sustainable path using social marketing programmes. Tentatively then, these actions are the basis of a simpler language to achieve sustainability. However, the capacity of these mutual actions to act as foundations for *fruitful* programmes, that are also not prone to misinterpretation and misguidance, still needs discussing. Recommendations for social marketers are also required. The following sections turn to critical thinking, systems thinking, value and relational thinking to draw out fundamentals of successful social marketing programmes that will be used to guide social marketers in developing more successful social marketing programmes that reduce misinterpretation and misguidance. An important point to remember is that these are discussions relating *theoretical assumptions* to the communal actions. When actually implementing the actions, primary research is obviously necessary to co-discover value that these actions could co-create and then co-design and co-deliver programmes accordingly. Based on this information, social marketers will need to conduct primary research in order to understand more about the interconnections between the problem, target audience(s) and the action in the particular context to in

which it is being applied, for example what the target audience values and how to co-create such value through value co-discovery, value co-design and value co-delivery. Nevertheless, social marketers should make use of actions' supporting evidence to the social marketing implications of how actions have actually played out in real life scenarios.

Recommendations take the form of a type of “ontological negotiation” where the ends supersede the means (Wallenborn, 2008: 230). Recommendations are also based on the assumption that social marketers are neutral stakeholders in tackling the sustainability challenge. This implies that if sustainability is the sought-after end, the means to achieve it – in this case sustainable development or degrowth – are considered superfluous. Universal actions that have a language that is less likely to be misinterpreted or misguide efforts are vital for realising sustainability.

Critical thinking is dealt with first as it allows for a logical flow of the recommendations section that is similar to that of the social marketing planning process—it is pertinent to identify causes of issues and perform a competitor analysis, two of these planning aspects relate to critical thinking. Additionally, as will be seen, some aspects of other paradigms are dependent on determining the critical viability of an action and the ability of overlaps to determine the degree to which misinterpretation and misguidance can be reduced.

To make it easier for social marketers to design social marketing interventions aimed at achieving sustainability that are less open to misinterpretation and misguidance, it is proposed that actions that possess the greatest overlap and offer ecological *and* social sustainability as an outcome are used first. Firstly, this is because actions that overlap to a great extent maintain higher propensity to engender a thorough critical appraisal and consequently reduce misinterpretation and misguidance. Secondly, such actions allow the identification of the correct variables as parts of systems that influence behaviours and determine some of the processes for creating fruitful long-term relationships. Furthermore, actions exhibiting the probability to improve the planet *and* society provide social marketers with the opportunity to engender higher chances of shifting towards sustainability as such actions could provide a double dividend.

From the analyses in Chapter 5, two coexisting actions that overlap to a high extent and offer social and ecological sustainability as outcomes are the ecovillages action and renewable energy. The ecovillages action is discussed first as it overlaps to the highest possible extent.

6.3 ECOVILLAGES

Before continuing, it must be noted that since the ecovillage action has been adopted by both constructs, it technically speaks one ‘language’ in that the constructs only borrow it as a means to their ends: it is not an action that has been developed individually by either construct. Therefore, it is inevitable that the action overlaps to the greatest extent possible. As stated before, critical thinking is applied to the action first as in some cases it guides or forms the basis of the application of the other theoretical paradigms in social marketing.

After briefly recapping critical thinking, systems thinking, value and relational thinking, and applying the theory to action’s commonalities, how overlaps in the ecovillages action can engender critical thinking, systems thinking, value co-creation and relational thinking is demonstrated.

6.3.1 Critical thinking guidelines for ecovillage programmes

Ecovillages have been connected to a variety of common and uncommon antecedents in both constructs. As an action, ecovillages has maximum overlap among definitions, strategies, benefits and outcomes. The multiple and diverse antecedents also provide excellent material to promote critical thinking. More details are provided below after showing how critical thinking in social marketing helps to create more successful programmes and relating it to overlaps in the ecovillages action.

Discerning the broader forces that cause problems is one of the reasons why strategic social marketing is more successful and is an activity that is placed under the jurisdiction of critical thinking (e.g. French and Gordon, 2015: 402-404). Exemplified by the antecedents of degrowth and sustainable development constructs are deep-seated causes/forces that have been attributed to disrupting sustainability and society’s wellbeing. Critically examining these antecedents will therefore give social marketers

a better understanding of some of the forces that influence a problem and people's wellbeing, and therefore higher propensity to design programmes that do not reinforce these causes and are consequently better at achieving greater social good—and are ultimately more successful (Andreasen, 1994: 113; Hastings and Saren, 2003: 307; Marques and Domegan, 2011: 50).

Antecedents do not necessarily have to be common between constructs. In fact, it is reasoned here that uncommon antecedents from actions offer an additional critical perspective by providing more reasons social marketers can allocate to what causes the sustainability problem. Following this argument, the greater the number of antecedents, similar and dissimilar, the more rigorous the critical analysis will become, thus increasing the social marketing programme's chance of succeeding by delivering beneficial wellbeing that does not reinforce causal factors. Accordingly, what will be applied to ecovillages (and other actions) is that critical analyses become increasingly beneficial for reducing misinterpretation and misguidance, reducing chances of reinforcing underlying causes and increasing the chances of achieving wellbeing when overlapping actions have a greater number of antecedents; and when overlapping actions possess different antecedents. Therefore, to engender critical thinking when designing ecovillage programmes, social marketers will need to start the critical appraisal with a thorough analysis of all antecedents linked to the ecovillages action from both constructs.

Concerning ecovillages, two factors contribute to the reasons why the social marketer can develop a strong critical perspective: 1) common and uncommon antecedents are present and 2) because antecedents exist in social and environmental sustainability, there are a greater number of antecedents. As a result, a sound critical approach can be taken so as to ensure that ecovillage programmes do not reinforce such causes, are less open to misinterpretation and ultimately protect humanity's wellbeing. Without such a critical appraisal, approaches such as the one by the Senegalese government, which has been criticised for designing ecovillages in such a way that they are dependent on the government and are only a means to support development and economic growth policies on which the current problems are based (e.g. Olivier, 2014: 14), can be avoided.

In the case of ecovillages, it is therefore recommended that social marketers include the following antecedents in their analyses.

Degrowth	Sustainable development
Ecological sustainability	
Exceeding limitations; Development, culture and ecology; Development, growth and consumerism	Excessive exploitation; Development, growth and ecology.
Social sustainability	
Wellbeing, neoclassical and neoliberal economics and consumerism; Economic growth, development and injustice; Democracy and economic growth; Democracy, economic growth and scale	Poor economic growth, development and inequality; Inequity, society and the environment; Wellbeing, economic growth and development.

Table 4 Ecovillages antecedents

By identifying and analysing these antecedents, it is more easily discernible for the social marketer to firstly develop a more holistic picture (including underlying forces) of what causes the sustainability problem; and secondly to design ecovillage programmes that do not reinforce such causes. Ultimately, this will provide advantages to society by ensuring that ecovillage programmes positively affect wellbeing and reduce misinterpretation and misguidance. The critical viability of an action is further strengthened by systems thinking, which is elaborated on in the systems thinking guidelines.

Another important component of successful social marketing programmes is a critical assessment of whether the means and outcomes of the programmes could positively influence people's behaviours for society's benefit (Dholakia, 2012: 221; Fuat Firat, 2009: 833). The key issue to consider here is the extent to which wellbeing (sustainability) can be achieved by the constructs proposing it and the actions implicit within them. Privy to conceptualising (defining) wellbeing as a strategic guideline and therefore successful programmes that benefit society is both examining manifold and

unlike perspectives (Andreasen, 1995: 31; Brenkert, 2002: 18; Gordon and Gurrieri, 2014: 266; Hastings and Domegan, 2014: 273) and using ‘progressive’ angles that are morally and ethically superior (French and Gordon, 2015: 402; Hastings and Domegan, 2014: 220).

Inside degrowth and sustainable development constructs prevail certain actions that could be used to achieve sustainability and greater social good/wellbeing. Since these constructs are in theory considered progressive, coinciding actions and their definitions, principles, strategies, benefits and outcomes will be useful in delineating wellbeing that strategically guides programmes based on such actions. Additionally, since the constructs under review epitomise multiple and diverse interpretations of sustainability, critically analysing their intersections also increases the critical robustness of the type of wellbeing these two constructs offer and the consequent strategic guideline of a programme. Therefore, what will be applied to make recommendations as to which actions are more likely to reduce misinterpretation and/or misguidance, and are therefore more likely to be foundations of fruitful social marketing programmes, are the notions that intersecting actions and their links to common definitions, principles, strategies, benefits and outcomes that are found in degrowth and sustainable development constructs (because they are diverse, plural and progressive constructs and because of they interact with one another) will increase the ability of social marketers to define a more beneficial wellbeing for people, groups or society to strategically guide programmes that use overlapping actions. As such, the second part of the critical appraisal for designing ecovillages programmes is to analyse the common definitions, strategies, benefits and outcomes of the ecovillages action to direct social marketers in developing an appropriate strategic guideline.

The strategic guideline for ecovillage programmes should include the definition of an ecovillage, which is an “intentional, traditional or urban community that is consciously designed through locally owned, participatory processes in all 5 dimensions of sustainability (social, culture, ecology, economy and whole systems design) to regenerate their social and natural environments” (GEN, no date: About Ecovillages). By designing ecovillage programmes according to this definition, social marketers can effectively reduce misinterpretation and misguidance. The ecovillage action’s content also overlaps at strategy level with degrowth’s right-sizing the economy strategy

equating to sustainable development's one planet living strategy. On the social side, overlaps between degrowth's increasing social participation and democracy, *oikonomia* and reduce poverty and inequality strategies and sustainable development's improve wellbeing and reduce poverty and inequality and increase democracy and improve governance strategies are evident. Since these strategies overlap, they are recommended to be used to develop the strategic guideline for ecovillage programmes. This will help social marketers ensure that ecovillage programmes contribute to behaviours and economic activity that can be sustained by one planet, improve wellbeing, reduce poverty and inequality and increase democracy and improve governance. Using the overlaps at outcome level to further add to defining the strategic guideline ensures that the constructed ecovillages should subsist over time in social and ecological terms. As the principle of efficiency is embedded within the principle of sufficiency in ecovillages (e.g. Jackson, 2004), ecovillage programmes will need to be designed in a way that maximises simplification of lifestyles rather than unnecessary overconsumption. For example, through resource sharing and alternative, less-intensive recreational options, residents of ecovillages can reduce their ecological footprints and lead a more socially rewarding lifestyle. The benefits of ecovillages from both constructs overlap and relate to improved wellbeing, more equality and less resource use. As such, ecovillage programmes should be put together in a way ensure that these specific benefits are accrued. As a whole, a strategic guideline defined in the above manner will be more in tune to cater to society's wellbeing. By aligning with such a strategic guideline, misinterpretation and misguidance will be reduced and successful programmes are more likely to be designed,

The above discussions alluded how certain elements of ecovillages that have been connected to degrowth and sustainable development constructs can engender critical thinking for social marketers through developing a sound understanding of the problem and a strategic guideline for ecovillage programmes that fosters wellbeing. Since these overlaps reduce misinterpretation and misguidance, it is recommended that social marketers use all antecedents and the abovementioned overlapping definition, strategies, principles, benefits and outcomes in designing ecovillage programmes.

6.3.2 Systems thinking guidelines for ecovillage programmes

Systems thinking in its basic form is about comprehending significant problems and possible solutions as sets of interconnecting variables (structures, actors, behaviours, etc.) (Domegan *et al.*, 2016: 1125) that influence and interact with one another (Brennan *et al.*, 2016: 224). In a social marketing context, determinant to a programme's success is fathoming the complex interactions of these many and diverse variables within and amongst systems that cause such problems, as well as how solutions to (co-)create value are facilitated by, affect and are affected by these variables (Brennan *et al.*, 2016: 225-229; Domegan *et al.*, 2013: 250; Wood, 2016b: 112). In this order these issues are discussed below.

Antecedents refer to causes and underlying forces of a problem, and, from a systems perspective, are connected to many different variables. Thus if successful programmes rely in part (the other part being at solution level) on understanding the variables that are connected to a problem (Domegan *et al.*, 2016: 1125) so as not to reinforce a problem or have unintended consequences (French and Gordon, 2015: 190), antecedents can provide a starting point from which some of the variables that are connected to causes can be identified and understood. Seeing as understanding multiple and differing variables contributes to more successful social marketing programmes (e.g. Kennedy, 2016: 355-356; Luca *et al.*, 2016: 1152; May and Previte, 2016: 272), common and uncommon antecedents from both constructs – because they provide multiple and diverse viewpoints of problems – can be particularly useful in identifying multi-perspective, influential variables that affect a problem. What will therefore be applied to ecovillage programmes (and later others), is that all antecedents of an overlapping action are useful in supplying variables that can contribute to understanding more critical, systems-wide causes of problems and therefore and more successful programmes with a minimised likelihood of being misinterpreted.

Antecedents that are found in the environmental side of the ecovillage action all point to three major forces as the reasons why the action was developed: transgressing the earth's capacity to regenerate natural resources; the negative ecological impacts of development and high-consumption lifestyles in the developed world; and unbridled economic growth, to which the underlying philosophy of neoclassical and neoliberal

economics, which continuously seek new markets and therefore exacerbates raw material extraction, are connected. On the social sustainability side, antecedents found in the constructs see uninhibited and unchecked economic growth, and its underlying philosophies, as one of the factors that perpetuate poverty, inequality, injustice, and ultimately, a deficiency in wellbeing. Where ecovillages have been identified as a possible solution to problems of unsustainability (or those that can be connected to these antecedents), social marketers would need to recognise and comprehend the variables that are linked to these antecedents. For example, in villages in developing nations, the idea that moving to an urban environment will bring prosperity and that the government as a stakeholder, which is promoting modernisation and industrialisation, could be variables that are connected to the economic development and high-consumption lifestyles antecedent. Such variables will need to be considered when determining the systemic nature of the problems to which ecovillages can contribute. These could be categorised at different levels such as micro, meso, macro, exo and chronosystems and should also try to seek out the underlying institutions perpetuating a problem.

Successful programmes are also contingent to finding the *right* variables to facilitate more appropriate behaviours and grasping the interconnectedness and complexity of such variables and how they affect and are affected by systemic solutions in behavioural, value co-creating terms (e.g. Kennedy, 2016: 355-356; Lindridge *et al.*, 2013: 1413-1414; Luca *et al.*, 2016: 1152). Finding the right variables is a joint effort of critical and systems thinking. Critical analyses increase the likelihood of delivering wellbeing and averting causes and pitfalls (French and Gordon, 2015: 190; Kennedy, 2016: 357). Highly common actions are said to be more critical. Thus when looking for variables that are more likely to facilitate beneficial behaviour change, communal actions can be particularly useful in systems thinking. Clarifying the appropriate variables also paints a more detailed understanding of the complexity of how solutions function, and therefore also contributes to better (and more critical) social marketing solutions (Brennan *et al.*, 2016: 229; Conroy and Allen, 2010: 195-196; Domegan *et al.*, 2016: 1127; French and Gordon, 2015: 188). Or in other words, if systems are used in social marketing to “[see] the bigger picture and [develop] strategic responses that both address causal factors and support individuals and groups to act in such a way that net social good is achieved” (French and Gordon, 2015: 187), actions that are common

between constructs and have been critically appraised (so that causal factors are addressed and social good will more likely be reached) are more likely to succeed because these actions could provide sound guidelines concerning the appropriate variables to be involved.

When developing systemic ecovillage programmes, it will also be necessary for social marketers to systemically map out the impact all variables have on sustainability (including its causes). This can be done by understanding and critically evaluating not only the impact of variables that affect and are affected by ecovillages, but also the effects of variables that facilitate behaviours toward setting up more ecovillages. For example, one of the recurring themes throughout the Autumn 2012 (Roth, 2012) issue of *Communities* magazine was the problem of legal restrictions that hampered the designing and building of ecovillages. Changing these legal restrictions may result in more ecovillages being developed. However, if these legal restrictions were to be changed or removed to facilitate the design and building of many ecovillages, social marketers will have to ascertain the impact of the absence/changes of such legal restrictions not only on ecovillages' design and people's behaviours, but also whether they could reinforce the causes or be misinterpreted and therefore misguide sustainability efforts. Also, in terms of the variables that facilitate ecovillages in being implemented, the GAIA Trust, who has funded the GEN in the past (GAIA, no date) would be an important variable to understand and critically and systemically appraise. Another variable affecting and that will be affected by ecovillages is the increasing consumer malaise in affluent societies (e.g. Alexander and Ussher, 2012: 70-71). How consumer malaise affects ecovillages, and how ecovillages will affect consumer malaise, are key aspects the social marketer will need to systemically and critically consider. The natural intersection of ecovillages with other systems (such as food, energy and housing) will also need to be systemically mapped and critically appraised accordingly. For example, what the impact on jobs might be, how 100s of ecovillages will impact city/town planning (transportation, economy, policy, etc.), changes in food systems, are issues to consider (e.g. Xue, 2014: 136-137). This is why it is important to build a solid critical foundation to the programme as it lends a more critical perspective to the systemic mapping of variables.

To summarise the solution aspect of systems thinking: when designing systemic solutions to defiant problems, it is vital for social marketers to consider the variables that facilitate the development of ecovillages and their effect on sustainability. Additionally, variables that affect and are affected by ecovillages and their consequences of on sustainability is also important. Furthermore, when designing ecovillage programmes, social marketers should ensure that causes of unsustainability are not inadvertently reinforced. Using overlaps and combining critical and systems thinking is a way to determine the right variables to facilitate behaviours and how variables could affect and be affected by ecovillage programmes and sustainability. Such a combination reduces misinterpretation and misguidance and ensures that ecovillage programmes can deliver social and ecological sustainability.

6.3.3 The concept of value and guidelines for ecovillage programmes

The theoretical background of value in social marketing contexts is applied to overlapping actions before guidelines for social marketers are given.

Value in social marketing can be described in terms of processes (how value is created) and dimensions (what types of value exist). Value co-creation lies at the heart of social marketing: the success of a programme is based on the extent to which value is co-created amongst all parties involved (Domegan *et al.*, 2013: 250; Hastings and Domegan, 2014: 283). The critical thinking section showed that highly alike actions from different constructs are more likely to achieve sustainability because they are less open to misinterpretation and less likely to misguide programmes to improve sustainability. Based on this, and assuming that the more people living sustainably the better the chances of eventually realising a sustainable civilisation, it is reasoned here that the greater the number of individuals that an action can get to behave sustainably, the more likely sustainability will be achieved. Actions that can do so are those that can maintain a greater number of value attributes i.e. those that can increase social wellbeing *and* ecological prosperity. This is because when people perform one ‘action’ a double pay-out is more likely to occur.

The ecovillage action offers both social and ecological sustainability as outcomes. Consequently, the ecovillage action is perceived to have a greater capacity to co-create

value with *more* target audiences (i.e. those concerned with social sustainability, those concerned with ecological sustainability and those concerned with both) and could therefore be more successful in engendering sustainability. Furthermore, because ecovillages stimulate social and ecological sustainability, once these target audiences are behaving as the social marketer intended, i.e. living in an ecovillage, both social and ecological sustainability are by design increasingly likely to occur (e.g. Jackson, 2004: 2-3). Naturally, what the different target audiences value and how these values can be co-created by social marketers implementing ecovillage programmes necessitates primary research. For example, research shows that roughly 30% of people who simplify their lifestyles do it to spend more time with family (Hamilton, 2003: 20; Hamilton and Mail, 2003: 23) and therefore connect to emotional and social value (section 2.6.3.2). As ecovillages mean that people will simplify their lifestyles, this kind of research will be crucial to determine what values can be co-created by living in an ecovillage.

6.3.4 Relational thinking guidelines for ecovillage programmes

In essence, relational thinking in social marketing is an approach to designing programmes that affords the surfacing and deployment of correct processes (with stakeholders and complex networks thereof) that co-create value and influence behaviours repeatedly and indefinitely as part of sustained relationships (Barrutia and Echebarria, 2013: 339; Hastings and Domegan, 2014: 288; Kennedy and Parsons, 2011: 46). As has been outlined in relational thinking in Chapter 2, the factors that influence value co-creation through relationships include dialogue and interaction as key processes, and the key constructs fuelling them namely relationship quality, trust, commitment, satisfaction and co-operation. All of these have been shown to play an important role in designing successful programmes from a relational thinking perspective. Taking this into consideration, it is theorised that social marketers who understand how the joint actions from this research could be used to develop and maintain value co-creating, multiple-stakeholder relationships with target audiences via relationship marketing's processes and constructs are better poised to more successfully influence behaviours. The following sections do just this by elaborating on guidelines as to how social marketers can use the overlaps in the ecovillages actions and their connection to relationship marketing's key constructs and processes to design

successful ecovillage programmes. Important to keep in mind when designing successful programmes from a relational perspective is the critical and systemic ability of an action to reduce misinterpretation and misguidance. The reasons for this will be shown below.

Interaction and dialogue are reiterative processes that allow different target audience's values to transpire (Domegan *et al.*, 2016: 1137) and are the processes with which social marketers construct and maintain relationships and customise offerings that co-create value and influence behaviours (e.g. Forbus and Snyder, 2013: 105). Thus, if a programme's success is dependent on the extent to which the entire behaviour-change process can be customised according to what an audience values (e.g. Domegan, 2008: 137; French, 2011: 155; Grönroos and Gummerus, 2014: 221; Hastings, 2003: 7; Marques and Domegan, 2011: 49), actions that can be customised and cater to these values are more likely to succeed (e.g. Luca *et al.*, 2016: 1161). Customisation may refer not only to the *set* of behaviours that an overlapping action could provide, but also a *series* of behaviours over time. Based on the fact that a critical appraisal of the ecovillages action has rendered it appropriate to use in sustainability programmes, overlapping actions that achieve outcomes, even though by different means, can provide a greater set of processes to influence people's behaviours that can be customised – through interaction and dialogue – according to what a target audience values. Therefore, actions with social and ecological sustainability, as well as actions with multiple activities or specific-actions as part of it, could also be geared towards catering to the values of multiple target audiences. In relation to this, the ecovillage action can achieve both ecological and social sustainability and has multiple activities within the action (renewable energy, food systems, reduced consumption patterns, equality, democracy, wellbeing). It is therefore recommended that when designing ecovillage programmes, social marketers use these multiple means and ends to adapt the processes (interactions and dialogue) to suit different target audiences' needs. Such adaptation is likely going to relate to for example the communication with target audiences, the processes of getting people to move to ecovillages and how the multiple elements that constitute an ecovillage's sustainable environment (food systems, renewable energy, reduced consumption patterns, etc.) are arranged. With reference to supporting evidence, it is recommended that other ecovillages are used as benchmarks to learn from and replicate how sustainability has been lived out in real-world scenarios,

and importantly how different ecovillagers' values have been co-created through customised processes. 'Up selling' or 'cross selling' behaviours, which is about trying to persuade people to adopt more challenging behaviours as time passes, should only be done in accordance with the critical and systems thinking guidelines i.e. that all behaviours are subjected to such scrutiny. To illustrate this point using the definition of ecovillages (as part of the strategic guideline), introducing behaviours in series format over time to a target audience should only be done to further regenerate social and ecological environments and not to slowly lead up to it. For example reducing consumption by starting with easy-to-adopt behaviours can only be done if such behaviours regenerate social and ecological environments in the first place. A systems perspective would also dictate that the effect on social and ecological sustainability of such behaviours be examined.

Trust, commitment and co-operation are all determinants of the success of social marketing programmes (Lindridge *et al.*, 2013: 1413; Marques and Domegan, 2011: 55). In order to develop trust, and consequently co-operation and commitment, the right stakeholders will need to be chosen (Grönroos, 1997: 327; Luca *et al.*, 2016: 1158; Moorman *et al.*, 1992: 315). Doing so will need to be justified by thinking critically and systemically about stakeholders' involvement in programmes so as not to misguide such programmes. Because of this, it is proposed here that the extent to which stakeholders align with actions at definition, principles, antecedent, strategy, benefits, and outcome levels as well as their alignment with the critical and systemic guidelines determines the level of trustworthiness, commitment to achieving sustainability and credibility as collaborators, which in turn determines a programme's chances of success. Thus, in the case of designing ecovillage programmes, it is recommended that stakeholders need to show alignment with

- the ecovillage definition, for example that the stakeholder is geared towards regenerating social and ecological environments;
- the principle of sufficiency and embedded efficiency, such that the stakeholder promotes an uptake of behaviours that fosters high levels of wellbeing through simple and highly efficient lifestyles;
- antecedents from both constructs, such that the stakeholder also views the sustainability problem to have root causes similar to those linked to ecovillages

for example the antecedents identifying the negative social and/or environmental effects that development and poor economic growth have had;

- strategies from both constructs, for example the stakeholder's strategies should also be about improving wellbeing, increasing democracy and social participation and reducing poverty and inequality and/or endorsing a one-planet economy;
- benefits, for example increased wellbeing and/or improved ecosystems;
- outcomes of social and/or ecological sustainability;
- critical and systems thinking, for example that the stakeholder does not inadvertently reinforce antecedents and/or maintain adverse effects on society.

As a result, stakeholders that can show alignment with all of the above are more likely to produce value co-creating relationships in the long term through relational thinking's key constructs and processes.

Trust is known to lead to co-operation, satisfaction and commitment to sustain a relationship (Baron *et al.*, 2010: 32; Egan, 2004: 103 Grönroos, 1997: 327; Hastings, 2003: 10; Morgan and Hunt, 1994: 24). Furthermore, it is via these key constructs of relational thinking that the social marketer is able to maintain better interactions and dialogue and (co-)create value with/for the target audience(s) (Hastings and Domegan, 2014: 288-289; Luca *et al.*, 2016: 1158; Wood, 2016a). Thus, developing trust is one of the key determinants of the success of a social marketing programme. When using systemic approaches to designing social marketing programmes with many stakeholders, the credibility of the source of the content from which the social marketer will design programmes will have an impact on building trust with stakeholders and people, the performance of the programme, the delivery of satisfaction and reducing misinterpretation and misguidance, and therefore the success of a programme. Thus in terms of relational thinking, because ecovillages coincide to the largest extent possible, and therefore reduce misinterpretation and misguidance to a minimum, they are highly likely to perform, deliver on their promises, build trust and satisfy multiple stakeholders in co-creating value. However, when implementing ecovillage programmes in a specific area, any research that has been done on ecovillage programmes also needs to be critically evaluated to determine the credibility of the source underlying the message

and consequently the ability of ecovillage programmes based on this message to perform, satisfy audiences and build trust that leads to enduring relationships. This should be done through critical appraisal and other stakeholder reflexivity, which would entail that social marketers and all stakeholders critically reflect on each other's agendas, frameworks, biases, practices, etc. For example, research by an NGO about possibly introducing 50 ecovillages into a region could be the source from which social marketers will design ecovillage programmes for that region. However, like in critical thinking, this message source will need to be contrasted with many different viewpoints on the same idea to make a sound conclusion as to whether the message on which programmes could be based, is credible. To do so, social marketers should perform a thorough critical appraisal of all message's antecedents, principles, strategies, etc. to determine the credibility and consequently the ability of ecovillage programmes to perform, satisfy audiences and build trust that leads to enduring relationships. Additionally, all stakeholders should critically reflect on each other's agendas, frameworks etc. Primary research will greatly assist in this process. In cases where messages do not overlap, social marketers should proceed with great caution; a small-scale pilot study could help to ascertain the critical viability of ecovillages in a particular setting in which credibility is an issue.

The above sections demonstrated how critical thinking, systems thinking, value and relational thinking when applied to overlapping actions can guide social marketers in minimising misinterpretation and misguidance and developing more successful ecovillage programmes. It emerged that because of its high overlapping content, the ecovillage action demonstrates strong capacity to design programmes that do not reinforce underlying causes and have a sound strategic guideline (critical thinking), which combined with systems thinking allows social marketers to: identify the right variables to facilitate ecovillage programmes and how these affect and are affected by different variables. Overlaps also showed how social marketers can co-create value with more target audiences. Finally, how the ecovillage action develops high levels of customisation, trust, commitment, performance, co-operation and satisfaction with target audiences was also discussed.

Renewable energy is the second action that has a large amount of overlap between the degrowth and sustainable development constructs and offers social and ecological

sustainability as outcomes. Guidelines as to how the overlaps amidst these actions and their relation to theories pertaining to social marketing can underwrite more successful programmes and mitigate misinterpretation and misguidance are given below.

6.4 RENEWABLE ENERGY

As previously discussed, the extent to which actions overlap determines the probability of success of a programme because common actions are more likely to benefit people and society; promote the inference of variables that cause problems and facilitate solutions; and are more likely to co-create value through relational thinking's key constructs and processes. Additionally, actions that are linked to social and environmental sustainability can co-create value with more target audiences. Renewable energy is an action that has been found in both constructs, connected to ecological and social sustainability as outcomes and shown high overlaps at definition, principles, antecedent and strategy levels. It also maintains varying antecedents. The following sections discuss how social marketing theories and overlapping actions can guide the development of successful social marketing programmes for renewable energy with reduced misinterpretation and misguidance.

6.4.1 Critical thinking guidelines for renewable energy programmes

As elaborated on in the ecovillages section, more and varying antecedents and commonalities at definition, principles, strategy, benefits and outcome levels represent a higher capacity for critical analyses, which in turn deduces the extent to which an action is able to circumvent reigniting causes, can benefit people and society, reduce misinterpretation and misguidance and underwrite successful programmes. The following sections discuss how overlapping antecedents and then remaining overlapping elements help achieve this.

In order to reduce misinterpretation and guidance, reduce the chances of reinforcing underlying causes and increase the chances of achieving wellbeing, antecedents need to be analysed as they are causes of problems i.e. the reasons for a lack of wellbeing. Where these critical analyses can be highly beneficial is when like actions have antecedents that are multiple and varying. Renewable energy actions from both constructs maintain the following antecedents:

Degrowth	Sustainable Development
Environmental sustainability	
Exceeding limitations; Neoclassical and neoliberal economics and the growth of systems; Technology, growth and the rebound effect.	Excessive exploitation; Development, growth and ecology
Social sustainability	
Economic growth, development and injustice.	Poor economic growth and development; Inequality and society and the environment.

Table 5 Renewable energy antecedents

Antecedents together indicate that the reasons for a lack of wellbeing in society that renewable energy can help mitigate are linked to the disproportionate use of natural resources, inequality and injustice as a result of economic growth and development; and that economic growth and improvements in technology maintain a rebound effect. Therefore, to forge a broad understanding of the problems and their underlying causes, social marketers are recommended to keep these in mind when using the renewable energy action as the foundation for social marketing programmes. This will aid in lessening misinterpretation and misguidance, designing programmes that avoid reinstating these causes and assist in escalating the propensity for society to achieve wellbeing. Additionally, a broad understanding of the problems and underlying causes is also facilitated by systems thinking – this link is discussed more in the systems thinking guidelines.

Progressive and diverse constructs are more likely to define a type of wellbeing that is beneficial and act as a strategic guideline in programmes underwritten by actions originating from such constructs (Andreasen, 1995: 31; Brenkert, 2002: 18; Gordon and Gurrieri, 2014: 266). Since ecovillages is an action adopted by such constructs, and since overlapping actions reduce misinterpretation and misguidance, the other part of

the critical analysis is for social marketers to analyse the common elements of the ecovillages action.

In terms of other overlapping content (definitions, principles, strategies, benefits and outcomes) and critical thinking, both constructs share ecological and social sustainability as outcomes. They both agree on the definition of renewable energy, which is energy that is not depleted when used (OUP, 2018). Degrowth's *oikonomia* and reduce inequality and injustice strategies; and sustainable development's improve wellbeing and mitigate poverty and inequality strategies are alike on the social sustainability side. Concerning the social benefits of producing renewable energy, sustainable development overlaps with degrowth as they both engender improved health standards, better energy distribution, job creation and higher living standards. From the environmental perspective, ecological benefits and strategies from both constructs are reduced resource use that obeys the finite amount of earth's natural resources. The constructs also share the idea that renewable energy should be geographically centralised or decentralised according to local and national conditions.

The one area where the renewable energy actions from both constructs seem to contrast one another is at principle level with the issues of sufficiency (degrowth) and efficiency (sustainable development). Degrowth argues that without sufficiency a rebound will occur, meaning that environmental savings will be expended in other activities effectively writing off said savings. Sustainable development proposes efficiency, which aims to maximise resource use; it also theoretically takes the rebound effect into account (UNEP, 2011: 559). However, research shows that the rebound effect has not been fully rationalised into renewable energy solutions and has therefore contributed to misguiding sustainability efforts in the past (e.g. Freire-González and Puig-Ventosa, 2015: 69-70; Sorrell, 2015: 81). As primary energy demand is set to increase significantly (UNEP, 2011: 204), a rebound will only further increase the pressure on the amount of natural resources used to produce energy and other products and services. If renewable energy from a sustainable development perspective were to pay increasing attention to the rebound effect in implementation, the constructs would overlap greatly and therefore the likelihood of the action to deliver positive social change improves. Because sufficiency proposes that energy savings not be reallocated to another pursuit for example to purchase other goods that cause a rebound, what will also improve the

critical viability of the action is if the consumption systems in which the rebound effect endures are also shaped to become more sustainable.

Thus, by ensuring that actions that actually underwrite social marketing programmes fully take into account the rebound effect, which would entail implementing a parallel programme that correspondingly ensures consumption does not reverse the environmental savings of consuming renewable energy, misinterpretation and misguidance can be significantly reduced. For example, it could be by making renewable energy cheaper than competitors, cost savings might be used to take a resource-intensive holiday on a remote island. To counteract this, a social marketer might suggest that such cost savings only be available for activities that are environmentally beneficial, such as making a home more energy efficient.

Tacit to these alignments is that both construct's strategies and overarching principles are increasingly progressive and therefore more likely to ensure society's wellbeing. Since strategies are a result of a construct's antecedents, increasing overlaps by consolidating each construct's differences decrease the chances of a programme being misinterpreted and misguiding efforts to promote wellbeing. Therefore, since these actions are from diverse and progressive constructs, it is recommended that social marketers designing renewable energy programmes try to ensure that their design is based on overlaps to the highest possible extent. This will ensure the definition of a beneficial wellbeing and an appropriate strategic guideline.

6.4.2 Systems thinking guidelines for renewable energy programmes

Systems thinking is an approach to designing complex social marketing programmes in which multiple and diverse variables play a role. As was applied to the ecovillage action, complex social marketing programmes have a superior capacity of triumphing when the interconnecting and multiple variables that are linked to a problem's cause, as well as those variables that facilitate, affect and are affected by solutions within behavioural systems, are understood and built into programmes (Domegan *et al.*, 2013: 250; French and Gordon, 2015: 187-194; Wood, 2016b: 112). Antecedents give social marketers a better idea of a problem's causes and a starting point to link the different

and many variables as part of a system to the underlying forces perpetuating a problem. This is discussed below.

To ensure a holistic (and more critical) view of a problem, build a solid foundation for designing systemic programmes and to promote systems thinking, social marketers should use similar and dissimilar antecedents to link variables to causes of problems and their underlying forces. Most of the antecedents from both constructs coalesce around undesirable resource extraction and social inequality and injustice due to poor economic growth and development policies. Two more are added by degrowth and refer to underlying economic philosophies and the rebound effect. As part of a systems understanding of problems and solutions, social marketers will need to understand and design renewable energy programmes based on the connection between antecedents and variables (values, norms, actors, ideas) that influence the way people behave. In other words, social marketers will need to identify the variables that for example cause poor economic growth and undesirable resource extraction and build these into designing their programmes. For renewable energy solutions in developed nations some of these variables could be the strong influence of multinational corporations producing non-renewable energy to keep the status quo, that people might not see and feel the negative effects of non-renewable energy, perceptions that renewable energy is unstable and unsuitable for entire nations, etc. Such variables could again be categorised at different levels such as micro, meso, macro, exo and chronosystems, but this will depend on the social marketer and the chosen method.

To reiterate what was said earlier, in order for the renewable energy programmes to be less prone to misinterpretation and misguidance, parallel consumption-related programmes that eliminate/address the rebound effect will need to be put in place. From a systems perspective on understanding the causes of an issue, this would entail that social marketers understand the antecedent variables of actions relating to sustainable consumption as has been discussed above in relation to critical marketing's guidelines.

Systems thinking in social marketing scenarios is also a useful way to distinguish variables that could facilitate behaviours and variables that affect and are affected by solutions (e.g. Kennedy, 2016: 355-356; Lindridge *et al.*, 2013: 1413-1414). Finding the correct variables is a joint systems and critical thinking endeavour. As has been

discussed above in relation to critical marketing's guidelines, overlapping actions are better poised to deliver wellbeing to society, avoid reinforcing causes and reduce misinterpretation and misguidance. Therefore, social marketers designing renewable energy programmes to increase the chances of sustainability will need to the variables that affect, are affected by and facilitate behaviours and value co-creation that are embedded within the action on a continual basis (by linking back to the critical analysis and the strategic guideline developed as a result of overlaps amongst actions) will be necessary. For example, policies that reduced the costs of implementing renewable energy, something OECD/IEA (2016: 3) found to parallel the highest deployment of renewable energy in 2016, could be a variable that facilitates upscaling renewable energy. However, policies that reduce costs could be linked to poor wages, job losses due to mechanisation and/or poor environmental standards in areas of production, which could be connected to several of the action's antecedents. Social marketers are therefore recommended to build and refer back to a solid critical foundation to ensure that the strategic guideline within which the renewable energy programme will operate will guide social marketers in choosing the right variables to construct systems that facilitate behaviour change. The critical and systems perspective will also give social marketers a better understanding of how variables affect sustainability and are affected by other variables.

6.4.3 The concept of value and guidelines for renewable energy programmes

The fact that renewable energy as an overlapping action can lead to increases in social as well as ecological sustainability provides social marketers with a potentially greater number of target audiences with which they can co-create value. This is because a larger range of value attributes could exist across these two dimensions of sustainability, and therefore can be connected to more possible audiences to increase the number of people using renewable energy. Furthermore, once people are connected to renewable energy both social and ecological sustainability is more likely to occur by default.

That both constructs also propose central and decentralised renewable energy production depending on conditions at local, regional, national and international level allows social marketer to further co-create value with more target audiences and

ultimately increase the number of renewable energy users, and ultimately the success of social marketing programmes to achieve improvements in society's sustainability. The different values for each target audience with which the social marketer will co-create value will be the result of primary research. For example, research on cost-benefits for switching to renewable energy will likely be required to determine economic value.

6.4.4 Relational thinking guidelines for renewable energy programmes

As demonstrated in the ecovillage guidelines, coinciding actions and their connection to relational thinking's key constructs and processes can assist social marketers in determining the appropriate means to developing sustained relationships that better co-create value amongst multiple target audiences in social marketing programmes. The following sections serve as guidelines on using the overlapping actions and their connection to relational thinking to create successful renewable energy programmes. Social marketers need to remember that the utility of an action to reduce misinterpretation and misguidance depends on its feasibility from a critical and systems perspective. Why this is important will form part of the discussion below.

To summarise what was discussed in section 6.3.4 and already applied to recommendations for ecovillage programmes, interactions and processes that can be customised according to what a target audience values are likely to be more successful (Grönroos and Gummerus, 2014: 221; Hastings, 2003: 7; Luca *et al.*, 2016: 1161). Therefore, overlapping actions that achieve different outcomes through the action or the same outcomes through different means can offer a larger set of activities to influence a target audience's behaviours that can be customised through interaction and dialogue according to what a target audience values. Therefore, actions that can achieve environmental and social sustainability, as well as overlapping yet slightly different actions will also be useful in designing successful programmes. In addition to the array of actual renewable energy possibilities that will be feasible in specific areas (solar, wind, hydro, biomass, etc.), the actions show overlaps at social and environmental sustainability and centralised and decentralised options. Therefore, through interaction and dialogue with stakeholders, social marketers could use multiple combinations

thereof to customise the behaviour-change process according to multiple stakeholders' preferences. This would likely lead to long-term relationships in which value is continuously co-created in the most sustainable way possible.

In theory, what is important to remember about trust and its connection to commitment and co-operation is that the greater the similarity between a stakeholder and overlapping actions' definitions, principles, antecedents, strategies, benefits, outcomes and critical and systems thinking, the more likely a stakeholder will engender trust, be committed and foster co-operation, and thus contribute to the success of a social marketing programme. Therefore, it is recommended that only stakeholders who align with actions at these levels are used in programmes to increase renewable energy as they will be more trustworthy, committed to achieving similar goals and more likely to have the capacity to co-create value through co-operation. For example, while renewable energy requires access to large amounts of funding and public-private collaboration (UNEP, 2011: 208), social marketers should make sure that the stakeholders used to promote renewable energy uptake and the collaborations they foster align with: the definition of renewable energy; antecedents, i.e. stakeholders share reasons as to why renewable energy is necessary; strategies, i.e. that stakeholders demonstrate one-planet living, for example that the production process is not harmful to society or the environment; benefits; outcomes i.e. that stakeholders seek ecological and/or social sustainability; and critical and systems thinking i.e. that stakeholders do not reinforce causes of unsustainability.

The next issue is how social marketers can promote trust. Since overlapping actions with a staunch critical perspective are less vulnerable to misinterpretation and less likely to misguide actions, they are more likely to be credible and deliver on promises, which has been linked to higher levels of trust, satisfaction and sustained relationships with a stakeholder and ultimately programme success. Thus, when designing renewable energy programmes social marketers should seek that relational processes to co-create value are designed according to the critical and systems thinking guidelines in the preceding section. The credibility of the message source and its capacity to deliver on promises and drive trust and satisfaction amongst the target audience(s) it wishes to influence the behaviours of is also important for designing successful programmes from a relational thinking perspective. In the case of renewable energy, because it greatly

overlaps, and therefore a robust critical perspective can be developed, the credibility of the message source on which programmes will be based is deemed high. Therefore, the ability of the action as a source of the message to actually do what is intended by the action is also deemed high. When implementing renewable energy programmes, it is recommended that any third-party research on which social marketers will base their programmes should be vetted according to the same procedures as in the critical and systems thinking section. For example, a large multinational has performed research on the feasibility of renewable energy in Congo, which is being promoted by the government as the base off which a social marketing programme to increase renewable energy should be formulated. What social marketers should do to determine the credibility of this message is compare it with a variety of other (organisations, public) viewpoints from different backgrounds. Furthermore, to promote other stakeholder reflexivity, each stakeholder's agenda, frameworks, etc. should be reflected on by the other stakeholders involved. Naturally a social marketer's own primary research will assist in discerning the message source's credibility.

The renewable energy guidelines and recommendations discussed above showed that because of its highly similar content, the overlapping actions from both constructs are a sound foundation to design programmes that avert causes and take society's wellbeing into account (critical thinking). Because of this, social marketers can: identify the right variables to facilitate ecovillage programmes and how programmes affect and are affected by different variables (systems thinking); and more effectively develop trust, commitment, performance, co-operation and satisfaction with stakeholders. Additionally, how social marketers can co-create value with more target audiences was also demonstrated.

The next fruitful area for social marketers would be actions that completely, or as closely as possible, overlap and offer either ecological *or* social sustainability as a direct outcome²⁵. Such actions, while less attractive than ecovillages and renewable energy, are still less likely to be misinterpreted and therefore misguide sustainability and are

²⁵ This is not to say that such actions do not have both outcomes, it is because the literature that has been analysed does not provide enough information to connect them to both nomological networks.

more likely to be accountable for society's wellbeing; are better equipped to surface the systemic variables required for successful programmes; and are more capable of developing and retaining relationships that co-create value. Two actions meeting these standards are transforming food systems and changing employment.

6.5 TRANSFORMING FOOD SYSTEMS

Represented in both constructs, transforming food systems is moderately to highly alike at definition, principle, antecedent, benefits, strategy and outcome levels, which in the literature was connected only to environmental sustainability. As overlapping actions and multiple antecedents provide social marketers with a better foundation to be critically viable; understand factors that impact on the problem and solution in systemic terms; and co-create value through relational thinking's key constructs and processes, they are better positioned to pave the way towards sustainability. The following guidelines are based on a discussion of these overlaps framed around the necessity to simplify sustainability's language i.e. it explains how theories underpinning social marketing are useful in designing simplified, more successful social marketing programmes seeking to transform food systems and engender environmental sustainability.

6.5.1 Critical thinking guidelines for transforming food systems

As was discussed in detail in relation to ecovillages, actions that have many and differing antecedents and that overlap to a large extent, especially at definition, principle, antecedent, benefits, strategy and outcome levels, are better positioned to enable critical analyses that ensure programmes bring about positive social change. In the end, critical thinking also reduces the chances of reigniting causes, juxtaposes systems thinking, outlines how programmes benefit people and society and reduces misinterpretation and misguidance. The following sections discuss how social marketers can design more critical social marketing programmes that aim to transform the food system.

As was applied to the ecovillages action, the greater the amount and variance of antecedents that can be analysed, the more likely a programme will not reinstate these causes, and as a result benefit society, minimise misinterpretation and misguidance. To

this end, both corresponding and irregular antecedents from the transforming food systems actions in each construct will help social marketers identify more causes to problems and therefore increase the capacity to design successful programmes that do not reinforce antecedents and ensure society's wellbeing.

Linked to transforming food systems are three antecedents from sustainable development, which are highly alike to the three antecedents in degrowth's ecology construct. Two of these similar antecedents identify unfettered economic growth and flawed development as primary forces driving ecological resource misuse. An expanding population as the third alike antecedent is seen to only compound ecological issues. Furthermore, degrowth offers two additional antecedents. The first one is from degrowth's bioeconomics component and says that although food systems have become more efficient at using resources, a rebound has occurred as the total sum of resources used still exceeds planetary provisions. The other additional antecedent from degrowth, is taken from the critiques of development and anti-utilitarianism component, which although is more aligned with social sustainability still maintains an ecological element that states that westernised consumption leads to further ecological pressures. Together these antecedents, because they are numerous and diverse, will help social marketers develop a strong critical perspective so as to ensure that programmes do not reinforce these causes, positively affect society's wellbeing and minimise misinterpretation and misguidance. They should therefore all be used.

Degrowth	Sustainable development
Environmental sustainability	
Exceeding limitations; Expanding population; Development, culture and ecology; Technology, growth and rebound effect; Development and uniform cultures.	Excessive exploitation; Expanding population; Development, growth and ecology.

Table 6 Transforming food systems antecedents

As mentioned previously, shared definitions, principles, strategies, benefits and outcomes of common actions connected to progressive and different constructs better

define wellbeing, which underwrites a more appropriate strategic guideline; hinders misinterpretation; and therefore minimises misguidance. Systems thinking is also strengthened by these overlaps and the critical perspective they help construct. The following sections elaborate on the former aspects, while systems thinking is discussed in the appropriate section.

Definitions/overviews of what transforming food systems means is shared between constructs and entails decreasing the environmental impact of producing and consuming food. Environmental benefits of reducing the ecological impact of all variables within the food system are present in the transforming food systems action in both constructs and include reducing the ecological impact of all variables within the food system. To achieve the common outcome of environmental sustainability, both constructs propose very similar strategies: right-size the economy (degrowth) and obey ecological limits (sustainable development), which can be summed up as a means to live within the regenerative capacity of earth's resources. Since overlapping strategies from progressive and different constructs will greatly diminish the chances of reinforcing antecedents – as such strategies essentially emerge from the construct's antecedents and are therefore more likely to deliver wellbeing – social marketers should use the alignment at strategy levels to construct the programme's strategic guideline. Specific actions also show high correspondence amongst organic food and consuming less meat and dairy and more vegetables and fruit and therefore should also be used in designing programmes that contribute to an overall transformation of the food system.

Specific actions where social marketers will need to conduct more detailed critical analyses is localising or regionalising food systems from a degrowth perspective and favouring small-scale farmers and respecting seasonality from the sustainable development construct. The extent to which these two specific actions align is unknown as the degrowth literature is not fully fledged on the issue of exporting and importing food. Thus, this could be one area where this action could be misinterpreted and misguide undertakings. It is therefore advised that social marketers looking to transform food systems carefully deliberate this issue. One way to do so is to revert to the antecedents to which the action has been connected in each construct so as to not perpetuate the causes of the sustainability problem. Social marketers could also use the shared definition to determine which actions are more critically sound, by ensuring that

actions minimise the environmental impact of producing and consuming food. This is discussed more under systems thinking.

6.5.2 Systems thinking guidelines for transforming food systems programmes

As has been said before, systems thinking is a method used to surface the multiple variables that help social marketers design complex social marketing programmes. Like in previous sections, social marketing programmes are more likely to succeed when the variables that are linked to a problem's cause, as well as those variables that facilitate, affect and are affected by solutions within behavioural systems, are understood and built into designing programmes (French and Gordon, 2015: 187-194; May and Preville, 2016: 272).

Antecedents can provide a starting point from which some of the variables that are connected to causes can be inferred and understood. Additionally, linking variables to antecedents promotes uncovering underlying forces, which further empowers critical analyses and systems thinking. Both common and uncommon antecedents from both constructs – because they provide multiple and diverse viewpoints of problems – will be particularly useful in identifying multi-perspective, influential variables that affect a problem, and which can contribute to designing systemic social marketing programmes that circumvent these causes. Therefore, all antecedents from both constructs (see Table 6) can and should be used to construct a systems view of the problem by linking these antecedents to variables that exert influences on people's behaviours. For example, free trade agreements promote the transportation of goods around the globe, which in some cases may be linked to the ecological overshoot the planet is experiencing. On this note, that Sweden withdrew a proposal for sustainable food consumption through localisation as it likely transgressed EU free trade regulations (Barling *et al*, 2012: 32) illuminates several variables that could be linked to exceeding limitations and would therefore need to be considered. Exceeding planetary limitations could also be linked to government as a stakeholder (variable) as “[m]ost of the largest impacts of various agricultural and food systems on the health of ecosystems, agricultural lands, waters, seas, and human beings are economically invisible, so they do not get the attention they deserve from governments or businesses”

(UNEP, 2015: 15). Another variable that is linked to the development and uniform cultures antecedent is the insatiable appetite for resource-intensive foods that typify a western diet, which is constantly promoted to ever-greater portions of the population (Barling *et al.*, 2012: 30; Blühdorn and Welsh, 2007: 186; EEA, 2012: 27; MacDonald, 2012: 160).

As previously mentioned, successful and beneficial programmes are also contingent to deducing the variables that can facilitate, affect and are affected by solutions. Such variables exist within matching actions (because these actions are more likely to deliver wellbeing to society – critical thinking guidelines). Thus, when using overlapping actions to design systemic transforming food systems programmes, what social marketers need to do is clarify the variables that are connected to each specific agreeable action they want to pursue and how these variables facilitate, affect and are affected by value co-creation and the influencing of behaviours. For example, an important facilitator of organic agriculture are governments (as a variable), who “are supporting the development of organic agriculture through a variety of government policies and programmes such as targeted subsidies, market development, capacity building, and research support” (Willer and Lernoud, 2016: 30). This is therefore a relevant variable that should be linked with when designing systemic transforming food systems programmes to facilitate more organic production. However, how this variable affects transforming food systems and sustainability in other ways and how transforming food systems is affected by this variable will also need to be determined.

The discrepancy between degrowth’s localising and regionalising food systems and sustainable development’s favouring small-scale farmers specific actions is that degrowth seeks to reduce imports and exports whereas sustainable development seeks to do the opposite in most cases. To overcome this discrepancy and be able to use these actions, social marketers should look at both options from a systemic perspective to determine that the effects will be beneficial in social and ecological terms. In some cases, exporting produce will be the best option, which has been recognised by both parties; in other cases localising and regionalising food systems will be preferable. Obviously this will need to be backed by critical thinking so as to reduce misinterpretation and misguidance, include society’s wellbeing in the systems purview and not to reinforce causes. Using the overlapping definition of transforming food

systems, which is to minimise the environmental impact, could also be useful in framing the systemic impacts and which option is more critically viable than the other.

6.5.3 Relational thinking guidelines for transforming food systems programmes

The key constructs and processes in relational thinking are a way for social marketers to highlight the useful procedures that facilitate value co-creation amongst multiple stakeholders in social marketing programmes. How overlapping actions can assist in highlighting the useful methods in designing successful programmes is discussed below.

As discussed previously, actions that are better poised for adaptation to audience-centred values can also underwrite successful programmes. This is because actions that are similar or highly similar, but not exactly the same provide a greater set of behaviours to achieve outcomes to which an audience's value can be connected through interaction and dialogue. Since the transforming food systems actions offer such a range of similar, but not precisely the same actions, social marketers using them will be able to customise offers according to varied audiences' values when stakeholders interact and communicate with one another. Customisation may refer not only to the *set* of behaviours that the action could provide, but also a *series* of behaviours over time with which the social marketer can 'up sell' or 'cross sell' behaviours (e.g. Hastings, 2003: 8). As an example when using overlapping actions, target audiences could be shifted from only eating more fruit and vegetables and less meat and dairy to eating more fruit and vegetables and less meat and dairy that is exclusively organic and seasonal. Naturally, critical and systemic thinking pertaining to the critical viability and systemic implications of certain actions will need to be taken into consideration when cross and/or up selling behaviours. For example, the impacts of up selling behaviours from locally produced food using conventional agriculture to globalised organic produce will need to be framed in critical and systemic terms.

As discussed in the previous sections, social marketers should vet stakeholders according to their alignment with actions' mutual antecedents, definitions, specific actions, principles, strategies, benefits, outcomes and critical and systems thinking.

Such parallels improve trust and consequently co-operation, satisfaction and commitment, which in turn furthers dialogue and interaction that ends up increasing the chances of value co-creation and influencing behaviours, and ultimately the success of the programme. For example, if a relevant (to the programme) organisation's agenda maintains similarities to the antecedents, definition, specific actions, principles, strategies, benefits, outcomes and critical and systems thinking of the transforming food systems action then it is judged to be more trustworthy and committed and consequently more co-operative to satisfy and co-create value with other stakeholders. To go into more detail, partnering organisations should acknowledge that the problem is caused by those similar to the antecedents; show alignment at strategy level; be able to demonstrate positive systemic benefits without negative impacts; and be geared towards supporting a transition towards better food systems across all specific actions and not for example promote increasing organic food production while also promoting increased meat and dairy consumption.

Like in the preceding sections, the overlaps in the transforming food systems action and its specific actions at construct level mean that the action and specific actions are more inclined towards being trusted by target audiences, delivering on promises, creating satisfaction and building long-term relationships with stakeholders through positive dialogue and interaction. In the end, because of their link to the key constructs and processes that foster value co-creating relationships, the overlapping transforming food system actions and specific actions are more likely to succeed in bringing about social change. This is another reason why it is important for social marketers to perform a critical analysis of the source of the transforming food systems' actions. What is also important is to apply critical thinking and other stakeholder reflexivity to specific messages e.g. research and opinions that could underwrite programmes. For example, as many as possible different perspectives on implementing programmes in a specific location should be consulted to determine the credibility of underlying messages on which programmes could be based. Additionally, each of these stakeholders should reflect on each other's agendas, biases, frameworks, etc. Primary research by the social marketer will also add to the critical appraisal as well as any evidence of programmes already implemented in other areas.

The application of critical, systems and relational thinking to similar actions was shown to guide social marketers in minimising misinterpretation and misguidance and developing more successful transforming food systems programmes. Due to its moderate to high unity, transforming food systems programmes have a high probability to avoid reinforcing underlying causes and maintain a robust strategic guideline (critical thinking). These facilitate social marketers in identifying more appropriate variables to engender transforming food systems programmes as well as identifying the variables that affect and are affected by different food systems (systems thinking). The critical thinking guidelines also allow social marketers to develop more effective relationships with target audiences as trust, commitment, performance, co-operation and satisfaction are more likely to ensue. How social marketers can create value with more target audiences with this overlapping action was also elaborated on.

The next favourable actions for social marketers to pursue would be ones that contribute to ecological or social sustainability and maintain a fair amount of overlap (moderate rather than high overlap). Although such actions do not have as high commonality across the constructs as ecovillages, renewable energy and transforming food systems do, specific parts of them coincide highly, which can therefore be used as foundations for social marketing programmes to increase sustainability, as such parts are still less likely to be misinterpreted and misguide sustainability efforts. Voluntary simplicity and sustainable consumption represent such an action, which is referred to below as reducing overconsumption as this is where these actions coincide.

6.6 REDUCING OVERCONSUMPTION

As has been demonstrated in Chapter 5, voluntary simplicity (degrowth) and sustainable consumption (sustainable development) as actions coincide in general to a moderate extent; however, high coincidences prevail in 1) tackling over- or unsustainable consumption in developed nations via bottom-up approaches and 2) the interconnection between environmental and social sustainability—not social sustainability itself. The following recommendations will therefore converge on these aspects (which is the reason for the heading) and in the process outline how analogous elements can: lead to programmes that deliver real wellbeing and are less open to misinterpretation and misguidance through critical thinking; engender systemic

understandings of problems and solutions can be found; involve more target audiences in value co-creation; and increase the likelihood of long-term value co-creation through relational thinking.

6.6.1 Critical thinking guidelines for programmes reducing overconsumption

The upcoming sections show how unities between actions advocate a better critical analysis, which consequently leaves less room for misinterpretation and misguidance and better formulates the type of wellbeing that can be delivered to society via this action.

Critical analyses are increasingly beneficial when like actions have antecedents that are manifold and varying. Thus, the design of the programme will be better at delivering wellbeing when all (social and environmental) antecedents from both actions are critically analysed. In turn this will minimise the likelihood that causes of unsustainable consumption patterns are reinforced and reduce the possibility for misinterpretation and misguidance. It will also increase the chances of realising environmental and social (to some extent²⁶) sustainability.

The antecedents are as follows:

Degrowth	Sustainable development
Ecological sustainability	
Exceeding limitations; Technology, growth and the rebound effect; Neoclassical and neoliberal economics and the growth of systems;	Excessive exploitation; Development, growth and ecology;

²⁶ The full extent of social sustainability – as argued by degrowth – will also entail tackling consumption in social terms alone e.g. in personal psychological terms and social cohesion (e.g. Hamilton, 2010).

Social sustainability	
Wellbeing, neoclassical and neoliberal economics and consumerism	Inequality and society and the environment; Well-being, economic growth and development.

Table 7 Reducing overconsumption antecedents

To build a solid foundation for programme development, social marketers should therefore maintain a good understanding of these antecedents and how they connect to overconsumption in developed nations. To do so will naturally require primary research and will also be facilitated by systems thinking (discussed in the systems thinking guidelines).

As previously discussed, overlaps that occur in progressive and diverse constructs are more likely to define a type of wellbeing that is beneficial to society and act as a strategic guideline in programmes underwritten by such overlapping actions. Therefore, the other part of the critical analysis is for social marketers to analyse the common principles, strategies, benefits and outcomes of the ecovillages action to formulate a strategic guideline.

The part where this action shows the largest cohesions is in tackling overconsumption in wealthy echelons with a bottom-up approach. Since the rebound effect as well as efficiency and sufficiency principles have been shown to be part of sustainable development's sustainable consumption action, the action is said to align well with degrowth in these aspects. Thus, programmes should be designed with the principle of sufficiency in mind. The alignment at strategy level (right-sizing the economy and increasing wellbeing) is something that also needs to be part of the programme's strategic guideline. While degrowth lists other positive social benefits, means and outcomes of voluntary simplicity, both constructs agree that social sustainability is dependent on environmental sustainability. Therefore, concerning the critical analysis and development of the programme's strategic guideline, social marketers should concentrate on environmental sustainability as well as ensure that the wellbeing social marketing programmes creates is representative of the interdependence outlined above

i.e. that there should be a focus on environmental aspects of overconsumption that will also have positive social effects. Programmes should also be designed with the rebound effect in mind so as to avert any gains being written off by further consumption. Furthermore, what social marketers need to be aware of are the previous misinterpretations and misguided efforts of sustainable development e.g. that consumption patterns have only increased as a result of poorly planned and implemented activities and/or favouring weak over strong sustainability (e.g. Lorek and Fuchs, 2013: 34; Lorek and Spangenberg, 2014: 34). Investigating why this has prevailed will increase the robustness of the critical analyses and therefore the social marketing programme's ability to deliver wellbeing and not be misinterpreted nor misguide actions. Antecedents are of high importance to do so and should therefore be reverted to.

6.6.2 Systems thinking guidelines for programmes reducing overconsumption

As previously applied, the identification of variables linked to causes and solutions and their inclusion in designing programmes play an important role in the success of a social marketing intervention. How overlapping actions can help social marketers determine these variables is discussed below.

Leading on from the critical thinking section, antecedents are a good point of departure from which variables that are connected to underlying causes of a problem can be examined. The many and varying perspectives to problems make social marketing programmes more likely to be successful in benefitting society, and therefore all antecedents and their connections to variables that influence the target audience's behaviours should be systemically mapped. Additionally, linking variables to antecedents improves systems and critical thinking as this could reveal underlying forces of a problem. Using the antecedents in Table 7, social marketers will need to identify the variables that are linked to these causes. For example, in developed nations some variables connected to the exceeding limitations antecedent could be consumerism as an established social norm, the media's influence on consumer culture including the advertisements from companies that promote consumption. The prevailing economic model that is established and promoted by governments and/or

large multinationals could be connected to the development, growth and ecology and the neoclassical and neoliberal economics and the growth of systems antecedents. Additionally, it is highly recommended that social marketers determine which laws and policies drive unsustainable consumption, as the voluntary simplicity movement (degrowth) explicitly aims at socially reconstructing these from the bottom up (i.e. influencing behaviours that reconstruct laws and policies, which in the end shape the way society behaves). Where sustainable development has shown weakness in the past is its tendency to adopt weak over strong or ideal sustainability (Lorek and Fuchs, 2013: 34; Lorek and Spangenberg, 2014: 34). Thus, to ensure that programmes move away from this tendency, systems thinking will need to uncover the variables that have allowed this to occur and their link to antecedents and underlying forces.

Because alike aspects of actions are more capable of underwriting social marketing programmes that deliver wellbeing, it is proposed that the optimal place for social marketers to infer the right variables that facilitate, affect and are affected by behaviours and value co-creation is the aspect of reducing overconsumption to sustainable levels via bottom-up approaches that voluntarily influence behaviours i.e. through downstream and midstream approaches. However, these approaches will likely represent an issue for strategic social marketers at surface level. This is because systemic programmes are often designed with involuntary choice in mind i.e. manipulating macro-environments to coerce people into performing a certain behaviour (e.g. Eagle *et al.*, 2013: 68-69, Weinreich, 2011: 93). However, by linking grass-roots behaviour change to the social reconstruction of the laws and policies that govern society as Alexander (2013: 3) does, social marketers will find that this approach is systemic in the long term. Therefore, if social marketers were to use the overlapping aspect of these two actions, they could only introduce elements that facilitate and not coerce behaviours via downstream and midstream approaches. Some examples might be providing workshops and messages about simplifying lifestyles, engaging in parent education to facilitate sustainable consumption behaviours at the family level, incentivising sustainable consumption through tax breaks and designing towns and cities in a way that encourages not necessarily coerces voluntary simplicity e.g. by not allowing huge shopping malls in town/city development plans and including small markets. It might nevertheless be difficult to design truly systemic programmes without

the capacity to influence behaviours via involuntary approaches even if part of the process is the social reconstruction of laws and policies.

6.6.3 The concept of value and guidelines for programmes reducing overconsumption

As illustrated in other discussion on value, actions with ecological and social sustainability as outcomes have a larger range of value attributes that can be utilised to connect to a greater number of individuals. Reducing overconsumption is an overlapping part of the actions from both constructs that can lead to increases in ecological as well as social sustainability. Because of this, social marketers will have a potentially greater number of target audiences with which programmes can co-create value, and therefore a higher chance of realising sustainability.

6.6.4 Relational thinking guidelines for reducing overconsumption programmes

The following guidelines demonstrate why and how social marketers can use the overlapping actions to design more successful voluntary consumption reduction programmes that co-create value. It is essential to keep in mind that relational thinking guidelines are based on the critical feasibility of the action and its capacity to reduce misinterpretation and misguidance. As the critical robustness of reducing overconsumption has been demonstrated, relational thinking guidelines can flow without concern for misinterpretation and misguidance.

Social marketing programmes are said to be more likely to be successful in engendering sustainability when the interactions with a target audience and processes to behaviour change can be customised according to what they value, which can be both a set and series of behaviours to perform over time. Because challenging overconsumption could achieve social and ecological sustainability, it is recommended that social marketers use these common outcomes to customise interactions and processes to capture a greater number of individuals and ultimately increase society's sustainability. For example, through research it might become apparent that there is a group of people who are concerned with the social aspects of overconsumption for example their family's health, another group who is more concerned with rainforest depletion from

overconsumption (environmental sustainability) and other groups who are concerned with both. When designing programmes to reduce overconsumption, the social marketer should customise the interaction with each target audience and the process to behaviour change to become more successful at fostering sustainable behaviours. For example, the messages sent to the target audience, the stakeholders they interact with, the process of behaviour change and the manipulation of macro-level factors will be different for each target audience depending on their alignment with social and/or ecological sustainability. Each of these parts of the relational thinking guidelines will need to align with the combination of critical and systems thinking. Up selling and cross selling behaviours should also show similar alignment with critical and systems thinking guidelines i.e. that interactions and processes should be customised to move behaviours to the most sustainable (sufficient) ones over time.

Programmes often operate with multiple stakeholders, thus the validation of stakeholders for inclusion in social marketing programmes is therefore necessary. As was previously elaborated on, stakeholders in agreement with an action's antecedents, principles, etc. increase the chances of a programme's success. Therefore, social marketers should validate stakeholders according to whether they recognise that the problem of overconsumption is based on the antecedents in Table 7; their alignment with the principle of sufficiency; alignment with strategies such as improving wellbeing, mitigating poverty and inequality and one-planet living; that they agree on the interconnection between social and environmental sustainability; and that they do not reinforce causes and adversely affect sustainability in some way.

At the construct level, seeing as tackling overconsumption coincides and therefore reduces the likelihood of misinterpretation and misguidance, the credibility of the source of the message (i.e. degrowth and sustainable development) that social marketers will use is said to be high. Therefore, programmes using it will be more likely to perform and deliver on promises, build trust, engender commitment, create satisfaction, and foster co-operation amongst stakeholders. What will be necessary at the implementation level is to ensure that any message sources on which overconsumption reduction programmes will be designed are compared and contrasted with varied and multiple viewpoints (i.e. performing a critical analysis) and that other stakeholder reflexivity is performed. For example, governments or international

institutions that base their economic model on consumption might be hesitant to reduce consumption in any form and could offer research to the contrary. The social marketer should gather opinions from different perspectives to determine the correct message that will be used throughout the behaviour change process and when interacting with target audiences to successfully build value co-creating relationships with stakeholders. Additionally, the social marketer should promote other stakeholder reflexivity by allowing all stakeholders to critically reflect on each other's agendas, frameworks, institutional make up etc.

The foregoing sections showed that the overlaps in actions from degrowth and sustainable development bode well for designing successful reducing overconsumption programmes that mitigate misinterpretation and misguidance. This is because programmes maintain a critical understanding of the problem and robust strategic guideline (critical thinking). This allows social marketers to identify the correct variables to promote reducing overconsumption programmes; variables that affect and are affected by different are also appropriately recognised. Developing fruitful relationships with target audiences is also contingent to the critical and systems thinking guidelines, as it is through this that greater levels of trust, commitment, performance, satisfaction and co-operation are cultivated. Value co-creation for more target audiences and how overlapping actions contribute to this was also explained.

The last two actions listed in Table 3 that have some overlap between the constructs, are changing employment and caps and taxes. Since they have a low or low/moderate level of overlap, misinterpretation and misguidance cannot be mitigated easily. Based on the framework of this research, recommendations for including changing employment and caps and taxes in social marketing programmes to increase sustainability cannot be made. The justifications are provided below.

6.7 CHANGING EMPLOYMENT

The discussion in section 4.5 showed that degrowth and sustainable development correspond at strategy level, as they are both linked to improving wellbeing and reducing poverty and inequality; and outcome level, as they both seek to achieve social sustainability. However, the end result was that the constructs only overlap to a

low/moderate extent. This is because they are different in some critical areas namely at specific actions, principle levels, and that degrowth also maintains an environmental element to its action. The actual actions that social marketers could use to develop programmes are so disparate that it would not be possible to find overlaps between them i.e. there are no commonalities between degrowth's specific actions and sustainable development; the principle of sufficiency to which the degrowth actions are connected is not represented in sustainable development; and degrowth's double dividend that includes social and environmental sustainability is not found in sustainable development. Since the actions speak very different languages i.e. they do not greatly overlap, it would not be possible for social marketers to reduce misinterpretation and misguidance through critical analyses. Therefore it is not feasible to make recommendations for social marketing programmes to include these actions.

6.8 CAPS AND TAXES

Although some similarities transpire for example benefits, strategies and sub actions in the form of environmental taxes, cap-and-trade measures and redistributive policies, the discussion in Chapter 5 showed that caps and taxes from sustainable development and degrowth in the environmental and social sustainability spheres correspond in general to a low/moderate level. The main reason was the intractable differences between urging and reversing economic growth. Where these actions could coincide is environmental taxes, cap-and-trade schemes and redistributive policies in the developing world as this is where both constructs indeed seek economic growth. However, this is where data from the degrowth construct is lacking, and therefore it is not possible to apply the paradigms underpinning social marketing. Because of this it would be difficult for social marketers to grapple with the language of each construct to determine whether caps and taxes in general could co-create wellbeing and reduce misinterpretation and misguidance. Nevertheless, what is recommended is that when information pertaining to environmental taxes in developing nations from the degrowth construct emerges, social marketers will need to compare it with similar proposals from sustainable development.

6.9 CHAPTER SUMMARY

This chapter has been responsible for relating the common actions identified in sustainable development and degrowth constructs to the theories underpinning social marketing: critical thinking, systems thinking, value and relational thinking. By relating each paradigm to common actions, it was demonstrated how misinterpretation and misguidance can be mitigated as well as how social marketers can create better social marketing programmes to target sustainability. A total of four common actions were put through this process: ecovillages, renewable energy, transforming food systems and certain elements of consumption-related actions. Changing employment and caps and taxes were two seemingly common actions that were found to be too incongruent to reduce misinterpretation and misguidance. These recommendations and guidelines complete the fourth objective of this research, and in general comprise of a tighter language for social marketers to use these actions as foundations for social marketing programmes. The forthcoming chapter analyses social marketing planning processes in search of an appropriate one to complete the fifth and final objective of this research.

CHAPTER 7: ANALYSING SOCIAL MARKETING PLANNING PROCESSES

7.1 CHAPTER OVERVIEW

This chapter principally deals with the presentation and analysis of the various social marketing planning processes in relation to the four paradigms underpinning social marketing. Its purpose is to supply a social marketing planning process that is most applicable to developing robust social marketing programmes that foster sustainable behaviours. Analyses reveal that only one is considered most appropriate.

7.2 INTRODUCTION

Since social marketers are tinkering with the way society behaves, and since the field is characterised by systematic planning (French and Gordon, 2015: 346), an essential instrument is a social marketing plan: a strategic blueprint for creating beneficial social change based on rigorous analyses and following a series of steps and tasks (Hastings and Domegan, 2014: 84-85). While French (2010) designed an online social marketing planning tool that integrated best practices from an extensive review of other planning tools, it is unfortunately not accessible. Luckily there are several other social marketing planning processes that social marketers can use. However, without any formal examination, it might be difficult for social marketers to judge which of the planning processes could be most useful to improve society's chances of becoming sustainable. The following analyses of the different social marketing planning processes presented in Chapter 2 caters to this need. In more detail, the analyses dissect the varying planning processes available to social marketers by sequentially relating them to the four paradigms contributing to social marketing: first critical thinking and then together systems thinking, value and relational thinking. The extent to which critical thinking can be incorporated into programmes is covered first because this is crucial to defining what causes a problem and the benefits in terms of wellbeing a programme will offer, both of which reduce the misinterpretation and misguidance of sustainability endeavours. Where planning processes cannot demonstrate that their outputs (social marketing programmes) are critically viable, their analysis is discontinued. When a planning process does furnish the means to delineate critical aspects of a programme, the other paradigms are discussed together as they are not exclusionary.

7.3 ANDREASEN (2006)

Step 1 Listening
Step 2 Planning
Step 3 Pretesting
Step 4 Implementation
Step 5 Monitoring
Step 6 Revising

Figure 16 Andreassen's (2006: 96) Social marketing planning process adapted from Andreassen (2004a)

Analysis

Although Andreassen's (2004a) social marketing planning process emphasises the listening stage, which is about gaining in-depth knowledge of the target market (Andreassen, 2006: 96-97 or Andreassen 2004a: 61), it does not allocate room for developing sufficient background knowledge of the issue at hand, such as the causes and environmental factors (political, legal, economic, etc.). Furthermore, Andreassen does not refer to critical implications of social marketing (e.g. ethics, critical marketing, methods of use etc.) anywhere in the planning process. Therefore, this planning process will not be able to fully develop a staunch critical perspective, which could lead to producing unintended consequences that do not actually benefit society, reinforcing underlying causes and in general being more open to misinterpretation and misguidance. This planning process is therefore excluded from being employed in the sustainability paradigm.

7.4 EAGLE *ET AL.* (2013)

Step 1 Scope the problem and plan and implement primary research
Step 2 Situation analysis
Step 3 Asset map
Step 4 Plan the evaluation
Step 5 Develop the intervention
Step 6 Implement the intervention
Step 7 Evaluate and follow up

Figure 17 Eagle *et al.*'s (2013: 42) social marketing planning process

Analysis

As part of Eagle *et al.*'s first three steps, the social marketer is provided with the means to develop a broad understanding of the issue including antecedents causes, the macro- and micro-level factors. Ethical considerations are also built into these steps. These steps are therefore seen as an ideal means to build a solid critical foundation to a programme. Relational thinking is considered vital to the authors and can be seen in the asset map in step 4, which is about identifying potential stakeholders to influence behaviours (Eagle *et al.*, 2013: 57). However, the authors choose to adopt exchange theory as the intervention framework; and, although value is mentioned (Eagle *et al.*, 2013: 62), the value co-creation aspect needed in social marketing programmes is lacking. Furthermore, with no reference to systems thinking, it would be difficult for social marketers to design the kind of programmes required to tackle sustainability.

7.5 HASTINGS AND DOMEKAN (2014)

Step 1 Situation analysis
Step 2 Stakeholder, competitive and harm chain analysis
Step 3 Segmentation and targeting
Step 4 Objectives
Step 5 Formulating the offer
Step 6 Implementation
Step 7 Monitoring and evaluation

Figure 18 Hastings and Domegan's (2014: 84) social marketing planning process adapted from Hastings and Elliot (1993)

Analysis

Beginning slightly differently to other planning processes, Hastings and Domegan (2014) propose several analyses to take into account many of the different forces that influence behaviours: situation, stakeholder, competitive and harm-chain (Hastings and Domegan, 2014: 86). In particular, a competitive analysis is provided as a means to consider the far-reaching implications of competitive forces that shape undesirable behaviours, for example not just that fast food brands play a role in obesity, but that the entire industry is so intertwined with socio-cultural and political spheres that they are allowed to make a profit often at a cost to society's wellbeing (Hastings and Domegan, 2014: 205–211). As a further breakdown of which stakeholders are producing virtuous or adverse outcomes, a harm chain analysis gives social marketers "further insight into the forces to be contended with and the pathways to the root of the problem" (Hastings and Domegan, 2014: 91) and thus provides a sound platform to explore antecedents to the problem in the form of different stakeholders as competitive forces. Stakeholders in this sense take on a more general meaning and can refer to "policy

makers...governments...the media, and many others” (Hastings and Domegan, 2014: 88). To form the other part of critical marketing research, Hastings and Domegan (2014: 223) indeed forge the link between strategies, actions and outcomes of strategic, systems-based social marketing programmes and societal wellbeing. An entire chapter is devoted to ethical issues at every stage of the planning process and therefore also contributes to strengthening the critical perspective.

Value and systems thinking permeates Hastings and Domegan’s (2014) planning process with a whole chapter being devoted to their interlocking discussion. Relationship marketing is commended as an opportune way to co-create value in social marketing programmes (Hastings and Domegan, 2014: 49), especially when confronted with complex problems requiring many interconnecting constituents (Hastings and Domegan, 2014: 269). It is also heralded as the strategic driving force behind social marketing programmes (Hastings and Domegan 2014: 48) and is intertwined throughout their planning process. Thus, because it incorporates the four theories underpinning social marketing, Hastings and Domegan’s (2014) planning process is deemed to be applicable to the sustainability problem.

7.6 LEE AND KOTLER (2016)

Step 1 Social issue, background, purpose and focus
Step 2 Situation analysis
Step 3 Target audiences
Step 4 Behaviour objectives and target goals
Step 5 Target audience, barriers, benefits and motivators; the competition; and influential others
Step 6 Positioning statement
Step 7 Marketing mix (4Ps)
Step 8 Plan for monitoring and evaluation
Step 9 Budget
Step 10 Plan for implementation and sustaining behaviours

Figure 19 Lee and Kotler's (2016: 51-52) social marketing planning process

Analysis

At the start of the planning process, Lee and Kotler (2016: 51) provide a step for social marketers to gather information about a problem's causes and the factors that influence it, which is vital for a critical perspective. Ethical issues are considered at every step of the planning process, which also bodes well for a strong critical standpoint. Step 3 is about segmenting, evaluating and selecting target audiences, which is concerned with dividing the population into groups, determining which group(s) are the best possible targets and selecting these groups (Lee and Kotler, 2016: 128-129). This stage employs a variety of models and research techniques in order to arrive at the most opportune

audience to influence (Lee and Kotler, 2016: 147) and therefore aligns with the critical debate component of critical marketing. Step 4 sets SMART goals for behaviours and Step 5 builds up extensive knowledge of the target audience including what might help to influence their behaviours and the competition. However, unlike in critical marketing, Lee and Kotler (2016) do not look at the deeper levels of competition (forces, systems and institutions) and therefore lacks this critical perspective. The traditional marketing mix is adhered to in Step 7.

While the situation analysis in step 2 lends a broader scope to the social marketer by looking at the microenvironment to identify strengths and weaknesses and the macroenvironment to surface any opportunities and threats, searching for any reference to systems thinking in Lee and Kotler's (2016) planning process did not turn up any results. Thus, like others that maintain the same issue, this planning process is also regarded as an ineffective process to deal with the large-scale sustainability challenge. Furthermore, the authors offer exchange theory as the framework for social marketing programmes developed from their planning process, thus it does not align with the concept of value co-creation.

7.7 MCKENZIE-MOHR (2011)

Step 1 Selecting behaviours
Step 2 Identifying barriers and benefits
Step 3 Developing strategies
Step 4 Piloting
Step 5 Broad-scale implementation and evaluation

Figure 20 McKenzie-Mohr's (2011) community-based social marketing planning process

Analysis

This planning process begins with selecting behaviours, which involves selecting the most appropriate behaviour based on which behaviour would have the greatest impact, would most likely be accepted and what percentage of the audience already performs the behavior (McKenzie-Mohr, 2011: 15). Step 2 moves on to identifying barriers and benefits to overcome obstacles and promote behaviours respectively. Thus although pragmatic in design, and a successful process to influence behaviours (e.g. CBSM, 2010), it does contain a flaw similar to Andreassen's: there is no means with which a critical viewpoint can be advanced. Although the author clearly states that identifying barriers of a specific target audiences' behaviour are a vital step in designing the social marketing programme (McKenzie-Mohr, 2011: 15-38), there is no evidence of an attempt to, for example, consider ethics and/or a background analysis of underlying forces. Therefore, it is deemed inappropriate for sustainability and reducing misinterpretation and misguidance.

7.8 THE NSMC (2016)

Step 1 Getting started
Step 2 Scoping
Step 3 Development
Step 4 Implementation
Step 5 Evaluation
Step 6 Follow up

Figure 21 The NSMC's (2016) social marketing planning process

Analysis

Formulating a robust critical perspective is made possible in The NSMC's (2016) planning process by means of steps 1 and 2. As part of step 1, a risk analysis helps

social marketers anticipate the outcomes of programmes in terms of their immediate and wide-reaching effects on the population, including the possibility of programmes reinforcing underlying causes (The NSMC, 2016: Assess risk). Furthermore, The NSMC proposes social marketers consider whether their programmes are “ethically acceptable” (The NSMC, 2016: Develop the intervention and marketing mix). Step 2 on the other hand offers ample opportunity to uncover causes of the problem as it seeks to derive information from micro to macroenvironments (The NSMC, 2016: Review internal and external factors) and underlying causes as to why people behave in such a way (The NSMC, 2016: Understand why people behave the way they do).

Systems thinking is, however, not referred to. This is considered so pertinent to the sustainability challenge that without a systems perspective, social marketing programmes will not be as effective as delivering beneficial social change as they could be. Therefore, this planning process is not recommended for programmes targeting sustainability.

7.9 WEINREICH (2011)

Step 1 Analysis
Step 2 Strategy development
Step 3 Programme and communication design
Step 4 Pretesting
Step 5 Implementation
Step 6 Evaluation and feedback

Figure 22 Weinreich’s (2011: 23) social marketing planning process

Analysis

Weinreich’s (2011) planning process is similar in sequence to the NSMC’s (2016). The

analysis stage proposes social marketers understand: the problem, which will help determine the background and scope of the issue the programme will overcome; the setting, which will identify challenges and opportunities existing in the greater context in which the programme will take place and; the target audiences and their behaviours, which provides detail to the actual people and their behaviours (Weinreich 2011: 23-37). These analyses gather some of the antecedents of a problem to contribute to a critical perspective. However, little attention is given to the competitive analysis, which could be useful in identifying factors that contribute to the problem or hinder people's wellbeing (French and Gordon, 2015: 399). Weinreich (2011: 25) does, under the banner of ethics, point out that social marketers must consider the "potential to do harm in any way". Thus, although an in-depth discussion is not offered, the authors do point out that humanity's wellbeing must be reflected on.

In addition to the somewhat weak capacity to develop a good critical perspective, the author does not raise the important contribution of systems thinking to social marketing, which, considering the scale and connectedness of sustainability, is imperative in social marketing programmes challenging it. Therefore, the planning process is considered unsuitable for application in sustainability.

7.10 MOST APPROPRIATE PLANNING PROCESS FOR SOCIAL MARKETERS

TARGETING SUSTAINABILITY

From the assessments above, the only planning process that emerges as one that incorporates all four paradigms underpinning social marketing is Hastings and Domegan's (2014). However, this being said, the author's critical thinking approach is limited to analysing competing products and behaviours, the environmental factors that affect the problem and does not extend to underlying institutions, systems and forces – a key aspect of a solid critical marketing foundation. Thus, although it is the most appropriate, some content is still missing. These pitfalls are addressed in the key contributions chapter.

7.11 CHAPTER SUMMARY

There are several existing social marketing planning processes, which were presented in Chapter 2, that could be utilised by social marketers in accelerating sustainability.

However, none of these processes had been critiqued with the specific goal of sustainability in mind. Using critical thinking and then systems thinking, value and relational thinking to scrutinise the different processes determined the likelihood of a planning process to facilitate more sustainable behaviours. It was shown that many social marketing planning processes lack a solid critical thinking element and that even the one deemed most appropriate is not robust in this feature. Thus, for social marketers to be able to safely use a planning process that reduces misinterpretation and misguidance, adaptations to existing processes are required. This aspect is dealt with in the next chapter, where other contributions to varied research areas are also outlined.

CHAPTER 8: KEY CONTRIBUTIONS

8.1 CHAPTER OVERVIEW

The first key contribution of this research is a summary of the guidelines developed in Chapter 6 and are specifically aimed at the managerial level for social marketers to incorporate into programmes targeting sustainability. The second contribution reflects on the critical thinking paradigm in social marketing and makes some specific additions broadening the scope of the paradigm. Thereafter, the contribution to social marketing planning processes summarises the analyses performed in Chapter 7 and accounts for the most appropriate planning process for targeting sustainability. The next contribution further strengthens this planning process through adaptations in each of the four paradigms underpinning social marketing. In the last section, broad and specific methodological contributions that arose from the use of nomological networks are described, after which the chapter is concluded.

8.2 INTRODUCTION

The unique approach of this research is the driving force behind the contributions put forward in this chapter. Identifying that the language of two constructs functioning within the sustainability paradigm could be a cause of misinterpretation and misguidance of sustainability efforts, framing the research in a social marketing lens, analysing the extant literature from degrowth and sustainable development constructs, mapping each construct's nomological networks, finding overlapping actions and associating these overlaps with the theoretical paradigms underpinning social marketing has not only achieved the objectives laid out in the opening chapter of this study, but has also breached new research territory in different ways. The following sections detail the contributions of this dissertation to different research areas.

8.3 KEY CONTRIBUTION 1: MANAGERIAL CONTRIBUTIONS

Detailed in the previous chapter, one key contribution of this research is the managerial recommendations made for social marketers looking to thwart unsustainability. By relating overlapping actions to the theoretical paradigms underpinning social marketing, guidelines as to how social marketers can use the overlapping actions to develop more successful programmes with reduced misinterpretation and misguidance were made. Thus, social marketers could take these actions and their related

recommendations and use them as foundations for social marketing programmes tackling unsustainability. From highest to lowest overlap, the actions are ecovillages, renewable energy, transforming food systems, elements of voluntary simplicity and sustainable consumption, changing employment and caps and taxes. Naturally, primary research that builds off these foundations will be required when actually piloting and implementing these programmes.

The following is a summary of the process of how social marketers should go about reducing misinterpretation and misguidance and designing more successful social marketing programmes for sustainability.

Firstly, it is important for social marketers to find actions from progressive and different constructs that overlap to a high extent in all areas except their antecedents. In the case of this research, ecovillages and renewable energy are good examples. When applying critical thinking, identifying an action's antecedents will improve a social marketer's understanding of the root causes of problems – the more and different antecedents the better. The next part of critical thinking is finding exactly where actions overlap in other areas and developing a strategic guideline. Here is where the importance of analysing different and progressive constructs becomes apparent, as it is actions from such constructs that enable social marketers to define a better strategic guideline. What this does is guide the programme in a way delivers sustainability and wellbeing. Combined with the critical analysis of antecedents, the critical thinking paradigm reduces misinterpretation and misguidance, mitigates the likelihood of reinforcing root causes and ultimately promotes the design of social marketing programmes that are more successful. The next step is to apply systems thinking to common actions. At this stage, antecedents should be used to surface the variables that cause a problem from which should evolve a systemic understanding of the issue the action could circumvent. Additionally, as primary research will need to be done to surface the variables that facilitate, affect and are affected by the action, the strategic guideline developed from the application of critical thinking should be used to determine the right variables to facilitate the action, how making changes to the system/systems might affect sustainability and what and how different variables might affect the system. Nevertheless, it will be beneficial for social marketers to turn to supporting evidence to see the systemic implications of implemented actions. Applying value to common

actions is also based on the ability of actions to achieve sustainability, which is elucidated by the strategic guideline of a programme through critical thinking. Although determining what target audiences value will require primary research, applying value theory to common actions, because they are more likely to succeed in reaching sustainability, means that programmes with social and ecological sustainability as outcomes can capture a greater number of end users and that such programmes are more likely to reach both social and ecological sustainability. Applying relational thinking as the last step is also based off critical and systems thinking as these predetermine the extent to which an action can reduce misinterpretation and misguidance and foster successful programmes. Thus relational thinking should only be related to overlaps from common actions that cannot be easily misinterpreted and misguide programmes. When this is the case, overlapping actions can be used to foster value co-creating processes and interactions that are more likely to succeed in influencing behaviours in a more sustainable direction.

8.4 KEY CONTRIBUTION 2: REFLECTIONS ON CRITICAL SOCIAL MARKETING

The need to move towards a more critical direction in social marketing was grounded by the concept's inadequate capacity to deliver positive and systemic social change. The conceptual boundaries in which such myopic social marketing interventions primarily operate(d) naturally restricted programmes in certain ways, some of which were the consideration of underlying causes, the concept itself, a lack of reflexivity and the effect programmes had on people and society. Borrowing from the critical marketing paradigm, the ascendance of the critical social marketing concept (Gordon, 2011) afforded social marketing a more strategic approach that sought to shed these previous disparagements.

The latest and broadest conception of the critical social marketing concept portrayed by French and Gordon (2015: 402) entails looking “[b]eyond commercial marketing to institutions, systems and forces”. In some cases, as in previous critical social marketing conceptualisations (e.g. Gordon, 2011), the authors convey underlying institutions, systems and forces as the means that allow and support *marketing* to function as destructively (critically speaking) as it does. For example, weak regulatory systems in

the developing would allow companies to promote alcohol consumption, which causes health issues (Farrel and Gordon, 2012: 139-141). In other cases, French and Gordon (2015: 402-404) imply that institutions etc. are in *themselves* causes of problems social marketing interventions can address e.g. where the underlying economic system directly causes poverty and inequality. If indeed French and Gordon (2015) see critical social marketing as a critical reflection of how the latter of the abovementioned causes relate to social marketing programmes, then this type of critical social marketing can and should be fittingly applied. If this is not the case, the critical social marketing concept needs to be broadened to include these underlying institutions, systems and forces as independent causes of social issues. Such an approach recognises that although marketing and connected forces definitely underly many environmental and social issues in sustainability, some problems are not characterised by this. Consequently, this independent feature of underlying forces needs to be fitted into the existing critical social marketing structure. Such additions will assist social marketing programmes to combat social ills that are not necessarily connected to marketing and invigorate further critical debate about the social marketing concept, which will make it more robust at delivering beneficial and systemic social change.

How critical thinking could be performed and its incorporation, along with the other paradigms, into a more appropriate social marketing planning process will be discussed after the different social marketing planning processes are evaluated.

8.5 KEY CONTRIBUTION 3: ANALYSES OF SOCIAL MARKETING PLANNING PROCESSES

The analysis of the various social marketing planning processes in the context of sustainability is an exercise that has not yet been performed. In doing so a number of shortfalls across the board were exposed. Firstly, analyses revealed that most planning processes do not effectively engage in critical thinking and that this is problematic in the sustainability context where the need for robust critical thinking is considerable – in its absence programmes are more likely to be misinterpreted and misguided, reinforce underlying causes, have unfavourable outcomes and thus are unlikely to deliver wellbeing. Secondly, many processes also lack the ties to value co-creation, relational thinking and systems thinking so essential to developing successful social

marketing programmes. Thus, by analysing the existing planning processes, this part of the study has identified areas of weakness and where further improvements are needed to be applicable in the sustainability context, which requires that all four paradigms underpinning social marketing are fully included and active.

8.6 KEY CONTRIBUTION 4: ADAPTATIONS TO HASTING AND DOMEKAN'S (2014) SOCIAL MARKETING PLANNING PROCESS

As identified in Chapter 7, many planning processes have similar steps and surface-level content. Where each planning process differs becomes apparent when their content is reviewed at a deeper level. The analyses demonstrated that only a few foster critical thinking, while only one (Hastings and Domegan, 2014) explicitly mentions systems thinking.

Nevertheless, it is considered pertinent that the social marketing planning process to be applied in the sustainability paradigm include critical, systems and relational thinking and value throughout the steps in each planning process. This would make knowledge embedded, available and clearly discernible.

8.6.1 How to promote critical thinking, systems thinking, value and relational thinking and their implications

Although some social marketing planning processes do offer a means of going about critical, systems and relational thinking and co-creating value, the following adaptations to Hastings and Domegan's (2014) planning process offers a viewpoint more specifically relating to sustainability.

Step 1 Situation analysis
Step 2 Stakeholder, competitive and harm chain analysis
Step 3 Segmentation and targeting
Step 4 Objectives
Step 5 Formulating the offer
Step 6 Implementation
Step 7 Monitoring and evaluation

Figure 23 Hastings and Domegan (2014: 84) adapted from Hastings and Elliot (1993)

When gathering insight into the problem at hand i.e. during steps 1 and 2, all antecedents from actions in multiple, diverse and progressive constructs should be collected to maintain a far-reaching understanding of the problem and its causes. Such analyses should naturally trace the issues until their root causes are reached i.e. performing a harm-chain analysis (Hastings and Domegan, 2014: 91). Additionally, and where this process is lacking, social marketers should extend the current competitor analysis to determining the underlying institutions, systems and forces causing the problem (e.g. French and Gordon, 2015: 402-404). This will help establish some of the critical limits social marketer programmes should not overstep i.e. to ensure that causes are not reinvigorated by programmes. Furthermore, antecedents should be linked to variables as part of systems thinking so as to understand the linkages between variables and causes of problems and the influence they have on people's behaviours in the context of the specific social marketing challenge. This also assists social marketers in developing a holistic view of a problem, which in turn aids in designing more critical and systemic interventions.

Where the process is also lacking is *how* to determine a more appropriate outcome that the programme will offer and develop a strategic guideline for programmes. In order to fill this gap, it will also be crucial to analyse actions and their connections to action's strategies, benefits, outcomes, principles and definitions from constructs that are progressive/modern and not traditional, outdated and lacking critical substance in the research phases of the planning process should. Not only will this determine further critical limits (e.g. if a programme is not delivering benefits to a target audience, something needs to be changed), it will more likely determine a type of wellbeing that is beneficial to society because it has considered wellbeing from multiple, progressive and different viewpoints. Doing so will also establish an appropriate strategic guideline for programmes. Exercising researcher and other stakeholder reflexivity could be some of the methods to go about such analyses. Examining how and why meaning is interpreted and constructed (researcher reflexivity) (Bettany and Woodruffe-Burton, 2009: 671; French and Gordon, 2015: 269; Gordon and Gurrieri, 2014: 265-266) and critically appraising other stakeholders' viewpoints (other stakeholder reflexivity) (Gordon and Gurrieri, 2014: 267-268) could direct the social marketer to evaluate multiple and diverse perspectives, generate critical insights from them and consider progressive ideas to define individual, group and/or societal wellbeing.

Value co-creation and relational thinking are well embedded throughout the planning process, and is heavily reliant on primary research to determine the appropriate value to target and interactions and process to influence behaviours. Nevertheless, it should be noted that when designing the social marketing programme i.e. engaging in steps 4 and 5, the social marketer should continuously refer back to the critical and systems guidelines developed in the previous steps to ensure that the right variables and stakeholders are used in processes and interactions to customise the offering and that trust, commitment, satisfaction and co-operation are according to the guidelines to facilitate value co-creation via relational thinking's key constructs. Furthermore, overlaps in actions catering to social and ecological sustainability can be used to provide greater potential to realise sustainability as such actions can be linked to more target audiences i.e. those with a connection to either *and* both outcomes.

The next addition to the planning process before full-scale implementation is to take the action, simulate it and critically analyse the effects it could have on society's

wellbeing and sustainability, whether it might reinforce antecedents and how it is affected and affects by other systemic variables and other systems. Thus the nexus between critical and systems thinking will again be utilised to justify and corroborate these simulations. This should also be performed and evaluated through a pilot programme.

8.7 KEY CONTRIBUTION 5: NOMOLOGICAL NETWORKS AS A METHODOLOGY

Mapping the nomological networks offers both broad and specific contributions as a methodological tool.

8.7.1 Broad methodological contributions of nomological networks

A nomological network is seen as an “interlocking system of laws which constitute a theory...[t]he laws in a nomological network may relate (a) observable properties or quantities to each other; or (b) theoretical constructs to observables; or (c) different theoretical constructs to one another” (Cronbach and Meehl, 1955: 290). While using parts (a) and (b) above to demonstrate construct validity is considered the primary application of nomological network research (e.g. Crede, *et al.*, 2007; Cronbach and Meehl, 1955: 290-291; Peterson and Zimmerman, 2004: 130), rarely has it been used for part (c) to observe associations between constructs. Furthermore, that this method was applied to in a qualitative fashion to secondary data is also atypical. Therefore, the first methodological contribution of this research is the distinctive way in which nomological networks were applied to review, map and surface the relation between constructs.

As an extension of the first contribution, the second contribution relates to the practicalities of the utility of this method, specifically that it allows a comparable overview of a construct to emerge through dismantling, connecting, synthesising and organising its internal elements and data thereof into manageable entities of a similar fashion. Employment as such affords practitioners to get a good feel of a construct, what it is made of and the intricacy of its interwoven threads. This allows for easier cross-examination and interpretation, more objective analyses and clarifying similarities and differences.

By clearly identifying how a construct's nomological network can be mapped using secondary literature, this study makes its final contribution by augmenting how to go about this uncommon approach. Categorising a construct's definitions, components, principles, antecedents, strategies, benefits and outcomes could prove useful to other researchers whose goal is to similarly compare two constructs.

8.7.2 Nomological networks and sustainability

Achieving sustainability is set to be a societal crusade of massive scale and importance. Guiding such an undertaking is where research plays a significant role (e.g. UN, 2012: paragraph 48). Two necessary characteristics of research where nomological networks can contribute to sustainability research is the need for interdisciplinary (e.g. Brammer, 2013: 3) and action-oriented research (e.g. Waas *et al.*, 2010: 634).

To tackle large-scale social problems humanity is faced with, interdisciplinary research as a methodology has been the most extensively promoted approach (Brammer, 2013: 3). And while interdisciplinary research is often conceptualised as undertakings that deal with multiple disciplines (such as biology and politics), Brammer's (2013: 7) use of the term concentrates on "research that involves experts from various disciplines and stakeholders from relevant practice areas working on a common problem". Sustainable development and degrowth are two research streams that can be conceptualised as expert-driven and multidisciplinary; they are stakeholders in that they are in the practice of sustainability; and they also work towards a harmonious goal. Therefore, mapping their nomological networks and the comparative analyses that flowed from such an effort is seen to make an addition to sustainability as it symbolises Brammer's (2013) notion of interdisciplinary research.

Action research in sustainability is also vital as it provides practical solutions to the sustainability conundrum (Waas *et al.*, 2010: 634). Mapping, comparing and analysing two nomological networks of constructs operational within the sustainability paradigm has surfaced certain actions that are more likely to realise sustainability. It has therefore aligned with the action research agenda and made a contribution to this area of research.

8.7.3 Nomological networks and degrowth

At the time of data collection, the degrowth construct was still relatively young and as such was unorganised in a way. Author's different contributions were scattered in that they often did not align with a strategy or components. The construct itself could be confusing and difficult to understand. Mapping the construct's nomological network consolidated most of the construct's literature (at the time) by grouping the different factions into common themes. In the end, the map of the nomological network showed these linkages on one canvas illustrating the construct in its entirety in a simple way that could be better understood. This could be beneficial both to those researchers within and outside of this construct.

8.7.4 Nomological networks and social marketing

The widening chasm between traditional and strategic social marketing approaches can be linked to the increasingly varied *modus operandi* with which strategic social marketers function²⁷. In the past, incorporating systems and critical thinking into the social marketing arena increased the discipline's vigour and improved its rationale for achieving beneficial social change; it also endorsed the welcoming of new perspectives. Indeed, Gordon and Gurrieri (2014: 266) have called for this approach in social marketing, stressing the lack of "alternative interpretations of research data" and advocating "the important role the consideration of different perspectives can play in facilitating deeper and novel understandings". Managerial contributions aside, where mapping nomological networks has met the need for alternative interpretations and different perspectives to facilitate deeper and novel understandings permeates not only through its success of offering a varying viewpoint of a single construct's data, but also offers a novel interpretation of the sustainability phenomena by mapping and comparing two constructs. It has therefore added value to the social marketing field as a whole as it could be applied to the multiple problem areas in which social marketing functions and where varied interpretations are key.

Furthermore, since social marketing programme development requires research that social marketers can wield, that the processes and outcomes of mapping the

²⁷ See for example French and Gordon's (2015) chapter on using theory in social marketing.

nomological networks are actionable is another benefit. The research has shown how commonalities amongst actions can be used to develop critical, systemic, value-oriented programmes that foster long-term behaviour change.

Moreover, since critical perspectives are increasingly considered in the social marketing concept, the departing point of this contribution is the notion that in “critical and radical studies in marketing and consumer fields, the macro-level perspectives are absolutely essential” (Dholakia, 2012: 221), which inherently contains the idea that “[t]he macro-level approach...is necessary to create at least an approximate map of the intertwined and not-so-visible [roots], linkages, influences, and flows” of a phenomena (Dholakia, 2012: 221). This implies that while micro-marketing interpretations of sustainability phenomena might have some value, macro-level tactics that allow a more critical overview of phenomena are highly sought after. As the approach appeases Dholakia’s (2012: 221) macro imperative, it is put forward that analysing and mapping the nomological networks of two constructs pertaining to the sustainability phenomena has garnered critical (social) marketers with such a bird’s eye view that indicates the interconnected roots, linkages, influences and flows of constructs aimed at attaining sustainability. It is from the critical perspective that many of the managerial recommendations arose and how social marketing programmes targeting sustainability can be created according to the strategic social marketing philosophy.

8.7.5 Nomological networks and the nexus between social marketing and sustainability

With the capacity to overcome the gruelling challenges in shifting society away from the current unsustainable model, social marketing can step up to the plate and become a leading strategic and operational player. This is because the concept is geared toward driving beneficial social change and engages with stakeholders from individuals to entities at international and supra-national levels to do so. Behaviour change is said to be made increasingly successful by the theoretical paradigms underpinning the concept. However, research in social marketing has not looked at sustainability from a systemic perspective. To the author’s knowledge, there is little focused literature on how to go about critical, systems and relational thinking and incorporating value in programmes aimed at sustainability at the macro level. Looking to overlapping actions guides social

marketers on where to get information from, what to analyse, how to go about certain function, etc. thus facilitating a better macro perspective. Thus, by viewing sustainability through a social marketing lens, mapping the nomological networks of constructs that maintain the rationale for achieving sustainability as a methodological approach contributed to the under-researched area of sustainability from a macro-social marketing perspective.

8.8 CHAPTER SUMMARY

The processes and type of findings this research has used and generated respectively has been shown in this chapter to make contributions to several research areas and not only achieve the study's research objectives. The first managerial contributions related to how social marketers can use the overlapping actions and processes derived from the research to develop more effective programmes. Secondly, the reflection on the critical thinking paradigm in social marketing surfaced how social marketers can improve critical thinking for sustainability programmes. Thirdly, it was shown how the planning processes developed for designing social marketing programmes in the context of sustainability can be better designed. Lastly, the contributions from a research methodology standpoint were discussed in relation to different research areas this study included.

CHAPTER 9: LIMITATIONS, RECOMMENDATIONS FOR FUTURE RESEARCH AND FINAL CONCLUSIONS

9.1 CHAPTER OVERVIEW

Pertaining to each research objective, this chapter firstly discusses limitations and recommendations for future research and secondly draws final conclusions by detailing key findings in relation to literature presented throughout this dissertation. It is therefore structured by research objectives.

9.2 INTRODUCTION

The starting point for this dissertation was the argument that sustainability is an intricate subject matter to which sustainable development and degrowth contributed as sources of scholarship and possible actions to be used in social marketing programmes. From here, specific research objectives were developed to discern a method of extracting certain actions that would simplify sustainability's language, reduce misinterpretation and misguidance and therefore contribute to social marketing programmes aspiring to maximise the chances of a society becoming sustainable. After limitations and recommendations for future research are outlined, the research objectives are revisited, discussed and concluded upon.

9.3 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The limitations section outlines some areas where the research may have been restricted. Recommendations for future research are made to address these limitations but also propose where further research would be valuable.

9.3.1 Limitations

The qualitative analyses employed in this dissertation are by their very nature interpretivist meaning that another researcher may have analysed and interpreted the data somewhat differently. However, using nomological networks as a standardised structure assisted the researcher in remaining as objective as possible.

The scale of sustainable development's literature made it infeasible to analyse all of sustainable development's actions and develop a more detailed nomological network.

However, because actions were deductively searched for in sustainable development's literature, overlapping actions were extracted nonetheless. Although multiple terms were used to search for similar actions deductively in the sustainable development literature, it is possible that some overlapping actions were missed. However, this is not believed to be a problem jeopardising the quality of the research as the core sustainable development literature (as referenced by sustainable development theorists e.g. DuPisani, 2006; Hopwood *et al.*, 2005) was covered in the analyses.

9.3.2 Recommendations for future research

In order to fully capture the potential impact the intersecting actions could have on environmental and social sustainability, future research could quantify their possible impact. Studies were found in the literature where quantifiable impacts were recorded e.g. for transforming food systems (e.g. Infante Amate and Gonzalez de Molina, 2013) and ecovillages (e.g. Boyer, 2016, Dawson, 2009, Sherry, 2014). A meta-analysis of such research literature and further documentation on actual impact on sustainability could provide valuable evidence of the effectiveness of various actions.

Further research could also split actions by those necessary in developing or developed countries. This is because developing nations would likely require different strategies to developed ones (e.g. R&D, 2010; UN, 2012). Taking the overlapping actions into consideration, research could be performed at national level to determine which actions might be of more use than others.

As ecovillages are one of the most valuable means to engender sustainability, it is recommended that ethnographic research from a social marketing perspective be performed to co-discover the different dimensions of value that could be used to codesign and co-deliver successful social marketing programmes. Moreover, further research (primary and secondary) at national or international levels into all actions that overlap to a high or moderate/high extent would be invaluable for social marketers tackling the sustainability challenge. This research should focus on the different theories underpinning social marketing to identify information that will make programmes more critical, more systemic, better at co-creating value and ensure that

the right stakeholders are incorporated. This process will also highlight any crevasses that are present in current theory application.

What would also be very useful is to in detail map the systems of individual actions to determine the variables of each system and where these systems interact. By doing so social marketers can comprehend matters on a broad scale and therefore design better programmes that foster synergy across multiple programmes.

Research could also be performed from a semiotics perspective to explicitly engage with the actual language each construct speaks and how it could affect people's perception of its actions. This research was undertaken from a social marketing perspective to identify a common language in terms of actions social marketers could use but marketing is not the only discipline that could make a positive contribution to sustainability. Exactly what in the language of sustainability causes misinterpretation and misguidance would further assist in reducing the flexibility of sustainability's language that many use to suit their needs and plans.

9.4 CONCLUSION: RESEARCH OBJECTIVE 1

Research objective: Map the basic nomological networks of sustainable degrowth and sustainable development.

As elements of a basic nomological network (Ackerman *et al.*, 2005; Byrne, 1984: 428; Chapman and Zweig, 2005; Cronbach and Meehl, 1955: 290; Jowett, 2009: 35; Spitzmuller *et al.*, 2008: 106), definitions, antecedents, components, strategies and outcomes from each construct's literature were used to map degrowth and sustainable development's basic nomological networks. Each nomological network element from these constructs were discussed and analysed, providing some insight into the type of language they used, which was then used to obtain Research objective 2. Analyses of the literature on each construct allowed for the development of a visual depiction of the factors internal to a construct i.e. a basic nomological network for each construct consisting of antecedents, components, strategies and outcomes (where applicable).

9.5 CONCLUSION: RESEARCH OBJECTIVE 2

Research objective: Compare the basic networks to identify overlapping areas.

The basic nomological networks mapped in Research Objective 1 were compared in search for harmonies and disparities between the two constructs. Here analyses revealed that the three sustainable development components were represented in the degrowth literature. It also emerged that antecedents were common in some cases, especially in ecology (degrowth and sustainable development) and justice (degrowth) and equity (sustainable development). Sustainable development's overarching strategy was very similar to degrowth's bioeconomics, meaning of life and wellbeing and justice strategies. Outcomes were identical apart from the end-state economy they proposed – degrowth seeking a steady-state economy while sustainable development looking to continue infinitely with a green economy. Thus, a vital outcome was that these two constructs appeared to maintain a fair number of joint features at the basic level. However, it also appeared that each construct's language has been/could be misinterpreted and therefore misguide(d) sustainability. Therefore, whilst they appeared to have similar nomological networks at the fundamental level, a deeper analysis unearthed some principle differences that ultimately impacted on the extent to which certain actions coexisted: the two large debates being sufficiency versus efficiency and blanketed economic growth versus situation-dependant increases or decreases in economic growth. Thus, it appeared that degrowth was a more radical construct (R&D, 2010; Tokic, 2012; van den Bergh, 2011), advocating more fundamental changes. This may explain why it could be misinterpreted and misguide sustainability efforts (e.g. Brownhill *et al.*, 2012; van den Bergh, 2011). Additionally, it emerged that sustainable development, by advocating less fundamental changes, could be misguiding sustainability efforts and only continuing the unsustainable conditions currently experienced (Robinson, 2004: 371).

9.6 CONCLUSION: RESEARCH OBJECTIVE 3

Research objective: Identify proposed actions common to both constructs that can be used within a social marketing framework.

A major contributor to this research objective was mapping degrowth's ecological and social sustainability nomological networks, which formed a deductive checklist for searching for sustainable development's actions. Furthermore, each action was pre-evaluated according to whether it met certain social marketing criteria: to influence behaviours using upstream, midstream and/or downstream measures that benefit individuals, groups and/or society as a whole. Caps and taxes, transforming food systems, voluntary simplicity/sustainable consumption, ecovillages, renewable energy and changing employment emerged as common actions, which were then compared in more detail. A key conclusion here was that due to their differences in content, some actions showed promising overlap while others did not.

9.7 CONCLUSION: RESEARCH OBJECTIVE 4

Research objective: Make recommendations for social marketing programmes for the common actions guided by the theories underpinning social marketing.

To achieve this research objective, the different theories underpinning social marketing were summarised and applied to the common actions identified in Research objective 3. From this application, guidelines were put forward on how social marketers could go about reducing misinterpretation and misguidance and how to design better social marketing programmes using the overlapping content from the previously identified common actions. As a result, aspects of the languages of each construct a simpler language of specific actions could be recommended that could be used in social marketing programmes to better achieve sustainability. A vital conclusion here was that some actions and their language were more utilisable than others. Also noticeable was that some actions cater for both social and ecological sustainability, while others only address either ecological or social sustainability outcomes. In descending order of importance were recommendations for ecovillages, transforming food systems, renewable energy and taxes, as those that offered the greatest commonality between the constructs of degrowth and sustainable development and thus constituted a common and thus simplified language. They also met the social marketing theory criteria of being able to facilitate exchanges within certain relationships and networks that benefit individuals, groups and/or society and thus improve the probability of reaching sustainability, so as to ensure society's wellbeing.

9.8 CONCLUSION: RESEARCH OBJECTIVE 5

Research objective: Analyse existing social marketing processes and if necessary develop an appropriate social marketing process specifically intended for social marketers to tackle the sustainability challenge.

As several social marketing planning processes exist, this research objective's goal was to identify or develop the most appropriate one possible to reverse unsustainability. To achieve this, planning processes needed to show that they could – at some stage of the planning process – cater to all of the theories underpinning social marketing: first a foremost whether they could engender critical thinking; thereafter whether they had the capacity to instil systems thinking, value co-creation and relational thinking into programme development. It was discovered that many planning processes lack the capacity to champion critical thinking, and only one process explicitly mentions systems thinking. However, even the most favourable process for sustainability lacked the full social marketing theory arsenal and therefore additions were made according to each of the four paradigms underpinning social marketing.

9.9 CONCLUSION TO THE DISSERTATION

It is well documented that at the current rate, the earth, society and the economy cannot be infinitely sustained and a movement towards sustainability needs to be executed (R&D, 2010; Starke, 2013; UN, 2012, 2015; UNEP, 2011). But what exactly is sustainability and how can we go about achieving it? How can social marketers tasked with changing behaviours in favour of sustainability achieve this objective? Sustainability proves to be a complicated concept (Engelman, 2013; Waas *et al.*, 2011). The literature is rife with varying interpretations and paradoxes (Jabareen, 2008: 181). The proliferation of the concept and its ambiguities has led to its broad misuse (Christen and Schmidt, 2012; Engelman, 2013; Robinson 2004). Thus, sustainability is a thorny and convoluted topic to which several research areas provide intellectual input. Two of these research areas are sustainable development and degrowth.

Grounded in sustainability's perplexing territory, and utilising a social marketing lens, the central idea in this dissertation was discovering a language consisting of a set of

actions that social marketers could use to underwrite programmes to influence behaviours towards sustainable ends. By analysing the intricate subject matter of these two constructs in the sustainability paradigm, it emerged that, although dissimilar in some instances, collective elements between actions existed. Scrutinising the elements of each of their nomological networks and applying the actions to the social marketing theory determined how their commonalities could be used to minimise misinterpretation and misguidance and develop more effective social marketing interventions. Thus, based on the overlapping nomological networks and intersecting actions, a set of actions (considered the common and simplified language on which social marketing programmes to increase the probability of realising sustainability could be based) was proposed. Social marketers tackling the challenge of sustainability are thus recommended to begin with these actions as they are considered the foundations for social marketing programmes that are least likely to be misinterpreted and misguide efforts, and therefore more likely to succeed in creating a more sustainable planet and society.

In the opening analogy two doctors put forward some progressive and complex treatments on how to treat the patient's cancer. Finding the overlaps between each doctor's prescribed treatment and looking at them in more detail determined where they intersect and to what extent. Through this, the patient gained a better understanding of and simplified a sophisticated medical jargon, which lowers the likelihood of the patient misinterpreting and misguiding their treatment. The commonalities in the prescribed treatments therefore provided some common ground on which the patient can base their cancer-beating treatment on.

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APPENDICES

APPENDIX 1: ETHICAL CLEARANCE



08 December 2016

Mr Harry Beachcroft-Shaw (205511775)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Mr Beachcroft-Shaw,

Protocol reference number: HSS/2111/016D (Linked to HSS/0797/014M)

Project title: Mapping the Nomological Networks of Sustainability Constructs as Foundations for Social Marketing Programmes

Full Approval – No Risk / Exempt Application

In response to your application received on 07 December 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor Debbie Vigar-Ellis
Cc Academic Leader Research: Dr Maxwell Phiri
Cc School Administrator: Ms Debbie Cunyngame

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APPENDIX 2: DETAILED ANALYSES OF ACTIONS FOUND IN THE DEGROWTH CONSTRUCT

Since fully-fledged analyses would have been too cumbersome to include in the analysis chapter, this appendix contains a detailed analysis of the actions that were collected from the degrowth literature and presented as a summary in **Error! Reference source not found.** The analyses below represent the link between an action and the elements of a nomological network by threading it backwards through the nomological network i.e. linking an action to outcomes, strategies and antecedents. Within these links, each action's content becomes apparent and therefore makes for structured comparisons with the analyses of similar sustainable development actions, which are provided in Appendix 3.

In general, these analyses made mapping degrowth's more detailed nomological networks possible. They also provided a list of actions that were deductively searched for in the sustainable development literature. Attention must be given to the fact that these actions are not necessarily implemented by a degrowth organisation, political party, etc. These are purely practical applications of certain degrowth concepts that validate the possibility of achieving degrowth and sustainability.

Precise justification of the possible impact these actions may have on sustainability is provided by Videira *et al.*'s (2014) Causal Loop Diagrams (CLDs), which depict a set of variables and their hypothetical impact on ecological, economic and social sustainability. These variables are discussed in relation to actions functioning under degrowth that could lead to ecological and social sustainability. Starting with ecological sustainability.

Degrowth actions for ecological sustainability

Caps and taxes

Caps and taxes are policies that ration and tax resources respectively (Alcott, 2010: 552; Daly, 1977: 61). By capping resource extraction and/or taxing substances high enough to limit their consumption, caps and/or taxes are seen as crucial actions that can adequately right-size the economy via non-technical operations (Alcott, 2010: 553; Daly, 1977: 61-62; Jackson, 2009: 173; Spangenberg, 2010: 564; Videira *et al.*, 2014:

67). Before continuing, the reader is reminded of upstream and downstream strategies need clarification. “Upstream influences on behaviour change are external factors such as legislation, policy or environmental factors that may facilitate, or act as barriers to, desired behaviour change” (Eagle *et al.*, 2013: 68). Downstream strategies focus on voluntary behaviour change (Andreasen, 1994: 111; Hoek and Jones, 2011: 32; Kotler *et al.*, 2002: 5).

Link to outcome

Caps and taxes could influence behaviours in an environmentally sustainable direction (Alcott, 2010: 553; Constanza *et al.*, 2013: 259; Jackson, 2009: 173; Spangenberg, 2010: 564; van den Bergh, 2011: 883; Videira *et al.*, 2014: 67) with the overall goal of depreciating economic throughputs until an environmentally sustainable medium is reached (Spangenberg, 2010: 566). Caps and taxes could “reduce throughput and manage a stable adaptation to a smaller economy” (Kallis, 2011: 876) and therefore lead to ecological sustainability.

Link to strategies

By capping resource extraction and/or taxing substances high enough to limit their consumption, caps and/or taxes are seen as crucial actions that can influence behaviours to adequately right-size the economy via non-technical operations (Alcott, 2010: 553; Daly, 1977: 61-62; Jackson, 2009: 173; Spangenberg, 2010: 564; Videira *et al.*, 2014: 67).

Link to antecedents

Alcott (2013) cites the technology, growth and the rebound effect or Jevons Paradox antecedent as a primary driver for introducing caps and taxes. The underlying reason for Alcott’s (2013) inclination towards capping and taxing is that other downstream strategies produce rebounds that render them ineffective (Alcott, 2010: 558). For example, “reductions in one factor can result in compensatory increases in others, perhaps leaving Impact²⁸ even untouched” (Alcott, 2010: 559). Looking more closely

²⁸ In the context of his action Impact “means carbon-based energy resource depletion with ensuing emissions” (Alcott, 2010: 552).

at rebounds, it is shown that since the 1980s “[e]nergy efficiency and energy consumption rise in lock step” (Alcott, 2010: 559). Therefore, due to the size of the socio-economic system, absolute decoupling has not taken place (Alcott, 2010: 559), as has also been suggested by Jackson (2009: 79). In addition, the plethora of downstream strategies can become complicated, difficult to coordinate and costly, and therefore could be ineffective and/or produce rebounds (Alcott, 2010: 559). Impact caps on the other hand, “cannot, by definition, rebound” (Alcott, 2010: 559). This is because impact caps are developed to directly affect an outcome through policies, laws etc. Exceeding limitations is another antecedent offered by several authors that is linked to caps and taxes (e.g. Constanza *et al.*, 2013: 252; Daly, 1977: 51-52; Jackson, 2009: 173; Kallis; 2011: 875; Latouche, 2010a: 73).

Specific actions

Caps and Pigouvian taxes

Introducing caps and Pigouvian taxes at the institutional level could reduce Impact (Alcott, 2010: 559). Alcott (2010) offers the following schemes that would influence behaviours:

- “1) Reduction of carbon-based energy resource production, i.e. a physically defined cap on harvesting and mining...
- 2) Limiting energy consumption per person (quotas, rations)...
- 3) Reduction of emissions – targeting pollution rather than depletion – through physically defined caps; one example is the ‘Kyoto’ approach with derived country caps.
- 4) Taxes on depletion or emissions high enough to limit consumption of energy inputs to the level perceived to be sustainable (Pigouvian Taxes)” (Alcott, 2010: 553).

In other words, these are taxes that right-size the economy.

Ecological caps

Capping natural resource extraction directly limits the quantity of economic throughput (Alcott, 2010: 556; Daly, 1977: 62; Jackson, 2009: 174; Videira *et al.*, 2014: 67).

Because economic growth requires natural resources, capping said resources would as a result also peg the economy to the amount of available resources i.e. adjust throughput to carrying capacity/right size the economy (Alcott, 2010: 557; Daly, 1977: 62; Videria *et al.*, 2014: 66), determine the upper thresholds of economic growth, increase efficiency (Daly, 1977: 63; Spangenberg, 2010: 564) and directly influence behaviours (Alcott, 2010: 556-557; Sekulova *et al.*, 2013: 5; Videira *et al.*, 2014: 66). For example, there would be less goods available and therefore individuals would have to maximise their wellbeing with what they have i.e. a return to sufficiency. Ecological payoffs from these processes would be limited pollution and a constant stock of resources determined by the cap (Alcott, 2010: 556; Daly, 1977: 64; Spangenberg, 2010: 564). From here, a cap that depreciates until a sustainable medium has been reached is one of the ways to reach a steady-state economy (Daly, 1977: 64; Jackson, 2009: 174; Spangenberg, 2010: 564).

Ecological taxes

Taxes on ecologically harmful substances represent a possible threefold impact: 1) it encourages people to shift behaviours to using less ecologically harmful products or services (Jackson, 2009: 174; Latouche, 2010a: 73); 2) it may limit their production and consumption (Daly, 1977: 62; Videira *et al.*, 2014: 65) and; 3) ecologically harmful processes that are being highly taxed, with their prices arranged accordingly, will have to become very efficient to maintain feasibility (Constanza *et al.*, 2013: 260; Daly, 1977: 62). Taxing at the source of environmental harm would mean that previous externalities are internalised into the price of the product (Constanza *et al.*, 2013: 260; Latouche, 2010a: 73). This would entail price increases for all ecologically degrading products, which may decrease its feasibility and/or consumption (Daly, 1977: 62; Latouche, 2010a: 74; Videira *et al.*, 2014: 65).

Income caps and taxes

Income caps could also be an effective medium to right-size the economy as they limit extreme consumption (Alexander, 2011: 217-218), decrease the will to accumulate (Videira *et al.*, 2014: 65) and redistribute private property ownership (Daly, 1977: 54), which also leads to higher resource use (Johanisova *et al.*, 2013; van Griethuysen, 2010, 2012). Overhauling income tax structures could narrow social inequalities, which is a

prime driver of positional consumption²⁹ that underwrites higher resource and energy use (Bonaiuti, 2012b: 42; Jackson, 2009: 181).

Models

Modelling a degrowth scenario, it is proposed that, among other factors, carbon taxes could assist in decreasing Greenhouse Gas (GHG) emissions and the scale of the economy (Victor, 2012: 211-212). And because scale correlates to entropy and therefore non-regenerative resource and energy use (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 171; Jackson, 2009: 15; Latouche, 2010: 520), carbon taxes could improve environmental conditions (Videira *et al.*, 2014: 67).

Supporting evidence

Caps

To demonstrate that caps can increase ecological sustainability, Alcott (2010) refers to three pieces of evidence:

1. the Swiss Forest Law of 1876, which simply forbids the number of trees to decrease below a certain threshold i.e. a cap exists (Alcott, 2010: 556);
2. in wartime Britain, when consumption caps achieved a 95% drop in the use of motor vehicles, a 16% decrease in overall consumption and an 86% decrease in household electrical appliance use (Simms, 2005 cited in Alcott, 2010: 557) and;
3. water extraction caps to protect aquifer levels in certain regions (Alcott, 2010: 556).

Plastic bag tax

In the form of taxes, a 15 Euro cent tax on plastic bags in Ireland decreased the use of the plastic bags by 90% thereby significantly influencing behaviours (Convery, McDonnell and Ferreira, 2007: 1).

²⁹ Positional consumption refers to people's desire to consume scarce goods (Bonaiuti, 2012b: 42; Jackson, 2009: 181).

Therefore, in line with a degrowth outcome, implementing caps and taxes has obtained positive environmental outcomes by means of influencing behaviours. It can thus be incorporated into degrowth's ecological sustainability nomological network.

Cuba and caps

Perhaps the only real-life large-scale empirical evidence of degrowth exists in Cuba's transition period. Up until Cuba's economic crisis the country relied heavily on imports and exports derived from monocultures (Borowy, 2013: 18) i.e. a growing socio-economic system using resources in excess of local supply. After the crisis, and a 30% drop in Gross Domestic Product (GDP), Cuba had to make structural changes that drastically decreased resource use and consumption in line with an environmentally sustainable economy (Borowy, 2013: 24) i.e. right-sizing the economy to national carrying capacity and using non-technical solutions to decrease entropy. Caps were administered through policy changes that included a shift to organic and semi-organic agriculture, which resulted in, among other things, locally produced food and the use of fewer fossil fuels and ecologically harmful substances (Borowy, 2013: 22). Other behaviours that were influenced by government promotion included using non-mechanical means of transport and farming, which also decreased the amount of fossil fuel burned (Borowy, 2013: 24). On the whole, Cuba, albeit from an external resource cap, realised a shift to a more environmentally sustainable society while ensuring high levels of wellbeing (Borowy, 2013: 24).

To analyse and summarise this section, it is clear that caps and taxes, and more specifically Pigouvian taxes, ecological caps and income caps and taxes are non-technical solutions that can theoretically reduce entropy. Furthermore, supporting evidence from Alcott (2010), Convery *et al.* (2007) and Borowy (2013) substantiated the practical effectiveness of some of these theoretical actions with a degrowth outcome. It was also showed that influencing behaviours were at the heart of these outcomes. Therefore, because it links with the elements of degrowth's nomological network and can influence behaviours to positive ecological ends, caps and taxes and its supporting evidence are included in degrowth's ecological sustainability nomological network.

Cohousing

“Cohousing communities are neighbourhood developments that creatively mix private and common dwellings to recreate a sense of community, while preserving a high degree of individual privacy” (Lietaert, 2010: 576).

Link to outcome

Entrenching environmentally positive behaviours within cohousing projects is seen as an action to reduce entropy within a certain social unit (Lietaert, 2010: 580). Decreasing resource and energy use are two variables that could contribute to ecological sustainability (Videira *et al.*, 2014: 66). Therefore, cohousing could help in attaining ecological sustainability (Videira *et al.*, 2014: 66).

Link to strategies

Because cohousers are predominantly geared towards more environmentally positive behaviours (Lietaert, 2010: 579), cohousing as an action can lead to developing a culture of ecology (Videira *et al.*, 2014: 66). Additionally, since many energy- and resource-intensive items are shared amongst the community, cohousing leads to sharing resources and acts as a catalyst for environmentally sustainable behaviours (Lietaert, 2010: 580). Therefore, cohousing can help to reduce entropy and right-size the economy with non-technical solutions. Put frankly by the author, “cohousing is a constructive step towards degrowth at the family and neighbourhood level” (Lietaert, 2010: 580).

Link to antecedents

Current lifestyles are among other things “[e]nvironmentally damaging” (Lietaert, 2010: 580). Hyper-individualism and the social breakdown of society, underwritten by the advent of capitalism and growth, cause people to intensify consumption, which is linked to environmental exploitation (Lietaert, 2010: 578). Therefore, development, culture and ecology is the antecedent Lietaert (2010: 580) refers to.

Supporting evidence

To justify the environmental benefits of cohousing, Lietaert (2010) cites Williams (2007), whose research shows that cohousing halves CO² emissions; and Meltzer

(2005), who claims that sustainable consumption patterns are reinforced within the cohousing community. Furthermore, according to Lietaert's (2010: 578) research, cohousers share many items including appliances, clothes, small items and cars, and they cycle more. However, from his research, Lietaert observed that cohousing does not make a community focused on improving the environment (Lietaert, 2010: 579) i.e. it depends on those in the community. "Yet a trend which is clearly visible is that the new generation of cohousing communities, built around 2000, compared to those in the 1970s, are on average much more oriented towards green building and lifestyles" (Lietaert, 2010: 579).

This section shows that cohousing as a theoretical action can influence behaviours to achieve ecological sustainability by developing a culture of ecology and non-technically assist in reducing entropy and right-sizing the economy. Supporting evidence justified the theoretical outcomes showing that cohousing projects are ecologically more sustainable. Therefore, since cohousing is connected with degrowth's antecedents, outcomes and strategies and can influence behaviours towards environmentally positive outcomes, cohousing and its supporting evidence can be included in degrowth's ecological sustainability nomological network.

Ecological rights

Ecological rights are constitutionally enforced rights that protect nature and regulate how people use natural resources (Cullinan, 2010: 143; MacDonald, 2012: 168), for example leaving resources in the ground (Demaria *et al.*, 2013: 209; Martinez-Alier, 2012: 66).

Link to outcomes

Ecological rights could positively influence the many variables that impact ecological sustainability such as by reducing pollution, soil erosion, monocultures, consumption of natural resources, energy use, farming methods, deforestation, international trade etc. (Videira *et al.*, 2014: 66).

Link to strategies

Installing ecological rights would regulate how people use natural resources (Cullinan,

2010: 143; MacDonald, 2012: 168) for example leaving resources in the ground (Demaria *et al.*, 2013: 209; Martinez-Alier, 2012: 66) and thus help reduce entropy to return to one-planet living and a right-sized economy (Demaria *et al.*, 2013: 196; GARN, 2015: paragraph 1). Additionally, ecological rights could rekindle our relationship with nature and develop a benign sense of “respect and coevolution” (Flipo, 2008: 27) i.e. lead to a culture of ecology.

Link to antecedents

Authors cite most of the antecedents from ecology and bioeconomics components as reasons for introducing ecological rights (e.g. Bauhardt, 2014: 62; Fournier, 2008: 531; Latouche, 2010b: 520; Princen, 2010: 3; Rockström *et al.*, 2009; Sekulova *et al.*, 2013: 5).

Supporting evidence

Spearheaded by environmental justice movements, Rights of Nature were introduced in Ecuador’s constitution to protect its ecosystems (Flavin, 2010: xviii; Martinez-Alier, 2012: 66). Since its introduction in 2008, it ruled in favour of ecosystems in 2011 and ordered for environmental repairs (GARN, 2015: paragraph 6). Together with the rights of nature, *sumak kawsay* (living well), which was also officially introduced into Ecuador’s constitution (Kallis *et al.*, 2012: 178; Martinez-Alier *et al.*, 2010: 1744; Martinez-Alier, 2012: 66), officially touts wellbeing as an intended outcome of life when economic growth is not the primary *modus operandi* (Martinez-Alier, 2012: 66).

From the literature and supporting evidence above, it is noticeable that ecological rights as a theoretical and implemented action maintains the capacity to influence behaviours towards more ecologically sustainable outcomes. Furthermore, since it is connected to degrowth’s outcome, strategies and antecedents, ecological rights is placed into degrowth’s nomological network for ecological sustainability.

Changing employment: job sharing, decreasing working time, increasing unpaid work and the job guarantee

Degrowth foresees job sharing, decreasing working time and shifts in labour from the paid to the unpaid sector (Andreoni and Galmarini, 2013: 67-68; Assadourian, 2012:

31; Jackson, 2009: 180; Kallis, 2013: 95; Latouche, 2010: 38). Unpaid work is defined as not-for-profit activities (Nierling, 2012: 240) that create output primarily “driven by love and other affections” (Nørgård, 2013: 63).

Link to outcome

Creating policies and influencing behaviours that increase unpaid work, decrease working time and share jobs could have positive environmental impacts that could help achieve ecological sustainability (Assadourian, 2012: 31; D’Alisa and Cattaneo, 2013: 72; Knight *et al.*, 2013: 698; Nørgård, 2013: 61; Pullinger, 2014: 12-14, Videira *et al.*, 2014: 66).

Link to strategies

“[W]orking less in the paid sector now will lead to a shift of values and perceptions” (Kallis, 2013: 96) that is in line with developing a culture of ecology with values beyond economic growth (D’Alisa and Cattaneo, 2013: 78; Kallis, 2013: 96; Nierling, 2012: 245). Additionally, increasing unpaid work, decreasing working time and sharing jobs could decrease entropy, and it is therefore a non-technical solution that right-size the economy (Assadourian, 2012: 31; D’Alisa and Cattaneo, 2013: 72; Knight *et al.*, 2013: 698; Nørgård, 2013: 61; Pullinger, 2014: 12-14, Videira *et al.*, 2014: 66).

Link to antecedents

The quest for economic growth caused an increase in the commodification/monetisation of unpaid work, which produced a ripple effect in increase in energy use (Cogoy, 1995 cited in D’Alisa and Cattaneo, 2013: 72; Nørgård, 2013: 67). Furthermore, more working time, and therefore income, corresponds with higher consumption levels (Nørgård, 2013: 67; Pullinger, 2014: 12-14). Along these lines, Knight *et al.* (2013: 694) identify two contributors to ecological pressures: scale and composition. Scale refers to the size of the economy, which denotes that more work equals more economic throughput i.e. increased entropy through the growth of socio-economic systems (Knight *et al.*, 2013: 694; Pullinger, 2014: 14). Composition on the other hand looks at the allocation of time and resources as contributors to increased entropy, for example people with less time and more money consume “relatively more environmentally harmful goods and services” (Knight *et al.*, 2013: 694). Therefore,

development, growth and commodification and neoclassical and neoliberal economics and the growth of systems are two antecedents degrowth authors pin to the reasons why job sharing and unpaid work are proposed (e.g. Knight *et al.*, 2013: 694; Nørgård, 2013: 67; Pullinger, 2014: 14).

Models

Hypothetical analyses predict that North Americans could minimise their energy consumption by as much as 20% if they were to embrace European working times (Rosnick and Weisbrot, 2006 cited in Nørgård, 2013: 67). Moreover, models of a degrowth scenario explain that, among other aspects, less working time and sharing jobs could assist in diminishing GHG emissions and the scale of the economy (Victor, 2012: 211-212). Further models display that a more balanced combination of reciprocity (unpaid) and market (paid) work can lower environmental pressure (Andreoni and Galmarini, 2014).

Supporting evidence

Using data from 1990 to 2010, D’Alisa and Cattaneo (2013: 76) provide evidence that energy demand increased as a result of decreased unpaid working hours due to qualitative changes at the household level, such as single households and single parent families, and an increase in the use of appliances. D’Alisa and Cattaneo (2013: 76) also illustrate that unpaid work at home uses less energy than if these services were delivered by service and government sectors. In another study, which was a cross-national analysis of well-developed OECD countries that looked at data taken from 1970–2007, Knight *et al.* (2013: 698) find that increased working time produces a larger ecological footprint, “which is a more comprehensive measure of environmental demands and impact”. When researching Swedish work-time habits, Nässén *et al.*, (2009 cited in Nørgård, 2013: 67) uncovered that a ten per cent reduction in working time instigated an eight per cent decrease in energy consumption. The authors name lower incomes as the primary driver of lower consumption (Nässén *et al.*, 2009 cited in Nørgård, 2013: 67). This link is further illustrated by other studies (e.g. Devetter and Rousseau, 2011; Nässén and Larsson, 2010; Pullinger, 2011 cited in Pullinger, 2014: 11). Researching Dutch and Belgian systems, Pullinger (2014: 18) found that flexible working time

policies taking worker preferences into account lead to environmental benefits (Pullinger, 2014: 18).

In general, these studies show that increased working time has negative ecological effects, that reduced working time/increasing unpaid work has positive ecological effects and that lower incomes, which would be a result of job sharing, also has positive ecological payoffs. Thus, it is incorporated into the ecological sustainability nomological network for degrowth.

An analysis and summary of this degrowth action reveals that influencing behaviours to increase unpaid work, decrease paid work and share jobs could theoretically improve the chances of attaining ecological sustainability. Non-technical in nature and with the ability to reduce entropy and right-size the economy, this action was linked to ecology and bioeconomics's strategy. Lastly, supporting evidence proved that this action can achieve improved ecological conditions. By being able to work backwards through degrowth's basic nomological network and having the ability to influence behaviours with positive ecological outcomes, job sharing, decreasing working time and increasing unpaid work, as well as its supporting evidence, is an action that is included in degrowth's ecological sustainability nomological network.

Voluntary simplicity

Focusing only on the environmental properties, voluntary simplicity is "a social movement made up of people who are resisting high consumption lifestyles" (Alexander and Ussher, 2012: 66) by actively opposing the global model of consumerism and 'downshifting' material consumption (Alexander, 2013: 2; Andrews and Urbanska, 2010: 178). "Above all, [voluntary simplicity] is a challenge to the dominant philosophy about money found in most societies" (Andrews and Urbanska, 2010: 178). Other terms that are often substituted for voluntary simplicity are downshifting or simpler living (e.g. Alexander, 2011: 186; Hamilton and Mail, 2003: 6; Trainer, 2012).

Link to outcome

Voluntary simplicity was proposed in response to individual requests for practising degrowth (Baykan, 2007: 517). Additionally, (environmental) voluntary simplicity implies consuming less (Alexander and Ussher, 2012: 66-67; Hamilton and Mail, 2003: vii) and devoting time to less resource-intensive activities (Alexander, 2011; Hamilton, 2003; Jackson, 2009; Trainer, 2012). Therefore, behaviours like these could benefit the environment and help achieve ecological sustainability (Videira *et al.*, 2014: 66).

Link to strategies

Less consumption equals decreasing entropy and right-sizing the economy (Demaria *et al.*, 2013: 202; Hamilton and Mail, 2003: vii). Individuals also seek alternative living means on the periphery of consumerism (Alexander, 2013: 2; Alexander and Ussher, 2012: 66-67; Hamilton and Mail, 2003: vii) and therefore contribute to shifting society's perception away from the dominant growth dimension to a culture of ecology (Andrews and Urbanska, 2010: 178; Cattaneo and Gavalda, 2010: 588).

With the capacity to revolutionise laws and policy, voluntary simplicity could also change the rules of the system from the bottom up (Alexander, 2013: 3; Cattaneo and Gavalda, 2010: 588). “[T]he basic argument is that if legal concepts are ‘social constructs’, then social movements can be understood as a mechanism through which legal concepts are socially constructed and reconstructed” (Alexander, 2013: 3).

Link to antecedents

Antecedents to this action are exceeding limitations, development, culture and ecology, technology, growth and the rebound effect and neoclassical and neoliberal economics and the growth of systems (Alexander and Ussher, 2012: 67-68; Alexander *et al.*, 2012: ii; van Griethuysen, 2010: 590; Hamilton and Mail, 2003: vii; Jackson, 2009: 15; Kallis, 2011, 874; Martinez-Alier, 2012: 64; R&D, 2010: 523; Schneider *et al.*, 2010: 516).

Models

To find an optimal degrowth level, Bilancini and D'Alessandro (2012: 202) developed a model that found that investment in leisure time and wellbeing needs to be much higher than consumption and production activities. Increased leisure time triggers,

among other things, fewer production and consumption activities (Bilancini and D'Alessandro, 2012: 202).

Supporting evidence

Rurban squatting as a form of voluntary simplicity

Rurban (on the fringe of rural and urban areas) squatting provides practical implications for degrowth and demonstrates how it is possible to live well within a low intensity economy (Cattaneo and Gavalda, 2010: 581). They are seen as “socio-political projects as an alternative to growth capitalism and to representative democracy” (Cattaneo and Gavalda, 2010: 583).

Through participant observation, ethnographic observation, auto-ethnographic observation and metabolic profiling at two rurban squats, which together housed 40 individuals, Cattaneo and Gavalda, (2010: 584) documented the following ecological findings: fewer material objects were consumed; renewable energy was employed; overall energy consumption was less than urban areas and; permaculture techniques were adopted, which increased sustainability and closed energy and matter cycles to convert waste into resources. Overall, consumption totalled “far below [Catalan] society’s average” (Cattaneo and Gavalda, 2010: 587).

Thus, changes in behaviour translated into decreasing entropy and thus a step towards ecological sustainability. Furthermore, by being directly linked to the natural resources on which they depend, rurban squatters likely have developed a culture of ecology (Cattaneo and Gavalda, 2010: 588). It can therefore be included in the nomological network for ecological sustainability via degrowth.

Ecovillages³⁰

Voluntarily simplifying within the degrowth tradition manifests itself in ecovillages (Demaria *et al.*, 2013: 202). Astutely simplifying to a level of sufficiency while efficiently using resources can provide ample ecological advantages, such as those exemplified by the Findhorn Ecovillage whose ecological footprint is less than half of

³⁰ Ecovillages will be discussed in more detail later on in this section.

the United Kingdom's average – “the lowest ever measured for any settlement in the industrialised world” (Dawson, 2009: 26). Sherry's (2014: 186-187) analysis of 3 ecovillages in the United States of America revealed a reduction in ecological footprints of between 51% and 66% when compared with similar communities; and between 61% and 66% relative to the national average. Boyer (2016) finds that residents in the Dancing Rabbit ecovillage less than 10% of the resources the average American consumes.

This evidence shows that voluntary simplifiers behave in ways that have positive ecological outcomes in ecological sustainability's direction. Furthermore, the action has been linked to elements of degrowth's basic nomological network and can therefore be included in ecological sustainability's nomological network for degrowth.

(Re)localising economies

In environmental terms, relocalising economies is centred on decreasing resource use through forming self-sufficient communities and narrowing the distance between production and consumption (Andreoni and Galmarini, 2013: 67; Curtis, 2003; Fournier, 2008: 538; Latouche, 2010a: 37; Trainer, 2012: 594-5). Geographically this can be thought of in terms of a specific bioregion (Curtis, 2003: 86; Latouche, 2010a: 50) towns (Trainer, 2012: 595; Transition Network, 2014) or country (Demaria *et al.*, 2013: 205), and depends on a web of intricately strung situational variables (Andreoni and Galmarini, 2013: 67), for example natural resources, socio-cultural environment and skills.

Link to outcome

The action to (re)localise economies in order to realise ecological sustainability is liberally referred to within degrowth scholarship (e.g. Andreoni and Galmarini, 2013; Curtis, 2003; Johannisova *et al.*, 2013; Kallis, 2011; Kallis and Norgaard, 2010; Latouche, 2010a; Trainer 2012).

Link to strategies

This action is linked to ecology and bioeconomics strategies. The projected ecological payoffs from behaviours favouring (re)localisation are: generally, the basis of a

sufficient, right-sized economy³¹ and; more specifically, a subdued biophysical impact and reduced throughput by means of less transport and consumption of resource- and energy-intensive globalised goods (Andreoni and Galmarini, 2013: 67; Curtis, 2003: 85; Kallis and Norgaard, 2010: 693; Latouche, 2010: 38; Trainer, 2012: 594-595). Converse to a global economy, a localised economy is one that places great importance on the ecological impact of economic systems (Curtis, 2003: 85-86; Latouche, 2010a: 50; Trainer, 2012: 595), on which the economy ultimately depends (Cattaneo and Gavalda, 2010: 582; Common and Stagl, 2005: 9; Costanza, Alperovitz, Daly, Farley, Franco, Jackson, Kubiszewski, Schor, and Victor, 2013: 242; Daly, 1977: 18; Latouche, 2010a: 50; Nørgård, 2013: 62; Kosoy *et al.*, 2012: 78). Consequently, socio-economic systems of this nature will probably not reverse economic growth (Johanisova and Wolf, 2012: 565; Johanisova *et al.*, 2013: 10-11; Trainer, 2012: 595) and therefore linked to a culture of ecology as a strategy (Johanisova and Wolf, 2012: 565; Johanisova *et al.*, 2013: 10-11; Trainer, 2012: 595).

Link to antecedents

Authors refer to development, culture and ecology, exceeding limitations, neoclassical and neoliberal economics and the growth of systems and economic growth, development and injustice to (re)localising economies (Alexander, 2011: 242; Boillat *et al.*, 2012: 600-601; Bonaiuti, 2010: 181, 2012a: 528; Curtis, 2003: 91; Deriu, 2012: 556; Johanisova *et al.*, 2013: 8; Johanisova and Wolf, 2012: 563; Kallis and Norgaard, 2010: 693-694; Latouche, 2010a: 69; Martinez-Alier *et al.*, 2010: 1741; Trainer, 2012: 594-595; Videira *et al.*, 2014: 66).

The internationalisation of markets as a by-product of the commitment to development and economic growth has paved the way for the massive circulation of goods, which has inflicted untold ecological harm related to exceeding limitations (Bonaiuti, 2010: 181; Curtis, 2003: 91; Kallis and Norgaard, 2010: 693-694; Latouche, 2010a: 69; Martinez-Alier *et al.*, 2010: 1741; Trainer, 2012: 594-595; Videira *et al.*, 2014: 66).

³¹ This type of economy is embodied in the subsidiary production principal, which refers to a local rather than global distribution network (Andreoni and Galmarini, 2013: 67).

Such a process has amassed a huge ecological debt: the repatriation of ecological degradation in terms of entropy³² (energy, natural resources and waste) created as a result of developed nations exploitation of developing nations (Latouche, 2010a: 37). Furthermore, globalisation has been the catalyst for large transnational companies to develop, which firstly exert major influence over national governments (Alexander, 2011: 242; Boillat *et al.*, 2012: 600-60; 532; Deriu, 2012: 556; Johanisova and Wolf, 2012: 563) and secondly, because of the latter, overexploit the natural capital of certain countries to create profits (Bonaiuti, 2012a: 528; Johanisova *et al.*, 2013: 8). Therefore, these authors relate to the development, culture and ecology, exceeding limitations, neoclassical and neoliberal economics and the growth of systems and economic growth, development and injustice antecedents.

Specific actions

Local currencies

Local currencies are defined as “alternatives or complements to legal tender money that are mostly created by civil society and sometimes by public authorities, and that circulate in a more limited space than conventional money” (Dittmer, 2013: 3-4). Local currencies are taken as a practical way to achieve relocalisation and therefore maintain its positive ecological outcomes (Curtis, 2003: 88; Latouche, 2010a: 49-50; Transition Towns, 2014: 6).

Thus, because local currencies can influence behaviours that lead to more environmentally sustainable ways of living, and linked to ecological sustainability, it is considered an action in degrowth’s ecological sustainability nomological network.

Supporting evidence

Ecovillages

By localising its economic activity, the Findhorn Ecovillage demonstrates major ecological advantages: an ecological footprint less than half of the United Kingdom’s average – “the lowest ever measured for any settlement in the industriali[s]ed world” (Dawson, 2009: 26).

³² Revisit the section on bioeconomics for a brief explanation of entropy.

An analysis of the cited literature surfaces the links between (re)localising the economy as a behaviour and degrowth's outcomes, strategies and antecedents. Supporting evidence also showed that (re)localising economies has ecological advantages. Therefore, this action and its specific actions and supporting evidence is embraced in degrowth's ecological sustainability nomological network.

Transforming food systems

A food system represents the complete range of variables in an entire food chain from production to consumption, including inputs and outputs at each link i.e. a cradle to grave approach (Infante Amate and Gonzalez de Molina, 2013: 28).

Link to outcome

According to degrowth authors, one of the features of ecological sustainability are food systems that have been transformed according to degrowth standards (Infante Amate and Gonzalez de Molina, 2013: 27; Latouche, 2010a: 47).

Link to strategies

Behaviours influenced through upstream and downstream interventions are purported to be a right-sized economy that obeys the limitations of earth's resources and reduced entropy via non-technical solutions (Infante Amate and Gonzalez de Molina, 2013: 27; Latouche, 2010a: 47).

Link to antecedents

Current food systems especially in the west exceed planetary limitations in terms of ecological footprint (Infante Amate and Gonzalez de Molina, 2013: 28). This has been attributed to an insatiable appetite for resource-intensive foods that typify a western diet, which is constantly promoted to ever-greater portions of the population (Blühdorn and Welsh, 2007: 186; Infante Amate and Gonzalez de Molina, 2013: 28) i.e. a link to the development and uniform cultures antecedent. Exceeding the planet's limitations is also compounded by an expanding population (Andreoni and Galmarini, 2013: 66) and the fact that current systems are also unsustainable in terms of energy use – energy return on energy input (EROI) studies since the 1970s indicate that modern agriculture

consumes more energy than it produces (Martinez-Alier, 2012: 60). Research done in Spain epitomises this: “for each unit of energy available in the form of food, 6 units of energy have been consumed in its production, distribution, transportation and preparation” (Infante Amate and Gonzalez de Molina, 2013: 30). Degrowth also refers to the inability of efficiency improvements to curb total energy and resource use i.e. the technology, growth and rebound effect antecedent (e.g. Infante Amate and Gonzalez de Molina, 2013: 31-2).

Specific actions

Localising/regionalising food systems

Considering the globalised Spanish food system, 17.4% of total consumed energy is used to transport food via lengthy national and international distribution networks (Infante Amate and Gonzalez de Molina, 2013: 31). Localising food systems could reverse these and other ecological negativities (Infante Amate and Gonzalez de Molina, 2013: 32; Latouche, 2010a: 44) and shorten the distance between production and consumption³³ (Andreoni and Galmarini, 2013: 67). This would – in certain worthy cases – decrease transportation, imports and packaging, and subsidiary processes thereof (Andreoni and Galmarini, 2013: 67; Infante Amate and Gonzalez de Molina, 2013: 32). Additionally, localising means reverting to seasonal consumption and promoting small-scale production (Infante Amate and Gonzalez de Molina, 2013; Latouche, 2010a).

However, Andreoni and Galmarini (2013: 67) comment that environmental impacts must be considered holistically, as producing something locally doesn’t necessarily imply ecological superiority. Thus, it is considered that some goods that people demand will still need to be imported or exported.

Organic food

“We think that only a shift towards organic farming (and corresponding changes in consumption patterns) can contribute to substantial reductions of resource use in the

³³ The subsidiary production principle is a term used to describe shortening the distance between producers and consumers (Andreoni and Galmarini, 2013: 67).

food system” (Infante Amate and Gonzalez de Molina, 2013: 32). Positive ecological outcomes related to organic farming include minimising fossil fuels, toxic compounds and biodiversity loss (Infante Amate and Gonzalez de Molina, 2013: 32). Corresponding changes the authors mention are referred to in the forthcoming paragraphs.

Less meat and more vegetables

There is agreement that developed countries should have a more vegetarian diet constituting less meat, due to its ecological burden, and more vegetables, which is better for the environment (Infante Amate and Gonzalez de Molina, 2013: 32).

Supporting evidence

Localising food systems

A promising smaller-scale initiative on localised food production is a permaculture³⁴ farm set up in an almost non-farmable desert in the Jordan valley that sustainably produced a wide range of products not normally grown in the region (Bates and Hemenway, 2010: 52).

Reverting again to Cuba for data on large-scale implementation of agricultural degrowth, the country proved that structural and behavioural changes, such as switching to organic and semi-organic farming methods and low import and low input agriculture yielded positive environmental results (Boillat *et al.*, 2012: 603).

Organic

Research on organic farming practices clearly demonstrates its far-reaching ecological benefits. Consider this passage:

“Higher biodiversity is seen in plants, earthworm, and arthropod populations (30 percent more species, 50 percent higher abundance), water and air quality

³⁴ “A contraction of ‘permanent agriculture’...[that] refers to a systems approach for designing human ecologies ... that mimics the relationships found in natural biomes (Mollison and Holmgren, 1978 cited in Bates and Hemenway, 2010: 52).

is shown to be better, lower greenhouse gas emissions, less energy use, less soil erosion, higher soil organic matter content and stocks as well as biologically more active soils. Organic farming avoids chemical/synthetic inputs (herbicides, pesticides, and synthetic fertilizers) and allows only a limited use of veterinary pharmaceutical products. These bans immediately and greatly reduce adverse environmental impacts” (Jawtusich, Oehen and Niggli, 2011: 89).

Not only does organic farming promote biodiversity, provide environmental benefits and use less toxic compounds and energy, it can also sequester huge amounts of carbon (from fossil fuels and greenhouse gas (GHG) emissions) – about 4,118 kilograms per hectare per year according to Hepperly (2003 cited in Bates and Hemenway, 2010: 51). Per acre, carbon sequestering of this magnitude equates to the GHG emissions of driving 16,000 km (EPA, 2015).

Less meat and more vegetables

Studies from Finland and Switzerland present data indicating that households eating less meat and more (organic) vegetables have a lower environmental impact (EEA, 2012: 18). This comes as no surprise considering that within the food sector meat and meat products have the highest environmental impact (Tukker *et al.*, 2006: 15). According to Infante Amate and Gonzalez de Molina (2013: 32) cooking vegetables is up to 70 times cheaper (in energy use) than meat products.

One example that supports an integration of all the above-mentioned sections is Findhorn’s Ecovillage. Operating on the principle of sufficiency and efficiency, eating a local, seasonal and organic vegetarian diet culminated in a food ecological footprint 33% of the UK average (Dawson, 2009: 27).

Transforming food systems has been connected to degrowth’s outcome, strategies and antecedents. It also has the power to influence behaviours. Therefore, it can be incorporated into the ecological sustainability nomological network.

Remodelling property: Legally redefining property rights

Legally redefining property rights entails altering the way property is owned and managed (van Griethuysen, 2010).

Link to outcomes

Legally redefining property laws, and subsequently swaying behaviours, to subvert economic growth to environmental concerns could constrain ecological exploitation and the growth of socio-economic systems i.e. lead to an ecologically sustainable society (Deriu, 2012: 559; van Griethuysen, 2010: 592; van Griethuysen, 2012: 265).

Link to strategies

Imposing limits on private property ownership could also minimise entropy, help right-size economies and advance a culture of ecology (van Griethuysen, 2010; Videira *et al.*, 2014: 64).

Link to antecedents

Property is a fundamental pillar of economic growth (van Griethuysen, 2010: 590), which together (property and economic growth) have fused a closed, cumulative and reinforcing techno-economic system (Steppacher, 2008 cited in van Griethuysen, 2012: 264) profiting developed nations, marginalising ecosystems and people (van Griethuysen, 2012: 265) and outranking ecological concerns (van Griethuysen, 2010: 595). Not only is it one of the core tenets of economic growth and bulging socio-economic systems, its physical expansion is also a major causes of natural resource over-exploitation (van Griethuysen, 2010: 592). Therefore, neoclassical and neoliberal economics and the growth of systems, development, culture and ecology and inequality, society and the environment are core antecedents referred to by van Griethuysen (2010: 590).

Degrowth's outcomes, strategies and antecedents are connected to legally redefining property rights. Furthermore, remodelling property can influence behaviours towards ecological sustainability. Thus, it is an action that can be included in the degrowth nomological network for ecological sustainability.

Remodelling businesses and the economy: Non-market capitals, social enterprises, and economic democracy

Bruyn (1992 cited in Johanisova *et al.*, 2013: 14) defines non-market capitals as items (such as land, housing or equipment) that are transferred from the market to the control of local democracies. A social enterprise is loosely defined as an organisation “involved at least to some extent in the market, with a clear social, cultural and/or environmental purpose, rooted in and serving primarily the local community and ideally having a local and/or democratic ownership structure (one-member-one-vote rather than one-euro-one-vote)” (Johanisova *et al.*, 2013: 11). Economic democracy is “a system of checks and balances on economic power and support for the right of citizens to actively participate in the economy regardless of social status, race, gender, etc.” (Johanisova and Wolf, 2012: 562).

Here a linear relationship exists: non-market capitals provide the necessary tools for social enterprises to exist (Johanisova *et al.*, 2013: 13), which in turn deliver the means to achieve economic democracy (Boillat *et al.*, 2012: 601; Johanisova and Wolf, 2012: 562).

Link to outcomes

Influencing behaviours through institutionalising economic democracy could attenuate “the concentration of economic power” (Johanisova and Wolf, 2012: 564). But because of the linear relationship outlined above, economic democracy necessitates non-market capitals and social enterprises as prerequisites. Placing capital under local democratic control empowers communities and lays the foundation for social enterprises to exist (Johanisova and Wolf, 2012: 568). And because they do not exist to grow, generate profits or externalise environmental costs, an economy characterised by economically democratic social enterprises could contribute to ecological sustainability (Deriu, 2012: 560; Johanisova and Wolf, 2012: 565; Johanisova *et al.*, 2013: 10-11).

Link to strategies

Non-market capitals, social enterprises, and economic democracy have the requirements to reduce entropy and right-size the economy (Deriu, 2012: 560; Johanisova and Wolf, 2012: 564). As Boillat *et al.* (2012: 606) put it: “a voluntary

reduction in material and energy consumption is only possible in an economic democracy that makes people responsible, as a community, for the environmental consequences of their own production and consumption pattern”. Another upshot of an economically democratic system characterised by social enterprises and non-market capitals is that it could instil a culture of ecology (Deriu, 2012: 559; Videira *et al.*, 2014: 64).

Link to antecedents

Under the guise of its alleged positive outcomes, economic growth continues to cause excessive exploitation that exceeds earth’s limitations (Deriu, 2012: 556; Jackson, 2009: 15; Johanisova and Wolf, 2012: 563; Kallis *et al.*, 2012: 173; Schneider *et al.*, 2010: 516). Furthermore, such a vision allows enterprises to maximise profit at the expense of the environment (Johanisova *et al.*, 2013: 8). These self-reinforcing factors escalate the scale of the socio-economic system and consequently drive unprecedented resources through the economy (Andreoni and Galmarini, 2013: 65; Bonaiuti, 2011: 172; Latouche, 2010: 15; Kallis *et al.*, 2012: 173). This action is therefore also linked to neoclassical and neoliberal economics and the growth of systems antecedent.

Supporting evidence

Johanisova and Wolf (2012) provide some evidence:

“In their analysis of land tenure and social organisation in Mexico, Sarukha’n and Larson [2001] reveal that 80% of agricultural land and 70–80% of forests in Mexico are communally owned. They link small scale and communal ownership with low energy and material throughput and high ecological efficiency” (Johanisova and Wolf, 2012: 567).

Additionally, empirical results from Cuba suggest that social enterprises were a contributing factor in the country’s transition to an ecologically sustainable period (Boillat *et al.*, 2012: 603). The authors postulate that such forms of socio-economic organisation intricately connect the environment to their wellbeing and is therefore in their best interests to ensure its sustainability (Boillat *et al.*, 2012: 606).

Having ties to degrowth's outcomes, strategies and antecedents, maintaining the capacity to influence behaviours, non-market capitals, social enterprises, and economic democracy is an action and supporting evidence that can be incorporated into degrowth's ecological sustainability nomological network.

Renewable energy

Renewable energy is defined as sources of energy that quickly regenerate and do not diminish over time (EPA, 2014).

Link to outcome

Expediting a behavioural shift that preferably decentralises renewable energy production and consumption curbs energy use in developed nations and increases energy use in developing nations, will improve the chances of attaining ecological sustainability (Demaria *et al.*, 2013: 202; Latouche, 2010a: 49). This is not to say that developing nations also need to ration their consumption, it is rather saying that their energy needs should be met with decentralised, locally determined renewable production and consumption until a sufficient standard of living has been achieved (Kallis, 2011: 875; R&D, 2010: 524). While phasing in renewable energies, developed nations should however reduce their energy consumption to only what is needed (sufficient) to maintain a high standard of living (R&D, 2010: 524).

Link to strategies

This action falls under the right-sized economy strategy by reducing entropy (Kakabadse, 2014: 5; Renner, 2012: 11) and focussing on sufficiency (Sorman and Giampietro, 2013: 92; Victor, 2012: 208).

Link to antecedents

Non-renewable sources of energy only support quickening environmental decay and contribute to exceeding the planet's limitations (Andreoni and Galmarini, 2013: 65; Jackson, 2009: 11; Moriarty and Honnery, 2012: 883). Due to recorded energy rebounds, technological improvements in efficiency measures have not been able – and most likely will not be able to – halt the relentless flow of fossil fuels (Alcott, 2010: 559; Herring, 2006; Jackson, 2009: 95; Moriarty and Honnery, 2012: 890). Taking it

one step further, it has been said that the access to cheap energy, most of which happens to be non-renewable, has been a precursor to larger socio-economic systems, consistent economic growth, technological efficiency lock-in and rising entropy (Akella, Saini and Sharma, 2009: 390; D'Alessandro *et al.*, 2010: 538; Jackson, 2009: 7; Renner, 2012: 10; Sorman and Giampietro, 2013; Victor, 2012: 206; Trainer, 2012: 594).

Models

Forecasts conclude that switching to renewable energy will reduce ecological footprints, GHG emissions, carbon etc. and reduce environmental pressure (EEA, 2012: 19, IPCC, 2012; WWF, 2011, 2013). One study by the National Renewable Energy Laboratory in the United States estimated that renewable energy will provide a per percentage reduction in GHG emissions i.e. that an energy system with 80% renewable energy will denote a corresponding 80% decrease in GHG emissions (NREL, 2012: 44).

Supporting evidence

Sufficing with an ecological footprint of 22% of the national average, the Findhorn Ecovillage in Scotland proves that reducing energy use and producing 100%³⁵ on-site renewable energy can abate the deluge of destructive fossil fuels and scale down to one planet living (Dawson, 2009: 26-7). The results are telling when considered on a larger scale: renewable energy substitution in the US has avoided over “a billion metric tons of CO₂ emissions” (EIA, 2014: 9) approximate to the annual GHG emissions of 210 million passenger cars (EPA, 2015).

Renewable energy can be included in degrowth's ecological sustainability nomological network due to the fact that its literature has been linked to elements of degrowth's basic nomological network and influencing behaviours to achieve positive ecological outcomes.

³⁵ On-site production actually exceeds the community's needs by 40% - the surplus is sold back to the national grid (Dawson, 2009: 26-7).

Ecovillages

Because ecovillages are used as supporting evidence in several actions (voluntary simplicity, (re)localise economies, renewable energy and transforming food systems), it is deemed necessary to analyse it as if it were an action linking it to the elements of degrowth's basic nomological network. Imperative to note is that ecovillages is a neutral action that has been adopted by both constructs and therefore although it will be linked to elements in degrowth's (and later sustainable development's) nomological network, the content from which this information is delegated is the same.

Link to outcome

Being models of sustainability (GEN, no date: About Ecovillages), ecovillages are seen as a method to influence behaviours towards ecological sustainability.

Link to strategies

In addition to the intentional connection to nature (GEN, no date: About Ecovillages) Jackson (2004: 25) believes that "[ecovillages] are establishing the very foundation of a new culture" thereby connecting ecovillages to degrowth's culture of ecology strategy. Furthermore, because ecovillages are more sustainable than Westernised lifestyles (e.g. Dawson, 2009; Sherry, 2014), and because ecological sustainability is enshrined in the ecovillage movement's guiding principles (GEN, no date: About Ecovillages) ecovillages are also connected to the right-sizing the economy strategy.

Link to antecedents

Jackson (2004: 26) and Olivier (2014: 9) together identify several antecedents that can be connected to antecedents in the degrowth construct. For example, the authors refer to the neoliberal economic system and its ecological externalities (Jackson, 2004: 26); and issues of economic growth and development economics and how they affect the environment (Jackson, 2004: 26; Olivier, 2014: 9).

These reasons can therefore be linked two of three antecedents in the ecology component: exceeding limitations and development, culture and ecology; and the neoclassical and neoliberal economics antecedent connected to the bioeconomics component.

Supporting evidence

Findhorn Ecovillage maintains an ecological footprint less than half of the United Kingdom average – at the time “the lowest ever measured for any settlement in the industrialized world” (Dawson, 2009: 26). Sherry’s (2014: 186-187) analysis of 3 ecovillages in the United States of America revealed a reduction in ecological footprints of between 51% and 66% when compared with similar communities; and between 61% and 66% relative to the national average. Boyer (2016) finds that residents in the Dancing Rabbit ecovillage less than 10% of the resources the average American consumes.

Ecovillages can influence behaviours towards ecologically beneficial outcomes. It has also shown ties with degrowth’s antecedents, strategies and outcomes. It can thus be included in degrowth’s nomological network for ecological sustainability.

Limiting advertising

Limiting advertising refers to controlling or banning advertising (Latouche, 2010a: 37).

Link to outcomes

As ecological resources are used faster in an advertising-rich world relentlessly encouraging consumption (van Griethuysen, 2010: 590; Jackson, 2009: 15; Kallis, 2011, 874; Martinez-Alier, 2012: 64; R&D, 2010: 523; Schneider *et al.*, 2010: 516), limiting advertising could lead to ecologically sustainable lifestyles.

Link to strategies

Foreseen benefits on limiting or banning advertising include shaping behaviours towards degrowing materialistic consumption and therefore contribute to right-sizing economies and reducing entropy in non-technical ways (Latouche, 2010b: 521; Videira *et al.*, 2014: 66). Successively, this could encourage people to reconnect with immaterial needs (Boillat *et al.*, 2012: 606; Hamilton, 2010: 571; Nelson, 2012: 2-3) and reinvigorate a collective responsibility for the environment (Bonaiuti, 2012a: 532; Deriu, 2012: 559).

Link to antecedents

Borne out of political needs to spawn more jobs and curtail unemployment to further economic growth, increases in production created the impetus for advertising to endorse consumption that kept abreast with productivity gains i.e. that consumption never fell behind production (Nørgård, 2013: 64). Furthermore, the proliferation of “the priority of economic growth, materialism, individualism, competition and monetary valuation” has shaped social and cultural life (Hamilton, 2010: 572) to the extent that to find happiness, one must be richer (Hamilton, 2010: 573). This goes hand in hand with the indoctrination that economic growth, through increasing amounts of individual consumption, is the key to happiness (Hamilton, 2010: 573; Matthey, 2010: 567). “It understands the exploitation of the natural world as not just a right but virtually a duty” (Hamilton, 2010: 573). Thus, by promoting materialistic consumption (Jackson, 2009: 88; Latouche, 2010: 17; Matthey, 2010: 569; Nørgård, 2013: 65; Tammilehto, 2012: 83), advertising is linked to the exceeding limitations, development, culture and ecology and neoclassical and neoliberal economics and the growth of systems antecedents.

Advertising products that use less resources, for example environmentally friendly goods, also has its drawbacks as the total sum of resources and energy used will outweigh its benefits in the long term, therefore leading to the rebound effect (Curtis, 2003: 92; Daly, 2013: 21; Jackson, 2009: 122, Peattie and Crane, 2005: 368).

Supporting evidence

To demonstrate that advertising bans can have an impact on behaviours, advertising bans on advertising tobacco products that took place in Norway in 1975 almost halved consumption of tobacco until 2002 (Bjartveit, 2003: 13).

Limiting advertising is a behaviour-influencing mechanism that can contribute to a more environmentally sustainable society. The links it shares with degrowth’s elements of its basic nomological network, and that it has been shown to successfully influence behaviours in real life, means that it can be included in the ecological sustainability nomological network for degrowth.

Degrowth actions for social sustainability

Not only does degrowth support ecological sustainability; one of its major territories is the necessity for social sustainability (Andreoni and Galmarini, 2013: 65; Bauhardt, 2014: 62; Demaria *et al.*, 2013: 195; Fournier, 2008: 532; Latouche, 2010: 520; Martínez-Alier, 2012: 54; Nierling, 2012: 240; R&D, 2010: 524; Sekulova *et al.*, 2013: 5). The contemporary organisation of society places economic factors such as growth and development above social factors like human wellbeing (Andreoni and Galmarini, 2013: 65; Demaria *et al.*, 2013: 192; Fournier, 2008: 531; Johannisova *et al.*, 2013: 7; Martínez-Alier *et al.*, 2010: 1741; Martínez-Alier, 2012: 54), which is a core factor in degrowth's social sustainability strategy (Hamilton, 2010; Kallis, 2011: 879; Latouche, 2010: 521; R&D, 2010: 523; Schneider *et al.*, 2010: 512). Taken from the remaining degrowth components, and communicated here in broad terms, social sustainability revolves around high life quality and increased wellbeing as a result of democratic, reciprocal and convivial institutions conceptualised separately from growth, development and materialism (Bauhardt, 2014: 64; Bonaiuti, 2012a: 530; Flipo, 2008: 27; Fournier 2008: 532; Hamilton, 2010; Kallis, 2011: 878 and 2013: 95; Latouche, 2010: 520; Muraca, 2012: 536; R&D, 2010: 524). Several actions found specifically in degrowth literature revolve around higher levels of wellbeing and life quality, and comprise the next section of this analysis, which has the same procedure as before.

Income taxes, income caps and basic income

Income taxes, income caps and a basic income are used to control, limit and provide disposable income respectively (Alcott, 2010: 552; Daly, 1977: 61).

Link to outcome

Income taxes, income caps and a basic income are seen as possible methods to influence behaviours towards social sustainability (Alexander, 2011: 213; Demaria *et al.*, 2013: 203; Kallis *et al.*, 2012: 176; Schneider *et al.*, 2010: 514; Videira *et al.*, 2014: 64).

Link to strategies

Socially speaking, highly progressive tax structures with minimum (basic) and maximum income levels could directly influence behaviours by redistributing money and wealth across social strata to reduce inequality (Alexander, 2011: 213; Constanza

et al., 2013: 261; Daly, 1977: 53-55; Jackson, 2009: 181; Latouche, 2010a: 73; Videira *et al.*, 2014: 64). Linking it to the *oikonomia* strategy, reducing inequality will have a knock-on effect on the wellbeing of a population as equality is said to be a fundamental factor of a society's wellbeing (Constanza *et al.*, 2013: 261; Wilkinson and Pickett, 2010). Taxing, capping and providing basic incomes could also redistribute the ownership of private property³⁶, which will consequently reduce social inequality (Daly, 1977: 54; Videira *et al.*, 2014: 64). Such measures would also allow people to re-imagine an economy extrinsic to economic growth (Videira *et al.*, 2014: 64).

Link to antecedents

Income and its relation to social sustainability is demonstrated by the Easterlin paradox and several studies relating to how income beyond a certain threshold does not improve subjective (Bechetti *et al.*, 2009; Easterlin *et al.* 2010; Jackson 2009: 40; Wilkinson and Pickett, 2010) and objective wellbeing (Wilkinson and Pickett, 2010). Furthermore, Wilkinson and Pickett (2010) expertly demonstrate that income inequality exerts massive influence on a panorama of social problems. Studies cite economic growth as the principal antagonist that predicates both higher and unequal incomes (e.g. Bechetti *et al.*, 2009; Easterlin *et al.* 2010; Jackson 2009: 40; Wilkinson and Pickett, 2010). Linking the action to wellbeing, neoclassical and neoliberal economics and consumerism and economic growth, development and injustice antecedents, income inequality has also preordained certain sections of society to own more private property, which becomes the means of exploitation and further inequality if not everybody is able to own some (Daly, 1977: 54).

Literature from degrowth shows the links between this action and influencing behaviours to a socially sustainable society and elements of degrowth's basic nomological network. It can therefore be included in its social sustainability nomological network.

³⁶ See remodelling property for a more detailed explanation on private property and social sustainability.

Cohousing

“Cohousing communities are neighbourhood developments where private and common facilities are combined in response to the social and the practical needs of contemporary urban citizens” (Lietaert, 2010: 577).

Link to outcomes

Social sustainability is a possible outcome of cohousing projects (Lietaert, 2010: 576).

Link to strategies

Cohousing communities could influence the behaviours of their inhabitants in terms of a better quality of life by providing a space for human relations to exist (Lietaert, 2010: 578).

Link to antecedents

The cohousing philosophy arose as an approach to urban living that counteracts economic growth's effects on modern city lifestyles: disjointed communities, trivial social relations, a focus on the production and consumption ideology and hyperindividualism (Lietaert, 2010: 576-8). Therefore, cohousing is connected to the wellbeing, neoclassical and neoliberal economics and consumerism, development, growth and commodification and development, growth and consumerism antecedents.

Supporting evidence

Lietaert's (2010) interviews with cohousers report a high standard of living and strong social connections with other cohousers. However, the author mentions that cohousing does not automatically influence behaviours; rather it is up to the inhabitants themselves to reproduce the behaviours that allow these benefits to occur (Lietaert, 2010: 580).

Cohousing as an action can be placed into degrowth's social sustainability nomological network because it has the capacity to influence behaviours towards social sustainability and it has connections with degrowth's basic nomological network.

Changing employment: job sharing, increasing unpaid work, decreasing working time and job guarantee

Job sharing is the redistribution of working hours across a broader section of the population (Jackson, 2009: 134). “[T]he degrowth proposal calls for a reduction [and redistribution] of working hours in the paid sector substituted by more useful and if possible gratifying work in the self-employed or unpaid sector” (Kallis, 2013: 96). Unpaid work is defined as individually arranged not-for-profit activities, for example caring (Nierling, 2012: 240). Degrowing the economy is perceived to lead to potential large-scale unemployment (Alcott, 2013: 56) and uneven distribution of work (Alcott, 2013: 57). To combat this perception, degrowth advocates propose the job guarantee, which is a legal right to paid work (Alcott, 2013: 57) that is decoupled from economic growth i.e. jobs that are guaranteed and are exempt from increases and decreases in economic activity (Alcott, 2013: 60).

Link to outcome

Creating policies that guarantee jobs i.e. paid employment to anyone who wants it could influence behaviours that contribute to a socially sustainable society (Alcott, 2013: 60). Additionally, increasing unpaid work (D’Alisa and Cattaneo, 2013: 77; Martinez-Alier *et al.*, 2010: 1746; Nierling, 2012: 242; Nørgård, 2013: 61; Pullinger, 2014: 12) and sharing jobs is connected to social sustainability (Jackson, 2009: 47; Pullinger, 2014: 14).

Link to strategies

Decreasing unemployment and evenly distributing the limited quantity of paid work, is linked to reducing injustice and inequality strategies (Alcott, 2013: 56-57). Connected to *oikonomia* and re-imagination strategies, behavioural changes that find a balanced ratio of paid and unpaid work are predicted to offer greater levels of general wellbeing (D’Alisa and Cattaneo, 2013: 77; Martinez-Alier *et al.*, 2010: 1746; Nierling, 2012: 242; Nørgård, 2013: 61; Pullinger, 2014: 12) and provide a space for debates about a new social organisation to achieve sustainability in which wellbeing is decoupled from income and growth (Martinez-Alier *et al.*, 2010: 1746; Nierling, 2012: 245; Nørgård, 2013: 68). Furthermore, reducing working hours for a section of the population could be redistributed to others (job sharing) to maintain better levels of employment

(Jackson, 2009: 134; Latouche, 2010a: 40; Pullinger, 2014: 14), which has been linked to wellbeing and therefore the *oikonomia* strategy (Jackson, 2009: 47; Pullinger, 2014: 14). In the long term, Kallis (2013: 96) suggests that “working less in the paid sector now will lead to a shift of values and perceptions that will make the downscaling of desired functions easier”. Finding a balance of paid, unpaid and shared work could therefore also challenge the venerated growth paradigm and therefore contribute to re-imagining a society outside of development and growth. Nierling (2012: 242-243) also places large emphasis on increasing the role of human relationships through unpaid work i.e. a connection with the human relations strategy.

Link to antecedents

Unemployment and income inequality are a cause of lower subjective and objective wellbeing (Jackson, 2009: 181; Wilkinson and Pickett, chapters 1 and 2). In spite of these shortcomings, the politics of economic growth stifles any chances of mitigating unemployment as it continuously seeks efficiency gains in productivity and increased working hours (Nørgård, 2013: 64; Spangenberg, 2010: 562). Thus, growth politics will always match certain levels of unemployment, which is linked to the growth, development and injustice antecedent. Facing higher outputs and fewer required working hours/workers due to increased mechanisation, political motives of yesteryear sought consumption and economic growth as a means to increase paid work (Nørgård, 2013: 64). However, commodifying/monetising unpaid work in an attempt to increase economic growth lead to a loss of wellbeing and therefore lacks the potential to create social sustainability (D’Alisa and Cattaneo, 2013: 77; Nørgård, 2013: 62) i.e. referring to the development, growth and consumerism and wellbeing, neoclassical and neoliberal economics and consumerism antecedents. Furthermore, higher incomes, as the result of more paid work, have had limited success in supplying happiness after a certain threshold (Bechetti *et al.*, 2009: 286-8; Easterlin *et al.*, 2010: 22467; Jackson, 2009: 40) i.e. a link to the Easterlin paradox.

Supporting evidence

Nierling’s (2012) empirical findings constitute interviews conducted with ten people performing unpaid work (Nierling, 2012: 243). The author found that unpaid work is a constituent of subjective wellbeing outside of the growth phenomena (Nierling, 2012:

245). Additionally, his findings affirm that the connection between unpaid work and wellbeing is a critical foundation for a socially sustainable society (Nierling, 2012: 245).

Changing employment is incorporated into degrowth's social sustainability nomological network because its literature shows parallels with elements of degrowth's basic nomological and shows that it has the capacity to influence behaviours to more socially sustainable outcomes.

Voluntary simplicity

Keeping only social sustainability facets in mind, voluntary simplicity is in general a social movement involving people who seek a higher quality of life with fewer material possessions and more non-material 'possessions' (Alexander and Ussher, 2012: 66; Andrews and Urbanska, 2010: 178; Trainer, 2012: 594). Other terms that are often tacked on to or used synonymously with voluntary simplicity are downshifting or simpler living (Alexander, 2011: 186; Hamilton and Mail, 2003: 6). For the purpose of this research, these terms will be used interchangeably.

Link to outcomes

Voluntary simplicity was proposed in response to individual requests for practising degrowth (Baykan, 2007: 517). Furthermore, (social) voluntary simplicity invites participants to seek socially sustainable lifestyles (Alexander and Ussher, 2012: 66; Hamilton and Mail, 2003: vii; Trainer, 2012: 594).

Link to strategies

Voluntary simplicity behaviours challenge consumerism and show others how it can be rewarding to live well without unnecessary consumption (Alexander and Ussher, 2012: 66; Andrews and Urbanska, 2010: 178; Cattaneo and Gavaldà, 2010: 588; Trainer, 2012: 594) and maintain a higher life quality by devoting more time to non-material consumption and abandoning materialism (Alexander and Ussher, 2012: 66; Hamilton and Mail, 2003: vii; Trainer, 2012: 594). Therefore, the action is linked to the re-imagination and *oikonomia* strategies.

Link to antecedents

Emphasising consumerism as the fuel for economic growth and human development has moulded human conscience to the point that wellbeing is directly associated with consumption (Andrews and Urbanska, 2010: 178; Hamilton, 2010: 573; Jackson, 2009: 88; Latouche, 2010: 17; Matthey, 2010: 567; Nørgård, 2013: 65; Tammilehto, 2012: 83). However, researchers have noted that ever-greater levels of consumption are in fact an inferior fabricator of wellbeing (Alexander and Ussher, 2012: 70; Cattaneo and Gavalda, 2010: 582; Hamilton, 2010: 575; Fournier, 2008: 536; Kallis *et al.*, 2012: 174; Martinez-Alier *et al.*, 2010: 1743; Masferrer-Dodas *et al.*, 2012; Trainer, 2012: 592; Vergragt, 2013: 124; Wilkinson and Pikett, 2010). Therefore, voluntary simplicity is linked to the development, growth and consumerism and wellbeing, neoclassical and neoliberal economics and consumerism antecedents.

With the capacity to revolutionise laws and policy, voluntary simplicity movements could also change the rules of the system from the bottom up (Alexander, 2013: 3; Cattaneo and Gavalda, 2010: 588). “[T]he basic argument is that if legal concepts are ‘social constructs’, then social movements can be understood as a mechanism through which legal concepts are socially constructed and reconstructed” (Alexander, 2013: 3).

Models

When modelling for ideal degrowth scenarios, Bilancini and D’Alessandro (2012: 202) conclude that investment in leisure time and wellbeing need to supersede consumption and production. Increased leisure time hypothetically triggers, among other things, a virtuous circle of wellbeing and social relationships exclusive of consumerism (Bilancini and D’Alessandro, 2012: 202).

Supporting evidence

Downshifting

Primary data on wellbeing was also gathered from the 1748 participants who voluntarily simplified. (Alexander and Ussher, 2012: 66). The data uncovers that health, minimalism, spirituality or mindfulness and self-sufficiency were reasons for simplifying for 62% to 75% of respondents. Of the total number of participants, 90% had downshifted their consumption levels while the other 10% had always lived that

way (Alexander and Ussher, 2012: 76-77). Out of the former group, 87% indicated that they were happier as a result of living simpler (Alexander and Ussher, 2012: 77). On the contrary, a decrease in happiness was documented in only 0.3% of participants (Alexander and Ussher, 2012: 77). To summarise these findings, 87% out of a total of 1573 (90% of total) downshiffters reported increases in happiness.

Downshifting studies have been performed in Australia and Britain. In Australia, 981 downshiffters mentioned more balanced lifestyle (16%), more time with family (35%), more control and personal fulfilment (16%), healthier lifestyle (23%) and a less materialistic lifestyle (5%) as the motivating factors for downshifting (Hamilton and Mail, 2003: 23). These decisions correspond with an overall satisfaction of 88% i.e. that 88% of respondents were happy with their lifestyle changes (Hamilton and Mail, 2003: 24).

British downshiffters (1136 respondents) responded similarly to Australians in terms of the reasons for downshifting: more balanced lifestyle (12%), more time with family (32%), more control and personal fulfilment (18%), healthier lifestyle (13%) and a less materialistic lifestyle (5%) (Hamilton, 2003: 20). A staggering 94% of Britons are happy with their decision to downshift (Hamilton, 2003: 22).

Other research offers findings that disprove the link between consumption and wellbeing, only in the opposite direction. The subjects of research by Masferrer-Dodas *et al.* (2012) were 600 adults living in “a small-scale foraging-horticultural society in the Bolivian Amazon” in the process of entering a market economy characterised by consuming more material goods after having lived without them. Analyses of empirical data collected disclosed that higher consumption of material goods did not correspond to increases in subjective and objective wellbeing³⁷ (Masferrer-Dodas *et al.*, 2012: 219).

³⁷ Subjective and objective well-being is referred to as an interrelation of economic, health, psychological, and social indicators of well-being (Masferrer-Dodas *et al.*, 2012: 214).

Rurban squatting as a form of voluntary simplicity

In the current economic system, profit and economic growth take precedence over wellbeing (Cattaneo and Gavalda, 2010: 582; Hamilton, 2010: 575; Vergragt, 2013: 124). More specifically, and in the case of rurban squatting, selling time to the labour market does not satisfy real needs and is therefore a “waste of time” (Cattaneo and Gavalda, 2010: 589). This inverse relationship between growth and wellbeing is seen by some as a direct cause of the lower quality of life haunting society today (Bonaiuti, 2012a: 533; Easterlin *et al.*, 2010; Wallenborn, 2008: 229). Rurban squatting provides practical implications for degrowth and demonstrates how it is possible to live well without materialism (Cattaneo and Gavalda, 2010: 581).

Research at the rurban squats in Spain (40 individuals) also gathered data relating to social sustainability (Cattaneo and Gavalda, 2010: 584-6). Findings include more time for leisure, personal growth and education; communal provision of basic and subjective needs and; considerably higher non-materialistic consumption than materialistic consumption, with very low consumption of the latter. Although the observations did not explicitly research levels of wellbeing, the researchers maintain that the satisfaction of direct and subjective needs achieve the goal of living a good life (Cattaneo and Gavalda, 2010: 588). This shows that changes in behaviour among individuals and groups could lead to social sustainability. Furthermore, by living well independently of consumerism, these behaviours could help change re-imagine a society outside of growth and guide people’s wellbeing (like in the *oikonomia*) (Cattaneo and Gavalda, 2010: 588).

Ecovillages as voluntary simplicity

Separating wellbeing from economic growth and high-consumption lifestyles is a vital ecovillage principle (Dawson, 2010: 186; Xue, 2014: 132). Informal evidence confirms that individuals preserve a high quality of life within eco villages (Dawson, 2010: 187). It is therefore deduced that redirecting behaviours towards an ecovillage set up is an implementable method to achieve increases in social sustainability.

By decoupling wellbeing from economic growth income and consumption, this section highlighted the argument that voluntary simplicity offers theoretical and practical implications for social marketing programmes aimed at influencing behaviours towards

behaviours that are socially sustainable. It was also connected to elements of degrowth's basic nomological network and can therefore be included in degrowth's social sustainability nomological network.

(Re)localising the economy

In social terms, relocalising the economy relates to increasing the chances of achieving social sustainability by ensuring the general wellbeing or a high quality of life of a local population (Andreoni and Galmarini, 2013: 68; Curtis, 2003: 86; Latouche, 2010a: 50; Trainer, 2012: 594). Geographically this can be thought of in terms of a specific bioregion (Curtis, 2003: 86; Latouche, 2010a: 50), towns (Trainer, 2012: 595; Transition Network, 2014) or country (Demaria *et al.*, 2013: 205) and depends on a web of intricately strung situational variables (Andreoni and Galmarini, 2013: 67).

Link to outcome

Relocalising the economy is purported to influence behaviours that facilitate social sustainability (Curtis, 2003: 86; Latouche, 2010a: 50; Trainer, 2012: 595).

Link to strategies

With the faculty to influence behaviours, relocalising the economy is said to heighten wellbeing by: combating unemployment (Latouche, 2010a: 49; Trainer, 2012: 595; Transition Movement, 2014: 6) and poverty (Trainer, 2012: 595), increasing conviviality (Andreoni and Galmarini, 2013: 67; Latouche, 2010a: 50; Trainer, 2012: 595; Transition Movement, 2014: 6), raising the quality of life (Curtis, 2003: 86), promoting equality (Transition Movement, 2014: 6) and improving health (Latouche, 2010a: 50). In general, these maintain links with the human relations and oikonomia strategies.

Link to antecedents

Building on the construct of wellbeing that is key to social sustainability, antecedents are those points that demonstrate a lack of wellbeing in non-local i.e. global economies. Many, if not all, countries' economies are intertwined at transnational or global levels (Andreoni and Galmarini, 2013: 67). However, the underlying reason for globalising economies is to ensure economic growth (Bonaiuti, 2011: 181). Therefore, the low

levels of subjective and objective wellbeing many countries with transnational economies exhibit can be attributed to the ill effects of economic growth, which links to the wellbeing, neoclassical and neoliberal economics and consumerism and Income-happiness paradox antecedents.

Supporting evidence

Ecovillages as a (re)localised economy

Ecovillages are also communities of people operating within a localised economic system (GEN, no date: About Ecovillages). Informal evidence from the Findhorn Ecovillage confirms that individuals preserve a high quality of life (Dawson, 2010: 187). It is therefore deduced that redirecting behaviours towards an ecovillage set up is an implementable method to achieve increases in social sustainability.

This section used degrowth literature to illustrate the behavioural element of a (re)localised economy as well as make associations with degrowth's outcome, strategies and antecedents. It can thus be included in degrowth's nomological network for social sustainability.

Remodelling property: legally redefining property rights

Property is the fundamental pillar of capitalism and economic growth and the expansion of the property economy has led to societies becoming dependent on its growth for their development (van Griethuysen, 2010: 590).

Link to outcome

van Griethuysen (2012: 265) and Videira *et al.* (2014: 64) link remodelling property to social sustainability.

Link to strategies

To reduce injustice and inequality, legally redefining property laws could sway behaviours by subverting economic growth to social concerns and abating social exploitation (van Griethuysen, 2010: 592; van Griethuysen, 2012: 265). Constitutional backing could foster equal wealth distribution and limit inequalities and therefore act as a precursor to social sustainability and therefore guide society's wellbeing i.e.

referring to the *oikonomia* strategy (van Griethuysen, 2012: 265; Videira *et al.*, 2014: 64). Connected to the re-imagination strategy, imposing limits on private property ownership could minimise the desire to accumulate and promote sharing, both of which correlate to social sustainability and spur a society that challenges the dominant growth hegemony (Videira *et al.*, 2014: 64). Altogether, remodelling property laws could stem the “potential for capitalisation, and consequently, the pressure for growth that would emanate from such capitalisation” (van Griethuysen, 2012: 265). Different arrangements of state and private-collective ownership may enable a more socially sustainable society (van Griethuysen, 2012: 265).

Link to antecedents

The subordination of life quality to the emphasis on, and accumulation of, wealth has crafted a society that is unable to redirect itself towards an economy that does not exploit human resources (van Griethuysen, 2010: 590-4). Contributing to this is an expanding property-based economy that perpetuates “widening social inequality, the reinforcement of a capitalist elite together with an increasing underclass of excluded non-proprietors” (van Griethuysen, 2010: 592). With economic growth as the overarching determinant, the property economy has fashioned a system that profits developed nations and marginalises people (van Griethuysen, 2010: 265). Thus, wellbeing, neoclassical and neoliberal economics and consumerism, economic growth, development and injustice and inequality and society and the environment are the underlying reasons why degrowth protagonists turn to remodelling property to attain social sustainability.

Supporting evidence

van Griethuysen (2012: 267) offers a critique of research by Hoffmann (2005) who described the collaboration between a state-owned water company and local communities. van Griethuysen (2012: 267) points out that collaborative ownership of, in this case the construction, operation and maintenance of a drinking water system, allowed the state to hand over many responsibilities to communities. Upshots of this were found at state and community levels: firstly, the state no longer maintained the economic burden of operationalising the drinking water system; secondly the

communities received water at lower prices and limited social exclusion (van Griethuysen, 2012: 267).

Literature taken from degrowth has shown that this action has bonds to degrowth's basic nomological network and that it can influence behaviours towards more socially sustainable outcomes. It can therefore be incorporated into the nomological network for social sustainability from a degrowth perspective.

Redistributing the ownership of capital: Non-market capitals, social enterprises, and economic democracy

Bruyn (1992 cited in Johanisova *et al.*, 2013: 14) defines non-market capitals as items (such as land, housing or equipment) that are transferred from the market to the control of local democracies.

A social enterprise is loosely defined as an organisation “involved at least to some extent in the market, with a clear social, cultural and/or environmental purpose, rooted in and serving primarily the local community and ideally having a local and/or democratic ownership structure (one-member-one-vote rather than one-euro-one-vote)” (Johanisova *et al.*, 2013: 11).

Economic democracy is “a system of checks and balances on economic power and support for the right of citizens to actively participate in the economy regardless of social status, race, gender, etc.” (Johanisova and Wolf, 2012: 562).

Here a linear relationship exists: non-market capitals provide the necessary tools for social enterprises to exist (Johanisova *et al.*, 2013: 13), which in turn deliver the means to achieve economic democracy (Boillat *et al.*, 2012: 601; Johanisova and Wolf, 2012: 562).

Link to outcome

Several authors attribute the ability of non-market capitals, social enterprises and economic democracy to influence behaviours towards achieving social sustainability

(Boillat *et al.*, 2012: 602; Johanisova and Wolf, 2012: 565-568; Johanisova *et al.*, 2013: 14; White and Baraldi, 2012: 99).

Link to strategies

The linearity of non-market capitals, social enterprises and economic democracy dictates that behavioural influences begin with non-market capitals. Placing capital under local democratic control empowers communities and paves the way for social enterprises to assemble (Johanisova and Wolf, 2012: 568). With “a one-member-one-vote governance structure...an explicit ethical goal in their founding documents” (Johanisova and Wolf, 2012: 565), social enterprises carry with it certain responsibilities that contribute to social sustainability by diminishing power inequality, curtailing growth (Johanisova and Wolf, 2012: 565; Johanisova *et al.*, 2013: 14), redistributing wealth (Johanisova and Wolf, 2012: 568; White and Baraldi, 2012: 99) and socialising investment (Boillat *et al.*, 2012: 602). Another upshot of an economically democratic system characterised by social enterprises is that it could quash the will to accumulate, slow consumption and realign society away from the guiding principles of growth – all of which symbolise facets of social sustainability (Deriu, 2012: 559; Videira *et al.*, 2014: 64). These statements by degrowth authors are comparable to re-imagination, deeper democracy, reduce injustice and inequality and oikonomia strategies from degrowth’s basic nomological network.

Link to antecedents

Under the disguise of its alleged positive outcomes, economic growth continues to disappoint us in the social crisis (Deriu, 2012: 556; Jackson, 2009: 15; Johanisova and Wolf, 2012: 563; Kallis *et al.*, 2012: 173; Schneider *et al.*, 2010: 516). To explain further, a system in which institutions are glued to economic growth allows enterprises to maximise profit at the expense of society (Johanisova *et al.*, 2013: 8). These self-reinforcing factors (economic growth and profit maximisation), together with multinational corporations’ ability to mould political decision-making (Alexander, 2011: 242; Boillat *et al.*, 2012: 600-60; 532; Deriu, 2012: 556; Johanisova and Wolf, 2012: 563), co-create an arrangement that externalises costs often with negative social ramifications (Johanisova and Wolf, 2012: 563). Therefore, non-market capitals, social enterprises, and economic democracy are directly linked to the wellbeing, neoclassical

and neoliberal economics and consumerism, economic growth, development and injustice and democracy, economic growth and scale antecedents.

Literature from degrowth has been used to illustrate this action's ability to influence behaviours that could lead to social sustainability. It has also been employed to link this action to degrowth's basic nomological network. Due to these connections, redistributing the ownership of capital is involved in degrowth's social sustainability nomological network.

Renewable energy

Renewable energy is also connected to certain social criteria (Akella *et al.*, 2009; IPCC, 2012: 18; WWF, 2014: 5).

Link to outcome

Degrowth considers renewable energy a budding solution to achieve social sustainability (Demaria *et al.*, 2013: 202; Latouche, 2010a: 79; Martinez-Alier, 2012: 62).

Link to strategies

Seeing as guiding behaviours to locally produce and use more renewable energy could reverse the negative effects on health, employment and distribution that non-renewable, centrally-produced energies maintain, it is connected to the reducing inequality and injustice strategy (Akella *et al.*, 2009: 390; IPCC, 2012: 18-20; Latouche, 2010a: 78; NREL, 2012: 44; WWF, 2014: 19). Furthermore, because these have an impact on people's wellbeing, renewable energy is also connected to the *oikonomia* strategy (Demaria *et al.*, 2013: 202; Latouche, 2010a: 79; Martinez-Alier, 2012: 62).

Link to antecedents

Poor health (Akella *et al.*, 2009: 391), fewer jobs (Akella *et al.*, 2009: 391; Latouche, 2010a: 78) and its unequal distribution among society (WWF, 2014: 19) are just some of the undesirable social aspects associated with non-renewable, fossil fuel-based energies. These have surfaced due to economic growth's reliance on relatively cheap fossil fuels and therefore are associated with the economic growth, development and

injustice antecedent (Akella *et al.*, 2009: 390; D'Alessandro *et al.*, 2010: 538; Jackson, 2009: 7; Renner, 2012: 10; Tammilehto, 2012: 79).

Models

In the paradigm of their research, Meadows, Randers and Meadows (2005) measure wellbeing using the Human Welfare Index³⁸ (HWI): “a combination of life expectancy, education and GDP indices” (Meadows *et al.*, 2005: 291). Their models predict that reducing non-renewable resources by 80% through 2100 would achieve a higher HWI than if this reduction was not initiated (Meadows *et al.*, 2005: 291). Although the authors offer technological advancement as a leading driver in this reduction, it is logical to conclude that this can also be achieved by means of substitution i.e. renewables replacing non-renewables.

Supporting evidence

Introducing decentralised and renewable energy production and consumption has helped rural communities in Nepal move away from their reliance on wood as primary energy producer (WWF, 2014: 18). Favourable outcomes include improved health, more time for social relationships – because they no longer have to search for wood – and higher incomes to improve quality of life (WWF, 2014: 18).

Looking at the social aspects of renewable energy within the degrowth literature provides evidence that social marketers can influence production and consumption behaviours to achieve better levels of social sustainability. It has also been linked to the elements of degrowth's nomological network and can therefore be included in degrowth's social sustainability nomological network.

Self-managed/autonomous democratic systems

Castoriadis (2005) defines autonomy as “the project for a society in which all citizens have an equal, effective chance to participate in the legislation, government, jurisdiction

³⁸ The Human Welfare Index is very similar to the UN's Human Development Index (HDI) (Meadows *et al.*, 2005: 291), which is “a composite index of life expectancy, years of schooling and income” (UNDP, 2014: 33).

and, finally, institution of society,” (cited in Bonaiuti, 2012a: 525). A self-managed/autonomous system is in general terms, a structure that allows individuals and groups to control the organisation of such a structure (Boillat, Gerber and Fune-Monzote, 2012: 602; Bonaiuti, 2012a: 525).

Link to outcome

“The outcome of a general transition towards a more democratic and autonomous social and political organization” is seen by the authors to lead to social sustainability (Cattaneo and Gavalda, 2010: 581).

Link to strategies

Because self-managed/autonomous democratic systems engender communal rather than personal or corporate ambitions (with values like sharing, trust and co-operation), and because social degradation is limited through social investment, initiating these structures could influence behaviours that result in social sustainability (Boillat *et al.*, 2012: 606; Bonaiuti, 2012a: 533; Borowy, 2013: 24; Cattaneo and Gavalda, 2010: 588; Deriu, 2012: 560; Videira *et al.*, 2014: 64). In such a system false needs are eliminated, which provokes people to search for their true personal, and often immaterial, needs (Boillat *et al.*, 2012: 602; Cattaneo and Gavalda, 2010: 582; Hamilton, 2010: 571; Nelson, 2012: 2-3). Wellbeing is also predicted to increase as economic growth will no longer be the guiding principle in a self-managed/autonomous system (Bonaiuti, 2012a: 533; Cattaneo and Gavalda, 2010: 582; Deriu, 2012: 556). Socio-political spaces that could underwrite a large-scale transformation of society’s dominant perspective to one uninhibited by the restraints of economic growth are also plausible (Bonaiuti, 2012a: 533; Cattaneo and Gavalda, 2010: 588; Deriu, 2012: 556; Videira *et al.*, 2014: 64). This literature demonstrates the links to the re-imagination, *oikonomia* and deeper democracy strategies.

Link to antecedents

The political concentration on providing access to consumption fused a resilient bond between democracy and economic growth (Deriu, 2012: 554) and founded an economic system that emphasises the accumulation of profits through the “[c]ompetitive production and exchange of goods and services” (Cattaneo and Gavalda, 2010: 582).

In this system, wellbeing and the satisfaction of subjective needs become diminished as they are back seat objectives (Cattaneo and Gavaldà, 2010: 582; Hamilton, 2010: 575; Nørgård, 2013: 65; Vergragt, 2013: 124). Furthermore, the sheer scale of the political system dictates that a represented elite must take power (Boillat *et al.*, 2012: 600-60; Bonaiuti, 2012a: 532; Deriu, 2012: 556). However, in a political system of this nature economic power is always, to some extent, used as a bargaining tool to please the economic elite and therefore clouds political decision-making according to their corporate interests, many of them not socially sustainable (Boillat *et al.*, 2012: 600-60; Bobbio, 1987 cited in Bonaiuti, 2012a: 532; Deriu, 2012: 556; Johanisova and Wolf, 2012: 563). To this end, the intertwined political quest for economic growth and increasing scale of their systems results in a loss of real democracy or autonomy (Bonaiuti, 2012a: 532; Deriu, 2012: 556) and an unequal distribution of power and wealth – in general terms social unsustainability (Bonaiuti, 2012a: 528; Deriu, 2012: 556; Videira *et al.*, 2014: 64) and therefore links to the democracy and economic growth and democracy, economic growth and scale antecedents.

Supporting evidence

Cuba

Cuba's crisis provides some fruitful evidence on social sustainability in a self-managed economy: structural changes in the agricultural system allowed cooperatives to develop and resulted in increased local autonomy and decision-making power (Boillat *et al.*, 2012: 606), which opposed inequality and individualism (Boillat *et al.*, 2012: 602), limited unemployment (Borowy, 2013: 22) “and stimulate[d] social inclusion through community building” (Borowy, 2013: 24). With closer attention to structural changes in the agricultural system, it was urban farming that helped lower unemployment and strengthen social ties and the psychosocial outlook of the population (Borowy, 2013: 24). Informal networks also contributed to the general wellbeing of the population (Borowy, 2013: 23).

Rurban squatting

Rurban³⁹ squats provide a small-scale experimental space for people to practice semi-autonomy and co-operative decision-making within a collective economic system unchained to pursuing economic growth (Cattaneo and Gavalda, 2010: 583-4). “The experience of rurban squatting helps highlight which possible means (collective-decision making, material economy, decreasing needs, degrees of autonomy from money and wage labour) can be employed in order to achieve the end of living well” (Cattaneo and Gavalda, 2010: 582).

Rurban squatting demonstrates how it is possible to live well within a low intensity economy as well as the type of structures that nurture it (Cattaneo and Gavalda, 2010). Relinquishing the accumulation of profits means that individuals do not sell their time in the wage-labour market (Cattaneo and Gavalda, 2010: 584) and devote this saving to general wellbeing, which includes “personal growth, education or leisure...maintaining relationships, contemplation and socialising (Cattaneo and Gavalda, 2010: 586). “The squatting experience shows that the utopian replacement of capitalism is a concrete and practical path towards another form of wellbeing” (Cattaneo and Gavalda, 2010: 582).

Basic needs are taken care of by the collective economy and domestic production (Cattaneo and Gavalda, 2010: 586). “[T]he community, rather than consumption, is the real incommensurable value of these experiences” (Cattaneo and Gavalda, 2010: 587). Self-organisation and decision-making processes guide the structure of the squats and allow participants increased material, political and economic autonomy (Cattaneo and Gavalda, 2010: 588). “Self-management and co-operation are necessary” for degrowth and therefore social sustainability to exist (Cattaneo and Gavalda, 2010: 588).

From analysis of the degrowth literature, this section outlined the possible effects invigorating a self-managed/autonomous democratic systems and local decision-making could have on social sustainability. The action was connected to elements of

³⁹ Rurban is a contraction of rural and urban and refers to the location of squats on the fringes of rural and urban areas (Cattaneo and Gavalda, 2010: 581).

degrowth's basic nomological network and showed that social marketers could adopt it in social marketing programmes i.e. it could influence behaviours.

Ecovillages

From a social sustainability perspective, ecovillages are community-based housing arrangements that regenerate social experiences within a community (GEN, no date: About Ecovillages).

Link to outcomes

GEN (2014b), Jackson (2004) and Olivier (2014: 17-18) refer to the end-state of ecovillages as being more socially sustainable in terms of equality, wellbeing, relationships and democracy. Therefore, ecovillages are linked to social sustainability as one of degrowth's outcomes.

Link to strategies

Taken from GEN (no date: Dimensions of Ecovillages) and Jackson (2004), Olivier (2014: 11 & 17) certain elements of ecovillages can be linked to several degrowth strategies namely *oikonomia*, as ecovillages seek to ensure the community's wellbeing; re-imagination, as ecovillages propose existence external to concentrating on economic growth; human relations, as ecovillages promote relationships between people in the community; increases in social participation and democracy, as ecovillages make decisions based on a democratic and participatory process; and reduce poverty and inequality as ecovillages in developing nations can be used to sustainably lift communities out of poverty and increase equality.

Link to antecedents

Duhm (2007: 2) and Olivier (2014: 15) note the dismantling of human communities partly responsible by commercial entities and globalisation as one of the important underlying causes of the establishment of the ecovillage action for social sustainability. Additionally, foreign commercial interest and corporate profit are seen as more important than society's wellbeing and the prosperity of local democracies (Jackson, 2004: 26). Lietart (2010: 577) refers to "neo-liberal globalisation" as a driving force behind movements that recreate a sense of community that has since been lost in the

developed world. Van Schyndel Kasper (2008: 12-13) refers to the “dominant western worldview” as a major reason behind the ecovillage movement. Ecovillages can therefore be linked to all antecedents from the critiques of development and anti-utilitarianism component, wellbeing, neoclassical and neoliberal economics and consumerism from the meaning of life and wellbeing component, the democracy and economic growth (democracy component) and both antecedents from the justice component.

Supporting evidence

Informal interviews conducted by Dawson (2009: 187) confirm that people living in ecovillages preserve a high quality of life. Thus, influencing behaviours so that people live in an ecovillage set up is an implementable method to achieve increases in social sustainability. Interviewing many residents of several ecovillages in Senegal and Gambia, Olivier (2014: 26-31) notes many positive social outcomes since officially becoming ecovillages. Mulder, Costanza and Erickson (2006) also conclude that people living in intentional communities, to which ecovillages are categorised, maintain a higher quality of life than those living in ‘normal’ settings (unintentional communities).

APPENDIX 3: DETAILS PERTAINING TO SUSTAINABLE DEVELOPMENT'S OVERLAPPING ACTIONS

Like in the sections covering degrowth's actions, actions from sustainable development are linked to ecological and/or social sustainability, a component's strategy and antecedents. All actions could influence behaviours and therefore meet the social marketing criteria. Models and supporting evidence provides, where available, evidence (hypothetical or real respectively) to support the action's argument i.e. that a certain aspect of sustainable development can be or has been attained. More detailed actions are presented in greater depth, sometimes including certain specific actions. Note that actions are limited to sustainable development scholarship i.e. authors supporting a sustainable development outcome. This does not however mean that they are being/have been implemented by sustainable development protagonists. These are purely theoretical and practical applications that validate the possibility of achieving a part of sustainable development. Unlike degrowth, sustainable development's actions are provided purely for comparative purposes and are not used to build sustainable development's nomological networks (due to the massive body of sustainable development literature) i.e. sustainable development's actions are compared with degrowth's to surface issues relating to the language they use.

Caps and taxes

Caps and taxes are considered mechanisms that control the flow of resources (Strange and Bayley, 2008: 94; UN, 1992: paragraph 4.25; UNEP, 2011). As governments collect taxes and contribute to UN funds (UN, 2016), national and international taxes play a pivotal role in generating funds that can be used to implement sustainable development actions to achieve ecological sustainability.

Link to outcomes

Taxes are referred to in sustainable development reports as behaviour influencing tactics that contribute to environmentally sustainable outcomes (e.g. Strange and Bayley, 2008: 94; UN, 1992: paragraph 4.25; UNEP, 2011: 483).

Link to strategies

Capping and or taxing certain resources or processes should shift production and consumption patterns to obey earth's limitations (UNEP, 2011: 277).

Link to antecedents

Antecedents to taxes are excessive exploitation, development, growth and ecology (Strange and Bayley, 2008: 79-81; WCED, 1987: 4).

Specific actions

Environmental taxes

Taxes on environmentally negative products and services are proposed as a means to internalise environmental costs in their prices (UNEP, 2011: 559). This could decrease resource use by enhancing business innovations and providing rewards for reducing their resource use (UNEP, 2011: 559). Additionally, by internalising the cost of ecologically degrading products and services, environmental taxes can concurrently increase efficiency and reduce demand (Strange and Bayley, 2008: 94; UNEP, 2011: 483). "They can also help avoid negative rebound effects with over-consumption as a result of efficiency savings" (UNEP, 2011: 483). To further influence behaviours, the UN proposes that the revenue accrued from such taxes be used to fund other actions that can lessen the ecological burden (UNEP, 2011: 559).

Cap-and-trade schemes

Cap-and-trade is another useful way to influence businesses behaviours – if emissions exceed a predefined cap (level), polluters have to buy up another businesses' quota who managed to under emit or pay a fine more than the value of the quota (Strange and Bayley, 2008: 94-95).

Supporting evidence

In many developed countries, fuel taxes have increased fuel prices to levels that have moderated behaviours (UNEP, 2011: 277). Taxes on plastic bags in South Africa reduced their consumption to levels that were deemed a success by national government (UNEP, 2011: 279). The cap-and-trade scheme halved sulphur dioxide emissions in the United States (Strange and Bayley, 2008: 95).

Because caps and taxes have been linked to elements of sustainable development's nomological network, and because it shows an ability to influence behaviours, caps and taxes can be compared with degrowth's similar action.

Transforming food systems

A food system is seen as the entire network of variables that constitutes producing and consuming food (FAO, 2013: 3).

Link to outcome

Transforming food systems from a sustainable development perspective involves mitigating the ecological harm of all variables in the network (Barling *et al.*, 2012: 29; FAO, 2013: 4).

Link to strategies

Obeying earth's limitations is one of the major consequences of influencing behaviours towards increasingly sustainable outcomes in the food sector (Barling *et al.*, 2012: 32; WCED, 1987: 144), which requires efforts upstream and downstream (Barling *et al.*, 2012: 30; EEA, 2012: 29-30; FAO, 2013: 4).

Link to antecedents

The unsustainability of current food systems is also apparent in the sustainable development literature, which mentions exceeding limitations; (UN, 1992: paragraph 32.2; Barling *et al.*, 2012: 30), expanding populations and structural changes, such as increasing proportions of the population gain access to higher incomes and therefore changing consumption patterns (Barling *et al.*, 2012: 30) and; consumption outstripping production (UN, 1992: paragraph 32.2; Herren *et al.*, 2012: 6) as primary causes of its basis for action. Barling *et al.* (2012: 31) cite higher income as a key driver of unsustainable food systems with a strong correlation between rising income and ecological footprints when considering changes in diet (Barling *et al.*, 2012: 32).

Specific actions

From a sustainable development perspective, obeying earth's ecological limits can be achieved by:

- localising/regionalising food systems (UN, 1992: paragraph 14.11a; Scherr, Uphoff and Herren, 2012: 48) through for example permaculture (Herren *et al.*, 2012: 8); favouring small-scale farming (WCED, 1987: 12);
- increasing organic food production (EEA, 2012: 31);
- respecting seasonality (Barling *et al.*, 2012: 32);
- reducing waste (Barling *et al.*, 2012: 34) and;
- lowering meat and dairy consumption while increasing fruit and vegetable intake (Barling *et al.*, 2012: 32; EEA, 2012: 31).

Supporting evidence

Organic farming is defined as “a holistic production management system, which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. It prohibits the use of synthetic inputs, such as drugs, fertilizers and pesticides” (UNEP, 2010: 12). Spearheaded by policy initiatives and farmers, organic farming in Uganda has contributed to ecological improvements. “GHG emissions per ha are estimated to be on average 64 per cent lower than emissions from conventional farms. Various studies have shown that organic fields sequester 3–8 tonnes more carbon per ha than conventional agriculture (UNEP, 2010: 13).

By being connected to sustainable development’s basic nomological network and maintaining the ability to influence behaviours, transforming food systems can be compared to a similar action found in degrowth literature.

Sustainable consumption

The Oslo Symposium (1994) defined sustainable consumption (and production) as:

“[T]he use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations” (UNDESA, no date: paragraph 3).

Link to outcome

Inherent in the action's title, authors make the connection between sustainable consumption and ecological sustainability (Lorek and Fuchs, 2013: 38; UN, 1992: paragraph 4.11).

Link to strategies

Sustainable development protagonists affirm that “fundamental changes in the way societies consume and produce are indispensable” (UN, 2012: paragraph 224). Furthermore, they “recognise that urgent action on unsustainable patterns of production and consumption where they occur remains fundamental in addressing environmental sustainability...and the promotion of sustained, inclusive and equitable economic growth” (UN, 2012: paragraph 61). It is known that consumption patterns in industrialised countries are unsustainable (UN, 1992: paragraph 4.5). Therefore, by piggybacking already-existing channels of sustainable development governance (Lorek and Fuchs, 2013: 39), producing goods more efficiently (UN, 2015: Goal 12; UNEP, 2011: part II or 195-493) and providing consumers with more information on the environmental impact of consumption (UN, 2015: Goal 12) a society that obey earth's ecological limits can be achieved (Lorek and Fuchs, 2013: 38; Strange and Bayley, 2008: 76; UN, 2015: Goal 12).

Link to antecedents

Excessive exploitation of earth's resources is driven by overconsumption in wealthier echelons of society (UN, 1992: paragraph 4.5; WCED, 1987: 9), technological efficiency's inability to save enough resources (Strange and Bayley, 2008: 81) and a growing number of individuals gaining access to resource-intensive consumer goods as a result of economic growth and higher incomes (Strange and Bayley, 2008: 78; WCED, 1987: 32).

Sustainable consumption is joined to sustainable development's basic nomological network. It can also influence behaviours towards ecological sustainability. Thus, it is an action that can be compared with a similar action found in degrowth literature.

Ecovillages

In environmental terms, an ecovillage is a settlement of people living in a way that embody different elements of sustainability to restore natural environments (GEN, no date: About Ecovillages). Because ecovillages are a 'neutral' action, the references are the same as those used in the degrowth section. They are used in this case to link ecovillages to the elements of sustainable development's nomological network.

Link to outcomes

Ecovillages actively seek to increase biodiversity and regenerate ecosystems and maintain ecological sustainability as one of its key dimensions (GEN, no date: Dimensions of Sustainability: paragraph 6) and is therefore related to ecological sustainability as an outcome.

Link to strategies

Several authors view ecovillages as an embodiment to live within the confines of earth's resources. For example, Boyer (2016), Dawson (2009) and Jackson (2004: 26) see ecovillages as an action that contributes to reducing the pressure on the natural environment. Therefore, ecovillages are linked to the obey earth's ecological limits strategy.

Link to antecedents

The links to two antecedents (excessive exploitation and development, growth and ecology) are referred to in the literature by Jackson (2004: 26) and Olivier (2014: 9), who both state that unchecked economic growth and exploitation of earth's resources are some of the primary motivating factors behind developing ecovillages.

Supporting evidence

Evidence indeed indicates that ecovillages are capable of reducing, in some cases significantly, the ecological impact of a community. For example, the ecological footprints of 3 ecovillages in the USA were between 51% and 66% less than comparable communities as well as the national ecological footprint (Sherry, 2014: 186-187). Research on the Dancing Rabbit ecovillage in the USA found that residents

managed to reduce their resource use by 90% compared to the national average (Boyer, 2016). Findhorn Ecovillage's ecological footprint is less than half of the United Kingdom average (Dawson, 2009: 26). Furthermore, one of Ireland's most successful ecovillages maintain a footprint just 15% above what is calculated as one-planet living (Kirby, 2016: 53).

Relating this action to influencing behaviours and outcomes, strategies and antecedents found in sustainable development's basic nomological network allows it to be compared with a like action in degrowth literature.

Renewable energy

Renewable energy is types of energies that renew themselves rapidly and remain constant over time (EPA, 2014).

Link to outcomes

Implementing policies that shift behaviours to higher renewable energy production and consumption will engender economic activity adherent to the planet's ecological boundaries i.e. ecological sustainability (WCED, 1987: 9).

Link to strategies

Clustered around improving efficiency (UN, 1992: paragraph 7.46; UNEP, 2011: 197) and centralising or decentralising dependant on the specific situation of the country or region (UN, 1992: paragraph 9.12.f; UNEP, 2011: 202), renewable energy in ecological terms is said to obey earth's ecological limits (UN, 1992: paragraph 9.9; IPCC, 2012: 22).

Link to antecedents

Non-renewable resource use poses many negative side effects (IPCC, 2012: 20; WCED, 1987: 174). Two important ones are exceeding planetary limitations (UN, 1992: paragraph 9.9) and a vicious cycle of energy use and economic development (IPCC, 2012: 18; Strange and Bailey, 2008: 68; WCED, 1987: 169), i.e. development, growth and ecology antecedent.

Models

In a report by the Intergovernmental Panel on Climate Change (IPCC), as well as in UNEP (2011), it is postulated that renewable energy can contribute to decoupling energy use and growing GHG emissions (IPCC, 2012: 18; UNEP, 2011: 206-207) i.e. reducing GHG emissions while increasing energy use. More specifically, UNEP (2011: 521) predicts that renewable energy (combined with efficiency measures) implementation will reduce energy intensity by 36%.

Supporting evidence

Sustainable Energy for All (SE4All) is a sustainable development action that aims to increase renewable energy production. To date (2015), 102 countries have joined the UN-led action to reduce energy poverty and increase energy efficiency and renewable energy uptake (UN, 2015: 10). In 2005, China implemented the Renewable Energy Law, which provides financial incentives for renewable energy production and consumption (UNEP, 2010: 9). “The combination of investments and policy incentives has encouraged major advances in the development of both wind power and solar power” (UNEP, 2010: 9).

Elements of sustainable development’s basic nomological network have been connected to renewable energy, which can also influence behaviours towards environmental sustainability. Thus, it can be related to a similar degrowth action.

Sustainable development actions for social sustainability

The actions that overlap with degrowth's and can influence behaviours towards social sustainability are now analysed.

Taxes

Taxes are seen as a pricing mechanism that could influence consumer behaviours and directly contribute to actions that alleviate poverty and inequality and improve wellbeing (UN, 1992: paragraph 4.24-4.25; UNEP, 2011). As governments collect taxes, and governments play a pivotal role in developing actions that achieve sustainable development (UN, 1992, 2012), many actions to achieve social sustainability are funded by taxes.

Link to outcome

Taxes influence behaviours towards a more socially sustainable society as they provide the mechanism to fund programmes that can achieve social sustainability (UNEP, 2011: 559).

Link to strategies

Taxes are seen as a pricing mechanism that could influence consumer behaviours and as a direct contributor to investing in other actions that alleviate poverty and inequality and improve wellbeing (e.g. UNDP, 2012).

Link to antecedents

Since taxes essentially fund all of sustainable development's actions, the reason why they are proposed contains all the antecedents that feature in the other actions: poor economic growth, development and inequality; inequality, society and the environment; and wellbeing, economic growth and development.

Links to outcome, strategies and antecedents in sustainable development's basic nomological network as well as influencing behaviours allows this action to be compared with a similar one found in degrowth's literature.

Sustainable consumption

Concerning only social elements, sustainable consumption's definition refers to consuming products that offer a better quality of life and do not take away from what future generations might need (Oslo Symposium, 1994 cited in UNDESA, no date: paragraph 3).

Link to outcome

Sustainable consumption, by its very name, seeks to achieve social sustainability (UN, 2012: Goal 12).

Link to strategies

Socially unsustainable consumption patterns are, for the most part, activities that intensify poverty and inequality and therefore lower levels of wellbeing and life quality (UN, 1992: paragraphs 4.3-4.6). Thus, facilitating sustainable levels of consumption could alleviate the environmental pressures that aggravate poverty and social injustice i.e. referring to the mitigate poverty and inequality strategy, and therefore provide a better quality of life for people who depend on the environment for their wellbeing i.e. improve wellbeing as a strategy (UN, 1992: paragraph 4.3).

Link to antecedents

Attributable to the idea of 'development' that reigned supreme since the Second World War, which paved the way for colonialist expansion and free trade (Baker, 2006: 159; DuPisani, 2006: 89), "[m]any theorists argue that the Western development model sustains inequalities and leads to underdevelopment in the Third World" (Baker, 2006: 159). Underdeveloped countries are uncritically painted with the same western-consumption-pattern brush used in developed nations, causing social injustices (Baker, 2006: 159). Structural adjustment programmes intended to assist development have in some cases only reinforced inequality, poverty and social injustices (UN, 1992: paragraph 2.33).

Amidst the benefits of post-war economic growth and accompanying gains in materialistic provisions loomed an enlarging crevasse of inequality (DuPisani, 2006: 91; Waas *et al.*, 2011: 164; WCED, 1987: 28-29). Keeping in mind that "poverty and

environmental degradation are closely related” (UN, 1992: paragraph 4.3), relatively affluent societies rely heavily on developing countries’ natural resources (WCED, 1987: 28), eventually leading to over-exploitation and poverty and inequality (UN, 1992: paragraph 4.3; WCED, 1987: 3). Hence, it can be said that, from a sustainable development position, poorly executed economic growth created the momentum for social unsustainability based on ecological exploitation (WCED, 1987: 28-29) i.e. referring to the wellbeing, economic growth and development and inequality and society and the environment antecedents.

Excerpts from sustainable development literature allowed this action to be connected to sustainable development’s basic nomological network. It also showed that this action can promote socially sustainable behaviours. Hence, sustainable consumption can be compared to a similar action in degrowth.

Increasing employment

This action operates under the umbrella phrase of “the creation of more and better green jobs” (ILO, 2016: “The ILO’s Green Jobs Programme”), which is justified on the basis that investment in the green economy will bring about large swathes of job opportunities (UNEP, 2011: 16) when combined with the right mix of support structures (ILO, 2012: ix).

Link to outcome

With widespread unemployment and underemployment today, required are policies to reverse this trend: “[f]ull employment should be a policy goal for societies at all levels of development” (UNDP, 2014: 11-12). UNEP (2011: 16) proposes that employment to maximum levels will most likely lead to social sustainability.

Link to strategies

“The most basic of all needs is for a livelihood: that is, employment” (WCED, 1987: 54). Sustainable development turns to green growth policies, which offer increased employment levels that will improve wellbeing. Furthermore, by increasing employment levels people will be able to earn an income and therefore employment can be used to mitigate poverty and inequality (UNDP, 2014: 6; UNEP, 2011: 16).

Link to antecedents

Referring to the poor economic growth, development and inequity antecedent, literature refers to the jobless growth highlighted in the 1993 Human Development Report (UNDP, 2014: 42) as the reason to strive for full employment.

Models

Green economy projections indicate that, in the best-case scenario, 4.9 people out of 9 billion will be employed by 2050 (UNEP, 2011: 518).

Supporting evidence

Workingfor Water is a South African sustainable development action that had positive effects on the wellbeing of previously unemployed people. Not only did the action employ some 20,000 people, it also improved the ecology of targeted areas as people were employed to help clear water catchments to improve local ecosystems functionality (UNDP, 2012: 54).

With the capacity to influence behaviours towards socially sustainable ends, employment as an action that emerged from the sustainable development literature is connected to elements of sustainable development's nomological network. Thus, a comparison with a like action found in degrowth scholarship can be made.

Ecovillages

Socially speaking, ecovillages are loosely defined as a housing settlement that rekindles social wellbeing amongst members of its community (GEN, no date: Dimensions of Ecovillages).

Link to outcomes

GEN (no date: About Ecovillages), Jackson (2004) and Olivier (2014: 17-18) refer to the end-state of ecovillages as being more socially sustainable in terms of equality, wellbeing, relationships and democracy. Therefore, ecovillages are linked to social sustainability as one of degrowth's outcomes.

Link to outcomes

GEN (2014b) and Jackson (2004) lay claim to the idea that ecovillages can achieve social sustainability by increasing aspects such as equity and wellbeing.

Link to strategies

Sustainable development's strategies to increase social sustainability (improving wellbeing and reducing poverty and inequality) prevail across several strands of literature. For example, Jackson (2004: 26-28) states that ecovillages embody equality; and decelerate consumerism, which in developed nations has the ability to reduce dependence on natural resources from developing nations on which their population's wellbeing depends. These can therefore be linked to improving wellbeing and reducing poverty and inequality strategies respectively. Olivier (2014: 17) recognises that one of the core social aspects of ecovillages in developing nations is to alleviate poverty and inequality and can therefore be linked to the strategy of similar name. Olivier (2014: 17) also maintains that one of the goals for the ecovillages under the administration of the GEN in Senegal is to advance people's wellbeing, which is naturally linked to the wellbeing strategy for sustainable development.

Link to antecedents

Wellbeing, economic growth and development: development's success relies on the availability of natural resources. However, economic growth to date has excessively depleted natural resources, many of which are found in developing countries and are required for their basic wellbeing (UNEP, 2011: 14). Consequently, development has mostly benefited those in developed nations and has also depreciated wellbeing of many poor people (UNEP, 2011: 14; WCED, 1987: 31-32).

Jackson (2004: 27-28) points out that one of the reasons why ecovillages came about is because of the way that resource extraction: impacts on inequality by providing only a few with excessive wealth; due to economic growth, has negatively affected people's wellbeing as partially derived from natural capital (clean air, fresh water). These can therefore be linked to the poor economic growth, development and inequity and wellbeing, economic growth and development antecedents. In developing nations, literature suggests that development policies that were supposed to tackle a host of

issues including poverty, inequality and wellbeing are a primary cause for the ecovillage movement (Olivier, 2014: 9&15). Further links to all three social sustainability antecedents are driven by the claim that resources are disadvantageously extracted in developing nations to satisfy consumers in developed nations; the needs of the world's poor are not being met due to the uneven and unjust depletion of their natural resources; resources are unequally used to create wealth for the already wealthy (Trainer, 2000).

Supporting evidence

Informal interviews conducted by Dawson (2009: 187) confirm that people living in ecovillages preserve a high quality of life. Residents in Senegalese and Gambian ecovillages maintained the same sentiment in a study done by Olivier (2014: 26-31). A WWF (No date: 9-10) report indicates that since becoming an ecovillage, residents could earn money to educate the community and build permanent homes. People living in ecovillages have reportedly higher quality of life when compared with regular communities (Mulder, Costanza and Erickson, 2006). Thus, influencing behaviours so that people live in an ecovillage set up is an implementable method to achieve increases in social sustainability.

Renewable energy

Renewable energy is also connected to certain social criteria (Akella *et al.*, 2009; IPCC, 2012: 18; WWF, 2014: 5).

Link to outcome

Literature from sustainable development maintains that social sustainability is a possible outcome of influencing behaviours to produce and consume renewable energy (UNEP, 2011: 202-203).

Link to strategies

Referring to improving wellbeing and mitigating poverty and inequality, promoting the uptake of renewable energy is said to raise living standards in developing nations, reduce environmental pressure, which is known to correspond with inequality and poverty and improve society's health by lowering the harmful by-products of fossil

fuel-based production and consumption (Akella *et al.*, 2009: 390; IPCC, 2012: 18-20; NREL, 2012: 44; WWF, 2014: 19). In developing countries, the focus is on reducing energy poverty by increasing renewable energy production and consumption (UNEP, 2011: 208).

Antecedents

When *Agenda 21* was written in 1992, the world's energy production and consumption was unsustainable (UN, 1992: paragraph 9.9). Nowadays, because it was reaffirmed at the Rio+20 conference in 2012, and because it is a key feature in UNEP's *Towards a Green Economy* (2011), it is clear that energy production and consumption are not yet socially sustainable. More specifically, renewable energy within sustainable development is for the most part concerned with the uneven distribution of primary energy, health affairs and environmental protection, which are the result of inequitable economic growth its dependence on fossil fuels associated with poor economic growth and development and inequality and society and the environment antecedents (Akella *et al.*, 2009: 391; IPCC, 2012: 18; WCED, 1987: 169; WWF, 2014: 11).

Supporting evidence

From policy initiatives in China to increase renewable energy production, approximately 300 000 jobs were created in 2009 (UNEP, 2010: 9). Additionally, renewable energy production in Tunisia created jobs to work for the 1000+ companies registered to install renewable energy production units (UNEP, 2010: 23). Increasing employment has positive social upshots and is dealt with in the next section.

Renewable energy as an action found in sustainable development supports the idea that influencing behaviours is integral in achieving social sustainability. Additionally, because it has been joined to the elements of sustainable development's nomological network, a comparison with a similar degrowth action can be made.