

**The Use of Nostalgia at the Ideation Stage of Permaculture
Design**

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Abstract

Permaculture is a sustainable design practice based on patterns derived from natural systems. Sharing an ideological base with green design and eco-design, but distinguished by its systems design focus and its embedded ethical framework, it offers agency to stakeholders through its democratised design approach, but is subject to being viewed as limited in scientific rigour, and suffers from being outside mainstream narratives of how the future will be enacted. Though its practitioners view it as science-based and progressive it is viewed by wider publics as nostalgic, which may affect its popularity.

However nostalgia can conceal deep longings within the perception of sentimentality and superficiality attached to it. Identifying the locus of these longings as part of the ideation process can aid in the design of futures which align with deeply held needs rather than superficial wants.

The aims of this thesis are to establish nostalgia as an implicit or explicit factor in the perception of permaculture giving greater clarity about its positioning with stakeholders, and the exploration and development of the use of nostalgia as a generative element within the ideation process.

Interviews were conducted with UK and Australian permaculture practitioners to test for the presence and placement of nostalgia within the perception of permaculture, from novice to expert designers and across more than one culture. Testing of nostalgic elicitation as a generative tool for participatory design took place in group workshop and client interview situations.

The three core contributions made by this thesis are: (1) clarity concerning the perception of nostalgia within permaculture; (2) a framework showing the elements of nostalgic perception implicit in permaculture enabling designers to strategically plan whether and where to invest a design with nostalgic elements; and (3) an original and transferable methodology of nostalgic elicitation within the design ideation process, which through greater participation and affective appeal can be used to imbue permaculture design with more impact and longevity.

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Chapter One: Introduction

1.1 Introduction

This chapter presents an overview of the thesis by outlining the key elements as they are situated within the chapters which organise it. The following sections are intended to provide a picture of the main points and focus of the thesis which follows.

Research context and problem statement: the issues this research addresses, and the reasons why

Hypothesis: a statement of the supporting hypothesis of the thesis

Summary of the literature review: an outline of the relevant literature in the fields pertaining to the thesis, and the inferences arising from this

Methodology: an overview and substantiation of the research methods

Overview of results: the project results and what is suggested by them

Structure of thesis: the following chapters in the thesis are listed.

The above sections of this introductory chapter will now be described in further detail.

1.2 Research context and problem statement

Nostalgia is an affective state which to some degree is embedded in the objects, processes, rituals and social structures we curate as part of our lives, as well as in those to which we are subject. It can exist explicitly or implicitly in these cultural artefacts: that is, artefacts or processes can be apprehended as nostalgic, or created with nostalgia as a conscious factor in their ideation; or nostalgia can be an unconscious stimulus for design in their creation. Nostalgia can at times be articulated as an appeal to emotion which works with the transfer of feelings, personal histories, and beliefs, and

even a shared public expression of desire and longing leading to calls for social change.

Permaculture is a design system which, from its beginnings as a study into sustainable food growing (**permanent agriculture**), has grown, reconfigured and adapted to incorporate design of symbols, objects, actions or systems. Although most people's experience of permaculture design is still situated within landscape or garden design, as a design practice it is readily applicable to wider applications (systems design) and permutations of the design process (distributed design, co-design). It sits within the same frame as many sustainable design practices, but has some significant differences, including an explicit moral framework.

Permaculture is a model for 'consciously designed landscapes which mimic the patterns and relationships found in nature, while yielding an abundance of food, fibre and energy for provision of local needs' (Holmgren 2011: xix). Permaculture links practices of caring for the earth, caring for people and sharing resources which are surplus to need (Earth Care, People Care, Fair Share) in its design processes, artefacts, and systems, which are intended to imitate, honour, sustain and repair the spaces and systems of which they are a part.

Humans have significantly impacted the fabric and functioning of the planet. Two of the most significant areas of impact are in the loss of biodiversity and in climate change. Meanwhile, present human levels of consumption and waste production and longevity exceed the Earth's carrying capacity. Human cultures also face many issues including disparity of resources and unmet needs, isolation and separation, systemic and embedded inequities. There is a need for practices which are not just sustainable but regenerative for all. Sustainability is an issue of primary importance for the survival of societies, species, and the Earth in its current ability to support life as we know it.

Design, in its widest sense as defined by Simon (1969: 55) - "devis(ing) courses of action aimed at changing existing situations into preferred ones" -

has had a role in creating these issues in the creation of products, services, and systems. It therefore could also have a role in solving them. However even design with good intentions cannot always avoid being co-opted into the overarching structural systems facing us.

A design practice aligned with a set of ethics encompassing ecological, social, and economic systems could provide a counter and check to these systems. A design practice which is very explicitly centred in a set of ethics is **permaculture**. Permaculture as a design process encompasses many tools of benefit to societies across the globe and can be used in design thinking from the regional to the international; yet it is still rarely heard of, and does not appear to be widely taken up at levels of powerful decision-making. It is popularly viewed as a primarily material practice, most often spoken about in terms of (organic, messy) gardening. It has been theorised within the discipline but is underrepresented at present within the academic field. It seems a source of bewilderment to permaculture advocates that it is not a more widespread practice. The reasons for this are under-researched at present. However the hypothesis that the perception of permaculture is subject to a nostalgic element has possibilities for a focused examination of one element which affects its wider appeal and uptake.

This thesis explores the convergence of an ethically-based design discipline, permaculture, with an affective psychological state, nostalgia. In terms of its theoretical and philosophical base, it is located within a number of broad conceptual fields, including philosophy, anthropology, geography, sociology and cultural studies. Drawing together elements from these fields is a complex activity but one which deepens and anchors the discussion of permaculture as a design discipline with an explicitly ethical focus, and which is subject to and aligned with an affective aura, which might be usefully recognised and utilised.

This study examines to what extent permaculture design invokes nostalgic artefacts, states, or processes in its presentation, ideation, or materialisation. Permaculture design may be attractive, or negatively perceived, depending

on how nostalgia itself is regarded. This research critically examines the motivation and application of nostalgia in permaculture design, and through this explores what possibilities there might be for more widespread take-up of permaculture design.

It proposes that permaculture would benefit from a framework enabling designers to strategically plan whether and where to invest a design with nostalgic elements in process or product, and it provides this framework. Nostalgia could continue to be an unconscious stimulus for permaculture designs in their ideation stage; or permaculture designs could be created with nostalgic elements as a conscious factor in their ideation to increase engagement with the process and/or the designs themselves. The core objective is to examine whether and where nostalgia is perceived as implicit in permaculture, and thence to propose a strategic framework to support the use of nostalgia at the ideation stage of the permaculture design process.

This thesis explores whether a nostalgic aura draws some to the practice of permaculture, and to strategically identify particular areas in which nostalgic readings may reside, in order to focus where nostalgic appeal may be of use in the ideation process. It furthermore proposes a strategy of nostalgic elicitation which may be used within the client interview or other preparatory activities, to facilitate a greater emotional response to permaculture designs. The impact would be in increasing engagement with the process and outcomes of permaculture design ideation.

Furthermore, there is potential for further impact where the use of nostalgic elicitation in design ideation may be taken as an impetus and/or have relevance for fields beyond permaculture.

1.3 Research questions

The project proposes firstly that nostalgia might be an impetus for permaculture design, and secondly that nostalgia may be utilised as an affective element in permaculture design.

The study set out to investigate the following propositions:

Firstly: that interested public, potential trainee designers, clients, or stakeholders respond to nostalgia in permaculture design. Establishing the extent to which nostalgia is a driver for permaculture design will allow for analysis of this response whether or not a designer was conscious of using nostalgia at the ideation stage.

Secondly: that nostalgia can be a driver for permaculture design, in that it can draw people towards an interest in or engagement with permaculture. If so, this factor is currently unexamined but could be explored to see whether and in what ways a deeper understanding of the value of nostalgia as a clearly defined design tool could be more consciously utilised by designers at the ideation stage of permaculture designs.

Thirdly: that nostalgia offers the potential of new, added value to the permaculture design process. If the use of nostalgia is better understood, it shows potential to deliver permaculture design with greater impact and longevity through greater participation and affective appeal. This could help increase user engagement and satisfaction with designs, leading to some positive impact on sustainability.

Permaculture may not be seen as powerful, cutting edge, realistic, or scientific (though it is all of those things) because of unconscious nostalgic associations. However, “nostalgia must be understood not as a reduction or denial of history but as a fundamentally productive affective engagement that produces new historical meaning for the past as a way of reckoning with the historical present” (Dwyer 2015: 22). It is with this potential for nostalgia in mind that the objectives for the study have been developed.

The objectives of the study are:

- To explore the extent to which nostalgia draws people towards the concept, use, or experience of permaculture

- To test the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating
- To examine whether nostalgia might be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, thereby creating benefits both for the designer and the intended audience/s.

1.4 Summary of the Literature Review

The literature review examines permaculture as a design discipline. It proceeds through seven main sections to establish the current understanding of the relationship between permaculture, nostalgia, and design ideation. A summary of the key areas within each section is included below:

Problem statement and hypothesis: The first section of the review presents the problem statement which underpins the research context and introduces the hypothesis guiding the review of the literature.

Nostalgia: This section explores nostalgia's history, context, and its psychological and social functions, and its relationship through those functions to design.

Sustainability and systems design: The second section outlines the issues of sustainability and systems design within which permaculture, as a design discipline, is situated. Permaculture is placed and contextualised within the field of design and compared to and differentiated from other sub-fields of design such as sustainable design (with reference to the UN Sustainable Development Goals), circular design, urban agriculture, and Transition Design.

What is permaculture? As permaculture is a relatively new field within academia, its main concepts are outlined to establish a base for

understanding its current status, potential, and limitations within the field of design and the wider culture. Permaculture's origins, ethical underpinning, and current perception, including common criticisms, are covered in the next section of the review.

The role of affect: This section explores affect as a psychological and sociological construct, setting out the broad field within which nostalgia will be placed in relation to design.

Nostalgia in permaculture: The first part of the hypothesis proposes that permaculture is subject to a nostalgic aura or perception. This section establishes the shortfall in the literature on this hypothesis. Drawing together literature from several fields and areas, this section explores the case for the existence of nostalgia within permaculture and examines in what ways this might present.

Permaculture design ideation: Ideation in permaculture as a field of design is examined in the next section, including the principles which form a framework for design ideation in permaculture practice.

Nostalgia in permaculture design ideation: The review then examines elements from the literature on design ideation strategies, nostalgia, and permaculture, and identifies the limitations of the literature to date and the potential for connections. The review explores nostalgia as a generative element in design ideation, where these three elements can be drawn together to create additional ideation strategies in permaculture design.

The literature review gives rise to the three research questions:

(RQ1) Does nostalgia draw people towards the concept, use, or experience of permaculture?

(RQ2) What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?

(RQ3) Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

1.5 Methodology

This section will examine the methodology employed in the project.

The project initially began with the first hypothesis – that permaculture is subject to a nostalgic reading or aura – and the methods employed to explore and examine this hypothesis make up Stages One and Two of the project. The research developed over time and in three phases; the reason for this developmental methodology is that, had the first hypothesis not been supported by the evidence, the other hypotheses would not have been relevant and therefore not suitable for development. With the first hypothesis supported, the other hypotheses arose, and Stage Three developed to interrogate and establish these.

Stage One was with a group of novice and experienced permaculture designers during a Permaculture Design Course (an introductory level course which all permaculture designers take as the first step in their permaculture career, and which many other people interested in permaculture who do not go on to become permaculture designers also take) at the UK Permaculture Association's head office in Leeds, in June 2016. This stage consisted of a questionnaire and further interviews and was designed to test the hypothesis concerning whether nostalgic elements perceived within permaculture were attractive – or the opposite - to potential and established permaculture designers alike. The sample frame was taken from a purposive sample – those who were drawn to permaculture enough to take an introductory course over ten weekends, and their experienced teachers who have experience of a number of these groups. Concentrating the sample population for the study on those already involved in permaculture as novice or experienced designers focused the capture of

data on those already interested in or knowledgeable about the development and practice of permaculture.

Following this initial stage, a further period of data organisation, analysis and interpretation was undertaken to investigate the level of support for the first hypothesis, and to examine the implications suggested by the results. A comparative approach, between novice and established designers, and between designers in two locations (the UK and Australia), was considered appropriate for further establishing the extent and locus of nostalgic elements within permaculture design, which did not exist prior to this research. This period, between September 2017 and August 2018 (Stage Two), used a purposive sample of new and established permaculture designers in the UK, and established individual designers and permaculture establishments in Brisbane and Perth/Margaret River, Australia, to examine both individual responses and observed cultural responses to nostalgia in permaculture. This was designed to further test the hypothesis that there was a relationship between the perception of a nostalgic element within permaculture, and to examine whether and how that drew novices, experts, and the public towards it.

The sampling of permaculture city farms, rural farms, and individual practices within Australia, gave a breadth to the intercultural sample, and the use of permaculturists of long standing allowed for interrogation of the development of the perception of nostalgia over a longer time frame than in the UK, as permaculture has a longer history in Australia than in the UK. The use of interviews allowed for challenge to the hypotheses from those with long experience of the public reaction to it, and also for a stronger and broader base for support for the hypotheses. Further data gathering occurred across permaculture-based print media in both Australia and the UK to establish whether, and in what ways, nostalgia was foregrounded (or downplayed) to appeal to audiences who might be attracted to permaculture.

From the interview responses, a period of analysis and reflection led to the formulation of a set of six main areas into which the perception of nostalgia

resided within permaculture, culminating in the development of the framework of the Permaculture Nostalgia Flower, which provides a conceptual structure for creative inquiry into the locus of nostalgia within permaculture.

Stage Three consisted of the experimental use of nostalgic elicitation as a specific element within the permaculture design process. This took place in a client interview for a garden design (September 2018) and in a group situation when ideating group design processes (October to November 2018). This experiment was designed to test whether the use of nostalgia at the ideation stage added anything to the permaculture ideation process. It was also designed to further test the locus of nostalgia within permaculture as exemplified by the Permaculture Nostalgia Flower, providing further support for the validity of its segments. The use of nostalgic elicitation within individual and group settings was developed into an original, transferable methodology for adding to the permaculture design ideation toolkit. This methodology is of impact and value to the permaculture community as it may be utilised to increase engagement with the ideation process and with permaculture designs.

1.6 Overview of results

In this section, a precis of the main results arising from the fieldwork will be presented. A full representation and analysis of all the results and what arises in response to this is presented in Chapter 4.

Following the results from Stages One and Two of the fieldwork, RQ1 has been addressed. **RQ1** asked “Does nostalgia draw people towards the concept, use, or experience of permaculture?” The results from this research question were crucial for the further development of the project, as without a connection being able to be drawn between nostalgia and the perception of permaculture no further exploration of the nostalgic element would have been relevant. However, the results established that nostalgia was a factor,

whether positively or negatively viewed, in the perception of permaculture both in the wider public and in novice designers.

RQ2, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?” was addressed in interviews with permaculture designers in the UK and in Australia. Results demonstrated that within the established and expert designers there was less of an initial perception of nostalgia within permaculture; most of these experts saw permaculture more as a progressive rather than ‘regressive’ practice, and initially eschewed the idea of permaculture as subject to a nostalgic perception. However, on further examination, some of the experts saw either that the public perception of permaculture had a nostalgic element, and/or saw the potential for nostalgia to be included as part of the design ideation process. Some also, after reflection, saw the potential for the framing of permaculture as nostalgic as potentially beneficial in certain circumstances.

The results showing nostalgia as a factor in the perception of permaculture were distilled and then envisioned as a flower shape including the different aspects within which nostalgia appears in permaculture. This is a graphic representation of the results, but also intended as a guide that could be used in the ideation process. These aspects are:

Children – permaculture is aligned with the exploration and experience of nature and the natural world, and of benefit to children’s development. The contemporary experience of children, perceived of as lacking in this natural exposure, and compared to participants’ experience and/or nostalgic memory of nature, is mentioned as a driver for the interest in permaculture.

Nature – the ability of people in contemporary culture to engage with nature is seen as being lacking, but necessary to the core sample. Permaculture is perceived as a way of engaging with nature, and members of the sample identified with a nostalgic response to this element.

Abundance – the possibility of seeing sustainability initiatives as providing an excess of positive elements (material, social, psychological) as opposed to constraints, drew some of the core sample to permaculture and related to personal or cultural nostalgic memories.

Community – some of the participants perceived a sense of lack in terms of community, or community feeling, and identified an attraction to a nostalgic perception of the community focus of permaculture, or a positive benefit of working permaculture designs which had nostalgic community elements within its expression or perception, as an attractant.

Agency – the focus on self-sufficiency, or alternatively a DIY ethos, within permaculture was identified by members of the sample as a positive nostalgic element.

Freedom – permaculture was seen by some participants as providing a freedom – either from mainstream ways of designing or even thinking, or from following a damaging unsustainable path.

Individually, these themes offer a focus on and for the direction of perceptions of permaculture. The Permaculture Nostalgia Flower offers potential here to be used for organising questions and responses within the client interview or group work.

This led to the development of the experimental element of Stage Three.

In the experimental section, nostalgic elicitation drew results deemed to be significantly different from other tools used in the client interview or the group ideation meeting, providing support for the hypothesis that nostalgia could usefully be utilised at the ideation stage of permaculture design. When nostalgic elicitation was included within parts of the ideation process, a different – more expansive, imaginative, affective – response allowed for a deeper recognition of what a client desired from a design. This offers potential for nostalgic elicitation to be included in the permaculture design toolkit, either as a strategy for novice designers, or an element for

experienced designers to consider when ideating. In this way, **RQ3**, “Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?” was answered.

Understanding that permaculture is subject to nostalgic responses allows designers the potential to use nostalgia as an element within both permaculture designs and the ideation process.

After analysis and critical reflection, it is determined that the key contributions made by this thesis are:

1. The establishment of nostalgia as an implicit or explicit factor in the perception of permaculture, amongst the wider public, potential permaculture trainees, and novice to experienced permaculture designers;
2. Six main areas within which nostalgia is particularly relevant for permaculture, and for permaculture designers;
3. The development and addition of an original and transferable methodology of nostalgic elicitation within the permaculture design ideation process.

A full account of these contributions will be found in Chapter 4.

1.7 Structure of thesis

The thesis is structured in five chapters, of which an outline of the remaining four is provided as follows:

Chapter 2 – Literature Review: recent literature relevant to the intersection of nostalgia and permaculture design is discussed, analysing the most pertinent literature and addressing the social and psychological underpinning of nostalgia, along with the key environmental, social, and economic issues affecting permaculture and design. Through this literature review, by

situating the project within current research in the pertinent knowledge fields and by identifying key issues to be addressed, a research context for the study is identified and established.

Chapter 3 – Methodology: the qualitative methods through which the research questions have been examined are discussed, and the methods used justified in terms of their appropriateness to the project.

Chapter 4 – Results: Stage One, Two and Three results are collated, displayed, examined and analysed.

Chapter 5 – Discussion and Conclusions: The key contributions made by this thesis are described:

1. Nostalgia is established as being embedded in the perception of permaculture.
2. The sub-factors or areas in which nostalgia materialise within permaculture are separated into the nostalgia flower, allowing for more structured or focused examination of the ways in which nostalgia manifests. This development of a six point framework through which to examine nostalgic elements within permaculture enables further exploration, both in terms of how nostalgia appears within permaculture for particular groups (allowing for focused appeal), and of how it might be framed within the design ideation process.
3. The development of an original, transferable methodology for inclusion in the client interview section of the permaculture design ideation process, using nostalgic elicitation to increase engagement with the process and outcome of permaculture designs, alongside a consideration of the research limitations and future research ideas.

Chapter Two: Literature Review

2.1 Introduction

This thesis sits at the nexus of three disparate fields which each have a breadth of theory and associated literature. Permaculture is at present not well represented in academic literature and its background, context and concepts require explication. However it is the potential of nostalgia as an affective and generative force which drives this study and its impact. Relevant literature of significance to the examination of the nexus of nostalgia and permaculture design ideation will be critically analysed. The references are not exhaustive but rather aim to place the study within a contemporary cultural context showing the current state of understanding of the elements, both separately and as they relate to each other.

In terms of its theoretical and philosophical base, this research is located within a number of broad conceptual fields, including philosophy, anthropology, geography, sociology and cultural studies in addition to design. Drawing together elements from these fields is a complex activity but one which deepens and anchors the discussion of permaculture as a design discipline with an explicitly ethical focus, and which is subject to and aligned with an affective aura, which might be usefully recognised and utilised.

The objectives of the study are to examine the affective state of nostalgia as it relates to permaculture design. It seeks to examine to what extent permaculture is identified with or affected by nostalgia, to investigate nostalgia in permaculture ideation, and to explore how concepts of nostalgic design in permaculture can inform current and future design processes and practices. The review will proceed through seven sections intended to build a composite picture of the key environmental, economic and social issues that contextualise this study.

Problem statement and hypothesis: The first section of the review presents the problem statement which underpins the research context and introduces the hypothesis guiding the review of the literature.

Nostalgia: This section explores nostalgia's psychological and social functions, and its relationship through those functions to design.

Sustainability and systems design: The second section outlines the issues of sustainability and systems design within which permaculture is situated. Other design practices aligned with sustainability are examined for significant similarities and differences which help distinguish permaculture.

What is permaculture? Permaculture's origins, ethical underpinning, and current perception, including common criticisms, are covered in the next section of the review.

The role of affect: This section explores affect as a psychological and sociological construct, setting out the broad field within which nostalgia will be placed in relation to design.

Nostalgia in permaculture: Drawing together literature from several fields and areas, this section explores the case for the existence of nostalgia within permaculture and examines in what ways this might present.

Permaculture design ideation: Ideation in permaculture as a field of design is examined in the next section, including the principles which form a framework for design ideation in permaculture practice.

Nostalgia in permaculture design ideation: The review then examines separate elements from the literature on design ideation strategies, nostalgia, and permaculture, identifying the limitations of the literature to date and the potential for connections. The review explores nostalgia as a generative element in design ideation, where these three elements can be drawn together to create additional ideation strategies in permaculture design.

A summary including the implications of the literature review is provided at the end of the chapter, which identifies the key opportunities for research

arising from elements identified in the literature review. The summary will situate the research context – its relevance and timeliness – and identify the research questions arising from the hypothesis and the review of the literature.

2.2 Problem statement and hypothesis

Nostalgia is an affective state which has regulatory functions in terms of individual psychology. Its relationship to social memory is complicated by its widespread perception as personally ineffective and politically suspect or regressive. However despite the perception of sentimentality and superficiality attached to nostalgia, it can conceal a deeper longing. Nostalgia may act as a cipher for a deeper emotional response; it may indicate a desire for certain things, places, or processes felt to be missing in the present. Identifying what these elements are could be an aid to design aimed at creating futures which align with deeply held needs rather than superficial wants. In the current set of crises in which we find ourselves this is of particular relevance and timeliness.

The Anthropocene is a current, proposed (unofficial) geological era describing and reflecting the change humans have made to the Earth's climate and ecosystems. Use of the term signifies acceptance that humans have significantly impacted the fabric and functioning of the planet. Among other changes, two of the most significant areas of impact are in the loss of biodiversity and in climate change. The Earth is proposed to be undergoing its sixth great major extinction, with extreme biodiversity loss attributed to human activity (Leakey and Lewin 1995) and continuing to accelerate. Anthropogenic climate change is now widely accepted (Edwards 2015) and again continues to accelerate, with proposed catastrophic results accumulating rapidly - for example, the predicted collapse of the Gulf Stream (Carrington 2021) which would potentially disrupt rainfall, temperatures, storms and sea levels, with significant impact on humans and other life forms.

Meanwhile, present human levels of consumption and waste production and longevity exceed the Earth's carrying capacity. Human cultures also face many issues including disparity of resources and unmet needs, isolation and separation, and systemic and embedded inequities (Tonkinwise 2015). Issues such as peak oil compound these issues and intersect with climate change (Irwin 2015). There is a need for practices which are not just sustainable but regenerative (Schultz 2017), and that are not just sustainable for weird (white, western, educated, industrialised, rich and democratic) humans (Henrich, Heine and Norenzayan 2010). Sustainability is an issue of primary importance for the survival of societies, species, and the Earth in its current ability to support life as we know it.

Design, both in the sense of - "devis(ing) courses of action aimed at changing existing situations into preferred ones" (Simon 1969: 55) – and as practised by the design community, has had a role in creating these issues in the creation of products, services, and systems. In its situatedness in creating new preferred situations it therefore could also have a role in solving them. However there are two main issues with the role of design in the creation of sustainable or regenerative change.

The first is that, as currently practised, many design actions are embedded within dominant unsustainable systems. Because of the "systemic priorities of the design industry" (Boehnert 2014: 119) designers find it very difficult to effectively address current environmental and social problems. Despite the greater understanding by the design field of the complexity and interconnectedness of design, and of its potential for effecting social and environmental change, "the structural dynamics of the design industry reproduce conditions of deep unsustainability" (Boehnert 2014: 119). Even design with good intentions cannot always avoid being co-opted into the overarching structural systems set in place by capitalism.

What is needed is a design practice aligned with a set of ethics which can provide a counter and check to these systems. These ethics need to encompass ecological, social, and economic systems. Initiatives such as the

United Nation's Sustainable Development Goals, the Circular Economy, Transition Design, and other sustainable design approaches and practices approach sustainability issues with a specific set of goals overlaid on an ethical framework. A design practice which is very explicitly centred in a set of ethics is **permaculture**.

However even ethical design practices are not as prolific as is necessary to overcome the current trajectory of unsustainability. The current systems also benefit from systemic inertia; there is a sense that either the danger has been overstated (Tonkinwise 2015) or that the problems are simply too large to be addressed (Irwin 2015). Commitment to the effort needed for change is lacking, limited or patchy. Knowledge of the changes necessary is not always matched by the emotional dedication to withstand the effort and difficulties involved.

Therefore the second reason for the current overwhelm of unsustainable practice is that an affective relationship to the change that is needed is lacking. An example of the ways in which awareness of the need for change can be subverted by psychological aversion is seen in 'soft climate change denial'. In contrast to scepticism or 'hard' climate change denial, soft denial applies to those who accept the scientific consensus on climate change but remain in psychological denial about its impact (Rees & Filho 2018). Soft denial is a form of cognitive dissonance where people, despite intellectually understanding the reality of climate change, behave as if its reality or severity is not real. Forms of denial include failing to act due to apathy or disengagement, overestimating scientific debate or uncertainty, or underestimating urgency or the scale of change required for effective mitigation (Hoexter 2016).

The case for design for sustainability has been well-established, but design, and society, are not yet sustainable by default. Consequently, along with an explicit ethical framework, what seems to be imperative for a design practice to engage effectively with the scale of changes required for sustainability is a similarly explicit affective approach which appeals sufficiently strongly to

provide a counter to this cognitive dissonance. One affective approach which might prove to be compelling enough to produce behaviour change is **nostalgia**.

Permaculture offers potential as a design practice which could contribute to sustainability, but it is not particularly well-known or taken up on a popular scale. This could be related to its perception as purely allied to gardening or nature and therefore subject to a certain kind of nostalgia. This means it might appeal to a small group of people, but potentially not to urban or future-centred people. On the other hand, knowingly capitalising on this perception, if it exists, may prove helpful for its visibility and popularity. However there is to date no research on this perception of permaculture.

It is possible that, in a world where the hegemony is speed, growth, and novelty, certain aspects of permaculture which seem nostalgic have limited its appeal. Another issue may be that this potential nostalgic appeal is not overt in permaculture literature, training, or design processes, where it might be used as a generative strategy and affective appeal within the **design ideation stage**, leading to greater engagement in and appeal of the permaculture design.

There are some initiatives which use a combination of imagination elicitation tied to affect, including nostalgia, but these to date are underdeveloped and there is no specific use of this in permaculture. It is currently unknown if permaculture is viewed nostalgically, or if it used (consciously or unconsciously) by permaculture designers.

The project therefore proposes firstly that nostalgia might be an attractant for permaculture design, and secondly that nostalgia may be utilised as an affective element in permaculture design.

The review of literature aims to investigate the following hypothesis:

Firstly, that nostalgia can be a driver for permaculture design, in that it can draw people towards an interest in or engagement with permaculture. It could be already a factor in why people are interested in permaculture. This

factor is currently unexamined but could be explored to see if the proposition is correct, and in what ways it might manifest.

Secondly, that clients or stakeholders respond to nostalgia in permaculture design. Establishing whether nostalgia is a driver for permaculture design will allow for analysis of the extent to which nostalgia exists at the design ideation stage, and initiate examination of whether permaculture designers are conscious of this or not.

Thirdly, that nostalgia offers the potential of new, added value to the permaculture design process. Furthermore, if the second proposition is correct, a deeper understanding of the value of nostalgia as a clearly defined design tool could be more consciously utilised by designers at the ideation stage of permaculture designs.

If the use of nostalgia is better understood, it shows potential to deliver permaculture design with greater impact and longevity through greater participation and affective appeal. This could help increase user engagement and satisfaction with designs, leading to some positive impact on sustainability. There exists the possibility that nostalgia may not be understood merely as a rose-tinted but fundamentally mistaken version of history but as a far more meaningful and impactful active process; as Dwyer (2015: 22) states, a “fundamentally productive affective engagement that produces new historical meaning for the past as a way of reckoning with the historical present.”

The review will now proceed to explicate more fully the significant literature in the elements underpinning the hypothesis.

2.3 Nostalgia

Nostalgia is an affective response to the perception of loss. Something once present is no more, and a wistful longing for the nostalgic object or state is triggered. This can be fleeting and can feel superficial, like the desire for the music or snack food of a previous time, but in many cases the superficiality of the focus of the nostalgia conceals a deeper longing - as Kant ([1798] 1996) pointed out, it is not a past that we miss, but ourselves as we were in

that past. The desire for the snack food only represents a desire to have the freedom, or security, or wonder felt at that time of life. It is a cipher for a deeper emotional response – and this emotional response in turn is a clue as to the existential needs of the person feeling nostalgia.

The term 'nostalgia' is Greek etymologically but its cultural and theoretical origins lie in Switzerland in 1688, where a medical student, Johannes Hofer, identified cases of an illness among Swiss soldiers and mercenaries who had left their alpine homes to fight in other European places. Hofer listed their symptoms as including sadness, anxiety, constant thinking of home, irregular heartbeat, lack of appetite, fever, insomnia, and physical weakness (Sedikides *et al.* 2015). Hofer conceptualised nostalgia as a disease, a neurological complaint, which at its most serious could cause death. He coined the term 'nostalgia' from two roots: *nostos* (return to the native land) and *algos* (pain), and therefore both etymologically and literally, 'nostalgia' means "the suffering caused by the yearning to return to one's place of origin" (Wildschut *et al.* 2006:1). Despite the theory that it was caused by the sound of cowbells in the Alps causing trauma to the eardrum and brain (Davis 1979), it was nevertheless observed in those from other nations: British and French soldiers during the Napoleonic Wars were susceptible, and thousands of Union soldiers during the American Civil War were reported to be afflicted (Matt 2007). It was clearly an illness associated with being away from home; indeed, the only treatment considered effective at the time was to allow the soldiers to return home.

However doctors could not identify a bodily location for the illness (Boym 2001), and the idea that it was not a bodily disease began to challenge the medical diagnosis. It was also not a simple affliction. Darwin (1896 chapter VIII: 216) wrote of remembering the past,

The feelings which are called tender are difficult to analyse; they seem to be compounded of affection, joy, and especially of sympathy. These feelings are in themselves of a pleasurable nature, excepting when pity is too deep, or horror is aroused...

As the field of psychology began to grow in the twentieth century the study of nostalgia began to take on a different focus. Early theorisations of it

supposed it to reflect difficulties in individuation and separation from the mother: it was still seen as a disease, but one of the mind rather than the body (Routledge 2016). However, a pivotal differentiation was made during the middle of the twentieth century, with psychoanalysts recognising that people could long for and miss a range of objects or people. By the end of the twentieth century, with the recognition that people could be nostalgic for a broader range of things than a homeland, there also came the recognition that nostalgia was not a purely negative state. Psychologists saw nostalgia as bittersweet: not just a sadness or depression but also pleasurable in some ways. Sociologists proposed that nostalgia helped people deal with major life changes by remembering their former selves in a positive light (Davis 1979), and the benefits of nostalgia for patients with dementia were examined (Routledge 2016).

By the late 1980s much of the study that was done on nostalgia related to its use in marketing. Researchers discovered that people throughout their life display preferences for the products they consumed in their early adulthood. Holbrook and Schindler (1994, 1996, 1989) established that the movie stars, films, and music that people liked or consumed in their teens and early twenties remained a preference throughout their life. This recognition of the power of nostalgia in influencing consumer choice influenced advertisers, designers, television producers, and others to employ nostalgia when creating or marketing products. Studies established that nostalgia-based strategies work: nostalgic advertisements not only increase positive attitudes towards a brand but also make people pay more attention to the advertisement itself (Routledge 2016). Nostalgia sells – but why?

Until recently this focus remained on the marketing element rather than on any deeper engagement with the triggering of a nostalgic response. Psychologists, until the beginning of the 21st century, did not appear interested in nostalgia. However, recently experimental psychology has recognised the value of studying past-oriented emotional experience (Routledge 2016): it is a relevant and prominent experience in people's lives, with which they identify.

Contemporary psychologists have distinguished nostalgic memories from other autobiographical memories as uniquely emotional, and as containing more positive than negative emotion (Wildschut *et al.* 2006). Nostalgic memories are also more social than ordinary autobiographical memories: nostalgia is decidedly interpersonal and focused on relationships (*ibid*). And studies have shown that, compared to autobiographical memories, nostalgic memories are discussed in more abstract terms – as if reflecting on a distant event and thinking about it in terms of its higher order meaning – but, when relating the nostalgic memory to the present self, the language used is more concrete, focusing on the particular details of a memory (Routledge 2016). This particular combination delineates nostalgic memories from others and may account for some of the qualities of nostalgia.

Psychologically, nostalgia has been shown to be triggered by loneliness and boredom, with people engaging in nostalgia to make themselves feel better in the moment. However, it is also triggered by self-discontinuity, where “the nostalgic evocation of some past state of affairs always occurs in the context of present fears, discontents, anxieties, and uncertainties” (Davis, 1979:34). The research indicates that nostalgia is being used by people to move from a distressed state to a more pleasant or accepting one (Routledge, 2016), and that nostalgia also appears culturally in times of uncertainty or anxiety, and to the same purpose.

Social interactions, and product-induced or sensory inputs such as music, movies, or advertisements from our youth also trigger nostalgia without the stimulus of psychological distress. In terms of the functions of nostalgia, current research indicates that nostalgia has a “mood-repair function” (Routledge, 2016: 49) – that is, when people feel in a negative state they turn to nostalgia to help them feel better. It also suggests that “people turn to nostalgia when their social needs are not being met” (*ibid*: 53). When people are lonely, they engage in nostalgia to help them feel more connected and also more socially motivated – when people had nostalgic memories from the past they were more likely to engage in social interactions and to feel confident in their social abilities.

In addition, self-related functions – self-esteem, self-growth, and self-continuity – are also positively affected by nostalgia, with studies showing that participants who engage in nostalgic memories show an increase in optimism (Wildschut *et al.* 2006). Self-continuity – the sense of a connection between one’s past and present selves – is positively associated with psychological well-being, and the lack of it conversely associated with distress and difficulty coping, particularly with life changes and challenges (Routledge 2016). A lack of self-continuity can trigger nostalgia, but nostalgia can help people feel connected to their pasts and as if they have a part of themselves that stays the same over time, helping people form and maintain a strong sense of identity which helps with adapting to changing circumstances. It may even (Wildschut *et al.* 2006) help people who have difficulty with feeling that their lives have meaning (Routledge *et al.* 2011). Nostalgia is the idiom of exile, and can be activated by negative feelings such as loneliness or negative affect (Sedikides & Wildschut 2016b). However the research on nostalgia shows that lay people (that is, not psychologists) understand both the emotion and the meaning of nostalgia very well. They recognise that it is a mixed emotional state of both longing – a certain sadness – and happiness. It also appears to be universal. Hepper *et al.* (2012 in Routledge 2016: 14-15) identified conceptualisations of nostalgia common across a number of cultures as an emotion focusing on good past memories, often from youth or childhood. In addition,

... Lay people also view nostalgia as social in nature, focused on close relationships. And they associate nostalgia more with positive feelings such as happiness than with negative feelings.... Finally, lay people associate nostalgia with a sense of longing, loss, and even a desire to return to the past.

These are familiar ideas about nostalgia that can be recognised from experiences and descriptions from many diasporas and as the above quote shows, there is a common thread to this across groups of people.

Areas of design for wellbeing have to do with affect and the self, where evoked nostalgia reinstates psychological equanimity, elevating mood, self-esteem, and social connectedness, increasing a sense of meaning in life

(often by creating or maintaining a perception of continuity between past and present), and motivates into prosocial behaviours (Sedikides *et al.* 2004; Wildschut *et al.* 2006; Sedikides *et al.* 2008; Barrett *et al.* 2010; Routledge *et al.* 2011; Turner *et al.* 2012; Juhl *et al.* 2013; Lasaleta *et al.* 2014; Van Tilburg *et al.* 2015; Sedikides *et al.* 2015; Sedikides & Wildschut 2016a).

Within psychology and sociology measures have been developed to test dimensions of positive (happy or content for example) and negative (sad or lonely, for example) affect. This research project does not directly use either affect tests or scales but does refer to research which does. Routledge (2016) provides an overview of the measures of nostalgia affect undertaken since the beginning of the twenty-first century, using measures such as the Positive and Negative Affect Schedule (PANAS) and its more internationally reliable modification the I-PANAS-SF, and other scales and measures. The measures as developed to this point show reliability and validity across cultures. When research is cited which examines measures of affect in nostalgia, these are the tools which have usually been used.

Contemporary research shows that nostalgia has a generally positive effect on people psychologically. From its perceived origins as a neurological disease to the present, it has changed from a negative state to a positive influence. In addition, the perception of nostalgia in something – food, song, place, or even more nebulous or less material placements – increases not only certain kinds of wellbeing but also engagement and attachment. This is of primary importance to the research project. If nostalgia is psychologically useful, and if it is attached to certain settings, could these settings be assessed for the existence or presence, or the potential for nostalgia? Could the perception of nostalgia in a thing, a place, or a state, be categorised or otherwise examined? Could the nostalgic attachment to a thing, a place, or a state, and most particularly a design output, be examined, or even increased? This project specifically aimed at examining the possible presence of a nostalgic element in permaculture.

Permaculture will be examined in more detail in a further section but first it is important to furnish the context within which it exists as a sustainable design discipline: that of systems design.

2.4 Sustainability and systems design

Sustainability can be defined in a number of ways. A very common definition, found in the World Commission on Environment and Development's 1987 Brundtland report 'Our Common Future' is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland 1987). Subsequently, and with this definition as its guide, in 2015 all United Nation Member States adopted 17 Sustainable Development Goals. Aimed at clarifying sustainability goals and providing universal targets for sustainability (169 targets to be reached by 2030 at the latest), the goals are:

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice and strong institutions
17. Partnership for the goals.

The International Institute for Sustainable Development (IISD), an independent think tank working with research and policy, maintains an SDG Knowledge Hub providing daily updates on the progress of the 2030 Agenda for Sustainable Development (<https://sdg.iisd.org/>). The IISD has five focus areas of prioritisation in which they predict policy shifts have the potential for substantial change within the SDG's time frame of 2030. These are

1. Climate change: address its causes and adapt to its impact
2. Resources: sustainable management of natural resources
3. Economy: fostering fair and sustainable economies
4. Act together: building the capacity to act together on sustainability, and
5. Engage: aiming to deliver insights that spark action.

Both the UNSDGs and four of the IISD's focus areas which overlap at points but can be grouped into three main sectors, which align with the categories Elkington (1999) popularised in developing the influential Triple Bottom Line concept (also Odum 1996). He proposed that companies, instead of only focusing on the 'bottom line' of profitability, should simultaneously also focus on social and environmental measures of achievement.

With this framework in mind SDGs 1, 7, 8 and 9 can be seen as pertaining to economic sustainability along with IISD's Economy focus; SDGs 2, 3, 4, 5, 6, 10, 11, 16 and 17, along with IISD's Act Together focus, are aimed at social goals; and SDGs 12, 13, 14 and 15 and IISD's focus areas on Climate Change and Resources are aligned with ecological and environmental agendas.

The importance of these delineations in thinking about and acting on sustainability lie firstly in challenging the relative importance given to the economy in general. Currently most of the world's economies operate under some form of capitalist system. Capitalism is an ideological, social and economic system in which the means of production is held by private ownership (rather than by, for example, the state or government) and operated for profit (Zimbalist and Sherman 1984). The capitalist economic

system appears so 'natural' it is difficult to imagine what alternatives to a capitalist system exist. Capitalism seems to belong to a "natural order of things" (Olin Wright 2010: 1).

An ideological bias inherent in capitalism equates improvement with growth and growth with increased consumption. The singular way to denote success has been by increase. SDG 8, 'Decent work and economic growth', still acknowledges this measure – though it is interesting that it places economic growth second to the concept of decent work – but the relative importance given by governments, businesses, and other influential voices to economy over all other measures of success is a danger to sustainability.

Even countries which are not defined as capitalist economies operate under some form of growth ideology. The level of consumption presently provided and promoted by this growth ideology is dysfunctional considering the carrying capacity of the Earth. Carrying capacity refers to the amount a system can support. In ecological terms this is the size of a population which can be supported indefinitely based on the resources held in that system. Carrying capacity is based on three factors: the amount of available resources; the size of the population; and the amount of resources consumed by each member of that population. At present rates of human consumption, three Earths would be needed to provide the carrying capacity demanded of the system (Wackernagel *et al.* 2006). There are finite resources and they are being consumed in a way which cannot support the system indefinitely. Consumption is therefore unsustainable.

Three main challenges to a fixed carrying capacity have been suggested by proponents of 'eco-capitalism': 'bigger pie', in which technology is used to increase production and/or resources; 'fewer forks', in which population stops increasing or reduces; and 'better manners', in which a more equal share is provided (Cohen 1995). Externalities, or the consequences which fall on people who are not directly involved in an action, need to be considered when discussing carrying capacity. These externalities include both positive and negative externalities involved in having children, for example, but also include waste or pollution – it is not usually currently

considered within production or consumption budgets and becomes a free-floating unregulated issue, as in the drifting islands of plastic in the sea.

At its least problematic interface with contemporary systems of consumption, the theory of eco-capitalism attempts to find ways of maintaining consumption, by replacing damaging components or elements with ecologically benign alternatives (Braungart and McDonough 2002), or argues that market forces have caused redesign of manufacturing so that there is twice the amount of output for half the amount of resources (Lovins 2016), or predicts that consumption can largely continue due to the production of 'green energy' in micro-energy plants shared in an 'energy Internet' (Rifkin 2011). These are comparatively palatable alterations; however they still operate under presumptions that an ideology of continued growth can continue - somehow.

However Raworth's (2017) model of alternative economics considers the embeddedness of economics within a wider set of systems which reflect the UNSDGs. The diagram consists of two rings (the doughnut) in which the inside ring contains all that is needed for "flourishing lives" (Olin Wright 2010: 11).

Anyone living beyond the boundary, in the hole in the middle of the doughnut, does not have enough for this flourishing life. The outer ring of the doughnut represents the Earth's limits. Humans are currently living beyond both rings, in both an ecologically unsafe and socially unjust situation. Raworth suggests that the purpose of economics is not to promote endless growth but to allow humans to stay within the limits of the circles in the diagram.

Doughnut economics represents a way of envisaging economics which considers resource limitations and social shortfalls. What is of particular relevance and importance for design is that economics is presented as embedded within a system. This understanding is crucial for design when it is engaged with sustainability.

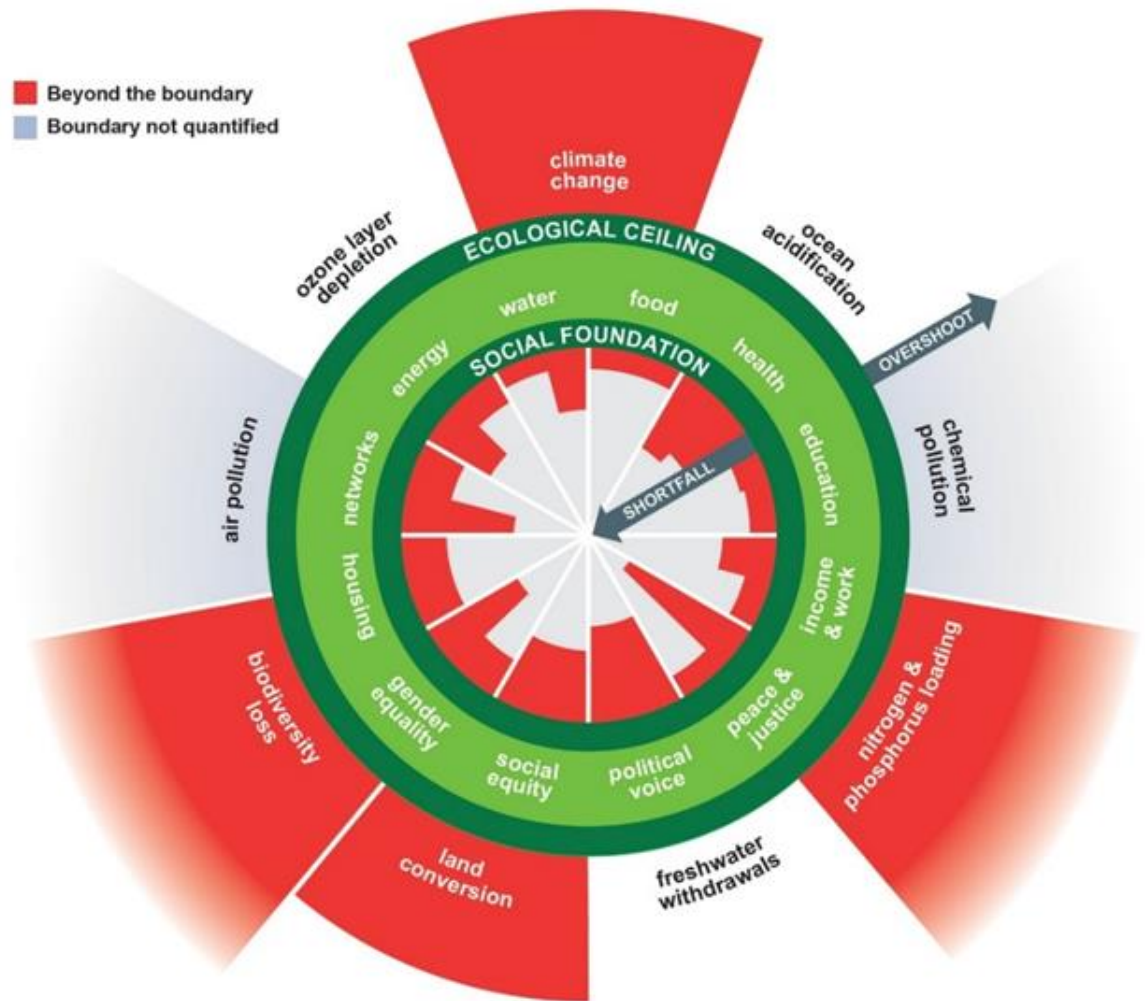


Figure 1: Transgressing the Boundaries Model (Raworth 2017)

This is the second reason the UNSDGs' combination of social, cultural, environmental and economic factors in sustainable development are so important. Along with triple bottom line theories and other frameworks which encourage a more balanced and appropriate approach to sustainability, human life and thriving (including the Transition Towns motto 'Head, heart and hands', and the permaculture ethics 'Earth care, people care, fair share' which will be examined in more detail shortly) they are an important systems-centred way of conceptualising what is necessary for sustainability to be reached.

Bertalanffy (1969) characterised the 19th and first half of the 20th century as operating under a conception of the world as chaos, and the second half of the 20th century as moving into the idea of the world as organisation,

informed by such disciplines as cybernetics, systems engineering, and information theory. Since that seminal publication there has been another reframing of our understanding of the world – that of systems self-organising in, alongside and out of chaos.

The world as ‘organisation’ seems beguilingly simple – and breaking things down into their component parts and studying them has led to a great deal of scientific progress, for example. However, the recognition that we exist in a world of interacting systems is recognised as a better reflection of reality.

A system is defined as a set of interlinked elements that act according to a particular set of rules to form a unified whole. A system is defined or described by three elements: its boundaries, its structure and its purpose. For example, a garden has observable boundaries, a structure of elements such as planting beds and hard surfaces, and a purpose of providing pleasure or food or outdoor space. A system is surrounded by and affected by its environment – what is outside its boundary. Systems theory views the world as a multifaceted system made up of interacting parts (systems). Natural systems may not have a purpose as humans understand it, but observers can interpret how they act as having an objective. The parts of a system work together to produce a cohesive entity of some sort, otherwise they are seen to be more than one system.

A garden is a relatively simple system taken in isolation – however no system is really in isolation but rather part of a network of systems. If other systems such as weather, socio-economic, educational, cultural, geographic, land ownership, pollution, and so on, it becomes clear that the boundary of a garden creates a model which gives an illusion of separateness which allows for planning and activity, but which is also illusory. The 17 SDGs are models which allow for planning and action, but they too are interconnected.

Complex systems share several characteristics which include having large numbers of elements which all interact in complex ways, decentralised decision-making, unpredictability, and irreducibility, meaning they cannot be broken down into their component parts without destroying the system (Hjorth and Bagheri 2006). Complex systems respond to change in their

environments – they are resilient and can remain in balance but can also be affected by extreme stressors or by emergent properties of their own (Gaziulusoy and Brezet 2015). The level of complexity and emergent nature of systems now makes it “nearly inconceivable that any single expert or manager can understand the entire system or operation” (Jones 2014: 93), and alteration anywhere in the system will have effects which cannot be predicted. Moreover, “(t)oday we must conceive of all systems as social systems, or at least socially implicated systems of systems” (Jones 2014: 92). As designers work at higher orders of complexity they work with contingent, emergent, and complex properties of systems.

Wicked problems (Rittel and Webber 1973) are difficult or impossible to solve because of inconsistent or opposing, and difficult to distinguish, requirements. The problems contain complex relationships to other problems, so that solving one problem may create or reveal others. There are ten characteristics of wicked problems, including their uniqueness, the fact that they can be considered symptoms of other problems, and their lack of immediate or ultimate test of a solution, that render them resistant to resolution. They share with complexity theory a physics-based understanding of relativity concerning the way problems are approached, in that the way a discrepancy is perceived and be explained in numerous ways, but the explanation chosen determines the kind of resolution sought or provided – that is, the understanding of the problem’s “whole” problem or solution can never be fully comprehended.

The concept of ‘super wicked problems’ (Levin *et al.* 2012) was introduced in 2007, in discussions around climate change, as having the additional characteristics of time running out, no central authority, and the facts that those seeking to solve the problem are also causing it and that policies irrationally discount the future. Underlying design approaches to wicked and super wicked problems is an understanding of complexity theory. The edge of chaos is a non-linear world, where a small perturbation no longer necessarily produces a small effect, but where simple changes can produce

complex patterns and there is a “possibility that information processing can become an important part of the dynamics of the system” (Lewin 1993: 51).

Even though the conception of both problems and solutions are contingent, design thinking at least allows for formulating a course of action in the difficult terrain of having no stopping rule and where every solution attempt counts significantly; “design-like approaches and practices to problem-solving are especially powerful in situations where a problem owner succumbs to the ‘tried anything phenomenon’,” (Schmiedgen 2012: n.p.).

Permaculture is systems approach and a formation of design elements based on a response to (super) wicked problems. Because of its explicit relationship to the super wicked problems of peak oil and climate change, permaculture design offers potential as a design tool in scenarios which take super wicked problems as their starting point, or which include super wicked problems in their brief. The permaculture approach to climate change is to see it as a systems crisis – both ecosystems and social systems – and because it is rooted in systems thinking, sees itself well-placed to offer a raft of solutions to the problems engendered by it (Penha-Lopes & Henfrey, 2015).

Peak oil is the point of maximum oil production in the world, after which production can only decline. Peak oil is accepted in the permaculture movement as being imminent and inevitable. It is one of the main drivers for permaculture development both in terms of theory and practical advances. Energy descent refers to the post-peak oil transitional phase where societies move from the increasing use of energy that has become the norm since the Industrial Revolution to a lowering use of energy (Hopkins 2008; Holmgren 2008; Heinberg 2003).

This double challenge is intrinsic to some permaculture work, especially as expressed by Holmgren (2008), who developed a set of four Energy Descent Scenarios, outlining conceivable futures based on the nexus between climate change and peak oil.

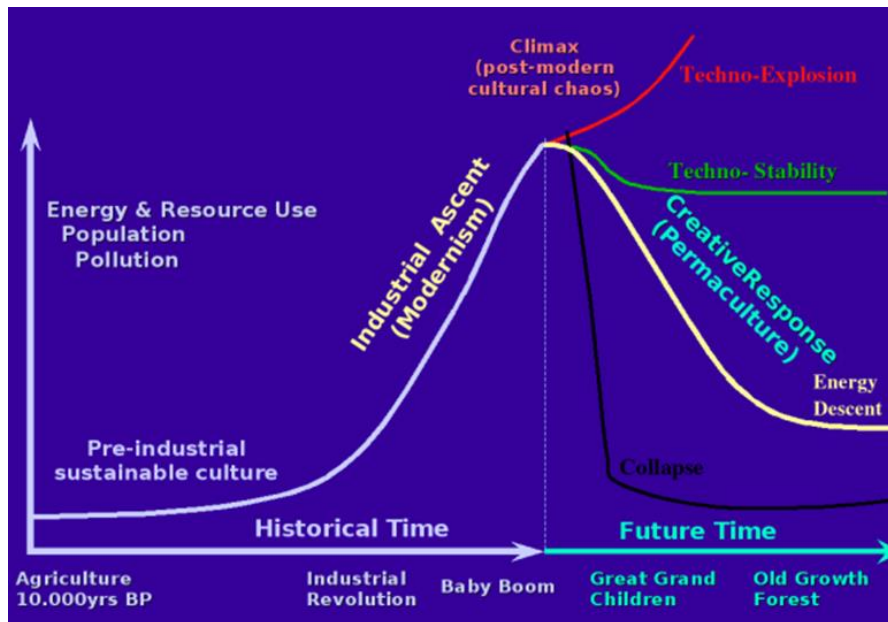


Figure 2: Four energy descent scenarios (Holmgren 2008)

Permaculture is implicated in the successful negotiation of the scenarios (apart from one, collapse, which does not have a successful predicted outcome for humans). When mainstream media deal with climate change they usually focus on the ‘Techno-explosion’ scenario, in which human ingenuity finds a way (or multiple ways) to deal with climate change (or to colonise other planets in order to escape its consequences for human life on Earth). Most permaculture literature and focus, in contrast, is predicated on the expectation of an energy descent scenario, which affects elements such as time scales and technologies involved in permaculture designs, and which inevitably involves a perception of retreat from current growth ideology and trust in technology. It therefore looks like going backwards, like returning to some prior state. Holmgren’s scenarios are a clear attempt to categorise super wicked problems to more clearly evaluate possible design solutions.

The Transition movement (Beattie n.d.) is intricately bound with permaculture: its founder, Hopkins, was a permaculture teacher. Transition as a concept and as a movement is therefore based on permaculture principles throughout. and is likewise predicated on the interconnection of the double challenge of peak oil and climate change. The Transition Movement name is based on this implication of transition from our current

unsustainable patterns to a more equitable and sustainable way of life by design. The Transition Movement itself is based on a recognition that Government is too large, too disinterested, and too diffuse to be able to initiate the change needed to deal with the ecological challenges, and the individual is too powerless and too small a unit to be able to initiate change. Meaningful action therefore must come from small, mobilised groups. It is therefore aimed at bringing these small groups together. Permaculture is a design approach which is feasible on an individual scale, though it does not preclude group work. It is therefore appropriate for a study which will engage with nostalgia, an emotion which engages people in individual ways.

The emerging field of Transition Design likewise has its origins in the Transition movement and therefore shares many elements with permaculture. Despite the common progenitor it does not appear to be subject to the same kind of (arguably nostalgic) profile as permaculture. This is potentially because of it being aimed at the education of those who are training as, or already define themselves, as professional designers, and because of its placement in professional design arenas. It shares many of the same concerns and ethics, and does contain some elements which examine the relationship between affect and engagement, but is not subject to the same perception.

There are other design approaches to sustainability involving a systems design approach which share elements of similarity to permaculture. Circular Economy Models are a response to the problems engendered by the linear economy approach which has characterised production and consumption patterns since the first Industrial Revolution. These linear patterns involve using raw materials taken from the Earth, manufacturing products, and then when they are finished with throwing them away: take-make-waste (Ellen MacArthur Foundation 2012). In contrast, a circular economy approach follows three principles: design out pollution and waste; keeping products and materials in use (by designing for reuse or repair and using and developing either renewable or recyclable materials), and regenerating natural systems (Ellen MacArthur Foundation n.d.). The Circular Economy

Model synthesises a number of theoretical approaches to sustainability including the Cradle to Cradle design approach (McDonough and Braungart 2002) and natural capitalism (Lovins, Lovins and Hawken 1999). Although it has elements which can be applied by individuals, the circular economy movement, particularly as represented by the Ellen MacArthur Foundation for example, has correctly identified that the greater leverage for its message lies with companies involved in the processes of extraction and manufacturing and is therefore not subject to the same nostalgic perception as permaculture. It is an ethically-based approach, but the lack of explicit social design elements further differentiate it from a permaculture approach. It is also focused on education and information, relying on logic and the development of viable alternatives, which makes it a good fit for working with companies but less involved in the identification of other affective approaches to promoting the acceptance of and commitment to behavioural change for sustainability.

An approach which does deal specifically with the affective element of design is Emotionally Durable Design (Chapman 2008) which specifically examines the concept of self as it applies to the practice of consumption and the emotional attachment to objects. This is an important contribution to the field of affective design but is tied specifically to consumption patterns and domestic electronic products, and while there are elements of nostalgic impulses in object attachment this research takes the theme further, and moreover applies it to a design approach.

Like permaculture, the urban agriculture movement has connections to place and self-sufficiency and promotes a connection to nature. It has historic and contemporary links with the grassroots permaculture movement which has been influential in the renaissance of this traditional approach to growing and distributing food around urban areas (see, for example, Edible Todmorden among many other permaculture urban garden initiatives). However there are many kinds of urban gardens, reflecting a range of different motivations and purposes: social networks based on developing communities as in the Transition Towns movement, or food security and ameliorating hardship for

those from disadvantaged backgrounds or in poverty as in the urban gardens of Detroit (Adams 2019), or the Severn Project in Bristol. Urban gardens are associated with a range of other outputs in addition to the food produced (Butler and Moronek 2002), including individual and community health and well-being, economic regeneration, and landscape and environmental regeneration. It is a model of sustainable design which is frequently invoked in policy initiatives and proposals for sustainable cities (Fraser 2002). As with the Transition Towns movement, urban agriculture has ties with permaculture – at times very close. However it is not always aligned with permaculture as a design practice, and although it acknowledges social benefits in terms of caring for people and redressing disparity, it is not ethically centred in these elements holistically as permaculture is.

Rewilding is one of the methods listed in the UNSDGs as necessary for the achievement of Goal 15 (Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss). Rewilding is based on the practice of allowing nature to take over the process of ecological restoration and, like permaculture, is aimed at setting up systems that require little, or passive management. It differs from permaculture in that it often aims to remove humans from a landscape (largely or entirely) by, for example, introducing apex predators with the aim of recreating or restoring a biodiverse, self-regulating stable eco-system. It shares a systems design base with permaculture, and its focus on restoring areas to a “pre-human” state makes it subject to some of the same perceptions of nostalgia as permaculture. However it is restricted to large areas of landscape and therefore is unsuitable for the investigation of individual design engagement with practice. However, it does come closer to an approach to sustainability which is aligned with permaculture goals, expressed in a definition by Ehrenfield (2008: 6) as “Sustainability is the possibility that humans and other life will flourish on the Earth forever.”

Sustainability literacy (Sterling 2010; Stibbe 2009) posits the idea that people need to be educated, or literate, in a number of different forms of theory and debate in order to make appropriate decisions regarding ecology and sustainability; these range from the material to the cultural and beyond. In other words, a practice such as fracking (or indeed permaculture design) is not merely constrained by hydrocarbon geology, but by knowledge and understanding of various systems which include social, cultural, economic, ecological, ideological, and so on. However understanding sustainability/ literacy is still only one part of what is needed to move towards sustainability. Knowing what is needed does not always result in behaviour change and the gap between these two is of primary importance in effecting behaviour change.

Permaculture is a possible contributor to sustainability which is not well known, and which therefore needs further explanation.

2.5 What is permaculture?

Permaculture is a design discipline based on a set of ethical principles which offers design-led solutions to ecological, social and cultural issues. As a design philosophy and practice it is based on the recognition and use of patterns, directly predicated on those found in natural systems. It seeks to emulate natural sustainable systems of land use or social organisation so that what is designed is itself a sustainable system. It has the potential to be part of the arsenal now needed to address the myriad of issues besetting human life on Earth – ecological, human care, and parity issues in particular. However it is not widely known and therefore its contribution to solutions to the issues is less than it could be.

Permaculture was originally developed in Australia in the 1970s by Bill Mollison and David Holmgren as an “integrated, evolving system of perennial or self-perpetuating plant and animal species useful to man (sic)” (Mollison & Holmgren 1978). The term ‘permaculture’ is a portmanteau of the words ‘permanent’ and ‘agriculture’ (and later, ‘permanent’ and ‘culture’), signifying its intention to create stable agricultural systems. Mollison, known

as ‘the father of permaculture’, reportedly thought of the germ of the concept while watching some Tasmanian devils in a clearing, with a diary entry stating, “I believe that we could build systems that would function as well as this one does” (Hemenway 2001: 4). Mollison had worked in environmental and fisheries government departments and was dismayed at the industrial-agricultural methods that dominated but were so dependent on non-renewable resources and which were degrading soil, poisoning land and water, and reducing biodiversity (Mollison and Slay 1991: v). He recognised that the Tasmanian devils were one part of a system which had remained in balance for many thousands of years, in contrast to the system in which we currently exist.

Mollison and Holmgren met at the University of Tasmania and would go on to develop permaculture together, based on both the understanding of the inherent instability of systems based on fossil fuel energy and on the example and inspiration of natural systems. Studying how long-lasting natural systems maintained their inputs and outputs in equilibrium and extrapolating from the commonalities they saw across these enduring systems, they developed a set of principles that they proposed could be applied to individual designs to create new systems that would be maintained in balance across long time frames.

Holmgren describes sustainability as “a set of coherent system priorities” (2011 xxviii). Permaculture as a field is nested in systems design (Holmgren 2007; Blizzard & Klotz 2012) just as systems design is nested within the wider design field.

Systems which require inputs of energy and create outputs of waste have flow economies (energy flows in and then out); those which do not have circular economies (Winkler 2011). The aim of permaculture is to move from flow economies to circular economies. Permaculture designs are aimed at creating a system which requires the lowest possible number of outside inputs and produces the least amount of waste to the system itself, setting up a design solution which will continue in as close as it is possible to a closed-loop scenario. Low or no inputs and no waste once a system is

functioning is the goal, along with an abundance of outputs. 'Work' is any need not met by the ecosystem, and 'pollution' is any output unable to be absorbed by the ecosystem. Permaculture design seeks to design systems in which both work and pollution are minimised. High quality and effort capital work is required in setting up a permaculture system, but this diminishes after the initial structures are in place, as linear flows develop into self-regulating cycles in which the system is able to self-organise and self-regulate.

Initially – as reflected in the name – the aim was to design landscapes which mimicked natural patterns and systems to provide food, fibre and energy in plenty for local needs (Holmgren 2011: xix). Meeting human needs by conscious design solutions which leave ecosystems unharmed, and preferably healthier, was and is still the goal (Whitefield 2012; Bell 2004). Permaculture began by mimicking natural systems in gardens and agriculture, and most of the experience, knowledge, and training continues to be focused on land-based systems.

However, gradually Mollison, Holmgren, and others, began to realise that the principles that had developed out of the attention to and application of natural patterns could not only be applied to land-based systems but to other areas dealing with physical resources, as also with energy resources and human patterns. These resources and frameworks are called invisible structures in permaculture. This widening of permaculture's focus, from land-based systems to including people as a design element within land-based systems, to design which accounts for and utilises these invisible structures, is what Holmgren describes as "the use of systems thinking and design principles that provide the organising framework for implementing a sustainable culture" (Holmgren 2011: xix). The recognition grew that, as useful and positive as the tool of permaculture was, it was the forces within human systems which often predicated the success of a design (or lack thereof), more so than the physical elements. Design artefacts (including designed systems) cannot have relevance or longevity if the systems to

support them are not in place, and the invisible structures component of permaculture design is intended to take this into account.

Permaculture is therefore a cross-disciplinary practice. Unlike design disciplines such as fashion, architecture, and so on, permaculture is not limited to a particular medium but is more abstract and transferable; it is an approach or philosophy which can be applied across a number of domains. Holmgren's Permaculture Flower (2002) shows the areas which might be involved in a permaculture design. As an example, a garden design might include an area of forest garden which might be owned or run by a cooperative which has designed new forms of investment which have included forms of consensus decision-making in their development. Not only the built environment and tools and technology but systems such as finance, land tenure, education and well-being, at the complex, experiential, cross-sector and cultural extremities of design practice are integral elements in permaculture designs.

The overlapping nature of the sections in the Permaculture Flower (Figure 3) make clear that organic agriculture or forest gardening share 'edges' – in this case, interactively impact on and are impacted by – factors such as land tenure (planting a forest is difficult to justify on land that is not owned or otherwise secure), or the built environment (how the land is affected by shade, pollution, or transport links, for example). Each of these factors is in turn impacted by other elements.

Permaculture forgoes a linear sectoral organisation of systems such as agriculture, energy and water management, architecture, urban planning, education, recreation, administration, and so on, in favour of creating networks between the various elements needed for each undertaking (Kennedy 1991).

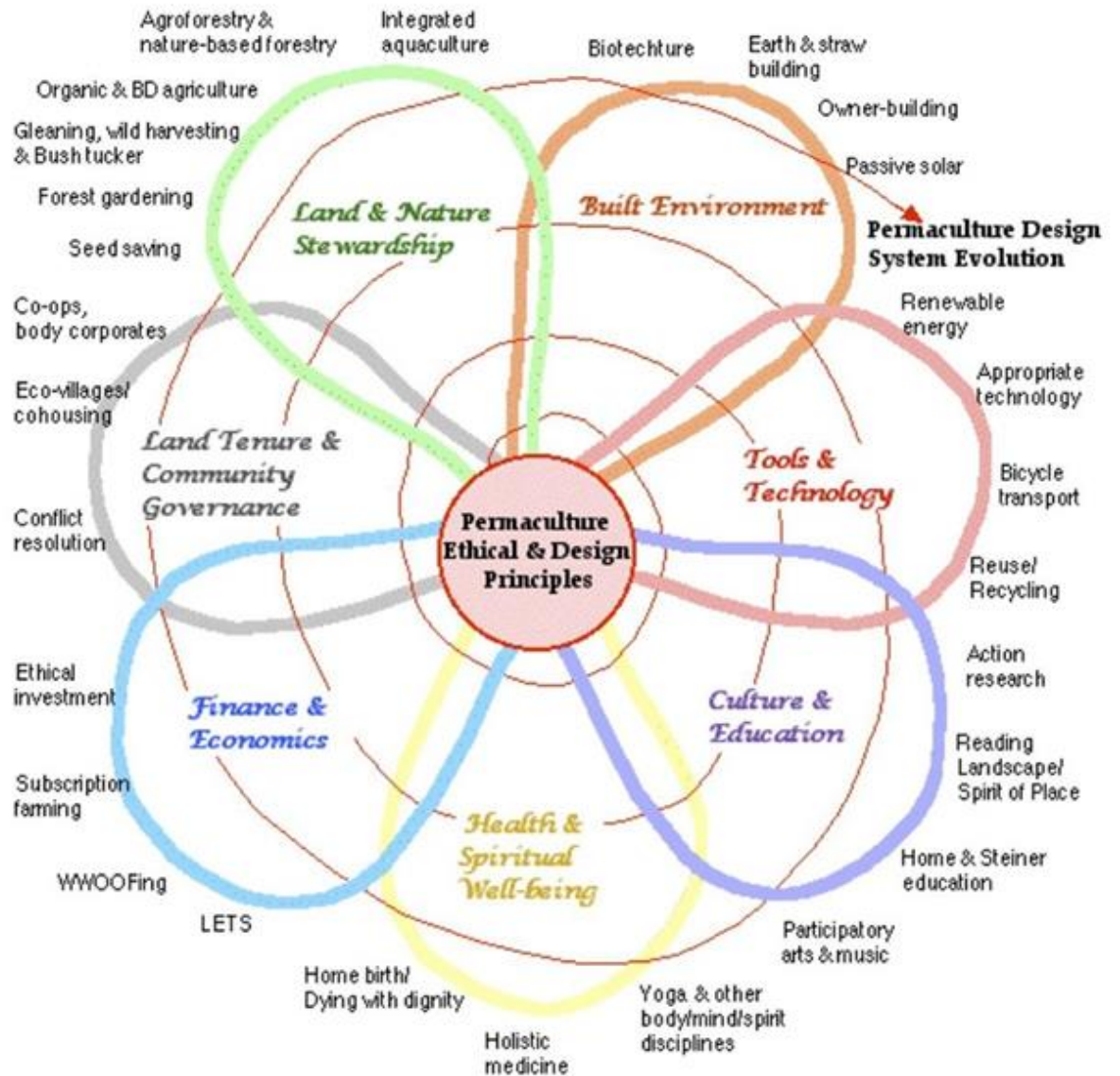


Figure 3: The Permaculture flower (Holmgren 2002)

Not all permaculture design will engage specifically with all these elements. There is a large section within the permaculture movement which sees permaculture as dealing specifically with sustainable and productive garden design, or design for larger food production systems – ethical in as much as they treat the Earth sustainably and even regeneratively, but without reference to wider cultural domains. But Mollison (1991: 5) provided a definition of permaculture as it related to systems and human society:

Permaculture is the study of the design of those sustainable or enduring systems that support human society, both agricultural & intellectual,

traditional & scientific, architectural, financial & legal. It is the study of integrated systems, for the purpose of better design & application of such systems.

Permaculture design uses the observation of natural patterns as impetus to address human problems, with an explicitly ethical focus (Atkinson 2016: n.p.). There are three ethical principles underpinning permaculture: Earth care, people care, and fair share. If a design does not adhere to all three of these ethics it is not permaculture: “A thousand herb spirals on the lawn of your nuclear missile launch facility aren't going to make it a permaculture nuclear missile launch facility” (Atkinson 2016: n.p.).

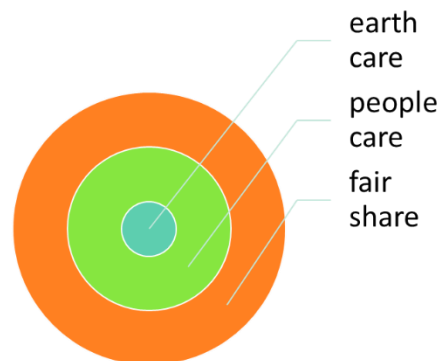


Figure 4: The three permaculture ethics

Every permaculture action is designed to protect, nurture, or regenerate the Earth and its ecosystems. Caring for people requires proactively avoiding and providing alternatives to exploitative conditions or situations and finding ways to increase wellbeing. Fair share signifies the distribution of any surplus in the system in ways which benefit everyone in the system (sometimes this ethic is styled differently, such as in Permaculture Magazine's 'Future Care'). The three ethics are inextricably linked; actions within one ethic affect the other two. When problems arise in one, other problems arise in others. A short introduction to the three ethics and some of their contexts follows.

Permaculture's ethics and principles are (relatively) set and can be described as the philosophical or theoretical grounding for permaculture (though there are a small number of different versions and there continue to be adjustments). From this philosophical basis arise frameworks for the

implementation of the principles; and from the frameworks or processes a wide range of design tools or methods have arisen. Within this section, the ethics will be examined, with the principles and the elements relating to their application being discussed in the section on permaculture design ideation (section 2.7).

permaculture			
philosophy		application	
ethics	principles	frameworks/ processes	design tools/ methods

Table 1: Permaculture ideation

2.5.1 Earth care

The ecology of place remains a core tenet for permaculture - the understanding that the living Earth supports all human endeavour. Even in 'social permaculture' it cannot be ignored that Earth provides a limit of resources (and capability of dealing with waste) which cannot be exceeded. Permaculture explicitly accepts and attempts to work within this limitation. Living within the Earth's carrying capacity is central to permaculture design.

The global ecosystem appears to provide endless streams of material for the use and comfort of humans, but this appearance is only possible because of the hidden nature of supply and waste chains. As Braungart and McDonough (2002) point out, everything comes from somewhere. Similarly, Commoner's (1971) first law of ecology points out that everything must go somewhere (there is no "away" to which things can be thrown), the other laws stating that everything is connected to everything else; nature knows best; and there is no such thing as a free lunch (everything must eventually be paid for) (in Egan 2007). In current economically advanced societies, the levels of material comfort enjoyed are being paid for by other people (and by the biotic community). Commoner's laws hint that this cannot continue, and many predict that a change is imminent (Graeber 2010; Morris 2010; Wright 2009). Human exploitation of non-renewable resources such as coal and

especially gas has led to technological and societal development but also reliance on energy sources which by their nature are going to run out at some point, and which produce worrying waste (in amount and/or in longevity, as with, for example, plastic, or nuclear energy). This historical interval of cheap, abundant energy is by its nature transitory, a “party” window (Heinberg 2003) in which patterns of consumption and waste creation are inherently unsustainable as a system. The law of diminishing returns in an overly complex system (Tainter 1988; Diamond 2005) is proposed to lead to the collapse of civilisations. Permaculture was conceived of and developed as a systems-based alternative to this inherently unstable situation: a multidisciplinary practice creating closed-loop systems such as those found in nature which are mutually beneficial for land, resources, the environment and people (Permaculture Research Institute n.d.).

Permaculture conceptualises Earth as a system, and more than that – as a living organism, with concomitant tendencies to self-regulate, evolve, and maintain life. Systems such as the one Mollison observed in the Tasmanian rainforest maintain steady states of energy use but interact with other systems. Most permaculture designs at present are rooted in place but require the designer and user to acknowledge and work with the fact that all places are connected within systems, rather than being domains with clear border demarcations. Solutions to design problems therefore must see the situation holistically as Mollison (in Holmgren 2011: 155) put it:

In every aspect of nature, from the internal workings of organisms to whole ecosystems, we find the connections between things are as important as the things themselves. Thus “the purpose of a functional and self-regulating design is to place elements in such a way that each serves the needs and accepts the products of other elements.”

There is a focus on respecting and preserving the biodiversity of Earth which is shared with sustainability literature; however within permaculture there is an understanding (Holmgren 2011; Macnamara 2019) that continuing at current levels of consumption and waste, as is sometimes the default position of sustainability discourse, is not going to be sufficient to sustain life

on Earth for large numbers of biotic communities (including humans). Therefore, the focus in permaculture goes beyond sustaining to regeneration: the creation of new habitats, and the intervention in patterns and systems to support regeneration. This emanates from an Earth care ethic of respect for all life forms for their intrinsic value, rather than taking care of creatures or systems because they are attractive or useful to humans.

However, care of humans is also an underlying ethic of permaculture.

2.5.2 People care

The systems that underpin, contain, and surround the idea of fair shares are as multivalent and complicated as those involved in Earth care and people care.

In industrial-consumer society, the value of work is often disconnected from products, systems or societies. Permaculture aims for all people to be able to work in ways consistent with social, ethical and environmental value. Whilst permaculture sees humans as only one of a set of members of any biotic community, the aim is always to promote and develop the holistic well-being of people, rather than see them as, for example, economic units. Systems and their design interventions can either contribute to or adversely affect how people feel or are cared for.

Currently the needs of humans are being met in unsustainable, unjust, and polluting ways. Humans are confusing what is necessary not just what is required for survival but what is needed for a full and flourishing life, with the superficial rewards of consumerism. There is confusion not only over what constitutes needs and wants but how to achieve them.

Permaculture looks to ensure care of people's physical, emotional, social, spiritual, and intellectual needs by design. For example, an understanding of the positive effects of nature in physical and mental health is part of garden designs (Macnamara 2019). Many permaculture designers see the design of livelihoods as a permaculture project, alongside the design of a life where productivity is not necessarily the main focus. The benefits of a sense of

connection, diversity, and a sense of community are also elements of focus in permaculture designs (Macnamara 2019). The ethic of people care can be applied to the individual or to collectives; they have been applied to healthcare, education, and prison systems (Vosper 2015).

Caring for people uses resources, not all of which are non-renewable – it has been argued (Macnamara 2019) that care is a resource which can grow as it is shared. But in some ways in economically developed societies resource use can act as a proxy for care. People are often exhorted to spend money to make themselves feel better. Even taking time to rest, in a system which values productivity, can seem like a loss of resources. There are some instances, for example the provision of social care, where people care can become part of an economic equation or discourse. Olin Wright (2010:10) calls for a participatory social science in which “...the word social implies the belief that human emancipation depends upon the transformation of the social world, not just the inner life of persons.” One of the benefits of acting in the world is the development of a sense of agency. “In a socially just society, all people would have broadly equal access to the necessary material and social means to live flourishing lives” (Olin Wright 2010:12).

However, it is abundantly and increasingly clear that we do not live in a socially just society. The world’s elites control a disproportionate amount of resources. The failure of self-regulation (Permaculture Principle 4 – see p85) by the world’s elites can be ameliorated in two ways; firstly, by understanding when one is in a position of the elite (as in by comparison to those in the developing world), and by taking personal responsibility for moving from a position of being “dependent consumers of unsustainable products and services to responsible producers of appropriate wealth and value” (Holmgren 2011: 82-3). The ethical principle of people care rests on the ability and willingness of people to accept this responsibility: to self-audit (consider what one’s needs actually are, and how one can minimise addiction to dysfunctional needs or habits) and to increase self-reliance. It is considered important to do this from a position of knowledge and awareness, before system breakdown causes chaos. It is also stress-

relieving to take action where possible; “the permaculture approach is to focus on the positives, the opportunities that exist even in the most desperate situation. The successful use of permaculture strategies in helping urban and rural poor in the Third World to become more self-reliant is partly a result of this focus on opportunities rather than obstacles.” (*ibid* 6-7)

People care and fair share are linked: holistic well-being and socially just lives depend on fair shares, the third permaculture ethic.

2.5.3 Fair share/return of surplus/future care

Fair share as defined by Holmgren (2011:1) consists of setting “limits to consumption and reproduction, and redistribut(ing) surplus.” Permaculture values and designs systems for living in balance with the natural world, living within its carrying capacities – this means limiting consumption and not exceeding natural parameters. It also involves making choices which avoid exploiting people.

As the permaculture flower (Figure 3) shows, permaculture designers are expected to be aware of the interconnectedness of all systems. It is well-established that factors such as land tenure affect well-being; both affect education, which has a direct influence on economics and a less direct influence on the built environment, and so on. Systems contain properties affecting fair shares, or in permaculture terms, setting limits to consumption and reproduction, and redistributing surplus. Geoff Lawton, a well-known permaculture teacher, considers the potential and responsibility of design practice when he writes, “The development, aggregation, and distribution of natural capital are undeniable indicators of real wealth...We can design our way into an equitable, permanently abundant present & future” (n.d.).

Systems such as globalisation which allow for the invisibility of unfair practices allow for the uncoupling of mutual obligations from economic, social, and ethical arenas. The idea of sharing is itself predicated on systems of social exchange, of which resources (including money) may play a part. It is important to bear in mind that systems both create, and are created by, ideas concerning fairness and distribution.

Much of the writing on fair share in permaculture is predicated on social equity. In sustainability literature social equity must consider debates concerning globalisation, neocapitalism and its alternatives. Gaps in equity exist between rich and poor; there are also inequalities between opportunities available due to factors such as gender, age, race and nationality. These gaps breed resentment, breakdown of trust, and exploitation, along with other issues.

A compelling set of arguments and data (Wilkinson and Pickett 2009) shows how measures including drug use, obesity, life expectancy, educational performance, violence and social breakdown not only improved the lives of those on the lower ends of the social spectrum but those in higher levels when inequality was redressed. Currently “plausible data exist which indicate that indebtedness may contribute to the development of mental health problems” (Fitch *et al.* 2011: 153). Fitch *et al.* mention that debt is often ill-defined, but there may also be effects from feeling ‘lack’ rather than surfeit or gratitude. The permaculture principle ‘produce a surplus’ may be applied in a wider sense than that of a monetary surplus; it may include a surplus of positive affect. Studies on the positive results from working with plants, in soil, and generally outdoors, can contribute to the link between permaculture and mental health benefits.

Fair shares when related to place range from ideas of the global (international trade and agreements, the Earth as a shared resource or dwelling place or community), the geographic (including regions, nations, cultures – for example the nomadic sub-Arctic peoples who share cultural similarities which bind them together despite political and continental differences), the national, and versions of the local, however defined. For example, ‘local’ may be a street, suburb, village, town, region, or any number of more loosely defined areas. That is, the multivalence of the concept of place reveals a similar broadness of application to the idea of communities within it. Massey (2003: 5) envisions spheres of influence, responsibility and negotiation, as a series of nested boxes emanating from the family, the local, and so on to the global. In Massey’s critique, as in

Shiva's (1993), globalisation is not simply an extension of localisation over a wider field but fundamentally different, and fundamentally about power.

There is some attempt to invoke principles or ideals of permaculture in the field of sustainable development (McManus 2010; Smith 2010) and planning (Anderson 2005; Kennedy 1991). Whereas the aim of global parity is often seen in the mainstream as enabling all communities to consume at the level of Western cultures, Hawken (1993: 55) suggests that a move towards sustainability in commerce would have to "reduce absolute consumption of energy and natural resources among developed nations by 80 percent". In other words, permaculture focuses on developing a 'steady state' economy rather than one which operates on 'growth mentality'. This has serious consequences for its reception in neoliberal capitalist discourse. Similarly, a concept of fair shares which includes all members of a biotic community is outside of normal frames of reference and reinforces the perception of permaculture as countercultural.

The idea of 'fairness' becomes easier or more difficult to indulge or ignore depending on the level of kinship felt between groups. There is far more outcry over the hunting of elephants than over the species extinction of large numbers of insects, because humans feel more kinship with large mammals and therefore are more inclined to act with care towards them. Conversely, the less kinship people feel towards other humans, the less negatively they feel about treating them unfairly (Olin Wright 2010). The anthropocentric environmentalist approach, where environments are valued according to how useful they are to humans, is far more common than that of valuing the Earth for its own sake. Living in balance with the natural world – living within limits – limiting consumption, not exceeding natural boundaries or exploiting other beings by the choices made, are integral parts of permaculture which aim at a fairer way of living.

Equitable arguments encompass many different theoretical areas and can be seen to be part of the same integrated network of social structures inhabited by the 'Earth care' and 'people care' categories.

Sustainability (as in, building a new sustainable system rather than maintaining the inherently unsustainable one we currently operate within) is the centre point where all three ethics are being met.

2.5.4 Perception of permaculture

The idea that permaculture is a gardening style, aligned with ecological design, and practised mainly by those with 'alternative lifestyles', is prevalent, and this conception of permaculture as a counter-cultural lifestyle can be both a strength and a weakness (Holmgren 2011: xxi). Seen in this way permaculture has gained some coverage in mainstream media, being non-threatening enough to appear in popular national gardening programmes for example – but also potentially non-relevant if the aesthetic of wood chip, straw, and a messy garden do not appeal.

Permaculture seen as a form of counterculture also carries other perceptions which both attract and repel. It has been referred to as a 'cult' (Bell 2014: n.p.) – partly because people become enthusiastic and zealous about the opportunities afforded by permaculture, either as a strategy for lessening or remediating current human impact on the Earth or about the use of the design strategies to solve all problems, and partly because of the perception of permaculture as a counter-cultural movement. Graham Bell, an experienced permaculture design teacher, writes that this view of permaculture may stem from either of two misconceptions; the nature of effective teaching or training, or the idea of spirituality. Bell writes that some people have expressed 'horror' at the idea of being 'made' to sing in Permaculture Design Courses (PDC); he explains that participants in a PDC may be invited to sing for sound educational reasons – to increase oxygen flow to the brain, to facilitate teamwork, to help with repetition (which aids retention of information), for fun which relaxes people, and so on. As Bell has worked in many teaching and training positions, including traditional and corporate situations, he refutes that the ways of teaching used on a PDC are chosen for any other reason than their efficacy. And he explains that the underpinning of permaculture by the three ethics implies a spirituality that does not equate to a religious dimension to permaculture or to it being a cult

(Bell 2014: n.p.). Still, the idea of permaculture as counter-cultural still conjures up ideas of a cult in some.

Over-enthusiasm, particularly in those who have recently discovered permaculture, can result in it being seen as a fad as well as a cult. Permaculture principles have been developed and designed as a way of applying permaculture design thinking to individual situations, and the array of design strategies available to the permaculture designer can also be applied to many design problems. However, it takes experience to assess how and where the principles are relevant and where strategies are most effective. Sometimes a strategy will not be effective; blind adherence to a non-effective tool is a criticism (admittedly levelled more at beginning or inexperienced designers). Over-enthusiasm can also result in over-promising; there is a certain amount of projection that permaculture can cure all the Earth's ills, as for example: "The next evolution has begun to take permaculture into the heart of all our people based systems" (Macnamara 2012: 3). This again provides justification for those who dismiss permaculture as a cult. But as Bell (2014: n.p.) puts it, "There's plenty to do working with those who get the concept without having to persuade those who don't."

Other criticisms of permaculture are that it is complicated, with too many rules and too much to remember. This again may stem from two aspects of permaculture. Firstly, the development of a set of principles that would be effective when applied to any land-based system on Earth – and later, the potential to apply the principles to any *system* – has resulted in an arrangement of overarching ideas which can be difficult to take in all at once and apply simultaneously for beginning designers. The intention to make it possible for anyone to apply the principles in any design situation has resulted in a set (or more than one set, depending on the 'school' of permaculture) of broad principles which can feel overwhelming. Secondly, within permaculture there is a very large and continuously growing collection of strategies that can or could be applied to design scenarios, and knowing which to choose can also feel overwhelming, along with the amount of

practical knowledge that is necessary in any application (from what plants will grow where, to how to ensure equality in groups situations). Experienced permaculture designers have embedded this knowledge within their practices (Dorst 2008), but it is challenging to apply the understandings in the beginning.

Interconnection is implicit in the permaculture ethics Earth care, people care, and fair share. However it can seem complicated and unwieldy to try to design with all these elements in mind. Moreover, cultural issues such as racism or poverty are both problematically systemic and often invisible to those not negatively affected by them, which can lead to frustration or a desire to refute implication in the system, often expressed as a desire to 'simply garden'.

This tension between those who prefer to see permaculture as a specifically land-based system, and those for whom political and cultural foundations and disputes are inextricably linked in any permaculture design, is one of the areas of debate within the permaculture movement. However other areas where criticism of permaculture occurs give a flavour of the issues surrounding the wider uptake of permaculture as a design strategy.

A common criticism of permaculture is that it is anti-technology. This again appears to be a mix of confusing a visual aesthetic of a lack of straight lines in gardens with a lack of rigour, along with being unaware of the nature or extent of permaculture development and research. On the other hand, it may be related to the emphasis in permaculture of using traditional knowledge, which may seem to indicate that no new knowledge is sought. However, this is not reflected in the current research field of permaculture, which often uses traditional knowledge as a starting point for further development. An example is using the traditional (and well-known) 'comfrey tea' recipe of steeping comfrey leaves in standing water (anaerobically) for a few weeks in order to create a plant feed. Studies within the permaculture field of aerating the water in order to increase the beneficial bacteria have both been scientifically rigorous – including at a microscopic level of both observation and data collection – and practically efficacious, though the emphasis on

practical application means that this research tends not to be part of the academy but rather something which is shared among permaculturists. However, the reference to and inspiration of traditional knowledge – and in particular Indigenous knowledge – is an area where criticism may be more properly levelled.

A common way to contextualise the use of patterns derived from nature and from traditional ways of living with the land - which have longevity and therefore have already shown a measure of sustainability in the system – is to align permaculture with the patterns of land use developed by Indigenous peoples, and at times their cultural patterns as well: “The essence of permaculture is ancient in origin – taking inspiration from the civilisations of the world that have survived for thousands of years...” (Lillington 2007: 26). The historical appropriation of traditional or indigenous knowledge as strategies or unifying ideas or principles is closely allied to colonialist ideology and can therefore be met with scepticism or viewed as culturally insensitive. In this research project both novice and established permaculture designers show awareness of this potential pitfall or perception. Respect for Indigenous cultures, knowledge and wisdom is a foundational principle for permaculture and the use of traditional patterns, for permaculture designers, intended as primarily respectful. The concept of permaculture is rooted in systems thinking, underlying which is an ethical approach - a respect for Indigenous cultures and their longstanding sustainability and the skills that generate that sustainability (Holmgren, 2011). Being aware of and paying attention to patterns of land use developed by Indigenous peoples is preferable to ignoring them which is to become complicit in their erasure, though the unease at the possibility of cultural appropriation can present similar problems. On the other hand, there are permaculture designers working alongside traditional or Indigenous communities which are re-evaluating their traditional knowledge/s in the face of increasing pressure from developed culture to Westernise, for example the work of Lachlan McKenzie (see McKenzie and Lemos 2008) in Timor. He works with the Indigenous population who had been advised to use fertilisers and other techniques by the developed world. On engaging with

permaculture principles and ideas the farmers recognised many of the techniques as things they had always previously done, and the stigma felt about being an undeveloped country was lessened by re-evaluating their traditional ways in the light of permaculture.

In examining criticisms of permaculture, it is clear that the majority of them arise in the perceptions of permaculture rather than in permaculture itself as a design strategy. However, this perception of permaculture is an extremely important element in how relevant, appropriate, and applicable permaculture appears to a range of issues, to how many take it up (and at what level or scale), and therefore how much its potential is fulfilled. The literature points to the need for research which examines first the perception of nostalgia within permaculture, and whether this enhances or detracts from its estimation as useful, effective, and desirable.

Permaculture has potential as a means of increasing not only sustainable horticulture and agriculture but also wider design systems, which have a greater possibility of increasing sustainability within the whole system of which forms of agriculture are a part. However, knowing what actions lead to sustainability and participating in them in the long term are not always aligned. Both the perception of permaculture as a desirable approach, and sticking to a course of action which may cause difficulty or discomfort, require more than understanding – they require an emotional engagement and commitment which has a stronger relationship to continued perseverance and behaviour change than comprehension. This engagement has to do with the component of the mind known as affect.

2.6 The role of affect

This research project is predicated on exploring what analysis of a particular affective state – nostalgia – can add to the reception and practice of a form of systems design aimed at sustainability – permaculture.

Although the logical case for sustainability is clear, cognitive dissonance – a psychological response to holding two opposing beliefs at the same time – appears to affect the adoption and longevity of sustainable behaviours or

practices (Siddique 2017). Design approaches to sustainability which do not engage with affective elements – with creating strong enough desire for participating in the change-based systems they design – are in conflict and competition with designs which appear to promise comfort, including psychological comfort.

In psychological terms there are three components of the mind: conation (mental purpose or will to perform actions, sometimes referred to as ‘behaviour’), cognition (all forms of awareness and knowledge) and affect. Affect refers to the experience of emotion. In some theories, the cognitive is included as part of the affective, or vice versa, and within this study these analytic categories will be related. What is termed affect will refer to an understanding which has an emotional component: for example, a nostalgic state or elicitation will comprise both memory and an emotional response to that memory. In sociology the term is used to refer to actions which principally are carried out to achieve a positive emotional state.

Affective design (or emotional design) is a branch of design, most often associated with human-computer interfaces, which seeks to understand and define the relationship between humans and products to maximise the pleasure emanating from human interactions with products or artefacts (Norman 2007; Jordan 2002; Van Gorp and Adams 2012). The assumption is that pleasurable interactions will increase interaction, and there has been much attention given to this aspect of consumer behaviour and in affect changing everyday behaviour by design (including the influential *Nudge* by Thaler & Sunstein 2008; and Crocker & Lehman 2013). Miller (2009) and Turkle (2007) make a specific case for the nostalgic attachment to ‘evocative objects’ as ‘things we think with’ rather than about, and for their affective place in our lives. However, the research concerning the relationship between affective design for behaviour change is less solid. Although behaviour change may be achieved by mechanisms including motivation, education, prescription (Chapman 2008; Lockton *et al.* 2010; Tromp *et al.* 2011) it is not proven whether increasing the pleasure component of an interaction is enough to effect meaningful behaviour change. Niedderer *et al.*

(2016: 1) interrogated the current field of Design for Behaviour Change (DfBC) as a driver for sustainable innovation and found “a significant disconnect between available theoretical knowledge of design for behaviour change and its practical implementation.”

Research on design for behaviour change emanating from the avoidance of negative states such as fear or sadness does exist (Pfarr & Gregory 2010). This avoidance of negative states is shared with the experience of nostalgia (section 2.6). However the link between nostalgia and design for behaviour change for sustainability is limited. To date, the main design disciplines which actively invoke nostalgia have been branding/marketing (for example Friedman 2016) and to a lesser degree product design (and interface/affective design). There has been little attention given to the affective elements of systems design, including permaculture design. This could mean that there is, even in those who show some initial interest in permaculture, opportunity for cognitive dissonance to interfere with the take-up or continuation of permaculture, either in clients of permaculture designs, or trainee permaculturists, or other stakeholders.

However, given the research on nostalgia as a motivator for pro-social behaviour (Li 2015) it is possible to assess elements of nostalgia, as an affective force, for the potential for behaviour change when invoked. These elements may take several forms: nostalgia as an embodied emotion, the memory of particular landscapes, and the creation and maintenance of identity for example.

The role of the body in apprehending and experiencing material space is a central feature of phenomenology, the study of direct experience (with the body as the experiencing organ); the “world as it is experienced in its felt immediacy” (Abram 1996: 35). Abram cites phenomenology as a driver for a return to a more ‘natural’ (arguably a nostalgic reading) way of life. Relph (1981, 2010), for example, from a phenomenological standpoint examined how places are experienced, and why modern built environments provide

ease, efficiency and material comfort yet at the same time seem to create isolation and despair rather than commitment and optimism.

Other phenomenological approaches include the examination of many sense-based perceptions such as smell, sound, touch, and so on (Feld 1990). The combination of the design element of meaning-making, and the widening of the field of attention to include sense- and emotion-based data, is of particular interest and use to this study. Permaculture expert Goldring (in Bastian 2014: 6) explains one of the ways these approaches come together in a permaculture approach:

We're trying to create spaces that are hugely productive, beautiful, that smell fantastic, look visually wonderful, there is community interaction happening, we are meeting our needs in the smallest possible space, so that all the other species on the planet can also thrive. And in that intention you can imagine a rich life in which more is happening, and the space is really alive.

The understanding that people act on and influence or even create the natural world is reflected in the idea of landscape. Landscape is conceptually employed to understand place meanings (Lippard 1998; Cosgrove and Daniels 1988), places which have been designed for aesthetic appreciation (Wilson 1991), or in the case of environmental psychologist Chawla (1990) as a rich sensory, recuperative, and formative arena. Chawla examines which landscapes stay in the memory from childhood and inform our adult personhood, suggesting that these landscapes have been intensely felt as ecstatic memories which particularly maintain, in later life, creative impulses and abilities. Gayton (1996) termed the sense of place which develops between people and their environments in childhood 'primal landscape'. This is contrasted with Diamond's (2005) 'landscape amnesia', where people forget how the landscape they have lived in has changed over time. Climate change is accelerating this change and bringing it to notice more forcefully.

A connection with the natural world and its systems may be categorised as a phenomenological one. Benefits such as glucose and circulatory regulation (Tsunetsugu *et al.* 2010) and in immune function (Li 2010) have been tested in shinrin-yoku or forest bathing in Japan, and White *et al.* (2013) studied the

health and psychological benefits of living near the coast, thereby providing physiological as well as psychological markers for the positive influence of certain places or landscapes on health and well-being.

Place attachment is a term used in environmental psychology to describe the multi-dimensional emotional bond between people and place. Meaning - "the thoughts, feelings, memories and interpretations evoked by a landscape" (Schroeder 1991), and preference - "the degree of liking for one landscape compared to another" (*ibid*) are elements of place attachment which can be examined for application in arenas such as disaster management (how people relate to a place which has changed due to disaster) or the care of elderly sections of the population. The effect of childhood experiences on place attachment, both specific and in general, have also been studied (Roszak *et al.* 1995).

Place identity, formed in relation to environments, is part of self-identity (Proshansky *et al.* 1983) and develops out of experiences of physical places. Places provide meaning, create attachments, allow a sense of belonging to develop, and also allow better coping with change (Gieseeking *et al.* 2014). The theory explains why people feel at home in some environments, and also why it can be so traumatic for people to be displaced. Potentially, identities and narratives may be examined emotionally in order to identify what creates a sense of homeliness, comfort, or well-being for people, in either an individual or cultural sense.

Design in permaculture is rooted in deep understanding of, and relation with, specific places. However, "...places are both universal and relational, as well as particular and contingent" (Till & Kuusisto-Arponen 2015: 293), and defined boundaries still require complex examinations: "A relational understanding of place means thinking about 'articulated moments in networks of social relations' rather than static containers that 'frame simple enclosures'" (*ibid*: 294). The permaculture ethic of people care, and the relationship between how places and systems provide care for people, and how they relate emotionally to this, is of great importance.

The field of ecopsychology asserts that “we cannot restore our own health, our sense of well-being, unless we restore the health of the planet” (Roszak *et al.* 1995: xvi). There is an element of ecopsychology (exemplified in Roszak 1995:15, emphasis in original) which is central to the development of this thesis:

*What do people need, what do they fear, what do they want? What makes them do what they do: reason or passion, altruism or selfishness? Above all, **what do they love?***

In certain sections of the ecopsychology community there is a belief that humans’ separation from the biotic community (to which they were previously bound in understanding and acceptance as well as in reality) is the cause of pain and grief and causes psychological suffering (for example, Hillman, Metzner, Gomes and others in Roszak *et al.* (eds), 1995). This is rooted in a mystical view of ‘nature’, the whole of the biotic community, as source of health and succour to humans.

‘Alternative hedonism’ Soper (1995) recognises not only the altruistic reasons commonly associated with ecologically-based consumption, but also identifies self-interested incentives for taking up less environmentally damaging habits. This work emanates from the same place as recent studies on well-being (Pickett & Wilkinson 2009; Stiglitz 2013) but crucially recognises the psychological component of identifying enjoyment in life as being separate from present levels of consumption.

If ecological and social sustainability are perceived as being averse to innovation (Niedderer *et al.* 2016) they may be perceived as embedded in the past and therefore suffused with nostalgia. Potentially this nostalgia could be used as an affective state in permaculture design. Whether this has the potential for behaviour change is as yet unknown; and as Forlizzi and Ford (2000) state, designers cannot create an experience, but only the conditions that might lead to an intended experience. However nostalgia does have elements which alter affective response, and further exploration is warranted.

2.7 Nostalgia in permaculture

Affect is one aspect of design which has the ability to increase pleasure and satisfaction with a design, and which offers potential for further development as a strategy in design ideation.

The potential for examining the functionality of a nostalgic element in permaculture begins with assessing the areas of permaculture which might be subject to nostalgic auras or perceptions. Prior to this project this has not been studied and no direct data exists; however, it is possible to review the literature on potential areas where nostalgia might be a perceived element.

The intention is to explore the first hypothesis; namely, that nostalgia can draw people towards an interest in or engagement with permaculture, that it could be already a factor in why people are interested in permaculture, and that it could be explored to see if the proposition is correct and in what ways it might manifest.

Because of the lack of direct data, the areas where links may be able to be drawn between nostalgia and permaculture are categorised under broad sections. The project is intended to draw out more specific and involved data and to identify more fully where nostalgia may be perceived or present in permaculture, but the initial exploration is considered under the permaculture ethics categories of Earth care, people care, and fair share. Again this is not a comprehensive map of all the ways in which nostalgia might be aligned with permaculture, but instead a proof of concept approach in which the possibility of several main perceptions which may be aligned with permaculture can be shown to have nostalgic overtones.

2.7.1 Earth care

‘Nature’ is of course real, a material entity, but it is also a construct: theoretical, ideological, and psychological, among others. Our relationship to the natural world is formed by a number of factors which may have nostalgic nuances or links.

The poet W.H. Auden invented the term topophilia in 1948, referring to Betjeman's poetry in its relationship to landscape embedded with a nostalgic sense of history (in Harris 2015). The term was developed by Bachelard (1969), Tuan (1990), and by Gibson (2009) who argued that the topophilic close connection to place is biologically based. Love of place, embeddedness in it and indebtedness to it, is an affective state with which nostalgia is frequently bound.

This is evidenced in a trope commonly expressed in popular culture – for example in movies such as The Hunger Games and in the Star Wars franchise - showing empires (that is, civilisations which extend in their reach of culture and power beyond their geographic origins) as inherently problematic and contrasting more place-monogamous cultures as inherently more truthful, enjoyable, ethical and desirable. This is a form of Arcadianism which is deeply embedded in the culture of the developed world.

Arcadia refers to an elegiac image of natural and unspoiled wilderness where humans once lived in harmony with nature and its bounties. It is a specifically nostalgic form of utopia in that it is irretrievably lost, like a vision of the Garden of Eden. In a secular society Arcadianism largely imagines 'nature' as something not only separate from but prior to human activity. Soper (1995: 187) writes critically of the Romantic view of Nature as

both a present space and an absent –already lost –time/space: a retreat or place of return, to which we 'go' or 'get' back, in a quest not only for a more originary, untouched space, but also for a temps perdu, or perhaps, more accurately, for a time that never was, a time prior to history and culture.

This looking for a lost utopia is a longing often found deeply rooted in the ecology movement, and perhaps it is a communal archetypal memory of the sylvan or the pastoral that provides the rhetoric of ecological debate with its emotional power. In any case it points to a nostalgic relationship with an *idea* of nature.

Placemaking can refer to the symbiotic relationship whereby people make places and in turn are made by (affected by) them. Lippard (1998) examined how layers of history and politics are ingrained in the landscape.

Kingsnorth's *Real England* (2009), about the destruction of small-scale, idiosyncratic, vernacular ways of life in England by corporate culture and ways of consuming, was labelled nostalgic on publication. Kingsnorth's response (2012: n.p.) was that the critics had "confused a desire for human-scale autonomy, and for the independent character, quirkiness, mess, and creativity that usually results from it, with a desire to retreat to some imagined 'golden age'" but conceded that "If you want human-scale living, you doubtless do need to look backward."

It is potentially a form of nostalgia influencing those who see sustainable futures as being inevitably rural in nature. There is a strong influence of Arcadianism which frames 'Nature' as inherently good; by default this makes culture or technology, when placed in contrast with nature, inherently less good.

The relationship between humans and the materialist geographical world around them – of Earth forms, flora and fauna – has been theorised as a 'culture/nature' divide, with humans providing social systems, and anything outside of this culture as 'nature', that is, the 'natural' world, untouched by humans. There are two problems with this: firstly, that there is really no natural environment in the sense of being completely untouched by humans. Smith (1984) explains how nature is produced by humans and the inescapable interaction of nature and culture (as do Cosgrove 1984; Cosgrove and Daniels 1988; Kaplan and Kaplan 1989). The difference between urban and rural systems is similarly bifurcated, and along the same lines, with rural being aligned more closely with the 'natural' world, and the urban with the products and activities of culture.

Pollan (1998) uses the example of two contradictory types of landscape – the wilderness and the lawn – as representing a dichotomy in understandings of the natural environment, with wilderness representing a preservation of an entirely untouched environment and lawn being almost an industrial form of nature, dominated by culture. Pollan's suggestion is to move beyond the contradiction and embrace the idea of the garden as that

of careful and respectful cultivation as a model of human relationship with nature.

However, the alignment of an untouched nature with ideas of sustainability is widespread among some sections of the community. For example, the Dark Mountain project (Kingsnorth and Hine 1990) is predicated on the necessity for living in harmony with nature, and this version of nature is bound up with rurality and notions of nature as separate from urbanism. Kingsnorth (in Newton 2011, n.p.) states, “If we continue to believe in human exceptionalism, in our separation from ‘nature’, in endless progress, in salvation-by-machine, then we will continue down the...civilisational path...that is destroying the Earth’s living systems.” This is aligned with a long history of writing which conflates ‘nature’ with rural, and thereby with ‘good’, but Kingsnorth (2012, n.p.) also writes,

I don't think I've ever met [a conservationist or environmentalist] who believed there was any such thing as 'pristine, pre-human' nature. What they did believe was that there were still large-scale, functioning ecosystems that were worth getting out of bed to protect from destruction.

In an alternative angle on nature and loss, solastalgia is a neologism coined by the Australian philosopher Albrecht in 2003. As opposed to nostalgia - the melancholia or homesickness experienced by individuals when separated from a loved home – ‘solastalgia’ is the distress that is produced by environmental change impacting on people while they are directly connected to their home environment. It describes a form of psychic or existential distress caused by environmental change, such as mining or climate change. This was the first conceptualisation of environmentally-induced distress as mental illness. Albrecht *et al.* (2007) focused on two contexts where researchers found solastalgia to be evident: the experiences of persistent drought in rural New South Wales, Australia, and the impact of large-scale open-cut coal mining on individuals in the Upper Hunter Valley of NSW. In both cases, people experienced negative effects exacerbated by a sense of powerlessness or lack of control over the environmental change process as it occurred.

This perception of loss, which can be viewed as a form of nostalgia, along with topophilia, Arcadianism, and other forms of aligning pleasure and mental and societal health with nature, provide some evidence that nostalgia is inherent in perceptions of nature/wilderness. Given permaculture's alignment with nature and/or wildness it is therefore possible that the affective state of nostalgia is implicated in the perception of permaculture.

2.7.2 People Care

Nostalgia is an affective state which has the potential to act as a positive force on individuals and communities. However it also arguably acts in different ways on individuals and on communities and appears in different forms: in individuals, nostalgia is often invoked in creating or maintaining concepts of identity; in communities it is often invoked in ideas of connection.

As Canavan (2014) points out, whether the perception of an Arcadian vision is seen as generative or regressive may well depend on an already-existing ideological bias within individuals – in other words, a sense of identity will be a likely indicator or predictor of people's response to the perception of nostalgia. This identity may be gender-based, diasporic, or relating to social groupings, for example.

Vallee (2011: 97) writes that nostalgia is irrevocably bound up with the individual as subject and their relationship to loss: "(r)ather than expressing the loss of something in the concrete world, nostalgia is the psyche's means of coping with the trauma of a primordial loss by imagining a utopian historical certitude of total union." In situations where there is manifest unfairness, or where one wishes for more fairness, nostalgia can provide not just a yearning for fair systems and situations, but an imagined scenario for it to be re-enacted.

Holmgren (2011) writes of the idea of emergence as derived from systems theory, but also as it corresponds to an engagement with time. He relates the quality of change in Industrial culture to the bias towards episodic

change, whereas “sustainable culture is biased towards rhythmic change” (2001: 267-8). Episodic change can be destructive, certainly chaotic, or transformative, but Holmgren sees it as gendered in masculine ways, and “the patterns of traditional life focused on the home and a domestic connection to nature, the cycles of the seasons, and even the mundane, supposedly boring aspects of childcare and education, housework and building maintenance, plant and animal husbandry, community support and maintenance, which must dominate any notions of sustainable culture” (2011: 268) as more in tune with feminine culture. This perception of the value of the ‘feminine’ in permaculture invokes nostalgia for some, for times when the feminine seemed more celebrated whether that be in living memory or a more distant/primordial time.

There is conscious reference to previous systems of belief and action embedded in permaculture. For example, indigenous ways of life are examined for possible systemic precedents; the right to common land is endorsed. The role of ‘the village’ in maintaining social structures is invoked as a positive influence (Ecologist, 1992); for example it is arguably present in Olin Wright’s (2010: 79) description of a strong community as one in which “reciprocity, solidarity, mutual concern and caring...(as)...mutual obligations run very deep.” These strong communities must, by virtue of the connections involved, be limited in population density.

Permaculture advocates the principle of optimum scale; that is, neither too small or too large, too slow or too fast. This echoes Schumacher’s (1973) *Small Is Beautiful* philosophy, in which small equalled human scale. In this view, shared by Popper and Popper (2010) in their work on ‘smart decline’, amongst others, the only way for humans to live sustainably on the Earth is in rural environments.

Dunbar’s number, a proposed optimal number for human societies and settlements, based on the work of a primatologist extrapolating from primate to human relationship numbers, is often used as the number for human-scaled societies. Permaculture expert Goldring (in Bastian 2014: 2), on his

work with the Human Scale development Initiative, states that human-scale societies are characterised by having approximately 150 people in them.

Human-scaled societies absolutely categorically were the most sustainable modus operandi of human beings. There is no doubt about that. It is civilisations which have destroyed environments, not human scale, hunter-gatherer, tribal people.

There is a tension between the Arcadian (and utopian) vision of the small or human scale, and the 'natural', which surrounds practices like permaculture, particularly in connection with natural systems, and modernist ideas of progress, progression, and improvement, which may also lead to destruction. Both visions are subject to nostalgia, but the one more likely to be associated with permaculture is the Arcadian, "that wonderful place where everyone eats natural foods and no machine larger than one person can fix in an hour is allowed in. Throughout Arcadia the breezes blow, the rains are gentle, the birds sing, and the brooks gurgle" (Canavan 2014: 2).

This is clearly an imagined vision; but it is one in which the vision of a pleasant, healthy, people-sized lifestyle can be achieved. It is a fantasy which points to a longing for something which is crucially felt as lacking in contemporary lifestyles, and which is felt once existed. In joining together an examination of permaculture design with that of nostalgia it is important to look at how social systems encompass and manifest nostalgic impulses and effects. If permaculture design is to reflect and make use of the affective role of nostalgia, it will need an awareness of the elements of people care which relate to affect and memory.

2.7.3 Fair share

Green economist Cato has suggested that in place of the globalised market and its problematic relationship with sustainability, a bioregional economy should be pursued (2011: 482). Instead of being driven purely by growth, the bioregional approach

challenges every aspect of that value system. It seeks a new ethic of consumption that prioritises...four concepts...key to the development of the bioregional economy: locality, accountability, community, and conviviality...The allocation of resources is performed by the market in

the contemporary globalised economy. In a bioregional economy, I argue, we might find a larger role being played by systems of social distribution which may share features with traditional commons.

This approach is clearly evoking earlier ways of living in its invocation of the commons. It is also strongly relating an economy to an ecological region. A critical response to this kind of approach states that although a common trend in the Green movement is to eschew big business and corporate culture, and see that approach as being anti-capitalist, it is merely a desire for a 'kinder' capitalism which is based on a nostalgic view of what capitalism 'used to be' (Wolfe 2011). Some criticisms of this back-to-the-land philosophy or tendency focus on the fact that they do not overthrow but underpin a 'softer' capitalism. Again, even the desire for something 'kinder' indicates a lack, a desire for something to be different: nostalgia supplies a vision of this difference from a remembered or imagined past.

However 'the commons' is not the only way the past is invoked as a more equitable place. As previously discussed, the concept of rewilding - allowing nature to take over the process of ecological restoration, introducing apex predators or keystone species with the aim of recreating or restoring a biodiverse, self-regulating stable eco-system. Its focus on restoring areas to a "pre-human" state makes it subject to a perception of nostalgia; in this case the fair share ethic being invoked goes beyond humans.

The 'deep green' movement takes the concept of the biotic community, first put forward by Möbius who in 1877 described the organisms interacting together in a habitat, as a foundational principle of both fact and ethics. Important theories include Naess' work on biological diversity (1973 for example) and the interrelationship of all living things; Linkola's biocentric empiricism (2011), which demands that humans return to occupy a much smaller ecological niche than they do at present (advocating radical human population decrease); and Plumwood's radical ecosophy (2002) based on the critique of hyperseparation of humans from the rest of nature, and critique of dualisms and the structure of power embedded within them. Naess coined the term 'deep green' thinking, as opposed to 'shallow green',

to allude to the more radical standpoint that non-human entities are of inherent worth regardless of their utility to humans.

This standpoint gives rise to an altered approach to ethics. Leopold developed the theory of 'Land Ethics' from being a paid hunter of wolves for a large American national park. The experience of looking into a wolf's eyes after he had shot it and whilst it died, gave an awareness that every living thing on Earth has a sovereign right to exist, rather than be 'managed' as part of a human-controlled landscape; that any human exists as "a plain member and citizen" (1949: 204) of a biotic community, not as its owner, manager, or consumer. The manifesto is often succinctly précised in the statement, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (1949: 224–225). Leopold saw this land ethic as an evolution in the philosophy and practice of ethics, from ethics concerning the relationship between individuals, to those ethics involved in the formation and continuation of societies, culminating in the inclusive land ethics – inclusive of the entire biotic community. Leopold's assertion that people live inside ecosystems, not separate from them, is obvious when stated. Yet the way humans live in contemporary capitalist societies is predicated on ignoring this fact. Even practices seen as sustainable or 'green', such as landscape gardening or even organic gardening, are often based on or include manipulating or eradicating parts of a biotic community for the benefit of human inhabitants (anthropocentric environmentalism).

Permaculture as a design discipline mirrors Leopold's systemic view and understanding of the ecological foundation, provision, and limit of all human activity. As such it is closer to the deep green approach than other design approaches. This makes it subject to a nostalgic frame in two principal ways: firstly, the countercultural Earth- or ecology-based movements of the 1960s and 70s, with all the positive elements of peaceful integration, harmony with nature and other humans, and striving to improve society, alongside the negative perceptions such as utopianism, and the counterculture's own nostalgia for previous ways of life.

Other initiatives such as design for human and planetary health (Wahl 2006), designing towards the Ecocene (Boehnert 2018), and Degrowth (Gaziulusoy and Houtbeckers 2018; Muraca 2012; Kallis 2011) have elements in common with permaculture and may also be viewed as containing aspects which may be considered to have a nostalgic reading. It is also true that the permaculture delineations for exploring potential nostalgic facets are rather arbitrary. Nostalgic elements may be present in permaculture in other ways – but this needs further research to discover in what ways nostalgia might be perceived as elements within permaculture.

In addition, nostalgic elements that may be present in practices or rhetoric around permaculture are not necessarily consciously noticed. However, it is possible for nostalgia to be an unconscious driver and therefore almost invisible. Again, further research is required to investigate this possibility.

Nostalgia is an affective state which contains the possibility of inducing psychological comfort in those who choose or are predisposed to engage with it (Sedikides *et al* 2004; Wildschut *et al* 2006; Sedikides *et al* 2008). It is allied to an emotional response to elements of the past, whether personal or cultural. It has been shown to play a role in some situations concerning cognitive dissonance. If nostalgia lessens cognitive dissonance it might have a role to play in the adoption and/or longevity of sustainability initiatives.

However, there is no evidence to date concerning nostalgia's role in the perception of permaculture. This gap suggested the proposition that interested public, potential trainee designers, clients, or other stakeholders respond to nostalgia in permaculture design. Establishing the extent to which nostalgia is a driver for permaculture design would allow for analysis of this response. This proposition led to Research Question **(RQ)1**: Does nostalgia draw people towards the concept, use, or experience of permaculture?

2.8 Permaculture design ideation

This section aims to contextualise permaculture as a design discipline before examining ways in which its ideation processes work and identifying if these are currently – knowingly or unknowingly – aligned with nostalgia. The field

of design, and its development in the ways in which this relates to the democratised and distributed design practice of permaculture, is considered first, followed by relevant literature considering the process of design ideation. The ethical dimension of design ideation in the form of one of the most common formative elements of permaculture design – the permaculture principles which are intended to provide a framework for permaculture design ideation – is explored next, followed by an examination of the process of futuring. This aspect of design ideation is not only becoming more common within the field of democratised and sustainable design ideation, it also inspires and provides some of the methodology for the project.

2.8.1 Design

Design is an expanded field. The word design is used as a noun and as a verb (Friedman 2000; Gedenryk 1998; Julier 2008; Lawson 2006; Manzini 2015); its Latin roots denoting marking something out have extended to other meanings, many metaphorical. Kimbell (2009) takes the plural noun form of design to mean outputs created through the course of designing, such as plans, prototypes, specifications and the final fabrication of products and services. All of the outputs of designing are design. Traditionally, and in the view of the general public (Kimbell 2009), designers have concentrated on improving the appearance and functionality of objects. However, the contexts of designing have undergone a great deal of change within the past fifty years.

The methods or procedures used for designing are believed (Gedenryk 1998) to have been accepted as a valid scientific research subjects since the Conference on Design Methods in 1962. Other design thinkers (Alexander 1965; Jones 1970; Simon 1969) supported and disseminated this view throughout the 1960s and 70s and the view persists contemporarily as the design science approach. This approach centres on a systematic, goal-directed, knowledge-directed, enquiry in which the findings are understandable and communicable to a target audience (Archer 1995). Permaculture training, for example, provides new designers with a set of

procedures and it is possible to work as a permaculture designer using the methodological 'toolkit' which could be viewed as the product of a design science approach.

2.8.2 Design Thinking

However, this approach began to be challenged almost as soon as it was ratified. As mentioned, Simon (1969: 55) retheorised design from an activity to a way of conceptualising, stating that "(e)veryone designs who devises courses of action aimed at changing existing situations into preferred ones." Design no longer belonged solely to design practices but had opened out into a way of thinking about problems and proposing solutions.

Schon (1983) wrote on reflection in action, based on observation of what designers were actually doing - "constructing knowing through practice" (Falín 2007: 2) - as opposed to theorising a methodology they should be following.

A shift in design thinking (Buchanan 1992) began, "away from its legacy in craft and industrial production towards a more generalized 'design thinking' that could be applied to nearly anything, whether a tangible object or intangible system" (Kimbell 2009: 4). Rowe's Design Thinking (1987) saw the phrase come into use amongst designers. Of 'designerly ways of knowing' it can be said that "method may be vital to the practice of science (where it validates the results) but not to the practice of design (where results do not have to be repeatable, and in most cases, must not be repeated, or copied)" (Cross 2007: 43). Lawson & Dorst (2009) describe core design activities of formulating, representing, moving, evaluating and managing – the 'carriers' of design thinking. The 'toolkit' approach has made way for the idea of thinking in a particular way as being the hallmark of a designer.

However, the concept of design thinking, though arising as a descriptor for what expert designers do, has been further developed as a way of conceptualising that degrees of design can be effected by people who are not designers. Most prominently advocated by Manzini (Design, When

Everybody Designs 2015), but increasingly adopted by those working in social innovation, design thinking in this context concerns a way of using the tools of a designer either as, or in addition to, the role of facilitator in social design. Manzini describes a collaborative approach between expert designers and diffuse design (design performed by everyone) as a particularly promising and valuable path for design in the present and into the future.

Buchanan (2001: 17) proposed that the challenge facing design was to understand the situatedness of design in the lives of individuals; “to understand how designers may move into other fields [such as the social sciences] for productive work and then return with results that bear on the problems of design practice.” Jones (1970) and Alexander (1965) among others suggested a constructivist or interpretive way of thinking in which the main goal was to understand the relationships between people, their artefacts or activities and their environment. Philosophies of design have moved increasingly from concern with individual perception towards models of distributed social execution based on sociological and anthropological work to help designers understand the needs of users (Suchman 1987; Frankel 2009; Wasson 2000). Vitta (1985) writes of a ‘culture of design’ making the point that design is bound by the social background in which it occurs, and “therefore we cannot conceive of any theory of design that is independent of a theory of society” (Margolin 1989:7).

Without this understanding – that societies create conditions under which design takes place, and design creates societies – permaculture would indeed be confined to a landscaping practice; but it is intended to be a democratic, distributed practice, in which individuals are enabled to become designers of their own lives, from the way they move around their kitchen to the way they move and act within their society.

Moreover, permaculture is as involved in social systems design as in biotic systems design. High quality and effort capital work is required in setting up a permaculture system, but this diminishes after the initial structures are in place, as linear flows develop into self-regulating cycles in which the system

is able to self-organise and self-regulate. Permaculture forgoes a linear sectoral organisation of systems such as agriculture, energy and water management, architecture, urban planning, education, recreation, administration, and so on, in favour of creating networks between the various elements needed for each undertaking (Kennedy 1991). The ecological underpinnings of permaculture are more explicit about progressive or moral imperatives than many other design practices. Moreover, the investigation of nostalgia is embedded in understanding situatedness in design; people are nostalgic within systems within places and an exploration of nostalgia must therefore be contextualised within these conceptual areas.

2.8.3 Design for social change

There is a growing sense of the necessity to not just acknowledge the social dimension(s) of design, but to use design for social change. Julier (2006) describes design culture as a field of study that intersects value, circulation and practice, and one which must examine consumption theory and science and technology alongside each other. Innovation in products often requires innovation in practices (Tonkinwise 2015b), with Shove et al. (2007) calling for a 'Practice Oriented Product Design'. Norman (1988) and Squires & Byrne (2002) stipulated the need for putting end-users and stakeholders at the centre of the process. Knorr Cetina (2001: 187) examines a difference between practice as embodied skill or routine and one that is "more dynamic, creative and constructive" and centred on the way stakeholders use objects in a "relational rather than performative idiom". Penin and Tonkinwise (2009: 4327) conceive of service design as different from other forms of design as "primarily the design of people, rather than the design of things for people" and discuss (*ibid*: 4337) the importance of the iterative nature of design with its stakeholders: "service design must engage...so that...the service providers can have input into the design of [the] initiative so that their autonomy and expertise is part of all aspects of [the] project". Davis (2008: 73) aligns this with a progressive (if not moral) imperative:

If design both illustrates the axiology of a culture (i.e. mirrors its highest or most dominant values) and shapes its social interaction (i.e. influences interpretive perspectives and behaviors), then the consequences of design have implications that reach far beyond the immediate consumption of goods, information and services.

The recognition that problem framing and solving are a cognitive style (Kimbell 2009) inherently embedded in social relations is central to design thinking. Davis (2008) provides a grid, showing the coexistence of levels of complexity in design practices, from artefact design, to practices which may require multiple stakeholder inputs, involve direct manipulation of stakeholders (design of people), and be subject to the law of unintended consequences (Merton 1936). Because of this, design, as Davis suggests, is therefore unavoidably a moral practice. The ecological underpinnings of permaculture, seen within this framework, are more explicit about these imperatives than many other design practices, and “design must be seen...as the process that creates meaningful experiences for people. Creating products, communications or environments is merely a means to this end” (Press & Cooper 2003: 7-8).

The Social Design Pathways matrix was developed at the 2013 Winterhouse Symposium for Education and Social Change. The grid shows the nexus between the scale of engagement with which a designer may participate and the range of expertise needed. Individual designers may work at any level from single defined project to entire culture level design; designers may work in an interdisciplinary team on projects, again from the singular, through systems level and on to cultural level designs; or the designer may facilitate and perhaps oversee a cross-disciplinary team on the design project through complex levels. At higher levels the designer may not have all the expertise necessary for the project but is expected to have the skills necessary for cross-sector communication, engagement, and collaboration.

Permaculture begins at the small axis with individual gardening projects but has the potential to be employed all the way to the further axis with cultural cross-sector projects.

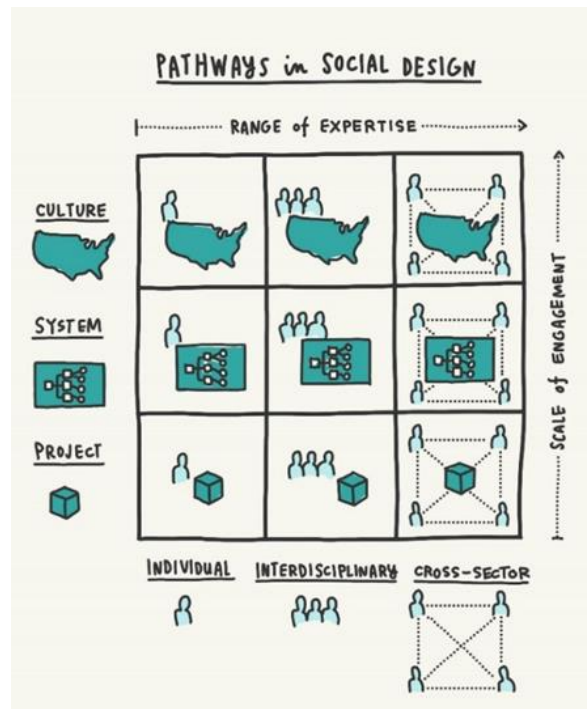


Figure 5: Pathways in Social Design matrix (2015). At the cross-sector and cultural levels of engagement the designer will at least for part of the time be taking the role of facilitator between different experts

Permaculture can be utilised at any level of design: permaculture principles can be used in designing a herb spiral (a simple artefact) to a garden to be used as part of a performance festival and space (complex experience). Vosper, a permaculture designer working in prison reform, is involved in permaculture design at the cross-sector and cultural level, where she works as a designer-facilitator in groups comprised of experts across several sectors, and her design interventions are intended to change the wider culture within which they take place (Hopkins & Vosper 2015).

Carnegie Mellon University's Transition Design syllabus (2018: n.p.) suggests that it is of primary importance that designers are able to "look up and down systems levels and see the interconnections among issues and consequences related to wicked problems". In systems-based designs it is necessary to understand that even when problems are framed at the individual and project level they are nevertheless nested within wider systems which impact on the original problem in ways which cannot be

predicted and in disciplines beyond a designer's expertise. Refusing to engage in the wider systems levels, however, results in solutions which are very different from those which engage with the wider approach.

When the interconnections and interdependencies between these problems at higher systems levels are revealed, it can seem overwhelming. But, it also opens up the possibility to design interventions that address multiple issues/problems simultaneously.

Social design marries an approach embedded in ethics with systems understanding and systems design. Permaculture design fits this matrix as it is applicable to all sectors of the Social Design Pathways matrix. The permaculture principles developed by Mollison and by Holmgren are intended to guide designers across a range of design problems and scenarios to build ethical and effective designs.

The next section examines the main approaches and tools, including the underlying principles, that are used in permaculture design ideation. It will investigate the relationship between democratised design and the use of these tools, including reasons for differences in how these tools might be being used by designers in different stages of their training or skill development.

2.8.4 Design ideation

Design ideation is the way innovative ideas are formulated by designers when they imagine or develop "...possible ways of materializing futures...it is...how designers evaluate whether those futures are preferable to the present" (Tonkinwise 2015a: 2). Design as a discipline includes a variety of approaches as detailed above, even before the opening out of the model of design thinking as a process beyond designers in democratising design (Manzini 2015).

For some design processes, for example those which do require specialised knowledge for the sake of safety, such as designs in engineering or architecture – where wheels must stay on, or buildings stay up – complex sets of skills require trained designers. This is the layperson's view of a

designer, and can create “a kind of debilitating mystique, a learned helplessness around the business of designing” (Atkinson 2019: n.p.).

However the foregrounding of the role of the end-user in design, alongside the combination of design with fields such as sociology, politics, and psychology, has led to the development of a new kind of design work (Manzini, 2015). In participatory design the designer’s role is that of facilitator, enabling conversations between stakeholders who then undertake the designer roles themselves (Kensing and Blomberg 1998, Gilchrist 2008, Bastian 2014). Orlikowski (2000) showed that stakeholders engaging with a design shape emergent and situated adaptations of the design. The design is not ‘held’ within an institution (or technology) but is enacted by its users in practice (a common example is ‘hacking’; also the use of ‘desire lines’, showing the routes taken by people instead of designated paths). In addition, not all designing is very highly complex, and not all designing does require expert-level knowledge.

The idea of ‘democratic design’ is not entirely fixed; Starck (in Wingfield 2018: n.p.) defined democratic design as “(i)mproving the quality while striving to make it accessible to the greatest number of people, at affordable prices.” This is a definition which has been taken up by companies such as IKEA (Fager n.d.); however it still leaves design authority with experts, and the public as passive consumers. Manzini’s (2015) approach, of diffuse design (design practised by everyone) is predicted by him to be a promising approach for contemporary and future designing. At times diffuse design is practised in a collaboration with expert designers, but at other times it is aligned with Simon’s previously noted definition (1969: 55) - “(e)veryone designs who devises courses of action aimed at changing existing situations into preferred ones.”

Permaculture’s approach to democratised design is far more akin to Manzini’s, and Simon’s, than to Starck’s. It is aimed at people taking control of the design process, and in addition, where possible, the production and implementation of designs as well (Atkinson 2019). People are drawn to permaculture design from many different angles and with many different skill

sets, but it is unclear how many people on Permaculture Design Courses are already expert designers from other disciplines. This eclectic approach to design has resulted in the development of a wide range of methods and techniques used by permaculture designers. Tools such as input-output analysis, where each element of a design is considered, and its needs and what it produces is listed to see where needs might be met or products used elsewhere within a system, have been borrowed from other design disciplines, as has the development of the concept of zones and sectors, which support energy efficiency by providing a framework of design decisions. Many of these design tools derive from the rational model of design (Newell & Simon 1972), a logical sequence of stages which proceed from the identification of a problem, potentially encompassing research, analysis, prototyping (potentially iteratively), modifying, implementing, evaluating and maintaining on the way to a solution. Permaculture typically uses a version of this in its SADIMET tool (Survey, Analyse, Design, Implement, Maintain, Evaluate, Tweak), or as Goldring (in Bastian 2014: 5) states:

... you have... a cyclical process...working out what the challenge is, think about what your intervention is going to be, plan your intervention, do your intervention, observe your results, evaluate how that went, reflect on your next opportunity for change...

Other models can also be used in permaculture, for example the action-centric model in which designers can work intuitively and spontaneously in a non-linear fashion, alternating between design phases, perhaps evolving goals as the process progresses. This approach is flexible and creative but may involve the risk of missing some elements out. Approaches will be appropriate in one design scenario more so than another and at times the challenge will be in identifying which approach will be more fruitful, particularly in the light of the Social Design Pathways matrix as detailed above, where a permaculture designer may be working in one of many scales or sectors.

The idea of models and toolkits for designers may seem at odds when considering design as a way of thinking (Rowe 1987; Cross, 2007; Lawson &

Dorst 2009) or a cognitive style (Kimbell 2009), or design as a socially embedded set of activities aimed at creating “meaningful experiences for people” (Press & Cooper 2003: 7-8) or a collaborative democratic activity (Manzini 2015). However if design as a skill, and designers as people developing design skills, are considered further, the two ideas can be seen as linked in some circumstances along a developmental axis. That is, in permaculture beginner designers may begin their training with little or no previous experience of design. The tools and techniques taught in a Permaculture Design Course and later in the Permaculture Diploma are intended to provide a framework for ideating designs. The Permaculture Flower (Holmgren, Figure 3) exemplifies the systems nature of permaculture design, showing as it does the interconnectedness of fields and elements within potential design scenarios. However, beginner designers can feel overwhelmed at the complexity and scale of design decisions. For beginners, toolkits and methods allow for the onset of design thinking skills. For those who are serious about permaculture design, the toolkit will give way to design thinking. Because of the democratisation of the design process the rational process is at the start of the journey.

Dorst (2008) described levels of proficiency in the design profession, including the *naïve*, “adequate for everyday use in conventional situations” (2008, p8), who makes choices from a prescribed set of design solutions, and the novice, who follows rules as set down by experts. Other stages include advanced beginners, who understand when exceptions to the rule are appropriate, and competent designers who are “likely to become the creator of the design situation, through strategic thinking” (2008: 9) – this is through the practice of framing (and reframing), with the expert designer experiencing problem solving and cognition as intuitive after much experience. In other words, as designers becomes more experienced and expert, they use frameworks and heuristics less, or in an intuitive, unconscious way, and they add to these subconscious frameworks as appropriate.

There is an example of expert permaculture designer Andy Goldring working with a group on a cohousing development. The group was having difficulty deciding on an optimal size of shared outside space integral to the design. Various design tools had been tried without success, when Goldring took the participants outside, asked them to stand in a circle and take steps outward until the area felt “enough”. This was not a technique which was part of a toolkit but was a creative response to a design problem (author conversation with Atkinson 2018). This level of flexible and creative application of permaculture ethics and principles can only come with a great deal of embedded experience and illustrates a level of intuitive understanding which is not available to novice permaculture designers.

For this reason, in terms of the apprehension or use of nostalgia as an element in permaculture design ideation there may be a difference between how nostalgia is perceived or used between levels of designers. Naïve or novice permaculture designers will use the design ideation strategies and tools they have been taught, but whether nostalgia has been a factor in attracting them to permaculture or not, there is at present no specific strategy for design ideation using affective elements, and specifically nostalgia, within the ideation process. Therefore a gap in the data exists on both whether new permaculture designers are drawn to permaculture because of a perception or nostalgia or not.

Experienced to expert designers will use a permaculture perspective without much conscious thought, as they have moved beyond a toolkit approach. It is possible that experienced to expert designers use aspects of nostalgia during design ideation. They may be conscious of this, or they may use aspects of nostalgia unconsciously. Presently no data exists on either whether expert designers use aspects of nostalgia or on whether they are conscious (or not) of doing so. A gap in the data exists.

Therefore, the literature review points to an opportunity to discover whether clients, stakeholders, or trainee permaculture designers are drawn to nostalgia in permaculture design, or if they are indifferent or unreceptive to it.

There is also an opportunity to analyse the extent to which nostalgia exists at the permaculture design ideation stage, and whether naïve or novice to experienced or expert designers are conscious of this or not.

If nostalgia is found to be a factor in the perception of permaculture design, it may be useful to map the areas in which this perception resides to help naïve to novice designers to focus possible attention in a design ideation process.

Permaculture’s philosophical basis includes principles from which a range of design tools or methods have arisen. Design tools and methods continue to be added to the practice of permaculture design. However it is useful to examine the permaculture principles to explain how the ethics and system design are implicit in a set of guiding tenets which allow designers – whether novice or expert – to work in a permaculture way to effect ethical, systems-aware solutions to design problems. In terms of the Social Designs Pathways matrix the intention would be that the principles could be applied at levels throughout the matrix.

permaculture			
philosophy		application	
ethics	principles	frameworks/ processes	design tools/ methods

Table 2: Permaculture ideation

2.8.5 Permaculture principles

In observing and replicating the desirable characteristics of ecosystems, early permaculturists began to formulate the ecological concepts they were noticing and using into convenient guiding rules for designing in a permaculture way. For example, in ecosystems, the ability to respond to change is an indicator of the health and resilience of the system; therefore a design principle, “creatively use and respond to change” became part of the guidance for designers. As permaculture, and permaculture teaching,

developed, the list of precepts grew, until it reached in the region of an unwieldy fifty principles. Both Mollison and Holmgren developed slightly different sets of principles, though the concepts within them are the same – simply organised or explicated in a slightly different way. Each of these sets of principles are used within permaculture design and education.

Though there are a few variations of Mollison's principles, the Permaculture Association notes that the principles in *Permaculture: A Designer's Manual* (Mollison, 1988) – still the textbook and curriculum for the introductory-level 72-hour course Certificate in Permaculture Design – are as follows:

1. Work with nature rather than against: if you have a windy site, either plant a windbreak or place a windmill there to capture the energy. Don't waste resources trying to force something against its nature.
2. Make the least change possible for the greatest possible effect: small changes produce less resistance and are also easier to maintain – growing salad on your windowsill decreases plastic use and use of air miles, increases freshness and availability of food, and also increases well-being.
3. The problem is the solution: Mollison is well-known for saying you don't have a slug problem, you have a duck deficiency. Each problem holds within it the seed to its solution; every perceived obstacle can be a positive feature if looked at differently.
4. The yield of a system is theoretically unlimited: the only limit is in the information and imagination of the designer.
5. Everything gardens (or modifies its environment): as a bird, for example, goes about its life it redistributes biomass, energy, seeds, and beauty.

Holmgren (2011) developed a set of twelve overarching principles, intended to provide a framework or lens through which to examine design decisions. As the permaculture perspective comes from observing nature (Macnamara 2012: 1), the principles are at one level ways to interact with the natural environment; however, they can be (and are designed to be) applicable also to social design. The brief mottos can be utilised as a checklist for

considering multifaceted options when designing anything from a window box to a monetary system.

The twelve principles of permaculture (Holmgren 2011) are:

1. Observe and interact: it is commonly advised in land-based designs that no work is undertaken in the first year, which would instead be spent observing a number of elements. Similarly, in social permaculture a long period of observing how the system currently works before inserting change points in it is central to any permaculture design.
2. Catch and store energy: use solar panels, or compost or green manures; ensure energy in the form of knowledge is captured and passed on.
3. Obtain a yield: yields can be food or fuel energy, biodiversity, soil health; or happiness, the better functioning of a system, human connection and more.
4. Apply self-regulation and accept feedback: if a plant is not doing well in a particular situation, assess what it needs and provide it, or move the plant; if your efforts are not succeeding, assess in the same way.
5. Use and value renewable resources and services: from solar panels to the sun itself in passive solar design elements; from libraries to goodwill – renewable elements need to be developed and maintained.
6. Produce no waste: in a closed loop system all unused elements are returned to the system, whether this be compost or greywater cycling; use the energy of older people to teach forgotten skills, for example.
7. Design from patterns to details: noticing how water drains beneficially in nature has led to the use of swales in garden designs, for example; noticing people's needs for connection or security leads to designs which include spaces encouraging social interaction or safety.
8. Integrate rather than segregate: recognise and encourage beneficial relationships, and the need of the community over the individual. Monocultures may seem to increase yield in the shorter term but are unsustainable and unhealthy in the long term.

9. Use small and slow solutions: in design systems with many variables, each change has unpredicted and unpredictable effects. Make small changes slowly, observe, and add further changes based on observation.
10. Use and value diversity: diversity within a system provides resilience in the face of change, whether that be by including many different species in a garden design facing climate change, or by including many different stakeholder views in designing a healthcare system.
11. Use edges and value the marginal: in ecological terms, where one system meets another – for example, the shoreline, or the edge of a forest – is often the most fertile part of an ecosystem; similarly, where two institutions or ways of working meet there are opportunities for creative growth and change.
12. Creatively use and respond to change: in order for a system to remain stable, there is constant change amongst its elements. Adaptive change is one of the ways in which a designed system can maintain itself over time, providing resilience and flexibility. For example, in the tropics a design might favour renewability of construction materials over durability, given rates of decay and prevalence of natural disasters.

Each principle, as Holmgren has published them, also has a logo/image and a proverb to go with them. This has the aim of providing more than one way of accessing the information: visual thinkers may find the logo more accessible or that it sparks more understanding than the written principle, and the proverbs are metaphors that are intended to work at a different level of engagement. For example, the logo for Principle 3, Obtain a Yield, is a vegetable with a bite out of it – both to show the cultivation of something that gives us a yield and to remind of other creatures trying to get a yield from what is cultivated. The associated proverb is “You can’t work on an empty stomach” and Holmgren (2011: 56) states that “there is no point in attempting to plant a forest for the grandchildren if we haven’t got enough to eat today.”

The 'hand drawn' character of the font and the images is of interest in the examination of possible nostalgic perceptions of permaculture, particularly when compared to the graphic design choices of sustainable design philosophies and practices such as Transition Design, Doughnut Economics, and the Ellen Macarthur Foundation.



Figure 6: Holmgren's 12 Principles of Permaculture

The principles are intended to guide designers, from the beginner to the expert level, in ensuring designs mimic natural ecosystems as much as possible in terms of sustainability. 'Catch and store energy', for example, is intended to mimic closed loop systems in which energy from the sun (also 'renewable resources') is stored by photosynthesis in plants, which may be eaten by animals or turned into compost ('obtain a yield' and 'produce no waste'). Each principle may be inherent in many design elements and each element may serve many functions. For example, the animals in a designed system may eat waste and become food, or provide the yield of connection and enjoyment, or be part of a diversity of life in a system.

These principles originated in experiments with natural ecological systems and permaculture remains rooted in direct interactions with the natural environment. However, as Holmgren noted, the organising structure is more broadly applicable to other domains: physical and energetic resources and human organisation can be examined with reference to the structure.

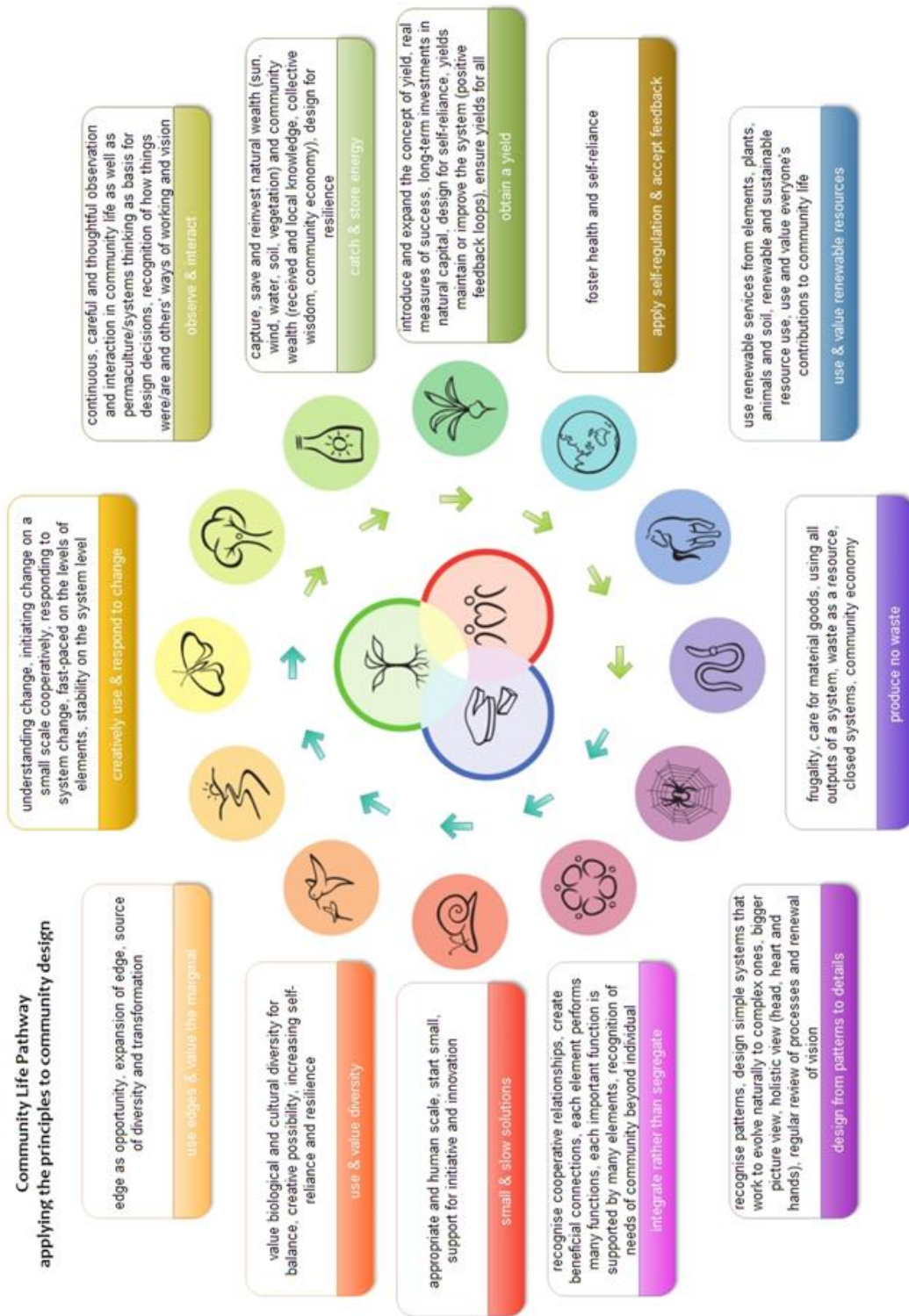


Figure 7: Community Life Pathway applying the permaculture principles to community design (Anthony 2014)

For example, the principle 'Use edges and value the marginal' may apply to the recognition that the edges between natural systems – such as the margins between a pond and a garden, or between a forest and a meadow –

are the most productive areas in a system, and so edge is sought after for its abundance. In business, the edge of a practice or market may be where the most interesting areas for growth or development exist. Figure 8 demonstrates how the principles can be applied to the design of communities.

In this design scenario, the principle of using renewable resources may mean taking an asset-based approach to communities and seeing what members can do before calling in outside help; producing no waste may refer to the development of local currencies so that a more circular economy is allowed to thrive. Central to this applicability, however, is the cross-domain mapping of the principles from concrete, biological entities and processes to more abstract conceptualisations of energy and resource flows and scales.

For permaculture designers the principles of observing and interacting, and of creatively responding to change, are key to design whether in rural or urban settings. Each will provide a different set of needs, characteristics, and yields, which must be first understood in order to design from patterns to details. Physical environments are created by following pattern languages that are held in the mind. These become a set of organising principles that can be a tool for designing sustainably. An issue which presents in seemingly different ways in urban and rural environments, but which can be usefully examined for a pattern or principle, is that of waste.

What waste *is* within a system seems self-evident, but in order to design a sustainable system waste should be examined for the way it works within natural systems. Permaculture Principle 6, 'produce no waste' (see Appendix A) is linked with Principle 4, 'apply self-regulation and accept feedback'. In natural systems, higher order control is an evolutionary response which has resulted in internal self-regulation mechanisms, such as the ability of kangaroos and other herbivores to slow the development of embryos in response to harsh conditions. Odum (1996) wrote of a 'tripartite altruism' in nature, in which (approximately) one third of captured energy is needed for the maintenance of an organism or population or system (for example grass for rabbits), one third is fed back to lower-order system

providers (for example rabbit droppings), and one third to higher order system controllers (rabbit predators). In this way the system stays in balance. What appears to be waste is not. For example, plants which shed their leaves appear to be creating waste, but this 'waste' not only feeds organisms in soils but produce friable soil structure and other benefits. Holmgren (2011) argues that systems which produce more waste – because of being sustained by rich energy resources - usually support richer sub-systems which have co-evolved to take advantage of the higher (seeming) waste. This is a principal tenet for Braungart and McDonough's (2002) call for a move from a cradle-to-grave system to a cradle-to-cradle system (a Circular Economy), in which waste is redefined, since all elements in a system are entirely reusable or recyclable (thereby eliminating the need for any reduction in consumption).

Townsville, in the Coastal Dry Tropics region of Queensland, Australia, has a section on the City Government website with information on Water Sensitive Urban design (WSUD), identified as important for protecting aquatic ecosystems in the region from development impacts. In the dry tropics water is not waste, but its pattern of coming all at once and not being captured by traditional Western constructions means that it can overwhelm ecosystems when it is treated as such. The government guidelines give examples and advice for design measures which have a great deal in common with permaculture design, such as “appropriate design flows for use in sizing stormwater management measures (e.g. sediment basins and swales), design adaptations for constructed wetlands and bio retention systems required in response to the seasonal rainfall patterns” (townsville.qld.gov.au 2017: n.p.). It is a very permaculture approach, embedded in a government website on planning.

Appropriate design interventions allied to the tenet 'reduce, reuse, recycle' can effect great reductions in consumption patterns which create needless waste. Where waste can be reconfigured to become an opportunity for beneficial exchange there is an opening for a design contribution to a system. However, approaches to waste are altered by affective responses to

consumption. Affective responses to place also contribute to attitudes towards Earth care.

Shiva's (1993) Monocultures of the Mind portrayed globalisation as not only an economic issue but an ideological one, focusing on large yields of singular crops rather than smaller yields of many crops. Shiva says that this hostility to biodiversity is an importation of Western ideas which has negative ramifications for systems of farming which have remained sustainable for many generations. Shiva refers to globalisation as colonialism, stating "the dominant system is also a local system" with a "social basis in a particular culture, class and gender" (1993: 9). Holmgren (2011: 211) describes "modernity" as delivered by the media and corporations (as) the greatest cultural imperialism the world has ever seen" and describes it as a "global culture of no-place" (*ibid*). Permaculture Principle 10, use and value diversity, encourages an action research approach to agriculture, suggesting that a shift from monocultural approaches to a diversity of solutions provides a patchwork quilt providing resilience and sustainability. Culturally this approach is more problematic, with concerns about cultural appropriation levelled at permaculture's use and promotion of patterns common to traditional cultures as design models and principles. For some this uncomfortably approaches the essentialism critiqued by Mukta & Hardiman (2000) and can be viewed as a form of cultural nostalgia which lessens the attraction of permaculture. However a recent provocation was issued to the permaculture community in the form of an open letter, "Whitewashed Hope: A message from 10+ Indigenous leaders and organizations. Regenerative Agriculture & Permaculture offer narrow solutions to the climate crisis" (2020; see Appendix E for full text and attributions), published on the Permaculture UK website noting that it was not uniformly agreed with, but inviting responses. The permaculture community does not yet have a unified response to this issue of essentialism or cultural appropriation, but it may form part of a nostalgic perception of permaculture which may benefit from further research.

Principle 8 in permaculture, 'integrate rather than segregate', is one way of caring for people within social structures. There has arguably been a use of nostalgic triggers to effect desirable behavioural change, such as designing new shared spaces in housing developments to mirror older common spaces and promote neighbourly activity. This is also seen in use for therapeutic or palliative outcomes in initiatives such as De Hogeweyk, Amsterdam, and an upcoming dementia village in Tasmania (Lehman and Bhole, 2017; Beavis 2020) in which the entire community is designed around a simulacra of communities as they once were as wellness aid for those with severe, advanced dementia. These are different from the predominant 'silo' method of dementia care, in that the system is set up where each element performs many functions (a subset of Principle 8): for example what is a medically equipped facility for caring for the elderly is also a provider of pleasure and enhanced cognitive function, as well as a provider of jobs. The Netherlands has similar multi-function initiatives in place such as care homes for the elderly in which university students are given free accommodation in return for time spent interacting with the elderly residents. Successful initiatives with similar multi-function aims are permaculture community food gardens, set up as self-reliant systems. Permaculture education itself is seen as beneficial. Corazon *et al* (2012), Ingram *et al* (2014), Mukute (2009), Reeves (2015) and Smith (2000), discuss the effects of permaculture in terms of education, therapy, or both, with Reeves and Ingram *et al* specifically looking at the positive effects of permaculture education on learners.

A self-managed housing project, LILAC (Low Impact Living Affordable Community) in Leeds, was devised and set up on permaculture principles where the homes and land are managed by residents through a Mutual Home Ownership Society. This financial model ensures permanent affordability through purchasing shares based on a percentage of income (each buyer pays the same percentage of income rather than a set amount), and the price of the housing units rises with the rate of inflation rather than the rate of surrounding property. It takes an ethical will to uncouple from the

gamble of house prices rising but this is an example of a design scenario intended to engage with each of Holmgren's principles in a systems-based approach to the contemporary urban design problems which include housing unaffordability, urban disconnection, energy inefficiency and waste production, lack of food security, and community disengagement in poor areas.

Permaculture design principles and ethics underpin their application in frameworks and design processes, tools and methods. One aspect of permaculture design ideation which also bears a potential relationship with nostalgia is its relationship to time. Every design practice invokes a relationship with time in its active creation of futures. Some of the ways in which futures are invoked as part of a design ideation process will be explored in the next section, as this is one of the key ways in which affect can be employed to increase engagement. However permaculture has other relationships to the idea of time which will also be investigated. The perception of nostalgia is that its relationship to time is backward-looking; however there are some tools used in the design ideation of futures which may be of relevance to the focus of this research.

2.8.6 Futuring

All design is involved in the practice of creating new futures. Tonkinwise (2015a: 2) differentiates design from other fields in this way: "Design makes futures...Other discourses imagine new and different things, but do not make, do not realise them as things that people in the future will experience as their reality." Tonkinwise examines the practice of design as that of actively creating futures, stating that practices of making (crafts, for example) do not imagine new kinds of things and therefore do not future; practices that make futures such as architecture and planning – larger-than-human scale – do not share the design element of "approaching the world in terms of human-thing-interactions" (2015a:2). Designers, he proposes, are engaged in generating futures, evaluating futures, enlisting sponsors for futures, and materialising futures. In this way, they do not just imagine

futures, or participate in materialising things for the present, but rather have an instrumental practice of making futures.

Aligned with the idea of designers as change agents who work across scales and subjects – the matrix as previously discussed which “positions contemporary practice within a pan-disciplinary framework” (Yelavich and Adams 2014: 14) - there is a growing group of people involved in the prediction of different possible futures called, appropriately, futurists. Some of them assess and predict futures through research. For example, planetary futurist Alex Steffen’s work is predicated on predicting post-carbon futures, and environmentalist Jonathan Porritt has written a futurist book (*The World We Made* 2013) exploring the world that may result from sustainability initiatives arising now. These examples of futuring – exploring a human society which is not contingent on carbon-releasing oil and coal for energy. The role of these futurists is to imagine what a future may look like and share the vision with the rest of the world, to help make the potential for such a future more realistic and believable. As Steffen says (in Rinde 2016: 24), “It’s literally true that we can’t build what we can’t imagine. The fact that we haven’t compellingly imagined a thriving, dynamic, sustainable world is a major reason we don’t already live in one.”

Futurists are not necessarily designers. Porritt is a writer, and writes compellingly of a fulfilling, ethical, sustainable future in a narrative form employed to engage affectively. This kind of scenario-based creation of a captivating future has a part to play in creating both vision and desire for a preferable future. Futurists like Steffen are more inclined to theorise possible future scenarios and strategies but tend not to engage with narrative or other affective devices. They are involved with visioning possible futures – but not necessarily designing them.

However designers are also doing the work of visioning possible futures. The futuring which permaculture, and other design disciplines, engages with is also aligned with the democratised, participatory design approach (Escobar 2018; Irwin 2018). In this approach the projection of futures is a

community or democratised activity, less concerned with the correctness of predictions of the future and more concerned with the functions of the activity of futuring.

These functions include the building of a compelling future vision which encourages participants to work towards it – an affective draw to encourage behaviour change through the difficult steps of transition towards a desired future (Irwin, Kossoff and Tonkinwise 2018). As with other forms of democratised design, there may or may not be input from field experts, but the designer's role is partly facilitation of the design process.

As with the tools and methods employed in other forms of permaculture design, the tools employed in the design of futures have been collected from a wide range of sources. The tools include those for facilitating group work, for non-violent communication, for ensuring the consideration of each participant's contribution, for eliciting responses. One of the tools for “building consensus around a sustainable future vision and then planning backwards to determine how best to get to that objective from our current state” (Irwin, Kossoff and Tonkinwise 2018: 19), is backcasting. It is a practice productively used for the elicitation of stakeholder or participant responses, and the one with the most relevance to this project

Backcasting is the process of casting the imagination forward into a preferred future. This can be in more or less detail and involve a number of elicitation techniques, but the important thing to recognise is that this ‘casting forward’ differs significantly from logical prediction of what participants believe is possible from their standpoint in the present.

Gaziulusoy and Ryan (2017: S1917), in assessing the use of futures inquiry in a project aimed at developing low-carbon, resilient futures in Australian cities, identify that not only is the ability to imagine and act towards preferred futures depends on the agency of participants, but also that, for generating understanding of what needs to be known for transforming into future preferred scenarios,

discovery-based research is not sufficient as these types of knowledge require creative imagination of new system concepts and articulation of pathways that can link unsustainable present states of the systems to (imagined) sustainable future states.

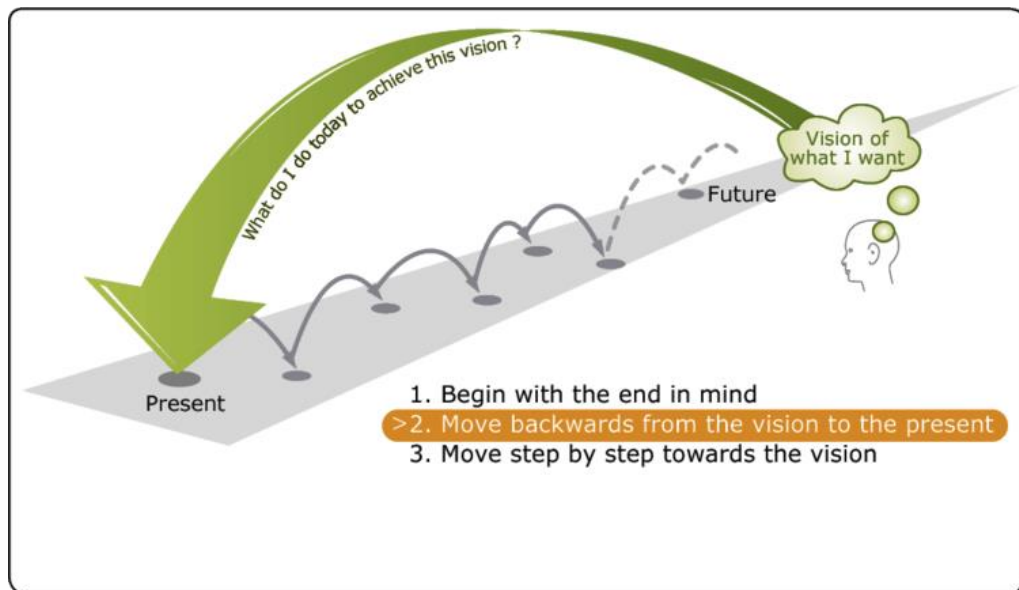


Figure 8: Backcasting from a vision of preferred future (Innovate Change, adapted from The Natural Step 2011)

In addition, one of the difficulties in futures enquiry is that participants focus on the difficulties and are unable to effectively imagine a future which they can believe in:

One challenge in creating momentum for rapid structural changes has been the fixation of stakeholders on the perceived barriers of change in the present state and not being able to imagine alternative future states that are plausible as well as sustainable. (ibid)

This is the strength of a practice such as backcasting. Instead of trying to logically predict what futures are possible given our present situation or conditions, the imagination is allowed free range. Not 'what is possible?' but 'what is preferable?' and even 'what is desired?' It is in the creation of a compelling vision of the future that what Irwin, Kossoff and Tonkinwise (2018: 22) describe as a 'magnet' which can draw stakeholders into the future they have imagined and a 'compass' which guides actions in the present in then proceeding forwards into the desired (and designed) future.

They identify three areas which define “new ways of designing” for Transition Design: “visions, theories of change and new mindsets/postures.”

It is the ‘visions’ part of the Transition Design practice with which this research is concerned. By starting at the end and casting back it is a whole other way of using emotions and dreams to create a positive desired future. This is the way using nostalgia works too: backcasting techniques are predicated on this transfer of affect-related desire from the consumption of nostalgia provided by the manufacture and branding of objects to the aforementioned movement towards a more creative and proactive position. Design can “promote individual agency, engage communities, and propose systemic changes within a global framework of mutual obligations” (Yelavich & Adams, 2014: 15). Making the future by design is a stated aim of permaculture, and the use of looking backwards in order to project forwards the focus of this study. Future-making is therefore at the heart of this project, and a “practice that continuously reimagines its own conditions of possibility” (Appadurai, in Yelavich & Adams, 2014: 9) is particularly well-placed in this for ‘future-making’ when that future seems increasingly uncertain.

Backcasting, in particular amongst other futuring tools, would seem to be of particular relevance to this project. There is an opportunity to look backwards (nostalgically) before casting forwards (imaginatively) before casting back from that future to plot a journey of stages towards that future. Permaculture designers are not currently doing this, and research is required to see whether this approach would be of value.

If the data supports RQ1 affirmatively, and nostalgia is found to play a role in the perception of permaculture, there is therefore a second gap in the literature concerning the use of nostalgia at the ideation stage of permaculture design. Establishing the extent to which a permaculture designer used nostalgia as an element or strategy at the ideation stage (including whether or not designers might be using less conscious and more intuited nostalgia when ideating) is of significance to permaculture designers

and other stakeholders, and to those interested in the uptake and longevity of sustainable design initiatives. This leads to **RQ2**: What is the position of nostalgia in the design ideation phase of permaculture design?

2.9 Nostalgia in permaculture design ideation

Despite the perception of sentimentality and superficiality attached to nostalgia, it can conceal a deeper longing. Nostalgia may indicate a desire for certain things, places, or processes felt to be missing in the present. Identifying what these elements are could be an aid to design aimed at creating futures which align with deeply held needs rather than superficial wants.

Although there is no direct literature to date on nostalgia in permaculture design ideation, this section of the literature review will examine firstly literature which touches on concepts of importance in the development of an ideation strategy for permaculture which involves nostalgia, and secondly examines practices and projects which are related to the elements under consideration. In this way literature will be examined which approaches **(RQ3)** - Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

Nostalgia as an affective state is not necessarily aimed at social change. Boym (2001) distinguishes between two types or tendencies of nostalgia. Restorative nostalgia is a desire to rebuild the past in its entirety, as it was. This is the kind of nostalgia often invoked in rhetorics of nationalism, where “(t)he streets were cleaner and the children less disorderly: faces were whiter in those days, and doubtless the grass was greener too” (Wright, 2009: 215). In contrast, with reflective nostalgia the concern is with a meditation on historical and individual time and the spaces and differences between them. “Restorative nostalgics don’t acknowledge the uncanny and terrifying aspects of what was once homey. Reflective nostalgics see everywhere the imperfect mirror images of home, and try to cohabit with

doubles and ghosts” (Boym 2001: 251). This way of looking at nostalgia critically, but without the distancing tools of irony and cynicism, is called by Boym (2001:30) “off -modern”: “In this version of modernity, affection and reflection are not mutually exclusive but reciprocally illuminating, even when the tension remains unsolved and longing incurable”. Off-modern is a way of engaging emotionally, while staying wary of meta-narratives which are employed to legitimate mechanisms of social control. For example, reflective nostalgics can enjoy the countryside, while at the same time appreciating that both the countryside and ideas about nature are socially constructed, and are used in the process of constructing society.

Clearly restorative nostalgia, as the homeland and idiom of those for whom colonial and conservative ideas of society are preferred, is not the focus of this research. However reflective nostalgia offers a way of considering the past which offers some potential, and the need for a closer examination of the role of nostalgia in design which is not allied to wants but to needs is clear.

Design may be described as the process of detecting and providing solutions for unmet human needs and designers typically use a number of methods by which they ascertain client needs; if skilled, this can be in spite of what people express as desires or wants - for example, by trying to ascertain and design for values. However this is not unproblematic, as the provision of artefacts or systems, perhaps particularly when utilising the technique of attending to the emotional qualities of a designed experience (either to provide pleasure or mitigate or remove pain; see Routledge 2016 for the overview of relevant research results) may in fact be rather more about the articulation and provision for a want or desire rather than a need, and in some cases (many cases within the consumerist model within which the developed world works) may be creating desires rather than fulfilling actual human needs (Mumford 1970). Wants are infinite and trying to fulfil them has contributed to the unsustainable level of consumption faced by the world: as Irwin states, there is a large industrial complex which is “motivated by the desire for profit and economic growth rather than human fulfilment”

(Irwin 2015). Distinguishing between needs and wants is similarly affected by this industrial complex and the concomitant economic resource-centred view of human needs – the best-known example as articulated in Maslow (1943), but also McClelland (1988), Herzberg (1966), and others, as well as by Max-Neef (1992).

Maslow's (1943) hierarchy of needs proposed that physiological needs such as food and rest were primary and needed to be fulfilled before higher order needs such as safety, love/belonging, and finally self-actualisation were considered or acted towards by the human subject. However, this theory has been the subject of criticism since its inception and even after several refinements – it is not difficult to think of common examples of artists who created while hungry, or in unsafe or lonely environments, for example, thereby calling the structure of Maslow's hierarchy into question.

Part of Chilean economist Max-Neef's Human-Scale Development (1991) included a chapter on 'Wants Versus Needs'. Max-Neef's Theory of Needs is more flexible, more complex, and more interrelated than Maslow's. According to Max-Neef the nine fundamental needs of humans are interactive and interrelated. There is no hierarchy but rather an interdependent set of universal human needs which comprise subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom. For Max-Neef, basic needs are bio-psycho-social. Although they are the same in all cultures and across all historical time periods, they are also finite, limited in number, and able to be classified.

On the other hand, the ways in which these fundamental needs are satisfied are unique to eras, cultures, geographical locations, and age. In other words, although we all have the same set of needs, the ways in which we think we can satisfy them are culture-dependent and are formed by (and form) our ideas about progress.

The ways in which we think to satisfy our needs are called satisfiers. For example, Max-Neef suggests that we do not see food and shelter as needs, but as satisfiers for subsistence, the basic need. He states that "in much the

same way, education (either formal or informal), study, investigation, early stimulation and meditation are satisfiers of the need for Understanding” (Max-Neef 1991: 199). In this view, needs are universal; satisfiers are contingent.

Max-Neef distinguishes between needs and wants, or rather, fundamental needs and non-fundamental needs, by the use of this framework of satisfiers (ways of meeting needs), which he further classifies as follows:

1. *Violators* seem to be satisfying needs but make satisfying the need more difficult.
2. *Pseudo Satisfiers* seem to be satisfying a need but have little to no effect on actually meeting the need.
3. *Inhibiting Satisfiers* over-satisfy a need, which then actively impedes the possibility of satisfaction of other needs.
4. *Singular Satisfiers* only satisfy one specific need, being neutral regarding the satisfaction of other needs.
5. *Synergistic Satisfiers* satisfy a need, and at the same time contribute to the satisfaction of other needs.

This distinction between needs and satisfiers, and between the satisfiers themselves, relates specifically in two different directions within this research project. Firstly, there is a relationship between synergistic satisfiers and permaculture principle 3, ‘obtain a yield’, and also in the permaculture strategy of stacking. If a satisfier satisfies one need (for example keeping chickens obtains eggs for food) but also contributes to the satisfaction of others (chicken manure contributes nitrogen to compost, and chickens eat waste, as well as eating bugs and providing pleasure), then it can be seen that synergistic satisfiers are an example of stacking (or vice versa). On the other hand, the inhibiting satisfiers such as having to work for long hours to be able to provide for food and clothes can be seen to inhibit other satisfiers such as relaxation and imagination.

Secondly, there is a relationship between systems theory and design, and with the design theory of reframing, which relates to the way designers can

think holistically about design situations. By understanding how satisfiers can be violators, pseudo-satisfiers, inhibiting satisfiers, singular satisfiers, or synergistic satisfiers, the ability of design to meet fundamental human needs can be better understood and engaged with. This is particularly important when designers are engaged with wicked problems.

The more clarity is obtained over needs as opposed to wants, the better design solutions can address fundamental human needs – because if wants are provided for but needs are not properly fulfilled, more wants arise, since the underlying need remains. Providing for wants which are counter to needs has been the mainstay of increasing consumption and has contributed to the unsustainable patterns of living causing so much damage in contemporary societies. However, the wants which point the way to fundamental needs are intrinsic to being human. If these wants can be identified and engaged with, then designers have a far higher chance of producing design solutions which contribute to happiness and the fulfilment of needs than if they did not engage with needs expressed as wants. If needs are only expressed obliquely – because the understanding of the need is subconscious, for example – then part of the work of the designer is to find ways to uncover the fundamental needs. In the same way that metaphor elicitation in market research is used to uncover and identify hidden desires, nostalgia and the longings its concrete/specific and abstract memories identify as being of primary importance (Routledge 2016; Section 1.3.2), can be used to more closely identify the satisfiers for fundamental needs. Nostalgia can be a way of finding unexpressed desires which lie dormant or subconscious in the minds of stakeholders.

One of the ways in which a deeply-held need, which could be perceived as nostalgic in affect, is in the use in permaculture of the principle of biomimicry.

Permaculture is a design practice based on the use of patterns seen in nature. These patterns provide an example of valuable approaches, as well as specific solutions to problems. In this approach it is similar to that of biomimetics, which looks to nature for inspiration and “embrac(es) the

practical use of mechanisms and functions of biological science in engineering, design, chemistry, electronics, and so on" (Vincent *et al.* 2006: n.p.). However Atkinson (2016) states that because permaculture is so strongly aligned with systems thinking, and includes both biological and non-living elements in its consideration of systems, it would be more accurately described as ecomimetic design.

In permaculture there is the constant presence of the biotic community as a client group, no matter who the other clients may be. Nostalgia may arise from various arenas or be attached to different theoretical beliefs – for example, a response to different ways of encouraging wildlife may emanate from social or ecological nostalgia; from wanting an experience of the natural world as it used to be in one's childhood, or perhaps wanting to return the natural world to a previous state (as in rewilding).

Biomimetics, like permaculture itself, may invoke nostalgia inherent in the appeal of the natural world. The use of psychological elements in design ideation is a feature which encompasses nostalgia in design ideation.

Affordance theory states that the world is not only perceived through objects or spatial perceptions, but also through relational possibilities afforded by objects (Gibson 1986). An affordance is a clue in the environment, a property of a thing that tells its user what it can be used for, as handles on cups indicate where and how they should be held. Affordances are directly perceived and not processed by conscious thought. Everything has affordances; in terms of design these can be intentional or unintentional. A train seat designed to afford comfortable sitting facing others also affords the activities of resting feet on and leaving newspapers on. Unintended affordances need to be discovered and understood as part of the design process. Many affordances are possible, but only those which "fit" the framework within which an actor interacts with the world will be perceived. It is therefore to be expected that permaculture design which includes opportunities for nostalgic affordances (for example, a scent memory, or a

wildlife corner which invokes a childhood memory) may increase affective response.

Yelavich and Adams (2014: 70) note, “There is a distinct pleasure and reassurance that comes when we recognize a glimmer of continuity with those who came before us.” Escobar’s *Futuring for the Pluriverse* mentions that the “act of dwelling” is a “fundamental medium of our being-in-the-world”, but that the functional architecture within which most of us live, along with the way we live, have excluded “poetics of the home — linked to memory, emotions, dreams, identity, and intimacy” and calls for a move from “defuturing” to “futuring” (2017: 39). In terms of affordances, however, what Escobar is calling for – with criticisms of televisions instead of fireplaces – is a nostalgic futuring. Futuring is an active use of nostalgia. Xue & Almeida (2011) examine why nostalgic experiences and artefacts are appealing in an attempt to use this information in user-centred design scenarios – so far, however, this has not resulted in particular approaches or strategies to design. But the nexus of design/culture/memory/emotion is relevant to the potential for nostalgia to be a generative factor in design.

And economist Scott Cato (2008: 92) identifies the nostalgic impulse as generative rather than something hopeless or regressive. In examining the perception of Green politicians she writes,

People often accuse the Greens of being nostalgic - wanting to 'go back to the horse and cart'...Nostalgia is a yearning for a state that can never be reached, but Hiraeth is a yearning for a place from which we are separated only by space ...that feeling is associated...with a space that we hope to build - a genuine, sustainable utopia, and one situated right here, at home...

Similarly, shared understandings of how place and time work (or should work) are challenged by ‘Ghosts of place’ or “the sense of the presence of those who are not physically there” (Bell 1997: 813). Where Scott Cato places nostalgia – literally – in a location (advocating for bioregionalism as a new economic paradigm – which nevertheless invokes a nostalgia for a pre-globalised society), Bell recognises that places are imbued with presences from the past. In working with relationships between history and how it plays

out in the present there is often a recognition that an ethical relationship must be maintained if one is to invoke spectres from memory which, though they may be viewed nostalgically, may also be multivalent, contingent, fragile or awkward (Certeau *et al.* 1998; Till & Kuusisto-Arponen 2015).

The nostalgia for the future promised in the past which never came to be – the hauntology originating from Derrida’s *Spectres of Marx* (1993) but best known in the sociological writing of Mark Fisher (2014) – is invoked when reference seems to occur to the musical style of a previous time. However, in an echo of Kant, what is being mourned (Whyman 2019) is not the music but the unreachd possibilities of the former time.

What should haunt us is not the no longer of actually existing social democracy [for example], but the not yet of the futures that popular modernism trained us to expect but which never materialised. These spectres – the spectres of lost futures – reproach the formal nostalgia of the capitalist realist world (Fisher 2014: 27).

In a related way, the ‘social haunting’ (Gordon 2008) produced in the present day by past social forces present in complicated and unexpected ways and affect race, gender, class and their interconnected relationships. Gordon’s exploration of the uncanny and the persistence of history in the social structures of the present has resulted in pertinent contemporary examinations (Bright, 2012) of how the past might influence present social design. In *Working With Social Haunting* Bright developed a model of community engaged participatory research based on trying to uncover the ways in which a community history continues to play out in the lives of young people who did not even live through the historical time in question. Bright (2012 n.p.) says he

tried to understand why a whole group of young people from coal-mining families who were born during or soon after the 1984-85 strike were being excluded from school 15 years later for ‘behavioural difficulties’, and why none of them – in a culture that had always passed on its living knowledge of precarity, hardship and resistance – knew nothing about the shocks of their own bitterly contested history.

In a series of what are known as ‘Ghost Labs’ members of these communities are invited to share feelings about the past publicly. These

feelings are, according to Bright, “made available for reimagination in common” (2012 n.p.) through song, poetry, art, and other acts of collective creativity. These artefacts then become a source of hope for the stakeholders in an

entanglement of affect and imagination in working-class experience and how it has played out in the UK at key moments of a thirty-year period of de-industrialisation (Bright 2012 n.p.).

This approach is arguably a form of nostalgia as visioning or futuring, or even as healing, though it is not tied to nature, and not allied to permaculture in any way. However in its revisioning it also looks back in order to look forward with the aim of creating futures with more community affect and therefore longevity.

This method also, in its use of non-linear, extra-logical processes for dealing with the past, works in similar way to metaphor elicitation. There are a number of metaphor elicitation techniques, the best known of which is ZMET or Zaltman Metaphor Elicitation Technique (Pink 1998). It is commonly used as a market research tool and consists of a set of images designed to elicit conscious and unconscious responses through the elicitation of lateral and metaphoric responses. The technique has been developed due to the conviction that humans think in images and not in words. It has clear parallels to the use of nostalgic elicitation, though at present no data exists on whether nostalgic elicitation would need to involve images; this requires further research information.

Following the literature reviewed in this section, it is now possible to identify the distinguishing features of what would be an approach to nostalgia in permaculture design. These are:

- Using nostalgia reflexively as a way to distinguish needs and wants
- Maintaining an embeddedness in both systems design and ethics, including towards an expanded field of stakeholders
- An awareness of the moralities and significances involved in invoking shared pasts

- An understanding of what the psychological dimension (affect) brings to the ideation process

There is a gap in the invocation of nostalgia in the ideation of sustainable design, systems design, and specifically permaculture design. If the use of nostalgia is better understood, it shows potential to deliver permaculture design with greater impact and longevity through greater participation and affective appeal, if a way can be found to use it as a generative rather than regressive element (**RQ3**).

The literature review therefore highlights a need for further research to investigate ways in which nostalgia might begin to be utilised as a tool in permaculture design ideation.

2.10 Summary

This literature review has examined and established permaculture as a sustainable design practice, aligned with and differentiated from the United Nation's Sustainable Development Goals, the Circular Economy, Transition Design, and other sustainable design approaches and practices.

Sustainability is an issue of primary importance for the survival of societies, species, and the Earth in its current ability to support life as we know it, including humanity. The review has shown that the case for sustainable practices has been well-established, but design, and society, are not yet sustainable by default.

Although the logical case for sustainability is clear, cognitive dissonance – a psychological response to holding two opposing beliefs at the same time – appears to affect the adoption and longevity of sustainable behaviours or practices. Design approaches to sustainability which do not engage with affective elements – with creating strong enough desire for participating in the change-based systems they design – are in conflict and competition with designs which appear to promise comfort, including psychological comfort.

Affective design (or emotional design) is a branch of design which seeks to understand and define the relationship between humans and products to

maximise the pleasure emanating from human interactions with products or artefacts. To date, the main design disciplines which actively invoke nostalgia have been branding/marketing and to a lesser degree product design [and interface/affective design]. The literature review evidenced a gap where elements of affective design - designing emotional elements into wider design interfaces to effect behaviour change - might be interrogated. There has been little attention given to the affective elements of systems design, including permaculture design. Moreover the link between pleasurable affect and behaviour change is still underdeveloped. This has meant that there is, even in those who show some initial interest in permaculture, opportunity for cognitive dissonance to interfere with the take-up or continuation of permaculture, either in clients of permaculture designs, or trainee permaculturists, or other stakeholders.

Nostalgia is an affective state which research has indicated can contain the possibility of inducing psychological comfort in those who choose or are predisposed to engage with it in this way. It is allied to an emotional response to elements of the past, whether personal or cultural. It has been shown to play a role in some situations concerning cognitive dissonance. If nostalgia lessens cognitive dissonance it might have a role to play in the adoption and/or longevity of sustainability initiatives.

To that end the literature review examined to what extent nostalgia might be underpinning designs in permaculture such as garden design (including community gardens, farms, and orchards), housing design (including such developments as LILAC in Leeds), and social design for wicked problems (prison design, food distribution). The literature suggests that nostalgia is implicit in certain interactions/processes, such as rewilding, small-scale, idiosyncratic, vernacular and bioregional communities, community gardens, and others, and potentially embedded in the objects, processes, and social structures of permaculture design. The study places itself to examine to what extent the process of design ideation in permaculture invokes these interactions and processes in thinking forwards into the future.

Permaculture has potential as a means of increasing not only sustainable horticulture and agriculture but also wider design systems, which have a greater possibility of increasing sustainability within the whole system of which forms of agriculture are a part. However, the need for a closer examination of the role of nostalgia in design which is not allied to wants but to needs is clear.

The literature review produced evidence that nostalgia is inherent in perceptions of nature/wilderness. Given permaculture's alignment with nature/wildness it was possible that the affective state of nostalgia was part of the perception of the field of permaculture. However, there was no evidence to date concerning nostalgia's role in the perception of permaculture. This gap suggested the proposition that interested public, potential trainee designers, clients, or other stakeholders respond to nostalgia in permaculture design. Establishing the extent to which nostalgia is a driver for permaculture design would allow for analysis of this response. This proposition led to Research Question **(RQ)1**: Does nostalgia draw people towards the concept, use, or experience of permaculture?

If RQ1 was answered in the affirmative, and nostalgia was found to play a role in the perception of permaculture, there was therefore a second gap in the literature concerning the use of nostalgia at the ideation stage of permaculture design. The necessity of establishing the extent to which a permaculture designer used nostalgia as an element or strategy at the ideation stage (including whether or not designers might be using less conscious and more intuited nostalgia when ideating) is of significance to permaculture designers and other stakeholders, and to those interested in the uptake and longevity of sustainable design initiatives. This led to **RQ2**: What is the position of nostalgia in the design ideation phase of permaculture design?

Thirdly, that nostalgia offers the potential of new, added value to the permaculture design process. There is in particular a gap in the invocation of nostalgia in the ideation of sustainable design, systems design, and specifically permaculture design. If the use of nostalgia is better understood,

it shows potential to deliver permaculture design with greater impact and longevity through greater participation and affective appeal. This could help increase user engagement and satisfaction with designs, leading to some positive impact on sustainability. This led to **RQ3**: Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

These research questions, and their relationship to the methodology of the project, will be discussed in the next chapter.

Chapter Three: Methodology

3.1 Introduction

This chapter proceeds by delineating the study hypothesis in the light of the literature review, followed by outlining the objectives of the study and the resulting research questions.

A brief overview of all fieldwork gives a map of the work undertaken for the collection of data; then follows a description and explanation of the fieldwork in stages 1, 2 and 3. These sections detail the data collection methods, with explanations of why each was chosen.

The chapter then proceeds to a critical assessment and reflection of the work. This details the underpinning philosophical approach and then states its approaches to data analysis, along with the coding methods selected.

The chapter concludes with an examination of the research limitations and outlining of ethics procedures and considerations.

3.2 Hypothesis

The project proposes firstly that nostalgia might be an impetus for permaculture design, and secondly that nostalgia may be utilised as an affective element in permaculture design.

Following the review of literature, the study's aims were to investigate the following propositions:

Firstly, that nostalgia can be a driver for permaculture design, in that it can draw people towards an interest in or engagement with permaculture. It could be already a factor in why people are interested in permaculture. This factor is currently unexamined but could be explored to see if the proposition is correct, and in what ways it might manifest.

Secondly, that clients or stakeholders respond to nostalgia in permaculture design. Establishing whether nostalgia is a driver for permaculture design will allow for analysis of the extent to which nostalgia exists at the design ideation stage, and initiate examination of whether permaculture designers are conscious of this or not.

Thirdly, that nostalgia offers the potential of new, added value to the permaculture design process. Furthermore, if the second proposition is correct, a deeper understanding of the value of nostalgia as a clearly defined design tool could be more consciously utilised by designers at the ideation stage of permaculture designs.

If the use of nostalgia is better understood, it shows potential to deliver permaculture design with greater impact and longevity through greater participation and affective appeal. This could help increase user engagement and satisfaction with designs, leading to some positive impact on sustainability. In addition the use of nostalgia as a generative element may have application in design scenarios beyond permaculture. The hypothesis fourthly proposes that the practice of permaculture design offers a great deal of potential as a practical laboratory for investigating the influence of nostalgia on the ideation process.

This project methodology attempts to examine to what extent exploring, uncovering and utilising nostalgia in permaculture design – both its unconscious motivation and its use as a conscious strategy – might inform the development of futures, firstly within permaculture and with an eye to developing the strategy more widely. The objectives of the research project are:

- To explore the extent to which nostalgia draws people towards the concept, use, or experience of permaculture
- To test the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating

- To examine whether nostalgia might be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and creating benefits both for the designer and the intended audience/s.

These objectives led to the formation of the following research questions:

RQ1: Does nostalgia draw people towards the concept, use, or experience of permaculture?

RQ2: What is the position of nostalgia in the design ideation phase of permaculture design?

RQ3: Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

3.3 Overview of Fieldwork

In exploring the relationships between nostalgia and permaculture design ideation, reception, and engagement, this research project involved the examination of novice and experienced/expert permaculture designers, permaculture clients, and members of a permaculture group; across two countries – the United Kingdom and Australia; as well as a comparative study of elements of permaculture presence and cultural awareness across the same two countries. The project can be broadly divided into three interrelated stages.

Stage 1: The research project's initial part of the hypothesis had its starting point in the gap identified in the literature review concerning nostalgia's role in the perception of permaculture. The literature review had established that nostalgia could be an attractant for some people, but not whether permaculture was subject to a nostalgic perception. Therefore the researcher's objective in Stage 1 was to reveal the extent of any perceptions of the existence of nostalgia in permaculture. The initial research methods

applied were intended to be as open and exploratory as possible in addressing

- **RQ1:** (Does nostalgia draw people towards the concept, use, or experience of permaculture?).

Because of the relative unfamiliarity in wider culture of permaculture, it was apposite that data was drawn from people who already had some familiarity with the term. However it was important that people who were already immersed in the permaculture community were not the only data source: they may not clearly remember what drew them to it in the first place. Alongside data from permaculture designers and teachers, data from novice permaculture designers and people starting to explore the concept would give a contemporary indication of initial attraction.

A Permaculture Design Course (PDC) – an introductory level course exploring an overview of permaculture design principles and tools – was determined to be an appropriate source of data for RQ1 (Does nostalgia draw people towards the concept, use, or experience of permaculture?). An initial questionnaire was circulated on the permaculture group's email list on 12th May 2016. Subsequently questionnaires were given to participants to fill in by hand, and interviews conducted in person on 25-26 June 2016. The questionnaire invited observations and opinions on nostalgia itself and on its role within permaculture to the members of the PDC. The data collected in this way were apposite but restricted in scope due to the limitations of the method, and subsequently semi-structured interviews were held with one novice and one experienced permaculture designer – on the X July and 23rd August 2016.

Stage 2: Once the data had established a correlation between nostalgia and permaculture, the researcher developed a second objective: to test the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating. This objective resulted in

- **RQ2:** What is the position of nostalgia in the design ideation phase of permaculture design?

Stage 2 was again a scoping phase which continued to identify and locate nostalgic elements within permaculture, and which was also intended to determine the awareness of and engagement with nostalgia as it related to permaculture design amongst both novice and experienced/expert permaculture designers. The notion of a nostalgic element in permaculture was new to many of the participants, and nostalgia itself was at times viewed suspiciously or pejoratively even if it seemed apparent in elements of permaculture designs. Because of these constraints, the use of interviews – where a longer discussion which could examine both the interviewee’s attitude towards the concept of nostalgia, and its placement within their experience of permaculture design could be developed – was appropriate for Stage 2.

The examination of similar data sets within different contexts leads to greater replicability and increases validity and reliability of data. Therefore the opportunity was taken in Stage 2 to interview permaculture designers in Australia. Stage 2 sampling in Australia consisted of approaches to public and private permaculture designers and groups. Because of time and other resource limitations, only experienced and expert designers were included in the Australian data. Interviews took place at the permaculture site and lasted between 45 minutes and an hour and a half, with further data collated on site tours. Interviews took place between 21st September and 31st October 2017.

Stage 2 sampling strategy in the UK was to focus on the longitudinal element of participants who had previously completed the questionnaire in Stage 1 (along with an interview participant who had completed the elicitation activity in Stage 3) and who had expressed a continuing interest in the idea of nostalgia in permaculture. This group was therefore self-selecting to a degree. Interviews took place in locations including participants’ homes and public meeting places such as coffee shops and took place between

27th July 2018 and 11th January 2019. Interviews lasted between twenty minutes and an hour in length.

Because of the variety of ideological responses to the concept of nostalgia, Stage 2 also included an element of documentary analysis. Permaculture texts, the appearance and effect of nostalgia within areas considered to be permaculture-influenced, and observations of cultural differences between the UK and Australia were evaluated and compared (February 2016 to November 2017). This was included to increase validity of data in providing a comparison between countries by the same observer, with the same conscious awareness of, and ideological response to, permaculture.

The exploratory research design affirmatively answered RQ1 and data collated for RQ2 resulted in the potential to map the sectors or elements where nostalgia is implicit or explicit within permaculture.

These results then suggested a further area of exploration. If the first proposals are correct, this may mean that the comparatively low take-up of permaculture as a design strategy is either hampered by its nostalgic aura, or that the nostalgia with which it is viewed is not being utilised or leveraged for best impact. The second possibility provoked a third objective, which led to

- **RQ3:** Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

Stage 3 therefore represented a change from exploring whether permaculture was viewed as having nostalgic elements, to developing strategies in which nostalgia, as an affective state, could be used to increase engagement with the permaculture design process. A strategy of nostalgic elicitation was developed in individual and group permaculture design activities to assess impact.

The researcher's ongoing training as a permaculture designer presented a sampling opportunity to include nostalgia as an element in the client interview when ideating initial designs with a client. The individual elicitation trial was included as part of the standard client interview which takes place in any permaculture design ideation process. This occurred with a pair of clients for whom the researcher was developing a permaculture garden design. The interview and nostalgic elicitation activity took place at the clients' home on 7th September 2018 and took approximately two hours in total.

Subsequently, nostalgic elicitation in group design work was developed at the Leeds Permaculture Network monthly social gathering. Nostalgia elicitation was trialled as additions to strategies which are already in use in some group permaculture visioning design activities: Consensus Workshop, Dragon Dreaming, and Open Space. Visioning is a part of futuring, a strategy designed to allow for the comprehensive and imaginative, affective visualizing of a desired future. Visioning works to firstly have a detailed destination towards which to aim efforts for change, and secondly to embed an affective (emotional) relationship towards the desired future, which helps with resilience and determination during the disruptive process of change.

These trials took place over two monthly sessions at the Quaker Meeting House in Woodhouse Lane, Leeds, on the 3rd October and 7th November 2018. The first session included fifteen participants (not including three activity leaders) and the second session eight participants.

Permaculture design ideation to date does not currently include an explicit affective element. Approaches to affective design exist; however these do not include nostalgic elicitation. This addition to current permaculture design ideation practice represents a new procedure or new element which adds new knowledge to the permaculture design canon, with potential for further impact extrapolated to other design fields.

Name	Country	PC design	Quest	Int'vw	W/shop	Comp Ob	RQ
PDC	UK	novices, experts					1
B	UK	novice					1
AG	UK	expert					1
NS	Aus	expert					1, 2
FH	Aus	expert					1, 2
CL	Aus	expert					1, 2
SG	UK	novice					1, 2
KB	UK	novice					1, 2
CM	UK	novice					1, 2
H	UK	no					1, 2
CE	UK	client					3
LPS1	UK	mix					3
LPS2	UK	mix					3

Table 3: Stage 1, 2 & 3 data sources

The diagram above summarises the data sources for the project. Green represents Stage 1, orange Stage 2, and purple Stage 3.

Although there is an element of chronology slippage between stages, and although a certain amount of connections - conceptually and in terms of participants - between each stage occurred, the data collection process therefore proceeded in three stages: from the exploratory Stages 1 and 2 which were designed to test whether nostalgic elements existed in permaculture perception, and then design ideation. With the data positively supporting these research questions, Stage 3 built on the previous two stages by testing ways in which this nostalgia may be utilised in the design ideation toolkit for permaculture designers. Each stage will now be considered separately. Details of data sets and data collection methods will be described within each stage. The major results and findings of these research methods are analysed and discussed in the next chapter.

3.4 Fieldwork Stage 1: Questionnaire and interviews

The study was situated from the outset within the School of Design at the University of Leeds. With no design practice on which to situate the project focus specified at the outset, the broad question of the place of nostalgia within design ideation was quite wide open. The context for placing the thesis with more specificity within the field of design emerged as the researcher joined a Permaculture Design Course (PDC) in Leeds in January 2016.

The PDC is an entry-level course, run over weekends throughout the year (seven weekends in this case). This enables participants to be introduced to permaculture across seasons and allows for plenty of consolidation time for the principles without requiring participants to take time off work in a solid block, and therefore also allows for a wider spread of participants than a more concentrated course would.

The course allowed the researcher to decide on a methodology by applying the design theories of permaculture and from the developing literature review for the project. Once permaculture was decided as a delimiting factor

in examining design ideation, the suitability of obtaining data from other PDC participants became apparent.

Stage 1: Questionnaires and interviews

The initial research objective, to explore the extent to which nostalgia draws people towards the concept, use, or experience of permaculture, implied the need for a scoping study across different kinds of participants who are already drawn to permaculture. Within the context of Dorst's (2008) taxonomy of levels of experience from naïve or novice to expert, and how these levels of experience manifest in design ideation strategies and approaches, an appropriate initial approach to the research objectives was to ask a series of questions of both novice designers (who were undertaking an introductory course) and also experienced/expert designers (with more than five years of practice in the field). The methods selected for the first phase of the project were questionnaire and interview. The questions asked were centred on qualitative responses about the possibility of including nostalgia in their design process and the desirability of using nostalgia in the design process of their projects.

3.4.1 Questionnaire

The subjects of the Stage 1 questionnaires were the members of the 2016 Permaculture Design Course run by Leeds Permaculture Network at Hollybush Conservation Centre, Kirkstall, Leeds. Permaculture was a suitably limited field of design to use as a lens to examine the use of nostalgia in design; the opportunity to examine design ideation with a group whose study of a design field was in its initial phase, that might later offer the potential for a longitudinal element to the study after the first stage, was also a consideration.

Purposeful sampling by membership of the group was the initial sampling method: recruitment took place by asking class members whether they would be prepared to answer a questionnaire and potentially agree to be interviewed. The expectation was that snowball or chain sampling would

follow later in the study. For example, two established designers (teachers on the course) took part and then suggested other established permaculture designers who might also participate, along with the suggestion that the research officer at the Permaculture Institute would be able to advise and facilitate access to data groups (snowball sampling).

For research purposes, participant was defined as a member of the PDC who agreed to answer either a questionnaire or interview questions. The questionnaire was made up of six open-ended questions. The objective was to have over eight participants complete the survey before the end of June 2016. The questionnaire, with accompanying information and consent forms, was circulated on the permaculture group's email list on 12th May 2016. Subsequently one completed form was received via email, but the main data collection occurred when the questionnaires were printed out and given to participants to fill in by hand, and interviews conducted in person on the permaculture training weekend of 25-26 June 2016. The questionnaire invited observations and opinions on nostalgia itself and on its role within permaculture (see Appendix C).

As a cohort, the trainee permaculture designers were both cohesive, in that they were all at the same stage in their training, and although they were self-selecting in terms of their interest in permaculture design, disparate in both their level of prior knowledge and their age, ethnicity, and socioeconomic status. There were 16 participants in the group, 8 men and 8 women. Nine questionnaires were completed: five by men and four by women, including one male and one female tutor.

This was a group where a personal relationship had already begun to be established, so participation was expected to be rich, both in the percentage of participants agreeing to contribute and in the willingness to explore ideas in more depth than might be expected without a prior relationship.

The aim of the questionnaire was to investigate to what extent nostalgia was a conscious or hidden driver for design ideation in permaculture. Focus was placed on opinion and value questions and feeling questions (Patton, 2002:

348-351). It had been established early on during the PDC that students of the course echoed the literature review in not having prior engagement with nostalgia in relation to permaculture. Initially, to establish a scoping view of the field where the research questions were still being firming, a questionnaire issued to the novice designers and the teachers on the PDC was considered the best method fit. This therefore became the first data collection method.

Questionnaires can be a fast, consistent method of data collection when there are multiple respondents. In this case the questionnaire did, in fact, elicit multiple responses within a short time frame. However, the match between exploratory research and the use of questionnaires was not a good one for the purposes of this project.

Although this was seen as a problem in the methodology at an early stage, it was more realistically a useful indication of the issues which would become apparent later in the study (concerning interpretations of the term 'nostalgia' and dislike or distrust of the concept, and distrust by permaculture scientists of constructivist methodologies – see analysis section for further details). In this sense the use of questionnaires functioned well as exploratory research method as it did indeed provide insights (rather than definitive conclusions), along with both firming up the research questions, and pointing the way to methods which were a better fit for the research problem.

A broader composite of methodologies would provide more rigour to the study by offering various possibilities for triangulation of the qualitative data collected rather than the narrow focus of using only questionnaires. One issue was that the notion of nostalgia as it applied to permaculture was new to every participant. Though some recognised its relevance within the time frame of the questionnaire, others had little to say because the concept was so new to them. It also became clear at this point that nostalgia itself was a contested term and concept.

It became apparent that the questionnaire could fruitfully be used as a precursor to a more in-depth approach. Subsequently within Stage 1

interviews were initiated to take place during the same time scale. Semi-structured interviews, which began with introductory questions to be used as a starting point for discussion with interview subjects, but which allowed for the exploration of interesting areas in more detail, were especially useful because of being able to discuss emerging findings and test out ideas with the participants, without being held within a rigid structure. These interviews were carried forwards as part of the developing methodology for the project, and some of the interviewees were returned to, allowing for a longitudinal element in the study as they develop their design practices.

3.4.2 Interviews

Interviews are intended to collect a richer source of material from a small number of people about preferences, attitudes, opinions, and knowledge, among other things. They are useful for qualitative research because they provide opportunities for more open and in-depth discussion between interviewer and participant as well as a freer interaction (Potter 2002, Sarantakos 2013), particularly in the case of the semi-structured interviews which were used in this project. In the semi-structured interview the researcher has prepared questions but is free to change the questions or ask additional questions depending on what directions are taken in the interview. These interview questions are also usually open-ended, and this provides additional freedom to explore information in detail.

Stage 1 interviews were a follow-on from the questionnaire. These took place with one of the participants from the PDC in 2016 and with an experienced/expert designer (and CEO of the Leeds Permaculture Network). Purposeful sampling led to the choice of participants who had formed an opinion concerning the interplay of nostalgia and permaculture, whether that was ambivalence towards nostalgia as a concept and as a tool, as in the case of the data collected from the novice designer; or both more wary and more accepting of its possibilities as a tool, as with the more experienced designer.

The interviews were held at Hollybush Conservation Centre, Kirkstall, Leeds, in West Yorkshire, an environmental volunteering centre which is the home of the offices of The Permaculture Association and also the training site of the PDC. Each interview lasted approximately 20-30 minutes. The semi-structured interviews consisted of open-ended questions designed to explore the participants' experiences and constructions of nostalgia within permaculture, beginning with the interviewee's impressions of nostalgia in general and continuing to observations of its role in permaculture. The interview was intended to examine the same area as the questionnaires covered in more depth and detail, in order to pick up on the initial data which had some promise but was not substantive enough (further investigation of responses was required in order to test hypotheses). The interviews began with the same question as in the questionnaires, but further questions developed from the answers given by the interviewees. It was not possible to predict with any reliability in which directions answers would go, as previous data on the area did not exist.

B: To test the strength of the hypothesis against data which conflicted with it, a member of this group whose response was particularly detailed, and which potentially ran counter to the hypothesis, was subsequently interviewed. The interview proceeded from the questionnaire, with this participant from the PDC in 2016 who demonstrated an ambivalence towards nostalgia as a concept and as a tool. The interviewee was a novice designer whose interests lay in the direction of counterculture and social change as well as in growing food (July 2016).

AG: An interview with an expert permaculture designer who had not completed a questionnaire or interview previously. To verify whether there were differences in approach and opinion between novice and expert designers, and to assess whether more experienced permaculture designers – with their greater experience, and higher skills levels in design - would recognise the effects of nostalgia within permaculture AG, extremely experienced/expert designer and CEO of the Permaculture Association was interviewed. As an experienced designer he had a comprehensive overview

of the reach, role, and exemplification of permaculture both in the UK and globally, with a deep and broad knowledge and understanding of nostalgia's properties and possibilities as a tool, and his interview was necessary to provide both this overview – to discover whether nostalgia was currently being used in permaculture design – and as a counterpoint to the novice designers who had provided the data to this point (23rd August 2016).

Portable digital audio recording devices were used to record all interviews and facilitate transfer to secure data storage, and transcriptions made at a later date. Transcriptions were made with an initial pass by digital application and edited manually. The full script of a sample interview is available in the Appendices.

3.5 Fieldwork Stage 2: interviews, comparative analysis

Stage 1 data gave a partial picture of what nostalgia at the ideation stage of permaculture design might invoke or give rise to, which suggested further kinds of data collection and analysis would be beneficial to this investigation. Stage 1 questionnaires and interviews determined the format and design of the interviews in Stage 2. Coding of the questionnaires revealed that, whilst some respondents had little interest in nostalgia in permaculture, others had more opinion and detail to share. As will be discussed in the analysis section, reflection on the issues with the use of questionnaires resulted in a focus on the use of interviews.

Stage 2 developed out of the methodological modifications applied to Stage 1. Post-hoc coding of responses to the open-ended questions revealed that participants, whether novice or experienced designers, were unlikely to have considered the role of nostalgia in any depth. Therefore participants were able to reflect on the role of nostalgia, but in general only after the concept had been overtly and specifically introduced by the researcher's questioning.

With this in mind, and in terms of the elicitation of data of which participants may not be consciously aware, the critical analysis of permaculture designs

and artefacts was instated to provide data beyond what manifested in participants' conscious awareness.

Stage 2: Interviews – Australia and UK; comparative analysis

Stage 2 focused on interviews, taking place in separate geographic and cultural locations (England and Australia). Using data collected from two countries addresses a limitation in generalisability in the research, providing comparative data to increase the strength of the findings. Interviews also included a longitudinal element, with some interviewees being selected from the previous questionnaire respondents in Stage 1 to complete a longer, more evaluative response. Stage 2 also included a final interview with a participant whose engagement with nostalgia in permaculture had been introduced in a group work setting in Stage 3. For the sake of clarity of methodology this data is included in Stage 2 with other interviews.

Initial efforts were concentrated on collecting data on opinions and attitudes towards the conceptualisation of nostalgia within permaculture. Again following Dorst's (2008) taxonomy of the evolution of designers, initial efforts were also directed towards examining differences between novice and established designers and their ideation processes. It could be expected that, if novice designers were using nostalgia at the ideation stage of their designs, it would be as a conscious element, since a "novice designer ... will follow strict rules...to tackle the design problem...Maxims are used for guidance through the complex problem situation" (Dorst, 2008, p102). Tools based in nostalgia or nostalgic elicitation would need to be explicit in order to be utilisable by novice or advanced beginner designers. On the other hand, the "expert designer responds to a specific design situation intuitively, on the basis of a vast experience. There is no explicit problem solving and reasoning that can be distinguished at this level" (ibid).

Mid-stage interviews examined how permaculture designers with more than ten years' experience in the UK and Australia (AG, NS, FH, CL) viewed nostalgia and its contribution to their process and design work. The questions asked were centred upon qualitative responses about whether

they saw themselves, their clients, or the wider public as drawn to permaculture by nostalgia, the possibility of including nostalgia in their design process, and the desirability of using nostalgia in the design process of their project.

A work project in Australia in 2017 offered the serendipitous possibility of developing a comparative study approach, between permaculture designers and designs in Australia and in the UK. Given that Australia is the birthplace of permaculture, this was a worthwhile opportunity to collect comparative data. Three respondents in Australia were interviewed. Interviews and hermeneutic analysis of permaculture sites took place at the same time and sites. Comparative ethnographic observations were developed alongside interviews on two sides of the continent (NS, FH, CL).

In addition to these and to the semi-structured interviews, the culture around permaculture in two different places - Australia and the UK - was compared, with a visual interpretation of places, designs, and cultural appearances of permaculture as a concept (CO).

Content analysis (which can be quantitative or qualitative) is the analysis of text (in the expanded sense) and seeks to uncover patterns (themes or key ideas) within texts. Hermeneutics is the interpretation of this analysis and as such belongs in qualitative methodologies. In this case the term text is used to refer to content in a broad sense, and for the purposes of the project included graphic texts such as website or graphic signs of permaculture sites, and the appearance and treatment of permaculture in mainstream media (magazines). Hermeneutics seeks to elucidate the conditions under which texts exist and occur, and to understand groups within and across different cultures. For this reason a comparative study approach was also developed across two countries – the United Kingdom (UK) and Australia. A comparative analysis provided an element of triangulation in the data. Although this contextual analysis of elements and their relationships cannot elucidate cause and effect relationships, nor reliably offer a basis for

generalisation of findings, it is useful when not much is known about an issue and therefore was appropriate for this project.

In addition, because of the pejorative nature of some of the debates around nostalgia, the term itself has become loaded. The questionnaires provided responses which seemed to be judgements on nostalgia itself more than on its place in permaculture. Content analysis would provide a triangulation to this data and enable an examination of the effect of nostalgia on and within permaculture.

There were two main areas in which a comparative analysis approach could be deployed: in terms of location across two countries (Australia and the UK) and longitudinally, tracking the responses of the participants in the pilot study to see if any change in attitude or behaviour occurred during the period of the study. Two respondents from the UK first interviewed in the pilot study were interviewed at a later date and in greater depth.

3.5.1 Australian interviews

Participants in Australia were identified by purposeful sampling, with approaches being made to several groups and individuals, and interviews being scheduled with those who agreed. Prior to contacting participants for interview in Australia, the researcher created a database of possible interviewees by a combination of recommendation by knowledgeable and experienced permaculture designers prior to travel, including a visiting Australian permaculture design teacher. Most of the communication prior to interview with the Australian participants took place by email. Out of seven recommendations, three interviews resulted, with one non-reply, one interviewee too busy, and two interviews set up but unable to be completed on the scheduled day (because of a public transport issue and because of a computer error by the participant). Three permaculture designers in Australia were interviewed, along with comparative analysis of the differences in presentation and perception of permaculture in Australia and the UK. Interviews were held on the permaculture sites and lasted between 45 minutes and an hour and a half, with further data collated on site tours.

Interviews took place between 21st September and 31st October 2017. Portable digital audio recording devices were used to record all interviews and facilitate transfer to secure data storage, and transcriptions made at a later date.

NS: Northey Street City Farm in Brisbane has been a city permaculture farm since the 1980s. Early data suggested that permaculture was seen as a rural and privileged pursuit, and therefore the inclusion of a city farm, as an urban, public (specifically not privately-owned), multi-voiced as well as multi-activitied permaculture initiative was included to test this data. The fact that the farm had been there over decades was designed to compare the data from novice designers with little history of engagement with permaculture, with those with a strong embedded history of working with permaculture principles. (21st September 2017)

FH: Fairharvest Farm, Margaret River, Western Australia. This is a privately-owned farm, planned, planted, and run on permaculture principles but which also arose from a very strong social justice history, background, and platform from the 1980s. It is situated in a region famed for wine and tourism, which is increasingly identified as an attractively designed 'country escape' appealing to the well-off, in contrast to its previous, alternative, 'hippy' reputation. Its inclusion was designed to examine the difference between public and private permaculture projects, and because it is one of the best-known permaculture projects in the state, and this data was designed to examine whether a permaculture designer with a strong sense of marketing would have a particular view on the use of nostalgia (26th October, 2017).

CL: Candlelight Farm, Mundaring, Perth hills: In initial email contact with this participant, he strongly identified as a scientist, robustly questioning what was meant by nostalgia, and unconvinced about nostalgia being a driver for himself. This meant that this data source was important as a check against which to evaluate the other data pointing towards nostalgia as a driver, and this interview was included in order to interrogate the ways in which

nostalgia might not work, or might work against, the impulse towards or acceptance of nostalgia in permaculture (31st October, 2017).

3.5.2 Comparative observations and analysis

Permaculture originated in Australia and has had a presence there for over forty years. As such, the cultural associations there would be expected to be different from those in the UK. Comparative data collection and analysis could be made by someone

Data concerning observations made of the difference between the cultural role and status of permaculture in Australia and in the UK - the use of comparative observations and analysis between the two countries with regard to both the visibility of permaculture, and its nostalgic status (or otherwise) - was the method chosen to interrogate this difference. Visits were made to the area surrounding a large and longstanding permaculture community in Queensland (Maleny and surrounding areas), as well as to a town in the UK which is well-known for its approach to community food growing (Todmorden). Differences between the coverage of permaculture in popular mainstream gardening magazines and television programmes were explored, and the researcher's observations and assessment are used as a granular exploration of the different ways in which nostalgia appears within permaculture across these two countries and cultures (February 2016 to November 2017). Further notes were made of the researcher's perception of the appearance and effect of nostalgia within the areas visited, the material observed or collected, and of observations of cultural differences between two countries.

In Australia and in the UK, photographs were taken of manifested mature permaculture designs where designers were interviewed in situ, and of the site of the client interview for a permaculture design.

3.5.3 UK interviews

The interviewees in Stage 2 in the UK were previous attendees of the 2016 Leeds PDC and had therefore previously completed the questionnaire and/or had discussed the idea of nostalgia within the course setting. They had shown interest in responding further and were therefore self-selecting participants.

The three participants who were interviewed later who were also participants in the 2016 Permaculture Design Course – SG, KB, and CM - had time between the initial questionnaire and interview (a year approximately) to consider further the role of nostalgia in permaculture. The expectation was therefore that some more developed responses to the examination of the presence or role of nostalgia in permaculture would emerge. This could not be considered a longitudinal study in its proper sense but gave a longitudinal element to the data. Interviews took place in locations including participants' homes and public meeting places such as coffee shops and took place between 27th July 2018 and 11th January 2019. Interviews lasted between twenty minutes and an hour in length. Portable digital audio recording devices were used to record all interviews and facilitate transfer to secure data storage, and transcriptions made at a later date.

SG: A practising psychologist and participant in the 2016 Permaculture Design Course, this participant's interview responses were sought to examine whether there was psychological insight into the role of nostalgia in permaculture. This participant had previously been instrumental in helping set up a group in which substance abusers worked on a community growing project, with marked improvements in rates or relapse, so was chosen for insight into the psychologically protective role nostalgia may play (Routledge 2016), and being able to relate that insight to permaculture. (27th July 2018)

KB: An interview was conducted with a parent trainee permaculturist (KB) whose garden ideas and ideation were based around play spaces and exploration of the natural world. A participant in the Permaculture Design Course who identified with the role of permaculture in providing experiences

of the natural world for children, this participant was chosen for interview in order to further interrogate the data emerging from previous interviews in Australia in which the desire was expressed to provide experiences for children which occupied a nostalgic position in the culture. (27th July 2018)

CM: An artist and participant in the Permaculture Design Course who has worked permaculture principles into participatory art works with communities in Hull was interviewed. This was firstly as a follow-up to the 2016 questionnaire in which interest was shown about the role of nostalgia in permaculture, to assess whether further time to allow the interest to develop had changed or extended this interest. Secondly, the interview was undertaken to determine whether the public participatory art works, influenced by permaculture principles, had a nostalgic element included as a draw or ideation strategy. (8th August 2018)

3.5.4 Final Interview

The social design activities-based sessions had been introduced by the researcher explaining the focus and the role of the sessions in the project, along with an invitation for interested participants to ask further questions or to discuss their responses to the sessions in the light of the focus on nostalgia in permaculture. In this way the final participant and data source was included; this person approached the researcher with the desire to reflect on the activities undertaken and the insights provoked by them.

H: A new attendee at the Leeds Permaculture Network Social events, who approached the researcher after the second LPS visioning session expressing an interest in the subject of nostalgia as it related to permaculture, was interviewed in order to explore the insight that the use of nostalgia in visioning or futuring group design activities altered the engagement with the design ideation. To verify whether use of nostalgia in the social design of the permaculture socials increased engagement or satisfaction with these designs, a final semi-structured interview took place (11th January 2019).

3.6 Fieldwork Stage 3: nostalgic elicitation

The primary objectives of Stages 1 and 2 - exploring the extent to which nostalgia draws people towards permaculture, and testing the position of nostalgia in permaculture design ideation - had been robustly met by the data analysis. The exploratory research design affirmatively answered RQ1 and data collated for RQ2 resulted in the potential to map the sectors or elements where nostalgia is implicit or explicit within permaculture.

These results then suggested a further area of exploration. If the first proposals are correct, this may mean that the comparatively low take-up of permaculture as a design strategy is either hampered by its nostalgic aura, or that the nostalgia with which it is viewed is not being utilised or leveraged for best impact. The second possibility provoked a third objective, which led to

- **RQ3:** Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

Stage 3 therefore represented a change in methodology from exploratory to confirmatory: from exploring whether permaculture was viewed as having nostalgic elements, to developing strategies in which nostalgia, as an affective state, could be used to increase engagement with the permaculture design process. A strategy of nostalgic elicitation was developed in individual and group permaculture design activities to assess impact.

Stage 3: client interviews, workshops

Permaculture design uses the principle 'observe and interact' and, most often, the tool of the client interview to engage with stakeholder requirements. A client interview – a foundation of permaculture design ideation – with the relatively simple modification of the insertion of metaphor elicitation within the interview was trialled as the first use of nostalgia as a generative technique. It was predicted that this would elicit a less literal

approach to the clients' needs and lead to deeper engagement or insight. The interview and nostalgic elicitation activity took place at the clients' home on 7th September 2018 and took approximately two hours in total; this was recorded using a portable digital audio recording device, and transcriptions made at a later date.

The developing methodology of nostalgic elicitation was subsequently reproduced twice in workshop scenarios with groupwork/consensus approaches were being mapped out (with Leeds Permaculture Network social group). These took place over two monthly sessions at the Quaker Meeting House in Woodhouse Lane, Leeds, on the 3rd October and 7th November 2018. The first session included fifteen participants (not including three activity leaders) and the second session eight participants, during sessions that lasted approximately three hours each time. Sessions were recorded using notes, photographs, and workshop materials collated after the sessions.

For research purposes, participants were defined as those who gave their consent to take part in the interview or workshop activity.

3.6.1 Client Interview: CE

A young couple in their mid-20s in London participated in a client interview examining what they wanted in their plot (a small yard in Walthamstow). The couple were previously known to the researcher. They had agreed to have their small back garden become the subject of a permaculture design as part of the researcher's Permaculture Diploma (the Permaculture Diploma is a self-organised learning strand which requires ten completed permaculture designs in order to achieve the award). They were trying to live without plastic and were taking part in a "no-spend" year but are not permaculturists.

To test whether nostalgia might be used at the ideation stage of a well-established permaculture design process, the researcher used questions about their memories and their nostalgic feelings and responses as part of the client interview. The questioning process involved reminding them of

gardens they had recently visited, and invoking the memories of what they had enjoyed about those gardens, and in addition inviting them to remember the gardens they had spent time in when younger, and asking whether there was anything about those gardens, or the feel or impression of them, that they would like to recreate in their own plot.

The client interview is a normal part of the permaculture design ideation process but asking the client about memories or nostalgic thoughts is not, and represents a new procedure, adding to new knowledge (7th September 2018).

3.6.2 Workshops: LPN1 & LPN2

The client interview provided data suggesting that introducing an affective (memory and pleasure) element into the ideation process engaged a different way of thinking about and casting forward into the future intended design. The concept of futuring had been touched on in some of the 2016 PDC sessions, but not in detail. It was also familiar from the literature on Transition Towns as part of the Energy Descent plans, but the researcher had no prior experience of running futuring events. However these strategies or tools looked likely to be of benefit and interest in a permaculture design toolkit for use in creating social designs.

The Leeds Permaculture Network Socials take place monthly and do not have a formal structure or organising committee; it is hoped and expected that members of the group take part in organising and participating in the socials. Therefore when new members arrived and expressed confusion over the role of the Socials, the researcher took the opportunity to be part of organising the Social content for the following two months, and also to test the project hypothesis by including a nostalgic elicitation element into the already existing Consensus Workshop and Open Space group facilitation structures (see Chapter Four: Analysis).

LPN1 Visioning: Dragon Dreaming

To test this likelihood of nostalgia in the design toolkit being of benefit, the researcher led part of a visioning session for the Leeds Permaculture Network Social. The Leeds Permaculture Network social gatherings take place once a month on the first Wednesday of the month. During the August meeting, some new members questioned the role of the Socials, and this led to speculation within the small attending group that there was not consensus or shared vision on the point of the social meetings. Three members, including the researcher, offered to run a consensus workshop, including the additional elements of Dragon Dreaming (led by interview participant CM) and nostalgic visioning elicitation (led by the researcher). The third member of the team was a teacher on the 2016 PDC and the researcher's Permaculture Diploma teacher, who was an experienced Consensus Workshop facilitator. Consensus Workshops and The Technology of Participation (ToP)® - methods which were to be used in the session – will be further explained in the next section (3rd October 2018).

Leeds Permaculture Network Social (LPNS) events are held monthly either at Hollybush Centre or at the Quaker Church in Leeds. They are organised by a loose affiliation of people who have a connection to Leeds Permaculture Network; a specific hierarchy is avoided. After the LPNS in September in which some new attendees questioned what the role of the Socials was, the researcher (along with Participant 3, the experienced permaculture designer and teacher from the PDC in 2016, and CM, the artist participant in the study) suggested engaging with the question of what the group wanted from the socials using visioning exercises. The aim in terms of this project was to include nostalgia in the visioning process in a similar way to the way it had been included in the client interview process, in order to test whether it added to the engagement at the ideation stage of a social design facilitation process.

Visioning is a process in which a future scenario is imagined in particular ways to both conceive of detail and create an affective link. It is intended to

build up a detailed holistic futurescape, one which contains the positive elements participants would like to create (in opposition to negative scenarios which may be prevalent in the culture). This is generally followed by a “backcasting” exercise requiring participants to create a plan to get from the present to the desired future state. Already the process combines the elements of imagination and affect on which the core of this research is based. It was decided by all three facilitators that including nostalgia elicitation would be a useful addition as part of the visioning process.

The planning took place over several weeks, while the facilitators gained clarity over what the aims of the session were. Due to time constraints and to the nature of group work necessarily taking time to engage, build consensus and satisfactorily conclude, the activity was planned to run over two sessions.

The October social was planned to feature a number of elements which already exist in visioning activities. Participant 3 (P3), an experienced facilitator, had previously led a consensus workshop at LILAC, the Low Impact Living Affordable Community in Leeds. LILAC is a group of 20 homes built of timber, strawbale and lime, and the self-managed housing project was built on a list of shared values and community agreements, from parking to childcare to group meals. It is a co-housing or intentional community which was set up and continues to run based on participation and shared decision-making by all members of the group. In order to come to agreement over the outside areas, Participant 3 ran a consensus workshop covering the design of the shared landscaping at LILAC. The original landscaping vision for LILAC was owned by a subset of the housing project, and this landscaping team ran the consensus workshop process to engage and include the wider group vision.

Consensus workshops are part of what the Institute of Cultural Affairs (ICA) term the Technology of Participation (ToP). ToP has been developed over a number of years and shared iterations to facilitate group engagement and participation, and refers to a group of methods which are intended to build

common ground and shared identity in groups to help them work together to create effective and workable short and long term plans

[<https://www.icausa.org/facilitation.html> accessed 10th June 2019].

A consensus workshop eschews other kinds of decision-making processes in favour of community-building and consensus. It has a specific format which should be adhered to, comprising a five-step process which generates, collects, and then organises ideas into themes, and names the themes so that agreement can be reached both on the original question and on the next steps to take to move the decision on. The process begins with a focused question – in this case, the initial focus of the session, as planned, was “What do we want Leeds Permaculture Network Social meetings to look like?” Over a number of planning meetings, in which it was discovered that there had already been some work done on the Socials and how they should function, the question was altered to: “How can LPN help us to meet our fundamental human needs?”

This was a wider question than the initial one, but it was felt that it was necessary to respect the work already done on developing the Socials by other Leeds Permaculture Network members. However the three planners for the session also felt there were other aspects to a visioning session which would be supplementary to the work which had already been put into the Socials.

It was in this vein that the new question was developed, and the consensus workshop expanded to include two new elements: the nostalgia evocation, and Dragon Dreaming.

Dragon Dreaming is a tool which is sometimes used within permaculture and other social facilitation and design strategies. It is described, like permaculture itself, as a design process, a philosophy, and a methodological framework, based around three principles: personal growth, community building, and service to the Earth. Each Dragon Dreaming project proceeds in four phases, which are fractal (all the four stages proceed through and within each stage): Dreaming, Planning, Doing, and Celebrating.

The element which is most often missing from project design is one which Dragon Dreaming practitioners value - for this reason as well as because it results in positive outcomes for the group and the individual - is 'celebrating'. Many projects and facilitators suffer from burnout because projects are not celebrated.

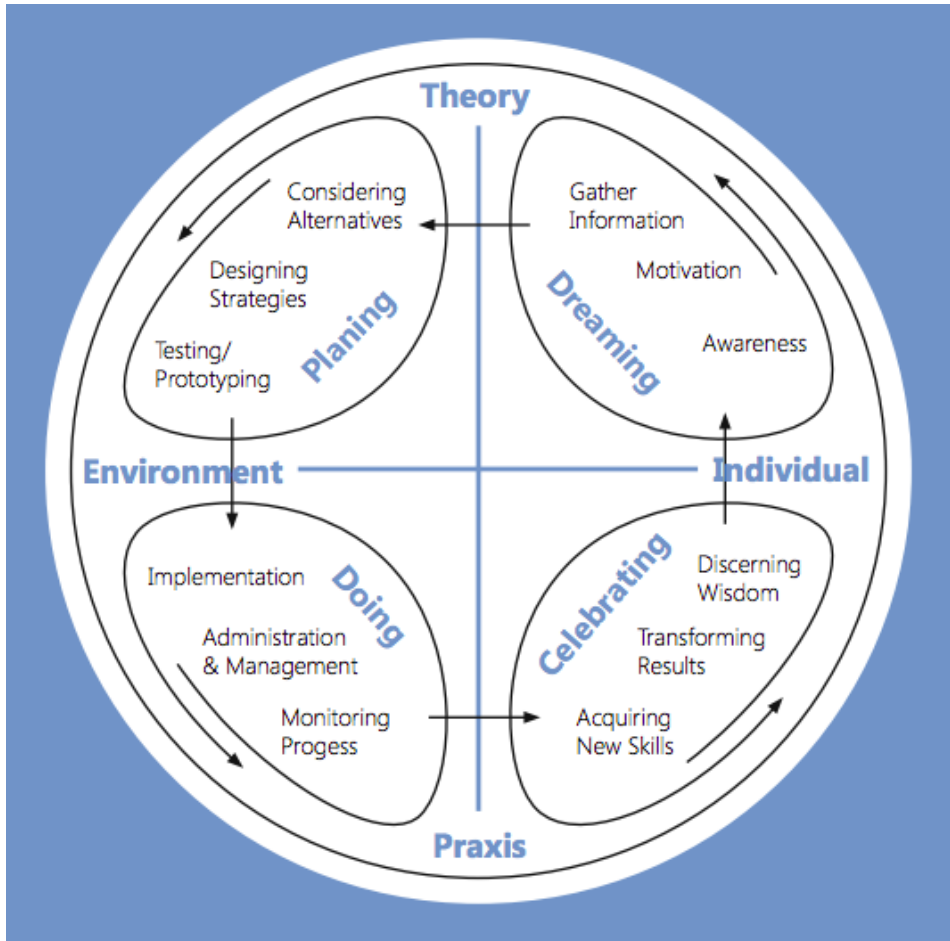


Figure 9: Dragon Dreaming Project Wheel

Dragon Dreaming mirrors permaculture in its presentation being enhanced or, alternatively, limited, by the nostalgic aura surrounding its name. It was devised and developed in Western Australia by John Croft and Vivienne Elanta for the Western Australia Gaia Foundation, which they cofounded. Croft had previously worked in community development and education and project management around the world and was curious about why some projects succeeded while others failed. The approach is rooted in “social and environmental activism, the new physics, Gaia and Earth sciences, living

systems and chaos and complexity theory, and the ancient sustainable wisdom of indigenous cultures and Australian Aborigines” (dragondreaming.org, 2019). The name itself, redolent of both mysticism and the Aboriginal dreamtime, is fitting for the approach, but may alienate those who do not connect with these values or the nostalgic perception of the elements within the approach – in much the same way as for permaculture itself.

CM had completed some Dragon Dreaming training and was interested in its possibilities for group consensus work, considering it a good fit for permaculture design (Rob Hopkins, originator of the Transition Towns concepts, and John Croft ‘co-discovered’ each other at the beginning of the development of the Transition movement, and each has had an effect on the other; Dragon Dreaming is increasingly used within permaculture social design). It is a technique which involves movement, and which can be engaging and inclusive. Although the whole Dragon Dreaming introductory exercise, which involves marking out four quadrants in the space and placing an element of fire in the centre, and having people place themselves in a quadrant depending on how they saw themselves (dreamer, planner, doer, celebrator) was determined to be too long for this session, and also had the potential to not be a good fit if people new to the concept or to the Network were to attend, it was decided that the consensus workshop would include a Dragon Dreaming element in its introduction. The Dragon Dreaming element itself would include the nostalgia evocation within its structure.

The aim of the workshops was to maximise engagement among LPN and to find an overarching vision that all members could share. One issue was that ‘members’ was a very loose term as the socials comprised anyone who wanted to come along on a given evening; however another issue was that the small band organising the evenings wanted a broader base of people taking part in the organisation, a more cooperative structure. When a vision is shared more people ‘own’ it and come forwards to make it happen, and

when more people's voices are heard there is more chance of people feeling they own the vision.

The consensus workshop is a facilitation strategy developed by the Institute of Cultural Affairs (ICA), a global community of non-profit groups whose aim is to advance human development across the world. ICA is focused on a set of ten major challenges in human development, including 'environmental degradation and climate change' and 'disconnectedness and barriers to engagement' (<http://www.ica-international.org/about-us/our-history/>, n.p., n.d.). The Institute has developed a decentralised peer-to-peer approach, allowing groups or organisations to build towards "a flexible, sustainable culture of participation that takes into account its human resources" (ibid). Its resources are open sourced and can be used by anyone; some more experienced facilitators work within business settings, NGOs, and other arenas, as well as the technology being used often in group facilitation including within permaculture settings.

ICA's Technology of Participation (ToP®) is intended to move groups from positions of conflict and polarisation through an exploration of ideas and to consensus.

At their core, ToP methods represent a consensus-driven approach that enables groups to 1) engage in thoughtful and productive conversations, 2) develop a shared narrative and collective identity, 3) build common ground for working together, and 4) create effective and implementable short- and long-range plans. [ica-usa.org, n.p.]

The tools, or technology, have been collectively developed and tested over time with a large number of groups and across cultures, and although experimentation and evolution of the methods is permitted, the consensus workshop method is straightforward and follows a set sequence.

The consensus workshop method was devised by ICA as a means of fostering genuine participation when articulating and implementing shared goals. The workshop requires a board and post-it notes (or similar) and writing implements and uses five main stages:

1. Context: present the question the group is trying to answer and provide some stimulus/inspiration
2. Brainstorm the ideas.
3. Cluster the ideas
4. Name the clusters
5. Resolve to take relevant actions/next steps

It can be very powerful because all the voices can be heard, and everyone's contribution is valued equally.

Firstly, the context for the workshop is introduced where the focus or aim of the workshop is stated, and the process and time frame are outlined. Some stimulus or focusing inspiration is provided – in this case, the Dragon Dreaming and nostalgia elicitation exercises were intended to provide this element. Next, the group brainstorms the issue. Individual responses to the focus question are written down individually on a card or scrap paper and then the important ideas are selected either individually or in groups and passed up to the board. The facilitator asks any questions required for clarity.

The next stage is to cluster the ideas into groups where the ideas have a common focus or concern. The groups are allocated a short name or tag and the remaining responses are placed into similar groups.

When the important responses are in groups, the groupings are talked through and the group understanding secured, and then each grouping is given a short three- to seven-word name which answers the focus question.

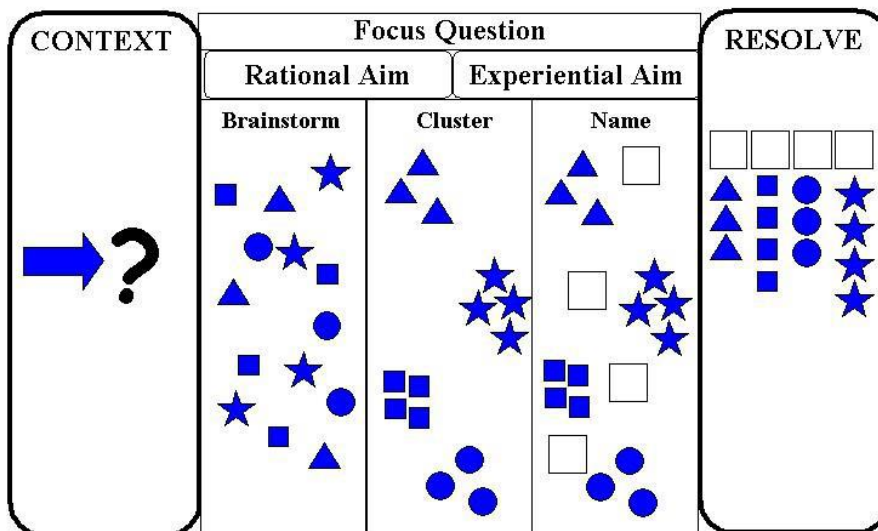
Finally all the title cards of the groups are read through by the group in order to confirm the consensus, and the significance of the consensus and the next steps are discussed. The method is appropriate for the given context because it allows everyone in the group to have some of their ideas represented in some form in the final vision. It captures the group's ideas,

views, and desires, and fosters support for the ensuing vision statement as it is collectively owned.

The facilitating group were also concerned that other members who had previously done work on developing the socials would feel their work had not been heard or honoured. The consensus method would allow them to restate their original vision if they wanted to while also allowing newer attendees to contribute and take ownership of ideas.

Interestingly, within ToP there is a method called ToP Historical Scan Process, in which the intention is to enable a group to share their perspectives of their history – Gailbraith (2007: n.p.) calls this “reviewing the past to prepare for the future”. This may look at first to be similar to a nostalgic envisioning but is different in that it requires participants to think over their own or their organisation’s past in terms of innovations or changes. It is not an affective invocation of the past which allows participants to identify what they value emotionally from the past and what they feel is currently missing, which is the point of the nostalgic inclusion in the workshop situation.

Consensus Workshop Method



**Figure 10: ToP® Groups Facilitation Methods, Consensus Workshop©
The Institute of Cultural Affairs, ICA: UK 2002, 2004**

With the workshop structure agreed, though still experimental, the three facilitators prepared for the workshop. It was felt that the time needed to create consensus was longer than one evening, especially as the workshop was trialling the nostalgia elicitation and there was the potential for people to connect to deeper unconscious needs, which may have needed a longer time to connect with and process. In order to take advantage of a longer time frame for thinking through the focus questions for the session, it was decided that the consensus workshop would take place, but that further discussion on how to implement the resolved next steps would take place a month later, in an Open Space workshop during the next LPNS meeting.

Therefore the plan for the workshop part of the evening consisted of the following steps:

- Introducing evening, explaining role of nostalgia
- Dragon dreaming
- Nostalgia evocation
- Dragon dreaming
- Visioning
- Consensus workshop/ToP

The workshop took place at the Carlton Hill Quaker Meeting House in Woodhouse Lane, Leeds. This is a warm and welcoming space which includes a foyer, with information in the form of notices and fliers about a range of social projects and initiatives, a small kitchen in which shared food can be heated and served and tea, coffee and biscuits bought, and a large meeting space with chairs which can be moved and placed in any configuration. The workshop took place in the second half of the meeting, after a talk given by another member. Fifteen people attended this second half of the social.

The exercise was introduced, explaining the reasons for doing it, as well as both the Dragon Dreaming aspect as part of CM's permaculture study and the nostalgia element as data for this research project. The workshop was contextualised as being part of permaculture ethics as people care, where the desire was to make sure the socials reflected what people wanted and needed, and the focus question introduced as, "how can LPN help us to meet our fundamental human needs?" The question was also framed as relating to the permaculture principle of 'the smallest change for the greatest possible effect', where by starting with a shared consensus of vision, effort can be tailored into meeting that need. The need and responsibility for creating and maintaining a safe space was also discussed, since there was the possibility that some participants might be pushed into quite a vulnerable place because of the big gap between the vision of where they want to be and where they/Leeds/LPN are right now.

Next, CM led an exercise adapted from Dragon Dreaming. In this exercise, each participant moved around the space as if in three settings: firstly in fields, then in a forest, then in a busy street, for one minute each time. At a signal from the facilitator everyone stopped and talked to the nearest person for one minute, without questions or conversation, about their dream or vision for permaculture in Leeds.

After this, the nostalgia evocation was inserted as a visioning exercise.

Participants were instructed as follows:

Close your eyes, go back to a time when you were very happy or content. Bring up the smell, feeling, sound, view, or any other memory state that encapsulates that feeling for you. Really place yourself inside that memory and call up all of the senses and the emotions you can which you attach to this memory. Now come back to the present. What is it that you are missing now from that other time and place?

Then CM repeated the previous exercise, moving around the space as if in three settings and then speaking to 3 different people for one minute with no

questions or conversation, only this time people spoke about their nostalgic vision.

The visioning part of the exercise came next, aligned with the nostalgic evocation. Participants were asked:

Going back to the memory/emotion/sense: (how) has it changed after moving about and saying it out loud? How do you want (it) to be in the future? Now cast forward and think/feel about what would need to happen for you to recapture that feeling. Try thinking with your heart instead of your head. What would things need to be like in the future for you to have that sense again?

After the tea break P3 led the consensus workshop with the focus question: “How do we want Leeds to be in the future?” This question was intended to lead to a further set of actions for people to take forward as, “How do we want to get there?” The participants were asked to cast forward into the future of Leeds, while keeping that vision of their nostalgic memory – something they valued which they felt had been lost – in their mind, in order to include in the planning an opportunity to creatively reinstate that affective state.

The exercise followed the Consensus workshop format, with the nostalgic elicitation as the stimulus or inspiration provided by the nostalgic feelings of the participants. The best ideas were written on slips of paper and then placed on the floor. After all the ideas had been placed on the floor, the group placed them into clusters (anyone could move a piece of paper into or out of a cluster), and then named.

The clusters comprised of lists, collated by the group as a whole by consensus.

LPN2 Visioning: Open Space

During the planning phase for the Leeds Permaculture Network Social workshops, it was decided that one session would not be sufficient to

complete the Consensus Workshop activity and therefore unlikely within the one session to reach a consensus, and so the decision was taken to run a second session. The second session with Leeds Permaculture Social participants would take the form of an Open Space session with elements of both Consensus workshop and Open Space technology (see next section), facilitated with the inclusion of nostalgic elicitation embedded in the process. These activities are futuring tools, and the inclusion of nostalgic elicitation in both sessions was intended to verify whether this inclusion of nostalgia as an affective state would result in different ideation results, and if so of what these differences consisted (7th November 2018).

In order to test the consensus which has been arrived at by the end of a consensus workshop, the groupings which were first decided on are opened out to the group to be re-grouped, to see if other headings or categories seem more appropriate or fitting. Because of the short time allocated to the consensus workshop at the first LPNS, the second part of the workshop occurred during the November LPNS, taking the form of an Open Space session. Open Space technology, or Open Space method, is a technique for running meetings, or workshops, or even segments of conferences, where the participants create and organise the agenda rather than having an agenda set for them. It is, like the consensus workshop approach, a way of gaining engagement with and ownership of an issue, leading to better solutions with more buy-in from participants. Sessions can be for between five and 2000 participants (the larger numbers depending on venue size); participants agree on the issues important to them, and then facilitate the session themselves.

The Open Space session was intended to follow the visioning session in the previous social in order to explore the backcasting element of the process. Backcasting is a process whereby the vision for the future and the present situation are joined together by a series of agreed actions designed to lead from the present into the desired future. Rather than forecasting, a strategy of planning where it might be possible to go based on knowledge of the present situation, backcasting has the desired end as its initial point, and

plans the action points in between the present and that point in order to achieve the destination.

The basic mechanisms of Open Space include invitation – invitation to attend the event, and then every section of the event has an invitation to participate and take action, circle – people need to see each other so as to know who is in a group and to be included, bulletin board - a way for people to see the issues that are to be addressed, allowing open communication, market place, a space for discussions of the topics, where people can move around freely, and others. The originator of the approach, Harrison Owen, provided five principles and one ‘law’ for Open Space which describe, but are not prescriptive about, the approach.

1. Whoever comes is the right people. The people who turn up are the people who care about the issue and they will be the ones who make decisions and get things done.
2. Whenever it starts is the right time. This reminds participants that any creative breakthroughs do not run to a schedule.
3. Wherever it happens is the right space. People can choose where they want to discuss things.
4. Whatever happens is the only thing that could have.
5. When it's over, it's over. As for the second principle, there is no scheduling problem-solving: when it has finished, the meeting is over.

Owen points out that meetings do happen in time and space, but that the openness to the process of self-organisation requires leaders and facilitators to let go of trying to organise too much or keep a rein on events (Owen n.d.: n.p.).

Owen's one law is called 'The Law of Two Feet' or 'The Law of Mobility', and states that if at any time during the Open Space session a participant finds themselves in a situation where they are neither learning nor contributing,

they need to use their two feet and go to another place. This clarifies that all participants have both the right and the responsibility to contribute and also to learn; the Law assumes and asserts that each participant is the only one who can assess and manage this. When participants lose interest, or when they have shared everything they can, it is time to move on.

Although Open Space is concerned with the self-organisation of a group it does require a facilitator or organiser to set the topic with a theme or question. In this case the question was to be reframed from the previous session, of 'What do we want Leeds to be?' to 'What is your personal vision of a permaculture Leeds?'

The session took place in the same venue as before, the Carlton Hill Quaker Meeting House. The researcher led the session alone this time, for eight participants, which is about the lower limit for running an Open Space session, and the participants had attended the previous session. Therefore the Open Space format was opened with a reminder of the nostalgic impetus for the previous session's visioning activity. The purpose of the discussion and the process of Open Space was introduced, and in an alteration to the normal process of Open Space introductions, the nostalgia elicitation exercise from the previous meeting was repeated:

Close your eyes, go back to a time when you were very happy or content. Bring up the smell, feeling, sound, view, or any other memory state that encapsulates that feeling for you. Really place yourself inside that memory and call up all of the senses and the emotions you can which you attach to this memory. Now come back to the present. What is it that you are missing now from that other time and place? How do you want (it) to be in the future?

Now cast forward and think/feel about what would need to happen for you to recapture that feeling. Try thinking with your heart instead of your head. What would things need to be like in the future for you to have that sense again?

All the participants were seated in chairs arranged in a circle, and the slips of paper from the previous session were set out on the floor in the clusters in which they had been arranged previously. Participants were invited to move the slips of paper to other clusters, or to create new clusters as desired. After this had happened and all the participants had reminded themselves both of what was written on the paper and of the clusters, two topics for discussion were decided.

The way topics are chosen for discussion in Open Space is that any participant can suggest a topic, but if they suggest one and it is chosen, they must be the one to stay and lead the topic. Others may leave the session with the Law of Two Feet, but the originator of the topic must stay and provide continuity for the topic and the reporting of it at the end. In larger Open Space sessions, topics are allocated a time and space, but with this session there was an allocation of an hour and a half for the discussion, and the space was large enough to accommodate eight participants in two groups, so this step was simple. The two breakout spaces simply consisted of smaller groups on the edge of the original circle (this was the marketplace). Participants moved to their chosen groups; the two topics which were explored were:

1. LPN – its history and story
2. A bigger picture of permaculture in Leeds and what it could look like

After the opening briefing, the facilitator usually remains in the background. The facilitator kept time, and once the discussions had drawn to a close invited each group to report to the other on the content and results of their discussions. The leaders of each group produced a report in the form of an outline showing the discussion points.

The results of the LPN Social session workshops will be explored in the next chapter, along with an analysis of these results and how this relates to the research questions.

3.7 Critical reflection and assessment of work

3.7.1 Philosophical approach

In a research project, the researcher's philosophical assumptions will guide their choice of method by affecting the questions posed, the answers observed, the methods chosen, and the interpretation of the answers (Walter 2010). There is no 'default' position – all research has its roots in a particular philosophical stance; all research positions are philosophically-based decisions. It is important to be aware of and transparent about both ontological and epistemological positions.

In philosophical terms, ontology considers the form and nature of reality (what reality "is") and therefore what can be known about it. Epistemology, on the other hand, considers in what ways reality can be understood. Each term is closely connected with the other; the nature of reality cannot be separated from the ways in which we try to understand it. Research is "embedded in commitments to particular versions of the world (an ontology) and ways of knowing that world (an epistemology)" (Usher, Bryant & Johnston cited in Crouch & Pearce 2012: 58).

There are two main ontological approaches that can be taken in design research. If researchers believe their research illuminates reality, they inhabit an objectivist ontological position; if they believe it instead offers reflections which are intended to make sense of research subjects' experiences, they inhabit a constructivist one (Willig 2012). The objectivist view "assumes that meaning in the world exists separately from an individual's experience... the research act simply involves identifying external objective reality and reflecting it in the research narrative" (Kincheloe and Berry 2004: 9). Conversely this project's ontological alignment is with constructivism, which asserts that realities are multiple, intangible, local, specific, and socially and experientially created, dependent on the people or groups creating them for their form and content.

Although this research project is informed by objectivist research outputs, for example the social science work on nostalgia by Routledge, Sedikides, Wildschut, and others, it does not take an objectivist stance. The research questions were not so much concerned with trying to find an objective meaning for either nostalgia or responses to it, nor with aiming for quantitative data outputs, but rather concerned with reflecting and making sense of the experiences of designers of and stakeholders in permaculture designs.

Epistemologically, this project takes an interpretivist approach, which is concerned less with trying to prove whether a hypothesis is objectively true or not (as with positivism), and more with the generation of theory. This approach requires the researcher to have a closer relationship to the study matter as observer and/or participant: it seeks to uncover the “what, how and why” rather than the “how much” (Patton 2002).

In keeping with this approach, this project employs qualitative research, engaging with designers and clients and critically appraising design artefacts attempting to uncover experiential elements therein. “The investigator and the object of investigation are assumed to be interactively linked so that the ‘findings’ are literally created as the investigation proceeds” (Guba & Lincoln 1994: 111). The researcher is constructing experience, phenomena, and meaning along with the research participants. The researcher moves from an outside, “observer” (etic) role to one much more “inside” the research setting (emic). In this study both etic (questionnaires, interviews) and emic (workshops) constructions are employed, to both evaluate the researcher position and its role in the formation of observations and hypotheses, and to formulate and assess the hypotheses themselves.

This does make for a complexity within the methodology. However, this complexity is not created by the methodological choice but reflects that of the lived world within which the project sits. Complexity theory and the theorisation of, for example, wicked problems, recognise that models cannot adequately represent the world or complex issues in a purposeful way if they

ignore the interaction of variables and – crucially - the place of the researcher-actor on the model (as on the lived world). In the same way, the multivalence of a research project which situates itself within the complexity of lived culture accepts the interdependence of researcher, culture, and the research project.

In accepting the complexity of the lived world, there is also an acceptance that ‘testing’ the validity of the research cannot be achieved by a step-by-step, proceduralised approach (Kincheloe 2001) but instead involves a reflexive piecing together of research, as described by Denzin and Lincoln (1999). Research planning is less about the use of an “inflexible...framework (which then shapes, or even determines a specific outcome) and more to do with engaging in a process, out of which numerous outcomes can potentially emerge,” as Wibberly (2012: 7) points out. Therefore, the process involved is less that of deciding a methodology at the outset of planning, and more to do with one which develops each stage out of the previous one, using reflexivity and an acceptance that each process and outcome can be augmented and deepened by a different approach. In exploratory design (Maxwell 2012) research questions, research goals, and methods all develop within the project, challenging and illuminating each other.

Objectives were not present from the outset but developed in phases throughout the research period. The emergent proposition following the initial literature review was that, given some of the documented responses to nostalgia with regard to nature (for example Albrecht *et al.* 2007) and to social constructions of the self (Wildschut *et al.* 2006), there was a possible relationship with permaculture design. However the direction and strength of this relationship was unknown. The first research question, while readily perceived by many participants once the question had been asked, had not been asked before. Therefore the first aim of the research design was to examine this connection with an eye to producing insights into the research area, generation of new assumptions, ideas, and tentative theories, and aiming to advance a direction for future research and firm research questions as the project developed. For the methodology to be appropriate

for the study of design where emergent properties are so foregrounded, and where what is being studied is an affective state which may be largely or wholly subconscious in intent, apprehension, or application, the methodology needed to be exploratory, adaptive, multiperspectival, and creative.

The second proposition, that nostalgia may be being utilised as an affective element in permaculture design, was firstly examined using inductive methods to gain information and insight into where this might already be happening, consciously or unconsciously. Comparative observation and analysis, used alongside interviews in this stage, refers to various methods of textual interpretation, where the term 'text' widely includes interpretation of what is written in questionnaires, spoken in interview, and observed in both drafted and ongoing/used designs, structures and systems (Guba and Lincoln 1994). The third research question was subsequently examined deductively, by trialling to see whether strategies for its use as an element in design ideation were supported by data.

This methodological approach describes the process whereby understanding the propensity of England towards nostalgia (Samuel 2012; Wright 2009) led to the necessity of comparing nostalgia in permaculture between two countries; and the discovery that people were drawn to permaculture by nostalgia led to the development of a methodology whereby the engagement with permaculture could be tested by eliciting a nostalgic memory in Stage 3.

Triangulation therefore took different forms in Australia from the UK, and these differences themselves provided a secondary triangulation in allowing for a comparative analysis. In Australia, the triangulation occurred between the literature, the site visits and the hermeneutics arising from them, and the interviews.

In the UK, the triangulation was between the literature, interviews, the client interview/design, and the group work results. A further triangulation took place using a comparative analysis between the UK and Australia.

In these ways what was foregone in terms of statistical sample size was developed in favour of being able to reflect a depth and breadth of subjective understanding about affective response to a deeply personal affective state.

It might be argued that such a personal response is not replicable, but this was not the focus of the methodology. Law and Urry (2005) argued that standard social science methods are not very well adapted to a global complexity containing concepts such as 'the multiple', 'the distributed', and 'the emotional'. This project deals with these complexities, the qualitative methodology is the way to capture them, and the components of the research design supported the reliability of the research project data.

The data provided by interviews, content analysis and observations, and testing the hypothesis in a design scenario, are not only of sufficient rigour but are the most appropriate way to collect and interpret data in light of both the research questions and the content of the study. By adopting this methodology it is not suggested that the nostalgic elements inherent in the perception of permaculture are a reliable predictor of its positive reception or acceptance; however it seems clear that the strong correlation between is itself a valuable and useful insight; and moreover that nostalgic elicitation techniques are not only useful for permaculture ideation activities but potentially of use in other design applications.

3.7.2 Approaches to data analysis

Qualitative methods are sometimes assumed to be less rigorous than quantitative ones, but information such as that collected in this study provides a depth of understanding that cannot be achieved in other ways. In quantitative analysis, there is a tendency to assume that all data is of similar weight and importance; here the researcher needed to use judgement concerning the interpretation of what was said in interviews and other data. Subtleties of meaning have the potential to lead to misinterpretations, which the addition of statistical information may either not eliminate or may even magnify.

In general it is expected that a qualitative methodology will provide data which has been selected and analysed through the prism of the researcher's interests and experiences. However in neither quantitative nor qualitative research are the researcher's opinions a formative element: the data dictates the findings. At one point qualitative comparative analysis (QCA) was considered as an analytic technique, but a criticism of QCA is that, although it is a mathematical application of logic to qualitative data, its underlying assumptions emanate from the researcher's perspective, and are still dependent on the researcher's interpretations.

Qualitative data analysis allows the collected qualitative data to become an explanation or interpretation of the phenomenon at the heart of the research project; the purpose is to investigate the significant, and also the symbolic, content of the data. A computer program is not able to assess what a participant means by a word or phrase; and the term 'nostalgia' was interpreted with wide differences within the project.

Stages 1 and 2 employed inductive analysis, where more general themes were aligned with the initial research questions, and more specific themes identified by the researcher as the key elements of the themes (usually between three and eight themes) derived from close familiarity with and multiple readings of the data.

Questionnaire results were subjected to thematic analysis. Because of the small number of participants and because of the qualitative approach to the data, statistical software was not used. Instead, responses from the questionnaire were transferred to a spreadsheet and answers coded manually. The emergent themes formed the basis of the subsequent interview questions.

All interviews were transcribed from recorded form by the researcher. Participants were anonymised by being given reference initials – this practice was observed across all interviews regardless of the traceability of some of the participants (by the naming of their business or title, for example – such participants did not require anonymity). Data was securely kept both

digitally and in hard copy. Results were also analysed manually, using qualitative data analysis.

Transcripts were organised into an identical format and then read several times, allowing major themes to emerge. Sections of texts from the interviews were coded and emerging themes tested against the transcripts, where information arising (or not arising) from each participant developed the conceptual framework further. Relationships between themes were connected and identified, allowing for analysis of the project findings (second order analysis).

In Stage 3, a more deductive approach was used, in which the more defined hypotheses were triangulated using client interview and group workshops in which the concept under investigation was trialled. Data arising from these activities was analysed against the framework, and the ways in which it illuminated Stage 1 and 2 data analysed.

The themes arising from the data are presented in the format of tables and diagrams. Findings are discussed in detail in Chapter 4.

3.7.3 Research limitations

A criticism of qualitative data in much design research is that it is subjective and not easily replicable. In terms of internal validity, there is still at times a bias towards 'objectivity' and its perceived presence in quantitative data. This perception led to the early adoption of a questionnaire as a method. The attraction of questionnaires for some is the notion of objectivity they hint at. If constructed in particular ways they have a fixed format which can allow for quantitative data collection, or result in a 'control' element against which to assess the rest of the data. However, for the purposes of this project quantitative techniques appeared insufficient in terms of the kinds of data sought and interpreted. The issue with using questionnaires in Stage 1 was that the sample size was not sufficient to gain quantitative data; and the questions were neither objective enough to gain consensus, nor open enough to gain useful depth of information. It was not that the method did

not yield any useful results – these did provide some corroboration of the validity of the initial ‘hunch’ - but that the results showed shortcomings in the methods and in the research questions (which were not yet fully defined).

What the questionnaire did not do was conform to rigorous standards of objectivity which would allow for standardisation of data. But too much was being expected of the questionnaire method at this point. The methodological disadvantage is that questionnaires do not allow for deeper or more in-depth observation (Bell 2005; Sarantakos 2013). What it did was to point out the direction in which further exploration was needed, where existing concepts needed clarification or definition. Although the replies to the initial questionnaire were interesting, some confusion or frustration was expressed that the participants had more to say as they thought more deeply about the nostalgic lens.

This qualitative research project aimed, instead of generating numbers or statistics, to provide maps of situations or conditions, with illustrations and examples which examine and explain processes. The numbers involved in qualitative samples were small to allow for information-rich, deep examination. Generalisation was not the aim; rather the aim is transferability through theoretical saturation, where methods are continued until it is felt that sufficient insight has been gained into the research problem or hypothesis. To this end the researcher must constantly be comparing the data to see what new samples or cases might be needed confirm, realign, or support the existing data. The research group can be relatively small but must therefore be heterogenous, in terms of being connected in some way.

Instead of triangulation in order to find a “correct” interpretation by the combination of qualitative and quantitative data, in this project the qualitative data - the meanings, beliefs and experiences as described and understood subjectively by the participants - has been triangulated by using interpretations of the data, the culture in which it is placed, and the reflexive position of the researcher, in order to achieve a clarity about the data’s positioning (Denzin and Lincoln 1999).

There were those within the novice designer group for whom nostalgia was not an attractor, and more whose reaction to the idea of nostalgia in permaculture would best be described as wariness. As the project proceeded and as the establishment of the relationship between permaculture and nostalgia progressed, a further exclusion was decided on: in order to examine whether nostalgia could be used as an affective element in permaculture, only positive affect states were designed to be tested by the methodology. This was partly because nostalgia has been more recently (Routledge 2016) understood as a broadly positive affective state, but also served to delimit the study in manageable ways.

As a study examining both permaculture and nostalgia, the initial research decision was to proceed by initially delimiting one of these areas. Permaculture was from the outset a limited field, and therefore the population of interest was set as those with an already existing relationship to permaculture. Another reason for the small sample size is the number of influencing variables on the hypotheses, such as the aforementioned levels of expertise, the cultural differences, the client/stakeholder differences for design outputs, and the co-creators of nostalgic visioning exercises. A statistically representative sample would only be significant if this breadth of variables was reduced.

The subjectivity concern is exacerbated in this study by the relatively small number of respondents who were appropriate for this study. Permaculture is still a comparatively small field. Finding respondents across the areas under examination – that is, new clients of permaculture, new permaculture designers, experienced designers, designers of different-sized and socially-based permaculture designs, and groups of people interested in co-creating visions for future permaculture designs – to create more statistically definitive sample sizes would have exceeded time and budget considerations. And although the researcher was fortunate enough to be able to gain comparative data from two countries, this is still a small comparative sample; more and different countries and variations in data would yield more solid and verifiable results. It is true that the small data

sample size means that it is not possible within the confines of this research project to produce a generalisable result. However, this could be a focus for further research or even practice within the permaculture field.

There was scope, given the longitudinal potential of the study and the relationship with the data set which may include collaborative change effected with the participants, to include action research as part of the methodology, given that the question asked of the participants raises a conscious awareness that they did not have in their mind prior to the question (Carnie 2010). However, this was perhaps one downfall of using an exploratory technique, in that the parameters for such a research design would have needed to be set earlier in the process. As it is, the longitudinal approach could add more detail and understandings, but would need to be undertaken in a subsequent study (see the section on further research). The methodology of testing the use of nostalgic elicitation in permaculture may have potential as part of an action research approach, where the effect of the elicitation is traced over time. Due to the emergent nature of the research design, however, the project was not initially set up in this way and therefore this was not chosen as a methodology. Similarly, a material permaculture design was not the focus of the project, for reasons of the time taken to initiate and complete such an outcome. Permaculture is a slow process, and the timescale for such a venture did not dovetail with the research project.

In terms of the external validity of the study, the approach by the final section of the project concerned itself with the ability to be replicated by others. By that time it had become apparent that one of the deliverables of the project would be a set of techniques which could be included in the permaculture designer's toolkit, alongside either the client interview when working on a client design, or in a workshop situation alongside other commonly used strategies used by permaculture designers in group work. In this sense, the external validity of the project was in a reciprocal relationship with the internal validity checks: the replicable approaches were not a feature from

the beginning but arose from modifications made to the methods because of the reflexivity involved in adapting methods as the project progressed.

This research does not make any claims about the universality of nostalgic elicitation on design ideation practice. It may, however, given the influence of nostalgia on permaculture suggested by the data in Stages 1 and 2, be a strategy worth further exploration and development. It may also be possible to adapt the methodology to examine the use of other similar affect states on design ideation strategies in other contexts.

3.7.4 Ethics and informed consent

This section addresses the measures adopted to mitigate the key ethical issues for the study.

Ethical considerations include respecting the safety, privacy and anonymity of participants (Bryman and Bell 2007). For this study all the participants were informed about the purposes of the project and gave their informed consent to participate. The precept of voluntary participation, and the right to withdraw at any time, were highlighted both in the consent material and verbally by the researcher. The researcher was clear about the implications of participation without pressure or coercion, and all participants who were approached had freedom of choice over their participation and were competent to consent. A thorough explanation of the research process was given in each instance, and the contact details given for those who had questions.

Participants in interviews were required to provide written consent. Participants in workshop situations were informed of the research aims and implications and given the opportunity to not attend that part of the session (in fact several attendees chose not to participate in the first workshop but only attend the first half of the social, indicating the freedom to refuse was provided).

The questionnaire took place in person or online. The interviews took place in person, with the nostalgia elicitation taking place in either a pair or in a small workshop situation. In each case participants were reminded of the voluntary nature of their participation and of the freedom to withdraw.

Confidentiality and anonymity were preserved by not revealing names or identities unless integral to the data (for example in the case of expert designers), and during the process participants' data have been kept in strict confidentiality. For example, data transcribing took place in a private room using headphones; identities were removed during transcribing; and the participants not providing their details as part of their professional identity (again, expert designers or representatives of a permaculture institution) were referred to by pseudonym in both descriptions and verbatim quotes.

Written consent, hard copies or written materials of the data are stored securely with access only available to the researcher. Digital data is stored in encrypted devices and password protected, and in line with the ethics guidelines in the application, the data will be used by the researcher only for analysis and for illustration if used in conference presentations and lectures – however no identifying information of participants will be included in presentations, reports or publications arising from this project. No other use will be made without permission, and no one outside the project allowed access to the original recordings. Participants will not be identified in the research and quotes anonymised. Data may be published between collection and 2021 and both within and beyond that time frame will be held securely. In line with the ethics approval, electronic and hard copy data will be stored for five years to allow for answering questions about study authenticity and to allow others to reanalyse the results and will be disposed of after that time.

Further ethical consideration involve care for the dignity of participants and keeping them from harm. In research involving the elicitation of memories this is something which has the potential for participants recalling suffering or pain. However the framing of the research projects, the questions, and the

activities, in terms of nostalgia rather than the act of remembering *per se* ensured that participants' memories were already self-selecting for recollections which were viewed positively. Face to face interviewing requires sensitivity and awareness of potential suffering by interviewees so the researcher was careful to monitor these conversations carefully.

In working across continents and cultures cultural sensitivity becomes part of the ethical landscape of the project. The researcher was sensitive to the cultural contexts in each of the locations, having lived approximately half their life in each continent. However it should be noted that the participants who chose to be involved in this project were, in the main, of a fairly homogenous racial makeup apart from in the early questionnaire stage. This is a criticism levelled at permaculture generally and was reflected in the data sources in this research. Had the research recruited Indigenous participants, the questions of the contexts of the ethical foundation and the principles arising from observation of Indigenous land management patterns would have required an awareness and perception of cultural bias and historical suffering which did not enter into this project. More research on the interconnection between permaculture and Indigenous knowledge and understanding is required, and this will become a key ethical consideration in the future.

Another ethical consideration in this project concerned working with different stakeholders: students and fellow students, teachers, professionals, and clients. Data was collected from participants with whom the researcher already had a working relationship (as in the fellow students and teachers in the PDC) and with those not previously met. Research relationships which can exploit or harm others are obviously to be avoided; however it is not inherently unethical to work with those already known to the researcher as long as no adverse effects are expected. With participants known to the researcher the focus was on ensuring voluntary involvement, by careful verbal acknowledgement and explanation and by reading cues in, for example, body language; for previously unknown participants there was a

protracted period of setting up interviews which, while contributing to a fall in participant numbers did ensure that participation was freely given.

With professional participants their details have been given (with permission) as they are known for their skill and they are expert in their field. However all participants who do not currently have a profile as a permaculture designer and whose opinion may change over time were anonymised. Client details were anonymised and only the element of the project relating to the client interview included in the study.

There was a longitudinal element to this research in the interviewing of participants who had previously completed a questionnaire. In this case the ethical consideration of ensuring that the voluntary nature of continuing participation without regard to previous agreements was at all times verified. The project did not instigate long time frames for a longitudinal study; however if research of this kind is to be investigated (as proposed in Chapter 5) then further careful attention to the emergent ethics (Neale 2013) of longitudinal research would be further foregrounded.

A further ethical dimension relevant to this project was the fact that it included collecting data from gatekeepers – those who provided data and detail on clients or stakeholders who had used permaculture design services, or attended a permaculture venue. It must be acknowledged that the data thus collected is at second hand and therefore through the lens of someone with perhaps a different perspective of the experiences and opinions of the original speaker. However the scope of the project did not allow for lengthy data collection processes across two continents of first time or returning visitors to permaculture sites, or for interviewing past clients of permaculture designers. In addition, the participants who acted as gatekeepers were simultaneously expert designers and did not share a common positive view of the role of nostalgia in permaculture, and because of this the data they provided was considered a collection and distillation rather than being edited in a way to suit the gatekeeper. As previously noted,

further research would require engagement with this element of the ethical protocol.

The 'light touch' application process undertaken within the institutional framework of University of Leeds covered the pilot and the projected ethical requirements of the study. This project was given a favourable opinion by Research PVAC & Arts joint Faculty Research Ethics Committee on 26th April 2016, ethics reference LTDESN-047. Approval was given for the duration of the project. A copy of the consent form and information sheet are included in the appendices.

3.8 Chapter summary

The study proposed three research questions. **RQ1** (Does nostalgia draw people towards the concept, use, or experience of permaculture?) arose out of the literature review which suggested that elements of permaculture had nostalgic overtones. **RQ2** (What is the position of nostalgia in the design ideation phase of permaculture design?) was intended to discover whether novice and experienced permaculture designers were using, consciously or unconsciously, elements of nostalgia in their design ideation. After positively identifying elements of **RQ1** and **RQ2**, **RQ3** (Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?) was developed both as a test of the previous data and as the first iteration of a new strategy in which nostalgia, as an affective state, could be used to increase engagement with the permaculture design process

This chapter proposed that the most effective methodology for examining the role of nostalgia in permaculture design ideation was qualitative and constructive in approach, adopting at the outset an exploratory, flexible research study design. Data was obtained using a combination of interview, workshop, and hermeneutics, and the data analysis triangulated using the

data, the cultures within which the data exists, and the reflexive position of the researcher.

The key data collection methods – questionnaire, interview, comparative analysis, client interview, and group workshop, were selected for their relevance to the research position and for the opportunity they afforded to most effectively fulfil the research objectives. Small sample size, and the wide range of interpretation of the term ‘nostalgia’, led to the consideration that manual coding and interpretation was the most appropriate method for the project.

For the purposes of this research project the researcher prepared one questionnaire (Stage 1), one semi-structured interview format (Stages One and Two), one amended permaculture design client interview (Stage 3), and two modified group activities (Stage 3).

In this project the sampling units include:

People: individuals and groups

Organisations: Permaculture institutions (working designs and groups)

Texts: graphics, magazines, television shows, cultural appearance.

The sampling strategy in terms of heterogeneity was to concentrate on individuals, groups, and cultural elements which were directly related to permaculture. As this was a small percentage of the population but one which would have had to seek out a connection to a non-mainstream interest in permaculture (to this point), this proceeded in the direction of theoretical saturation.

Initial contact in Stage 1 was made via the researcher’s participation in the Permaculture Design Course. Fellow participants and tutors formed the initial sample data set. Snowball sampling led to the further interviewing of participants

Activity	When	Details	RQ
Literature review	Oct 2015– Oct 2018	The nexus of design, nostalgia, and permaculture was examined and interpreted for themes and for a gap in the knowledge	1
Questionnaire	June 2016	Six open-ended questions on the use of nostalgia in permaculture design given to members of the 2016 Permaculture Design Course	1
Interviews	July 2016– Jan 2019	Interviews with permaculture designers from novice to expert level, from personal designs to multi-stakeholder permaculture site facilitators	1,2
Comparative observation and analysis	July 2016- Nov 2017	interpretation of what is written and observed in both drafted and ongoing marketing materials, designs, structures and systems	1,2
Client interview	Sept 2018	Conducted with permaculture design clients including the first iteration of a nostalgia elicitation component to a permaculture design client interview	3
Visioning workshops	Oct-Nov 2018	Two versions of visioning/futuring workshops conducted with the insertion of the nostalgia elicitation component to a permaculture social design activity	3

Table 4: Overview of research activities

Stage 2 sampling consisted of approaches to experienced and expert designers in Australia. Stage 2 also included comparative analysis, with permaculture texts from the UK and Australia being evaluated and compared. Stage 2 sampling strategy in the UK was to focus on the longitudinal element of using those who had previously completed the questionnaire in Stage 1 (along with an interview participant who had completed the elicitation activity in Stage 3) and who had expressed a continuing interest in the idea of nostalgia in permaculture.

The next research phase was to include nostalgia as an element in the client interview when ideating permaculture designs with a client. The use of nostalgic elicitation in group design work was further trialled over two sessions at the Leeds Permaculture Network monthly Social.

The next chapter examines and analyses the data arising from the project methodology.

Chapter Four: Results and analysis

4.1 Introduction to analysis

The following chapter provides a presentation of the results followed by analysis. Analysis takes place at the end of the presentation of each stage and additionally in Section 4.3. A short reminder follows of the focus of the research and of the data sources.

The research questions are:

RQ1: Does nostalgia draw people towards the concept, use, or experience of permaculture?

RQ2: What is the position of nostalgia in the design ideation phase of permaculture design?

RQ3: Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?

This chapter examines the analysis of the data and the findings concerning the above propositions.

4.2 Data sources

The following is a short precis of the data sources for the project.

Stage One: Questionnaires and interviews

PDC: The subjects of the Stage One questionnaires were the members of the 2016 Permaculture Design Course run by Leeds Permaculture Network at Hollybush Conservation Centre, Kirkstall, Leeds. There were 16 participants in the group, 8 men and 8 women. Nine questionnaires were completed; five by men and four by women, including one male and one female tutor. The introductory set of data led to the use of interviews to collect further data (June 2016).

B: A member of this group whose response was particularly detailed and which potentially ran counter to the hypothesis was subsequently interviewed. The interviewee was a novice designer whose interests lay in the direction of counterculture and social change as well as in growing food (July 2016).

AG: Extremely experienced/expert designer and CEO of the Permaculture Association (UK) with a comprehensive overview of the reach, role, and exemplification of permaculture both in the UK and globally, and a deep and broad knowledge and understanding of nostalgia's properties and possibilities as a tool (23 August 2016).

Stage two: Australian interviews

NS: Northey Street City Farm in Brisbane has been a city permaculture farm since the 1980s; an urban, public (specifically not privately-owned), multi-voiced as well as multi-activitied permaculture initiative (21 September 2017).

FH: Fairharvest Farm, Margaret River, Western Australia, a privately-owned farm, planned, planted, and run on permaculture principles but which also arose from a very strong social justice history, background, and platform from the 1980s (26 October 2017).

CL: Candlelight Farm, Mundaring, Perth hills, a long-running, multifaceted permaculture business (31 October 2017).

Comparative observations and analysis: observations made of the difference between the cultural role and status of permaculture in Australia and in the UK with regard to both the visibility of permaculture, and its nostalgic status (or otherwise) - visits to areas in Queensland and to a town in the UK; the coverage of permaculture in popular mainstream gardening magazines and television programmes; and properties designed on permaculture principles in both the UK and Australia (January 2016 – November 2017).

Stage Two: UK interviews

SG: A practising psychologist and participant in the 2016 Permaculture Design Course (27th July 2018).

KB: A participant in the Permaculture Design Course (27th July 2018).

CM: An artist and participant in the Permaculture Design Course who has worked permaculture principles into participatory art works with communities in Hull (9 August 2018).

Stage Three: client interviews, workshops, final interview

CE: A young couple in their mid-20s in London in a client interview examining what they wanted in their plot (a small yard in Walthamstow). The client interview is a normal part of the permaculture design ideation process, but asking the client about memories or nostalgic thoughts is not (9 September 2018).

LPS1: Three members of the Leeds Permaculture Network ran a consensus workshop, including the additional elements of Dragon Dreaming (led by interview participant CM) and nostalgic visioning elicitation (led by the researcher). The third member of the team was a teacher on the 2016 PDC and the researcher's Permaculture Diploma teacher, who was an experienced Consensus Workshop facilitator (Consensus Workshops and The Technology of Participation (ToP)® - methods which were to be used in the session – will be further explained in the next section) (3 October 2018).

LPS2: The second session with Leeds Permaculture Social participants took the form of an Open Space session with elements of both Consensus workshop and Open Space technology (see next section), facilitated with the inclusion of nostalgic elicitation embedded in the process (7 November 2018).

H: A new attendee at the Leeds Permaculture Network Social events was interviewed following the visioning and futuring group design activities (11 January 2019).

Name	Country	PC design	Quest	Int'vw	W/shop	Comp Ob	RQ
PDC	UK	novices, experts					1
B	UK	novice					1
AG	UK	expert					1
NS	Aus	expert					1, 2
FH	Aus	expert					1, 2
CL	Aus	expert					1, 2
SG	UK	novice					1, 2
KB	UK	novice					1, 2
CM	UK	novice					1, 2
H	UK	no					1, 2
CE	UK	client					3
LPS1	UK	mix					3
LPS2	UK	mix					3

Table 5: Project data sources

4.3 Data analysis

The following sections will present the analysis of the data in chronological order.

4.3.1 Stage One

Although any design originates with the process of ideation, nostalgia at the ideation stage of permaculture design was discovered not to be used as a conscious strategy when the research began: there has to date been no research on the use of nostalgia in permaculture design ideation. As a concept, nostalgia did not appear anywhere within the existing permaculture literature, and as such it can be attested that it had not previously been considered. Research on the ideation process of permaculture designers using, or being influenced by, nostalgia did not exist. Initial research with permaculture designers, both trainee and expert, identified that although there was some interest in the concept when it was introduced, this data did not provide evidence for nostalgia being used consciously in permaculture design. That is, although nostalgia may have been a factor in attracting people to permaculture or to permaculture designs, it was not as a conscious element, and therefore was not amenable to being collected as data in questionnaire form. It was therefore prudent to both question further those who expressed a particular interest in the concept of nostalgia in permaculture, and to supplement this collection of data at the other end of the process, as it were – at the evidence of nostalgia as it appeared in permaculture designs. The aim was to examine the outputs of permaculture design ideation for evidence of nostalgic influences, impulses, or inputs, and to work backwards from the designs to a ‘reading’ of the ideation stage of those designs.

Questionnaires

Questionnaires had been circulated (in both email and paper form) to the 2016 Leeds cohort of the Permaculture Design Course participants after nine previous permaculture training sessions on weekend meetings which

took approximately monthly from January to July 2016. During these sessions the researcher had discussed with the group her reasons for being in Leeds, and her interest in nostalgia, and it can therefore be considered that the participants all know the focus of the study in regard to nostalgia. However, this is not to say that they had particularly thought about the topic (*“I had not previously thought about this”* – participant 9, 26/06/16; *“It isn’t something I ever thought about before, not something I would normally think about when designing.”* – participant 1, 22/05/16).

Because they had not previously thought about or discussed nostalgia previously, it was challenging to get a discussion or conversation going centred on the idea of nostalgia itself initially. Pre-existing attitudes to nostalgia, whilst largely unexplored in the questionnaire, became apparent in the answers given (*“There can be no authentic/shared nostalgia in a rapidly and fundamentally changing world. In such a place nostalgia will be confined to the individual, and it’s (sic) usefulness in design subverted”* – participant 2, 25/06/16; *“As part of a design process I think subjective lenses should be removed as best as possible. This will allow for more consistent and predictable results based on fact, research and experience”* – participant 4, 26/06/16; *“To do this survey properly I think to give a definition of ‘nostalgia’ at the outset would be quite usefull (sic), as nostalgia could very easily mean different things to different people”* – participant 8, 26/06/16).

There was a commonality of nostalgia being something previously unconsidered – statements such as *“It isn’t something I ever thought about before,”*(Participant 1, 22/5/16) and *“I had not previously thought about this”* (Participant 9, 26/6/16) were combined with people looking up ‘nostalgia’ in the dictionary but being unsatisfied with that level of definition, wanting a clearer idea about what was meant by nostalgia, or being concerned with the differences between personal and legislated nostalgia (making people personally nostalgic for something they did not live through). *“I looked up nostalgia in my dictionary...Interesting definition!...I don’t really know that I would agree with that. To me nostalgia means evoking a time past, or trying to evoke the mood of that time.”* (Participant 8, 26/6/16). The same

participant went on to suggest, *“I...really think the dictionary definition of nostalgia is quite limiting to its usefulness in this context. To do this survey properly I think to give a definition of ‘nostalgia’ at the outset would be quite useful, as nostalgia could very easily mean different things to different people.”* Participants, whether broadly accepting of nostalgia as an affective dimension to permaculture design, broadly wary or rejecting of nostalgia as a design tool, or occupying a position in between these two poles, seemed to be ‘thinking through’ nostalgia as they answered the questionnaire.

This recognition that nostalgia is an individual state was another commonality from the participants in this part of the data collection process.

“Nostalgia can be a very individual thing – what genuinely works for one person won’t work for others” (Participant 9, 26/6/16). *“Each person can have different thoughts of nostalgia about the exact same things due to context and personal experience. This makes it of limited use in a design process...”* (Participant 4, 26/6/16). *“In our current path, nostalgia is becoming increasingly difficult to group. The effectivity of nostalgia is predicated on there being familiarity between your child, adult and elder worlds...It cannot work when there is no familiarity between generational milieu. There can be no collective/shared nostalgia in a rapidly and fundamentally changing world. In such a place nostalgia will be confined to the individual, and its usefulness in design subverted.”* (Participant 2, 26/6/16). In interview, this participant explained that because of the distributed and individualistic nature of social media, nostalgia experienced by large groups of people would no longer be a cohesive element and would become increasingly socially irrelevant.

Some of the participants identified the nature of nostalgia as *“distinctly nonrigorous”* (Participant 1, 22/5/16) and something that *“connect(s) with some people on an emotional level”* (Participant 9, 26/6/16); some showed awareness of the unconscious nature of nostalgia. *“I think it subconsciously effects a lot of things, and consciously needs temporing from a sentimental/wistful to the reality of the now”* (Participant 7, 26/6/16).

There was a shared caution over the evocation of other/earlier cultures: *“I am very wary of the risk of being nostalgic about traditional cultures/preindustrial societies/premodern societies...I am wary that we (I) can look at these objectively...they are complex systems and looking at a few specific factors eg group size, might be cherry picking. Sometimes I am also critical of the lack of feminist analysis”* (Participant 9, 26/6/16).

“Nostalgia for a lost ‘golden age’ of nationalistic sentiment and ethnic purity could be deeply problematic when radical change and interconnection are needed” (Participant 3, 26/6/16). Interestingly, there was more support for these ways of thinking from those from ethnic minorities – *“the relative stasis of civilizational patterns pre industrial revolution is proof of the sustainability of those patterns, and the real behaviours they represent”* (Participant 2, 26/6/16) and *“...it makes sense to turn back to times when...systems were successfully in place and learn from them...it is also useful to mimic systems that use the principles relevant to the culture they came from”* (Participant 5, 26/6/16). One participant with a nonconventional background, being brought up living in a forest by charcoal burning parents, had a nuanced view: *“...a lot can be learned from the past but it is easy to romanticise it and I feel the current socio/political/commercial/media driven systems are un-compatible with some of these ideas...(but it)...also brings about deeper connections, sharing pasts and growing empathy which helps groups to design together”* (Participant 6, 26/6/16).

Some participants, whilst initially cautious about the role of nostalgia - generally, not merely in permaculture design – became more enthusiastic as they continued thinking through their answers to the questionnaire; for others, the process was more vice versa. In most cases, the role of nostalgia was critically examined with skill; *“Dangerous – a lot can be learned from the past but it is easy to romanticise it and I feel the current socio/political/commercial/media driven systems are un-compatible with some of these ideas – it has to be brought into the design/discussion”* – participant 6, 26/06/16; *“Nostalgia can induce a response that connects likeminded people, therefore thinking about a collective*

future...(but)...getting attached to an ideal that can no longer exist or is irrelevant in the current system. Becoming closed minded to other possibilities and not sharing in other people's nostalgic visions” – participant 5, 26/06/16.

One of the shared responses to the questionnaire was the desire to think more about it, as with (Participant 9, 26/6/16): *“Feels complex and worthwhile to think about. Lots of levels at which it could be explored, personal and collective nostalgia, direct/indirect experience – design at lots of different levels – given me some food for thought!”*

The answers given to the questionnaires were grouped where a common theme emerged.

Q1	Q2	Q3	Q4	Q5	Q6
1.1 - 1	2.1 - 1	3.1 - 1	4.1 - 3	5.1 - 2	6.1 - 1
1.2 - 2	2.2 - 1	3.2 - 2	4.2 - 2	5.2 - 3	6.2 - 1
1.3 - 5	2.3 - 3	3.3 - 2	4.3 - 1	5.3 - 3	6.3 - 1
1.4 - 1	2.4 - 2	3.4 - 2	4.4 - 3	5.4 - 3	6.4 - 1
	2.5 - 2	3.5 - 2	4.5 - 1		6.5 - 1
	2.6 - 1	3.6 - 1	4.6 - 1		
	2.7 - 3	3.7 - 1	4.7 - 1		
	2.8 - 1				

Table 6: Coding of questionnaire responses

Q1 Is nostalgia useful when considering design?	
1.1	Don't know
1.2	Yes
1.3	Maybe
1.4	No

Q2 Emphasis on knowledge from previous cultures & eras	
2.1	Positive and helpful
2.2	Gives aspects not thought of before 2.3 Evidence of sustainability of patterns
2.4	Diversity – good
2.5	Facts shouldn't be skewed by emotions
2.6	Identity
2.7	Possibly inappropriate
2.8	Lack of feminist analysis

Q3 How to use nostalgia in thinking about the future?	
3.1	Make do and mend
3.2	May be meaningless because no shared reference
3.3	Thinking back to think forward
3.4	It shouldn't be used this way
3.5	Provide comfort, safety
3.6	Uses experience and lived knowledge
3.7	Subconscious effects so needs conscious care

Q4 Benefits of thinking about design using nostalgia?	
4.1	Use old knowledge
4.2	Comfort, innocence, belonging
4.3	Potential for happy memories
4.4	Good for specific communities only
4.5	Therapy
4.6	Intergenerational
4.7	Connect emotionally

Q5 Shortfalls of thinking about design using nostalgia?	
5.1	Might not use tech and new inventions
5.2	No shared meaning
5.3	Nostalgia is a powerful lie
5.4	Closed-minded/not sharing

Q6 Other thoughts?	
6.1	Complementary: systems thinking rigour, personal non-rigour
6.2	World changing too rapidly for nostalgia to be meaningful
6.3	Permaculture practical; nostalgia should be removed
6.4	Brings deeper connections and empathy
6.5	Worthwhile to think about

Table 7: Coding of interview questions

Post-hoc coding of the open-ended questions responded to revealed data showing that there were some emerging response groups around nostalgia perhaps being useful in permaculture (Q1), having to be used with caution (2.5, 3.4, 5.3) but showing evidence of the sustainability of certain patterns (2.3, 3.1, 4.1) and a helpful diversity (2.1) and having the potential to increase affective engagement (3.5, 4.2). This data was sufficiently well drawn to endorse further exploration of the hypotheses.

Stage 1 UK Interviews

Because of the small sample sizes and in order to encourage open responses from which to further code data, interviews were chosen as the data collection method for the remainder of Stage One. In particular, questionnaire data had revealed that some participants were influenced by nostalgia but were not consciously aware of it because the idea had not occurred to them before. This response would require further time and open-ended questioning in order to explore further. Another unexpected response deserving of further exploration was that of ambivalence about the perception or role of nostalgia.

What had emerged from the questionnaires was a strong critical approach to socio-political systems and discourse among a proportion of the group, leading to nuanced reflections on the role, not just of nostalgia, but of affective approaches to design and/or discourse.

Participant 3 was a permaculture tutor on the course, well-versed in design approaches and pattern thinking, but who had not previously considered nostalgia as a design or affective element. His response was indicative of this deep-thinking, critically-adept approach. He considered that deliberately invoking nostalgia by elements in a design might help create a positive affective state (security in an unsafe world) for some but could more problematically merge with romanticism, with the danger of creating a conflict of ethics: *“Nostalgia for a lost ‘golden age’ of nationalist sentiment and ethnic purity could be deeply problematic when radical change and interconnection are needed”* (participant 3, 26/06/16). This response

indicated a deep knowledge of permaculture principles and therefore the application of nostalgia to them was his focus. However, in both questionnaires and interviews, criticality, and the ability to hold both appreciation and wariness of affective approaches to discourse, was prevalent amongst both expert and novice designers alike.

Stage 1 UK Interviews: B

For example, the interview with B, a Permaculture Design Course trainee, conducted in July 2016, showed similar critical awareness of discourse:

“Like, when you watch the news, for example, they don’t tell you what’s going on; they tell you what you feel about what’s going on.” (B, 26/06/2016; all interview data from the same date)

This awareness of the difference between logic and affect, and the difference in both the appeal and the reliability of each, was to emerge as a pivotal concept later in the project, though it appeared in an interview which was expected to contradict the hypothesis. B was indeed wary of the nostalgia for nationalist sentiment mentioned by participant 3, stating the importance of applying classical critical discourse analysis to media outputs and what and why the stories that are told are being told:

“...we’re in such a phase at the minute that it’s easy to appeal to this idea of a Britain. Phhh! It’s nothing to do with me...I don’t relate to amorphous niceties that serve ends that I have no say in, have no affinity with...you can see how those patterns of appeals to tradition really do stifle the more important bits which is looking at our history and not in a nostalgic sense like ‘Oh, wasn’t it fantastic then?’ No, cos it never was...It just never happened.”

B’s response showed an awareness that the affective appeals of nostalgia to identity, freedom, protection, understanding - some of the fundamental human needs as explicated by Max-Neef (1992) - were very strong. B’s interview indicated a deep distrust of affective appeals. The questionnaire responses expressing wariness about the effects of these appeals were

even more strongly reflected by B in his rejection of a shared nostalgic view of tradition – something he felt he did not relate to and which did not include him. Moreover, he felt that these nostalgic appeals served particular power relations and were therefore not only irrelevant to him but an anathema:

“Those modes of thinking serve the incumbent systems ...It’s all lovely having a nice farm right in the middle of the Colne Valley, but I live in Rotherham and I’ve got a fly tip for an allotment...”

In addition to wariness about power structures, there were other aspects of nostalgia as applied to permaculture which provoked a problematic response. Although permaculture does not support or suggest a specific belief system, elements such as alternative educational structures, deep ecology, and feminism as an integral element of “fair shares” evoke other frames and forms of alternative thinking, in ways which can potentially attract potential interested parties or alternatively make them wary or even repel them. Not only the ethics of earth care, people care, and fair share, but the appeals to forms of spirituality which, although seeming to appeal to a nostalgic vision of a relationship between earth and humans, may or may not have ever existed. In particular B felt that there were “...*legitimate criticisms [about the invocation of an] earth goddess, and stuff like that...behind these appeals to ‘the ancient wisdom of...’ well anybody can say that...you can make any old nonsense up...*”

This response both echoes the concerns expressed in Mukta & Hardiman (2000) about essentialisation or romanticising indigeneity or gender, and foregrounds a potential stumbling block for the acceptance of permaculture amongst a wider audience. However it also supported the hypothesis that there were nostalgic elements embedded in the perception of permaculture, and whether response to these elements was positive or negative, the data in support of the hypothesis was strengthened.

Stage 1 UK Interviews: AG

In B's interview data, both in speaking of the difference between having a "nice farm" in the Colne Valley as opposed to a fly-tipped allotment in Rotherham, and in an invocation of a past in which systemic disparity existed but is ignored in nostalgic appeals he identifies an issue which also has to do with perceptions of permaculture. There is a concern amongst permaculturists to engage with the perceived lack of access to permaculture.

Initially permaculture was conceived as an agricultural or large-scale horticultural set of techniques or principles, and a concern within the Permaculture Association is that a lack of access to (larger amounts of) land is a barrier to people thinking that permaculture might apply to them. This is despite permaculture principles being applied to a wide variety of environmental and social situations, ranging from prison design to inner city aquaculture; many permaculture projects are situated in inner-city areas. AG, an experienced and esteemed permaculturist and tutor (and CEO of the Permaculture Association in the UK) was the first experienced designer to be interviewed.

AG's interview addressed some of the political tensions around access, for example the criticism that permaculture works in middle class ways, and in middle class areas. He cited projects such as those in the slums of South Africa, the poorest communities in El Salvador, hard-pressed places in Spain and Greece, and parts of Liverpool, as well as the project in Andhra Pradesh;

"...70 000 mostly women in seventy villages, most of whom are widows and therefore basically the lowest of the low, it's not true... actually there's...far more black, Asian and Hispanic people doing permaculture than there are white people...from a global perspective it's actually a much more mixed and diverse picture ...and [in] places like Malawi, it's really engaging with life and death situations." (all interview data from 23 August 2016)

This was an early indication that the perception of permaculture as a middleclass pursuit was not the same across cultures, and also that the use

of permaculture in social designs (for example amongst lower income communities in Britain) altered the perception of permaculture as something only privileged people did individually with their large piece of land (the nostalgic vision of a pre-industrialised past) to something more community based. The idea of cultural differences, and the understanding of a sense of community as something differently nostalgic about permaculture, were first flagged here.

AG indicated a keen but balanced understanding of the role of nostalgia in permaculture; he was both more wary and more accepting of nostalgia's properties and possibilities as a tool. When asked how he, as a designer, might use nostalgia, his response correlated with the level of designer which Dorst would categorise as beyond expert: the visionary, who "...envision(s) new ways things could be...seeking out marginal practices that hold promise for the future" (Dorst, 2005, p102). Without directly referring to Max-Neef's theories, he identified that nostalgia in permaculture pointed towards unmet needs. For example,

"...in the northeast, the nostalgia was for a time when everyone had a good job...that might seem like a romantic nostalgic notion...but actually in the future, people need some sort of meaningful livelihood...So what are the opportunities for us to create meaningful livelihoods?"

Similarly, AG identified people feeling that they were not being heard politically and wondered how the desire to be heard could be harnessed. For example, one of the nostalgias in the north of the UK is for when there were strong unions. If union organising is no longer an option, could political education in communities work? Discovering how councils work, how the MP system functions, might be a functional use for the nostalgia for unions, according to AG.

AG was broadly positive towards the use of nostalgia as an additional tool within permaculture. During the interview it became apparent that if work on building nostalgia as a client tool progressed, it would be one of a number of

affective visioning techniques which were already in use with permaculture designers.

“Nostalgia, from a design perspective, could be seen as...dreams for the future as well...with the...client interview phase of a permaculture process, I think the thing that nostalgia could bring to that is a sense of, what did we like from the past that we would like to bring into the future as well?”

AG identified that nostalgic desires are an expression of qualities which clients might like to bring from the past into the future. In permaculture terms he recognised this as a design input, and questioned how much, and in what ways, the things people are nostalgic about have relevance for the future in terms of sustainability.

For example, he mentioned an allotment neighbour who, reminiscing about his childhood, talked about not having any money but knowing everybody. AG noted that this was not nostalgia for poverty but for community connection, which allowed for sharing between people: *“So whenever we wanted to make something, we always knew someone where we could get it.”...Well – that’s a quality of the past it would be great to have in the future.”*

Things that were perceived to have worked in the past might be explored again, suggests AG, not to be recreated but redesigned. For example a neighbourhood using

“some sort of...toolsharedot.com, where they can put their resources...an app which basically means that, ok,... they don’t yet know their neighbours, but they’re willing to share information...and to start knowing their neighbours...So it might be a trigger for something which...we could do in a different way, but achieve similar results.”

For AG, with his deep and wide experience of permaculture design, there was clear opportunity in including people’s nostalgic memories in the design process. Immediately he identified the areas of community, agency, and

abundance (through sharing) in the above example, and also identified the area of nature, as in this observation:

“Or the nostalgia might be, “Oh, I remember when you could go along and there were loads of wild flowers everywhere, and it was just so beautiful...there seemed to be more insects,”... wouldn’t that be something to have...in the future as well...”

This was a clear indication in the data that the hypothesis of the possibility of nostalgia being a useful tool to engage people in permaculture designs was supported.

Summary of Stage 1: Key points

- Across the questionnaires and the interviews, despite the wariness towards affective arguments, there was an acceptance of a potential positive side in using nostalgic impulses to try to elicit designs which would work on several levels for clients.
- Participants in the PDC, that is, novice permaculture designers, expressed that it would be less problematic using nostalgia in design for individuals than for communities, expressing the difficulties inherent in assuming a commonality of affective response amongst diversity. However AG, as an expert and perhaps as a visionary designer, and looking at a worldwide picture, saw nostalgia as one tool among many – a visioning tool, and one which could be used in a number of circumstances.
- Although each interview was individually constructed they began to show two lines of examination in common. The data indicated that participants focus either on the reason they became drawn to permaculture, or the role nostalgia plays (or could play) in permaculture, either generally or in their designs.
- In each data group, the case for nostalgia being viewed as nostalgic in some way was clearly answered in the positive. All could see –

even if they did not agree with – a nostalgic element to the perception of permaculture.

4.3.2 Stage Two

Stage 2 Interviews: Australia

In Australia interviews were conducted with a mix of individual permaculturists and permaculture teachers (from Candlelight Farm in the Mundaring Hills in Perth, Western Australia – **CL**), and those who worked as part of a team on permaculture sites (Education & Support Team Manager at Northey Street City Farm in Brisbane, Queensland – **NS**; one participant, from Fairharvest Farm in Margaret River, Western Australia, is both – **FH**). All of these participants were expert level designers or above, with many years' experience in permaculture and in the changing appearance, perception, and engagement with permaculture projects over those years.

Interviews followed a general pattern of introducing the research project's general focus of nostalgia in permaculture, followed by an exploration of the way each participant works with permaculture ideas, methods, and principles, and finishing with a more direct question about the participant's experience or opinion about the role of nostalgia in permaculture.

Stage 2 Australia interviews - NS: Northey Street City Farm

Northey Street City Farm in Brisbane is a three hectare permaculture community garden which has been a city permaculture farm since the 1990s. The Farm is located close to the city centre, on a floodplain on the banks of Breakfast Creek in Windsor, Brisbane, Australia. It was founded in 1994 by a group of local residents who wanted to grow their own food and for disadvantaged and unemployed people to grow healthy food and to learn and educate others in how to do it. It still maintains these roles but its focus is on education and on demonstrating permaculture in a city setting. It has transformed a bare floodplain site to a productive, verdant, multifaceted model of a community-based urban permaculture farm. It is run by staff and

volunteers, welcomes thousands of visitors each year, and promotes and educates about and for sustainability.

A big part of its intended remit is the social element of permaculture, so the Farm aims to enhance community involvement, model effective participatory and inclusive processes and structures, and provide permaculture and sustainability learning opportunities. They also aim to develop financially responsible enterprises, which then provide services to the community, such as a very popular weekend farmers' market and a cafe, organic market garden and kitchen garden, chicken runs, a city farm nursery, which in partnership with Brisbane city council gives away two free trees to city ratepayers as well as selling bush tucker and permaculture plants, ethical gifts, and gardening products, and a city-wide compost collection point. The creek area is being regenerated with native species, including bush foods and cabinet timbers.

The Farm's website explains the roles of the various staff members:

"The Farm Team looks after all the plants and animals and on-site demonstrations as well as maintenance, services, safety and security; the Enterprise and Events Team operates the Markets and the City Farm Nursery as well as NSCF events; the Education and Support Team organises the education program and supports the other teams with finance, administration, HR, marketing and external relations...Northey Street acknowledge the Traditional Owners of the land, the Turrbal people."
(<https://www.nscf.org.au/about/ourorganisation/> n.d.)

The interview took place with the Education & Support Team Manager who began with an explanation of one of the reasons the site was so thriving. She noted that there was a change in society where it had become popular to 'grow your own' vegetables and healthy food. There had been a growth in interest from the general public, which she related to the change and upswing in food culture which had 'exploded' in the past ten years, with coverage on television of shows about food, in addition to the Australian focus on health and on people not wanting to eat artificial substances.

“We're getting a lot of interest from just the general public rather than just the alternative people in the past, it's much broader. I guess the participants in our workshops would be completely just your normal suburban people; a lot of people wanting to grow their own because it's organic and they can control what they're eating...creativity is actually a big part of gardening as well and growing your own stuff with that sense of achievement, which is quite hard to get in your work life now... you can go home and grow your tomatoes and eat your tomato, it's this cycle and a sense of control over your environment.” (all interview data 21 Sept 2017).



Figure 11: Northey Street City Farm site in Brisbane city. Photograph by author Sept 2017

Figure 12: Northey Street buildings - tree trunks and corrugated iron, nostalgic materials in Australia. Photograph by author Sept 2017

This recognition by the general public of the abundance and agency of growing their own vegetables had led to an increase in the visibility of permaculture within Brisbane at least. The permaculture courses run four times a year and take 15 students at a time and the interest was from an increasingly broad section of the public.

Northey Street is situated very close to the city hospital and on a flood plain. Brisbane had a flood in 1974 which devastated much of the city and since then there has been a lot of work on flood mitigation work. Over the years the city council has bought up and turned into parkland all the Creekside and riverside areas, which have become green corridors through the city. Northey Street leases its land from the council and the interface between the farm and the council functions as a permaculture edge, where a great deal of fruitful interactions take place.



**Figure 13: Community composting hub, Northey Street City Farm.
Photograph by author Sept 2017**

In the 1920s the small councils that made up the City amalgamated and because (unlike other Australian city councils which are made up of small local governments) of the ability to run citywide programmes and because of a relatively large budget it can afford to run a number of innovative initiatives. There is a community development section of the council, and they promote and protect community initiatives. There is a rigorous process of accessing council land for communities, but the council is also very supportive of what is approved. There are approximately 60 community gardens, for example.

“Yeah, I think they're pretty happy with us that we are providing a service to the city and increasing the diversity of what's on offer for residents...I think it's also seen as community building, increasing the social cohesion in the city, that's why the council's interested in it.”

One of the council's recent innovations is a community composting hub, where the council provides residents with a bucket for kitchen scraps which when filled can be brought to the Farm, where a weekly volunteer team maintains the composting. In a rapidly densifying area people no longer have much outside space and so the initiative is in part to keep food scraps out of landfill, but Northey Street get the compost as a yield as well. Another yield from the interface with the council is that every rate payer in the city can get two free native trees a year, using a voucher they receive with their rates notice. The council pays for the plants but Northey Street is the depot for the collection of the plants, thereby increasing the visibility of and interaction with Northey Street for the residents of the city.



Figure 14: Free native plants at Northey Street City Farm. Native plants are popular with the community. Photograph by author 2017

“...it's great because it brings just ordinary people here, who are coming to get their free trees and probably would never have come here otherwise, and then they normally look around and [say] "oh, here's a workshop I might

want to do”. It’s a great way to interface with the general public. Because our mission is to get out there and try and build a sustainable city.”

Northey Street is deliberately community-based and has been since its inception, trying to include as much community as possible.

This encompasses both the citywide community and the Northey Street community itself. They are a volunteer-driven Association with a number of long-term volunteers, including some of the founders, who twenty years later are still involved, with one looking after the trees and another the bees at the site.



Figure 15: Bee platform at Northey Street City Farm. Bees are seen as representative of a healthy natural ecosystem. Photograph by author Sept 2017

Another permaculture principle is to value diversity, and Northey Street merge diversity in their outputs with diversity in their stakeholder base. The material-based, growing part of the site runs in tandem with the social permaculture of catering for a wide spread of the community. There is a sense of freedom for people to come and spend time at the Farm, including a lot of rough sleepers, possibly because of the proximity to the city. The day before the interview one couple had been asked to move on because they were drinking and Northey Street is a ‘dry’ site – one example of the

balances of freedom which need even a light touch of monitoring to maintain for everyone.

“We try very hard to be as broad as we can; everybody's welcome and we have conflict resolution processes and codes of conduct so that we do have that base of acceptable behaviour. And if you flout that, well sorry you have to leave, and we are quite firm with that when it happens; once every three years or so someone will get drunk on site and abusive or whatever but that does then allow us to be quite comfortable in saying anybody can come, of all skills and abilities, we don't discriminate against people on any level...”

This approach has proven beneficial from the beginning and into the present where an initiative called 'Work For the Dole' sees people on benefits being required to work at the Farm (there has always been an unemployment related element to Northey Street). In terms of the affective state of people coming to the Farm, there can be a marked change in particular within this group:

“In terms of the Work For the Dole people, you see quite a lot of transformation there - people coming in quite aggressive because they're being forced to come...and then by the end of the program quite often they actually come back as volunteers, so they choose to keep going. It's six months...you can see quite a lot of transformation in particular individuals - not everyone obviously...”

It is not just the workers at the farm who are affected by its surroundings. As it is so close to the hospital people can make their way to the Farm to wander or read a book while waiting for an appointment; *“we do talk about it being a green oasis, and people do, actually quite often...come down here and get a bit of quiet green space.”* In addition the farmers' market and the café makes Northey Street a social hub. On Sundays when the market takes place often people are still there at two or three o'clock in the afternoon even though the markets finish at 11.

“...quite a few people in the community do see it as a meeting place... People come for breakfast at the cafe - definitely there's a group of people who come every week on Sundays, do their shopping, meet their friends. So it's like a social community in that sense...”

There were strong themes of community, nature and freedom emerging from the data, with a sense of abundance in the gardens (particularly in an area that had not seen rain for six weeks), from the links with the council providing free plants, and from seeing waste as a resource. Northey Street offers courses in beekeeping, bushcraft, and basketry among other things, and these seemed to add to the nostalgic aura around the site. However this was not the way it was seen at the Farm.

“I guess that depends how you're defining nostalgia. We're looking at skills for people who want to do things themselves as a self-reliance thing, and I don't think they're meant to be nostalgic, I think they're meant to be skills that people want...the more plastic and mass-produced the world becomes the more people want authentic and natural and handmade as a balance...I think it's teaching people skills that will be usable in the future...cheesemaking, making Brie and all this sort of stuff...”

It is true that the management structures and the science behind permaculture as it is used at the Farm are very forward-looking and progressive, and the whole enterprise is based around future-proofing as much of the community as possible. A focus on innovation seems to be one of the factors in the continuing success of Northey Street, and there are a number of experimental elements to the site, including documenting worm farm mixes and numbers and fostering a green roof experiment by Environmental Engineering Masters students who were trialling different soil mixes and different plant combinations to test which of the green roof solutions – most of which have originated in cold climates – would be best for local conditions; the students will write a guide for green roofs in the subtropics. The Association at the Farm strongly identified themselves as forward-looking and progressive and not with nostalgia at all. However in

one area there was agreement over a nostalgic appearance: their logo (see Stage 2 UK and Australia - Elements of nostalgia: logos and magazines).

“Certainly our logo which we’ll cling to I think to the end, and it’s the original one, it’s never changed, so that’s why it looks old school. Uncorporate is the word...it’s not all about money...”

It seemed possible that the aversion to the idea of nostalgia came from the way nostalgia itself was perceived. For many permaculturists, involved in trying to help people prepare for a future in which the systems which currently surround them do not function in the same way, the idea that permaculture is a backwards-looking, non-active or non-progressive is anathema. When asked if there was anything nostalgic about the Farm, the response was, *“No, not at all, I see it as very future-focused. And this is the way of the future...I don’t think we’re consciously looking backwards in the sense that we’re not trying to recreate some mythical past, not at all...”*

However, on further discussion on what nostalgia might mean, and more crucially might not mean in terms of not being able to cast forward into the future, there was more of an acceptance that permaculture might be seen as having a nostalgic aura by people.

“Yeah, maybe there is, there’s definitely an element of wanting to return to a simpler more pleasant cooperative friendly past...[as in] in the past it used to be better and then we had capitalism, consumerism I think you would call it, come in and now we want to go back to a non-consumer...definitely; I don’t know how conscious that is for many people. But when you hear the way they speak about things I think that’s what it is.”

There was a similar discussion about the invocation of traditional cultures and their philosophies in permaculture training. It was agreed that this was part of the “mythology” of permaculture – but for the Northey Street staff there was a mandate for permaculture to be progressive and to continue to observe and evaluate what worked, and traditional systems were not seen as nostalgic but rather as a set of principles which over time had been proven to work.



Figure 16: Jobs board in the orchard, Northey Street City Farm. A feel of a co-operative friendly community. Photograph by author Sept 2017



Figure 17: Orchard, Northey Street City Farm. Lack of a manicured, straight-line aesthetic leads to a feel of nature. Photograph by author Sept 2017

"I actually see it as more a science than an art in the sense that it is actually provable that this is a better way, creating an ecosystem that's working and producing some surplus that you can take just seems natural, applicable in any environment. And I'm sure that traditional cultures did that because

that's the way they lived... I lived in Central Europe and their traditional agricultural systems were very integrated...they still did a lot of things that would be classed as permaculture but it was just tradition."

There was a shared reference in the work of Lachlan McKenzie (see McKenzie and Lemos, 2008) in Timor, working with the original population who had been advised to use fertilisers and other techniques by the developed world. On engaging with permaculture principles and ideas the farmers recognised many of the techniques as things they had always previously done, and the stigma felt about being an undeveloped country was lessened by re-evaluating their traditional ways in the light of permaculture.

Another new trend that had been identified was that of people with young children wanting to visit Northey Street to teach them about contact with nature. This was acknowledged as something which referred to past memories of the parents being something they wanted to recreate for their children, having recognised it as missing from their children's lives.

"...often people will say things like oh, well, I was allowed to ride my bike around the neighbourhood when I was a kid and I see nowadays kids get driven everywhere, and so there's definitely this consciousness of children need[ing] to be given a bit more freedom and be allowed to get dirty and contact nature...people are thinking back to their own childhoods and thinking, well my kids are not getting that."

The Farm runs a popular school holiday programme called Earth Kids which is always full and has repeat attendees. However there is a genuine concern that very soon the last generation that was able to play outside with agency and freedom will be passing on. In terms of a relationship with nostalgia, and with nostalgia being a draw for permaculture, this was seen as a threat. If children are living completely electronic lives, the concern is that they will not even be nostalgic for the outdoor play, for the connection with nature, or for the agency to be outside without supervision for extended periods – the things their parents are identifying as nostalgic elements: *"this generation*

growing up that's completely disconnected from their environment, or their environment is air-conditioned and controlled, it's almost like some sort of dystopian future, already happening.”



Figure 18: Organic market gardens, Northey Street City Farm. A feeling of abundance. Photograph by author Sept 2017



Figure 19: Permaculture gardens, Northey Street City Farm. Photograph by author Sept 2017

The example was given of a facilitator who works with the playgroups, who makes a weekly clay fire and cooks popcorn for the children who attend,

“...because one mother came one time and the kid was just staring at the fire and he said, ‘oh, does [he] want to help make a fire?’ And she said ‘no, he’s never seen a fire.’ It was a three year old who had never seen a fire... they’re so disconnected from nature...when would they splash in water? Never.... not native dirty muddy water...”

Whether it was nostalgic to want children to play in nature or whether this was a basic need was a separate discussion: the elements of nostalgia within the permaculture design of Northey Street City Farm had emerged in a number of thematic areas including children, nature, abundance, community, agency, and freedom. The data indicated that these elements were drivers of nostalgia in permaculture in this design; further work would test and consolidate these data.

Stage 2 Australia interviews - FH: Fairharvest Farm

Fairharvest Farm, Margaret River, Western Australia. Margaret River was originally a dairy farming area in the earlier years of European settlement of the south west region of western Australia, and has also been extensively logged for the tall native hardwoods – some of which grow nowhere else in the world – which still provide the region with beautiful landscape views and experiences. Margaret River has, over the past two or three decades, become known as a viticulture region, and from counter-culture roots has become mainstream, catering to wealthy tourists and residents alike. Fairharvest Farm has followed the trajectory of the region in an interesting way. The farm is planted on permaculture principles but also arose from a very strong social justice history, background, and platform.

The owner’s parents bought 160 hectares of old dairy country in 1987. The researcher was given a tour of the section of this land which is now Fairharvest Farm. Before the farm in its current form, the owner moved to a corner of the farm where there were already sheds and farmhouses in 1995,

with an 'Intentional Community' started during the forest rescue campaign which was trying to save old growth Karri and Jarrah forests of the Pemberton region from being felled (for woodchip mainly).

Action took the form of forest blockades (which interestingly have just begun again, over the same issues) and the owner explained that the farm had become a bit like a safe house for the activists; people would take part in the activism and then come back to the farm. On the tour of the original site, the buildings and sheds, the owner explained that it was around the same time that she had completed her Permaculture Design Certificate, and all the activists were very much involved with planting and doing positive things towards the future; it was an amazing ten years of communal activity that was a real emotional draw. She stated,

“So you can imagine, you know, a group of people, passionate people... living communally...So it's got a bit of history to it...communal living went on for...about 10 years... there was always a group of anywhere between 12 and 24 of us here. We ate all of our meals together, we had regular meetings, we aspired towards land ownership of this corner so that we could build...everywhere that I look is a tree that somebody has planted and a memory...” (all interview data 26 Oct 2017)

She identified that, as difficult as it had been to keep a community going under difficult conditions, the skills and experience developed during that time, as well as the nostalgic memories of such a meaningful and passionate engagement with intentional community living and land regeneration which was underpinned by permaculture principles meant that the farm is a nostalgic place for her.

The data did not at this point provide evidence of the owner being drawn to permaculture by a nostalgic impulse. However, the notion of trying to save an area of old growth forest is related to a relationship to nature which can be seen as operating along the same lines as romanticism, which as seen in the questionnaire responses is aligned with nostalgia in some respondents' minds. From the correlation between nature activism and permaculture, and

following similar data from the Northey Street interview, nature as an element of nostalgia within permaculture continued to be established.



Figure 20: Trees planted at Fairharvest Farm; memories invoked of former times. Photograph by author Oct 2017



Figure 21: Rose arch planted by volunteers, Fairharvest Farm. Photograph by author Oct 2017

There are nostalgic aspects, not just in nature, for example as in the trees planted by remembered people, but in areas and objects which hold both individual and cultural memories. There is an old shearing shed – culturally

iconic in Australia, holding a nostalgia for a particular “bush” colonial narrative, and all around the farm are buildings which also hold memories, which are being repurposed specifically at times because of this nostalgia.



Figure 22: Old shearing sheds. Vernacular architecture invoking colonial nostalgia, Fairharvest farm. Photograph by author Oct 2017

There is a gypsy-style caravan, a small log building, and other buildings with ‘hand-made’, rustic, and ‘natural’ not just as descriptors of their style but as pointers to an aura of the sort of do-it-yourself cultural nostalgia for “the bush”. The element of self-sufficiency which is nostalgically reflected here is one of agency, of choosing to live simply and create a life out of what is available, using skill and ingenuity, and of being unhindered in doing so.

The buildings were not the only built elements on the farm which inspired nostalgia, as the owner noted.

“This table here... that was a communal eating space... and honestly it’s had hundreds if not thousands of cups of coffee had round it, and glasses of wine had round it and...we wanted it to remain the communal table, so we brought it out here to this communal space.”



Figure 23: Communal table. Scene of many communal meals, drinks, and conversations, Fairharvest Farm. Photograph by author Oct 2017

As part of the interview the owner was asked specifically whether she thought there was any link between permaculture and nostalgia. She replied that nostalgia at Fairharvest Farm had two different meanings to her; firstly the nostalgia of her own memories, people who planted particular trees and the history of the activist past and her own early days, her ideals and goals, and secondly she noted:

“...there’s nostalgia for a way of life that’s been lost in general, which I think permaculture is very connected to with...very much saying, let’s keep those skills that could be needed in the event of the decline of oil...”

Fairharvest Farm holds a festival every year, each year named a different thing, with the festival in the year of the interview being called the Festival of No Waste. The owner wryly noted that it was probably unnecessary to call the festival a different thing each year since they were all essentially about the kinds of skills that have been forgotten but that people come to the festival to learn and to share; a ‘Festival of How To Do Things’.



Figure 24: Cob seating area. Vernacular material, democratised building skill, communal area, natural setting, Fairharvest Farm. Photograph by author Oct 2017

She noted that “...people... love it, they love bringing their children, they love showing them this is how you do this...this is what my grandfather did...”, echoing the data from Northey Street indicating that an important element of nostalgia had to do with the desire of people for their children to experience aspects of their own childhood.

The owner also indicated that while there was a lot of aspects of permaculture in which high levels of technology had been developed for use, and which were of great value, there existed another aspect of permaculture, which she specifically identified as nostalgic, not just for her but for people who came to the farm.

“I know that there’s that aspect of permaculture that is looking back at...that lifestyle that has been lost, and community and all those sorts of things that I think that there could be nostalgia around...a lot of times when people come here to the café and they say “Ahhh! This is like Margaret River used to be!” and I know that that’s picking up on...people living a low key, growing their food, their kind of community, and that’s nostalgia I think.”

This data indicated that the elements of permaculture which were subject to a nostalgic affective response at Fairharvest Farm were nature and abundance ('low key, growing their food') and community.



Figure 25: Composting toilet, invoking a sense of DIY, back-to-nature, and past ways of doing things, Fairharvest Farm. Photograph by author Oct 2017

Moreover, this interview provided an indication that experienced permaculture designers could see a connection between permaculture as a process and nostalgia as an affective element in bringing people to an openness in engaging with it. The many years of development of social permaculture skills and the concomitant engagement with emotional and affective states will have contributed to this ability to engage with elements not normally taught on courses but which, with experience, have become apparent as elements of permaculture design.

Stage 2 Australia Interviews - CL: Candlelight Farm

Candlelight Farm is in the Mundaring Hills, about 30km east of Perth in Western Australia. The drive there leaves the flat coastal plain of Perth behind and climbs into forested red gravel and dirt soil with iconic eucalypt and spinifex, cockatoos and kangaroos common sights. Houses sit on much larger packages of land here – although still reasonably close to Perth, this

is more of a country than a suburban lifestyle area. Ross Mars (B.App.Sc. (Chem), Dip Ed., B.App.Sc. (Biol, Hons), PhD (Env Sc) and holder of the first Diploma in Permaculture issued in Western Australia) is the permaculture designer and teacher behind Candlelight Farm. He specialises in water systems and identifies as a scientist. He has a science background and approaches permaculture as a science, as a cultivated ecology, a scientific design approach. As a permaculture designer he has a business focused on water – grey water systems and rain water defence systems, whole house waste water systems, rainwater tanks and waterwise irrigation systems which help people use less water; he has become a specialist in these areas.

Mars stated that the ‘hippie’ reputation in Australia surrounding permaculture in its beginnings in the 1970s, for himself growing up at a later time and as a ‘mod’ was never part of the attraction. However he agreed that there may be a nostalgia for this amongst an earlier generation or indeed a younger one. Mars did not identify with nostalgia as a driver for himself, although he was more accepting of nostalgia as an attractor for others, and allowed that it was part of the “Australian dream” to have some land, which he did not particularly see as being a nostalgic impulse to get ‘back to the land’ but rather to live *“the permaculture lifestyle, and growing their own food and doing their own thing”, which is not so much aligned with a desire for community but rather its opposite, a desire for a freedom from interference and an agency to create a self-sufficient lifestyle*” (all interview data 31 Oct 2017).

Mars had seen many examples of this “coming unstuck” because people did not anticipate how much work – time, effort, and money – it takes to set up a property, building and making, buying plants, setting up irrigation and other systems. He stated that he thought they had good intentions, but that it becomes overwhelming, and things do not get completed or done properly. He thought that this happens because people did not have enough background understanding or experience of how things work and that despite the dream of self-sufficiency, people needed support from other

people in order to help them reach their potential. Mars had also had experience with attempting to set up intentional land-based communities (as did the owner of Fairharvest Farm), but did not have the same emotional connection to that time of his life. It is worth noting in this regard that the current Candlelight Farm is not the original one – the original Candlelight was designed and is still running, but in another location; Mars moved the name with his business to the new site from which he was interviewed. The new Candlelight Farm continues to be developed and used as a site for teaching activities as well as other livelihood elements, such as Mars' water consultancy and a plant nursery.

Mars has found that his success in permaculture is due to his capabilities as a scientist and having already been a high school science teacher he not only had the skills and understanding of permaculture but also of teaching and of the teaching system, so that he has been instrumental in setting up interfaces (or edges in permaculture terms) between the governmental teaching structures and permaculture teaching. He is the sole provider in Western Australia of accredited training, meaning accredited by the government and accepted by industry in that capacity, via a training organisation run through a national training package at TAFE (Technical and Further Education) in Australia.

In this way Mars' training provision provides an interface between permaculture and the government and cultural infrastructure which is an important part of giving permaculture the visibility and credibility which would increase its wider uptake. It is the same mechanism by which Northey Street City Farm's interface with the city in part via the local city government has led to greater interaction within the wider population. Northey Street City Farm's success and visibility in the mainstream was in part due to the status granted to them by their association with government.

The idea of piggybacking recognition through existing structures, particularly those which granted legitimacy in the form of already existing frameworks of certification and therefore provided a quality assurance system for potential

employers, was a difference between the UK and Australia. In the UK there are links between permaculture and education, for example, but the visibility of permaculture in Australia – not just through structures like awarding bodies but also through popular media, such as prime time gardening programmes, gives it a less ‘alternative’ image. Mars talked about what was being achieved with connections between local and regional government and groups of local people, such as securing community land. He noted that permaculture had never been integrated through government but had always been a grassroots organisation, and changed through people connecting with each other, but that this opportunity to be accredited as a designer would potentially open up job opportunities in the future by having the legitimisation of government certification. He saw this as a future direction which he was pursuing: he had developed the units and assessment tools for a course – a Certificate II in Permaculture - which was the first to be taught in an Australian mainstream secondary school.

‘Edge’ is the 11th permaculture principle – “Use edges and value the marginal”. The place where two ecosystems meet is the most rich and diverse in terms of the species living there than either habitat would be on its own. If edges are the most productive place, permaculture design encourages their inclusion in design. In social systems, the meeting place between parts of a system are often the most valuable and productive elements in the system. This is different from merely seeing the interface with mainstream society as being a way to introduce people to permaculture or to “sell” permaculture to the mainstream. Mars is developing the courses, not for people who want to “escape” the mainstream, but with an eye for course graduates to align with the mainstream system and work within it.

Despite not relating to the idea of nostalgia as a driver for himself, Mars acknowledged that his interest in permaculture was probably piqued by visits to his relatives’ and friends’ farms and more rural ways of living as a boy.

“(I)...have memories of my grandfather’s block...of having lots of veggies and fruit trees...when I was a kid we had a third of an acre...and we had

veggies and chooks and stuff...I had a friend who had a farm too and I'd go up there in the school holidays and help with the farm...and help with the shearing, so I had all those experiences..."

There may have been an issue with terminology which meant what many people would class as a nostalgic relationship with farming and a self-sufficient way of life, Mars classed as simply memories. He related that his early experiences and skills, his upbringing and background, were part of a progression leading to his desire to *"then get out of suburbia and come up in the hills and this different lifestyle..."*, which he agreed was triggered by permaculture. He contrasted this with younger people who did not have the same background:

"...who are jumping in fresh and don't really see permaculture as being that nostalgic thing...but – of course when they...understand what it's about and learn about rural properties and animals for rural properties then they can have that vision of doing that themselves ...it's everybody's Australian dream to have their little bit of block of land and own it and grow what they want to grow..."

From the point of view of the literature on nostalgia, Mars was making a distinction between personal and legislated nostalgia (Coupland [1991] defines legislated nostalgia as "To force a body of people to have memories they do not actually possess: 'How can I be part of the 1960s generation when I don't even remember any of it?"). This combination of, or perhaps tension between, personal and legislated nostalgia had appeared in all of the interviews so far, and was a suggestion that for some people nostalgia was operating unconsciously or in ways which were not consciously identified. For B in the UK, this was a dangerous tendency; for Goldring it was a generative element. For Northey Street City Farm it provided an attractor for people who identified the elements they saw in the legislated nostalgia surrounding a closeness with nature, a way of living only recently lost or superseded (in living memory) – in particular one lost to their children. At Fairharvest Farm a combination of personal and legislated nostalgia, both on

the part of those running the farm and on the part of the visitors to it, was identified as a strong affective draw.

Although Mars did not largely agree that nostalgia played a part in attracting younger people to permaculture, he was mainly considering the lack of personal experience, and therefore nostalgia, in experiences which would make people feel a connection. The legislated nostalgia in Australia for ‘the bush’, which is not just the term for a kind of landscape but also an emotional metaphor or placeholder for a colonial practicality, the ‘thousand yard stare’ of a culture which sees itself as having (and needing) the ability to survive and thrive in isolation, is part of a fierce national pride. This affection for, and pride in, a colonial past is strangely not connected to the part of the past which was so destructive to indigenous culture, and in fact there appears to be a re-working of this national legislated nostalgia to include a co-opted pride in this indigenous culture. Northey Street City Farm’s nursery sold ‘bush tucker’ plants (‘tucker’ is an old Australian word for food; these plants are what would have been eaten by the Aboriginal peoples), and one of Candlelight Farm’s successful ecology of livelihoods was its nursery, Red Planet Plants, in which indigenous medicinal plants were grown and sold. It does appear that non-indigenous Australians using or growing indigenous food or medicine are participating in a cultural, legislated nostalgia. Although again this is not a conscious strategy or attractor, it does share nostalgia’s non-critical affection for a version of the past.

Key points:

- The Australian interviews with expert designers well-versed and experienced in permaculture design ideation and in the responses of wider publics to permaculture showed a range of responses which, despite personal interpretations of permaculture as scientifically rigorous and prevaillingly forward-looking, each in some way provided data which positively supported **RQ1**:that nostalgia draws people towards the concept, use, or experience of permaculture.

- In addition, in examining **RQ2**, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?” it could be interpreted that elements of the professional permaculture designs – from community composting to skills festivals to indigenous food growing – comprised elements of design ideation which had some nostalgic element.

Stage 2 UK Interviews

In the UK, a recognition through the questionnaire and the previous interviews that engagement with nostalgia was less intentional than subconscious (but not absent), led to a set of further interviews. The Australian interviews had provided data showing that nostalgia in permaculture there was related to six different areas (children, nature, abundance, community, agency, and freedom). The aim of the UK Stage Two interviews was to explore whether nostalgia had similar roots in each country, and in what ways these subconscious impulses could best be examined.

Stage 2 UK Interviews: SG

SG is a practising psychologist and participant in the Permaculture Design Course. As a psychologist he works often with addiction and other mental health problems. He has been instrumental in setting up nature- or gardening-based initiatives for addiction rehabilitation support, which have had positive results (Outdoors, Active and Well, an outdoors and environment project for members of local communities including people with mental health or substance abuse issues and ex-offenders). It was judged likely he would have had a wider view of and insight into the human predisposition to nostalgia.

When asked whether he related any feeling of nostalgia to permaculture, his response was that he had not, until he was introduced to this research project. However, on further consideration, he identified his initial attraction

to something he stated he would probably never experience, a kind of homestead self-sufficiency experience, but he further identified that the attraction of that experience was related to a desire for security, a feeling that that kind of fantasy experience would provide security.

SG identified this sense of feeling secure and self-sufficient as being aligned to a parental feeling of love, leading a child to feel secure and sufficient:

“...the parent, if you're lucky enough, would be someone who looks after your every need...what attracts me to permaculture and the essence behind it, it was like holding on to some sense of control for myself...where I can feel self-sufficient and secure and safe.” (all interview data 27 July 2018)

When asked how permaculture provides this affective state, SG spoke about growing up in the countryside where there was a farming landscape which existed before the more common present monoculture system, one in which there was a sense of wildness, different from the current large expanses of open space, an unmanaged rawness which he described as “wild farming”.

“I don't know what that means!...But that's kind of what it means, a kind of wild garden. I think that's what I meant when I said before like it's a fantasy of something I've never known and never experienced.”

SG mentioned genetic memory (which is beyond the scope of this research) as a way of exploring this nostalgia for something that he had not personally experienced, for the loss he felt for something he had not have nor was likely to have. In practice the concepts of genetic memory and legislated nostalgia lead to the same affective state, which is the focus on a sense of wistful loss for something more culturally than personally experienced.

In addition to his sense of a managed, productive landscape (such as those found in successful permaculture designs) functioning as something which appears as a psychological nostalgia for a safe childhood state, SG also discussed specifically the sense of connection which he identified as an

attractor to permaculture. However, he not only identified community as an attractor, but mentioned its potential drawbacks as well.

“In a way because it's bringing people together it's a kind of process of remembrance, but at the same time there, there's deep social exclusion if you were to move against it. Ah - there's a Shadow self to nostalgia, that's interesting... [laughing] I'm thinking of the first day, before we even went...”

SG referred to the first meeting of the PDC group where the instruction was to bring food to share. He spoke of being very conscious of what to bring, to be as inclusive as possible, and choosing vegan products on that basis, and on finding out there were no vegans on the course, feeling a little less pressured. SG identified the pressure as centring on curating how one wants to be seen, as resonating within a certain culture (ethical, ecological)

“...there can be like a sense of guilt and a sense of shame and a sense of... conformity to the culture. If you're not gonna conform to this culture then there is the potential risk of exclusion. I remember thinking before, am I going to be enough?... have I got these values deep enough within me?”

This potentially exclusive (risking exclusion or rejection) aspect of permaculture is what B referred to in his interview as a potential drawback, the possibility of not having beliefs or views in common with people who were drawn to permaculture by what he calls patterns of appeals to history which mask or interfere with looking critically at history or society. If the view of permaculture is that it is composed of people like this, then other people like B are likely to feel that permaculture is indeed “...nothing to do with me...” when in fact there is a spread of reasons for people to be interested in permaculture, as well as a spread across socio-economic and cultural groups, as AG pointed out in his interview. (SG, in his later interview, identified this fear: *“Am I gonna have to hide parts of myself that are really not too environmentally conscious?... not being green enough, not being left wing enough...”*)

Stage 2 UK Interviews: KB

Data from the Candlelight Farm interview concerning the roots of interest in permaculture – both Mars’ own and those of the people he taught – originating in childhood, and the awareness of both Northey Street City and Fairharvest farms of the reasons people visited the permaculture sites, particularly those which concerned children, indicated a strong relationship between an attraction to permaculture and the desire to provide a particular experience or set of experiences for children. KB was a participant in the 2016 Leeds Permaculture Design Course who brought her child to the course and took great pleasure in the experiences provided of getting muddy, exploring, experiencing fire and planting and being outdoors. She was asked initially what attracted her to permaculture:

“Permaculture is... being outside, it's nature...it's that relationship with the Earth, with your environment...thinking about my childhood and A's (K's child) childhood now...” (all interview data 27 July 2018)

KB went on to explain a visit that the family had gone on a little time before, to a big country park which was where she had spent a lot of time in as a child. She remembered that

“...we used to go out on our bikes, cycle four miles there, spend all day in the lido, cycle back again. No mobile phones, no nothing and that would be the norm for our summer holidays; we'd go and do that at least once a week maybe.”

She said that going there again evoked memories of climbing trees and playing in woods, all kinds of sensory inputs (particularly smells), and she said it was very reminiscent and made her feel quite nostalgic about her childhood. She contrasted that with her child’s usual play, which she felt was very much about indoor play and electronic gadgets. It was clear that she felt A’s childhood was (at least in danger of) missing important elements from her own memory of, and nostalgia for, childhood. On the idea of nostalgia as an affective state having to do with a sense of loss, and on permaculture

being a way to reinstate something of that, she agreed. Recalling her child's experience of doing the permaculture course in 2016, she said:

“...he didn't miss being on his laptop or whatever while we were there...I think it was that kind of connection for him really and it gave him a buzz, and even now he has probably more of an interest than most kids of his age in gardens and...growing things...he loves all that kind of stuff, making fires and being outdoors...”

The drivers of freedom, agency, and nature were all articulated in these experiences and desires. When asked what drew her to permaculture, KB noted her experience working for an environmental organisation which worked with community groups. She had had previous experience at university where she had taken a module which involved being outside, taking field trips, and working in the community. In her work with the environmental organisation afterwards she worked with tree planting, hedge laying, dry stone walling, playing environmental games with Scout groups and making bat and bird boxes with students with learning difficulties and she stated, *“I was so happy, that was that was one of the happiest times of my life, it was one of my most favourite jobs...just made me feel good, getting dirty and doing good for other people and just being outside.”*

KB had identified that there was a relationship with nostalgia in getting outdoors in natural settings that reminded her of several periods in her past (including her childhood) where she had been happiest, and a related sense of freedom and autonomy, and later a sense of community - not just being part of one but having the agency to bring community together. The combination of helping others (community) and being outside working (nature) was the intersection where she had been happiest, and she saw permaculture as a way to provide that experience for her children. These identifications fitted into the previous data. Her interest in permaculture design was focused on providing experiences for her children, and for creating designs where the big age gap between her children could be bridged and balanced.

“...I've been looking at things like mud kitchens and construction areas ... Just things that they can both do, so setting some space aside where they can have mud and diggers and things like that and I think that will give A the permission to play...he can still get that enjoyment out of it.”

Again a connection with the previous data was the sense of the “Edenic” narrative of being a child in nature and of wanting to create, or recreate this, for contemporary children. Seeing it as an Edenic narrative is correct both in it being an innocent, holistic, secure sense of place, and similarly one connected with a sense of loss.

At this point the data began to point to nostalgia being personal or cultural (or both), but often appearing in permaculture as an attempt to provide for others – particularly children - what nostalgic memories identify as missing. Strands of agency, freedom, children, nature, abundance, and community had arisen as elements of nostalgia. Permaculture was considered as holding the potential of possibilities for revisiting these affective states.

Stage 2 UK Interviews: CM

Material permaculture designs (gardens and farms, for example) are one part of permaculture design, and another is social design (to complete a Permaculture Diploma the student must have examples of both in their portfolio). The Northey Street City and Fairharvest farms interviews provided data on the social side of permaculture, and the effects that activities, interventions, and participatory strategies had on groups of participants. CM is an artist and participant in the 2016 Leeds Permaculture Design Course who has worked permaculture principles into participatory art works with communities in Hull, and who participated in an interview concerning this aspect of permaculture design.

On her personal response to nostalgia in permaculture, CM identified that to her it felt like a reinvention or return to patterns and traditions that had worked well prior to the pesticide injections of the 1950s, for example. Her attraction to permaculture combined a personal response to nature with a

(legislated) nostalgia for a time in which knowledge and understanding of patterns in nature – water usage, the movement of the sun, seasons, microclimates – which she identified as systems thinking, were widespread. Not only that, but the ability to design with that knowledge she saw as being at an expert rather than a novice level. In other words, she saw permaculture as giving her access to a set of tools and a way of thinking which approximated a skillset of working with nature, which existed in previous generations but was now largely missing.

“I'm attracted to permaculture because there's lots of prompts about it, that help me pull things together... maybe it wouldn't have been a thought thing, it would just have been a done thing... So you put the cabbages there because they're next to something else that attracts the cabbages, right? And so that's what you just do. You don't think about it, you just do that... I imagined that patterns of living they're... more closely connected to the land... best practice... and it's all trickle down.” (all interview data 9 Aug 2018)

Elements in permaculture do not refer to chemical elements in the soil, for example, but to anything which is placed in a permaculture design (Mars, 2007), such as a pond, or herb bed, or chickens. Elements are positioned in a permaculture design in order to fulfil as many different uses as possible at the same time: for example, if you grow gotu kola for arthritis treatment in a small pond, you would situate the pond close to the house (the region called Zone 1) as you visit it every day. If you use bedding for chickens or ducks you might place the compost heap close to their pen, to avoid having to move the used bedding very far. In a permaculture design these elements are assessed by novice designers according to sets of design principles, but an expert designer would have amassed such a wealth of experience they would not have to assemble all the principles consciously – their method would appear more as a heuristic approach to designing. CM's nostalgia appeared centred on a lost way of life in which this systems thinking design was much more embedded in everyday life and practice. This aligned with the areas of abundance and agency, in that these practices had a history of

working with local conditions to produce abundance without having to spend long periods of time consciously designing them.

CM talked about both personal nostalgia as it related to gardens and also stately homes, where reproductions of past versions of connected domesticity exerted an affective draw to a past where people lived and worked in community, trying to unpick where the nostalgia appeared in these places. For her there was something about the ability to complete material tasks without the aid of too much machinery that lent a feeling of agency to these places, added to the possibility that there may have been some authority related to skill “below stairs”, where the housekeeper, for example, may have had some power, *“Which is then saying something about power...identifying with wanting the power...I think that's part of it, that repairing and restoration of learning...”*

She also considered the cultural nostalgia appearing in those participating in her art interventions, particularly with regard to the materiality of the nostalgia. Her art project was based in a community near to the city centre of Hull over 2016-17 and was concerned with making some kind of environmental interaction or intervention in a creative way. A fellow artist had finished using some straw bales in an exhibition and CM recycled them by placing them on the streets of the estate like a pair of sofas, along with some pallets on which stood items such as old typewriters. The intention was to invite the residents to participate in some way, by conversations or play – for example, sitting on the straw bales, or using the typewriter.

She identified that, although the impetus for using the straw bales hadn't been nostalgic on her part (more to do with recycling materials), they were an unexpected object of nostalgia for the people on the estate. Younger people did not know what they were, she said, but they became a connecting point for people who would normally walk by. People were curious;

“...and then I think in addition it evoked all sorts of stories in there, so then they'd share, "Oh I haven't seen those since I was a child", and "I remember

when I used to go to my grandpa's farm", and "I brought... the straw and the hay, bringing in the animals" and you get these sort of stories."

CM wondered about the tactile nature of the straw, which would have evoked a different quality when sitting on the bales than would sitting on wood, or brick, and thought that perhaps that warmth and tactile element would also evoke stories, *"so I think it probably was on lots of different levels, actually, that people would sit and share stories..."* It is possible that the more 'natural' or perhaps less permanent nature of the straw bales evoked nostalgic responses, but this would be more difficult to assess – perhaps something for further study.

Alongside a nostalgia for nature, there were other nostalgias evoked by the typewriter, which also provided stories. Younger people did not know what the typewriter did, while one particular generation responded with, *"oh I learned to type on this, I used to use it for work..."*, while yet another response was to respond as a community to the material object.

"...there were some ladies that I got to know through a ladies' group, and they were quite sort of shy really of getting involved in anything. But with the typewriter, they chivvied each other on, of, "go on, type something..."

Nostalgia was therefore an aid to community participation in the art work and activity led by CM in this example, with the sharing of stories and the engagement with activities at times initiated by nostalgic responses. As a permaculture designer CM's art works are influenced by and aligned with permaculture principles for social design, and therefore the data supports the use of nostalgic elements leading to a sense of community.

Key points:

- The three participants who were interviewed later who were also participants in the 2016 Permaculture Design Course – SG, KB, and CM - had previously completed the questionnaire, so the idea of nostalgia in permaculture was no longer new to them. It was therefore

an opportunity to begin to see if the data supported the suggestion that more time between the initial questionnaire and the interview (a year/13 months), so that participants could have the opportunity of more depth of thinking on the role of nostalgia in permaculture, would lead to new insights.

- Two of the participants, SG and CM, found that they had considered nostalgia in permaculture in more depth since the questionnaire, and one, KB, did not.
- Each of these participants also provided data which positively supported **RQ1**: that nostalgia draws people towards the concept, use, or experience of permaculture.
- In CM's case, in the use of straw bales there may have been an unconscious affirmative answer to **RQ2**, "What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?"

Stage 2: UK and Australia - Comparative analysis

AG's interview established that permaculture manifested differently in different countries and cultures, and therefore it was foreseeable that nostalgia in permaculture would appear different in different places. To begin to plot areas where nostalgia might reside within permaculture, as well as to be able to ultimately utilise this awareness, it was necessary to examine how it manifests within different settings. A comparative analysis based on examination of the manifestations of nostalgia as they applied to permaculture in the two countries where this project's data was collected – the United Kingdom and Australia – provided a triangulation of the interview data and the review of literature.

A visual interpretation of logo designs and cultural appearances of permaculture in magazines was assessed. Along with these data readings, visits to individual permaculture sites across the two continents as well as observations of towns or areas close to well-known and established areas of

permaculture activity made up a secondary level of comparative analysis. The primary observations of sites are reflections of the researcher's focused attention, supplemented by verifiable activities in the sites or areas. Although neither causation nor correlation could be proved by this method, nevertheless the analysis of influences provides another layer of data.

Stage 2 UK and Australia - Elements of nostalgia: logos and magazines

An examination of the logos of the permaculture sites where interviews took place in Australia reveal a connecting style of the 'handmade' in terms of the fonts and the composition of the signs themselves. Atkinson (2006, p1) suggests that the handmade in designs becomes popular because it represents a more "individual aesthetic unbound by the structure of mass production and passive consumption." Hosey (2012, n.p), in contrast, states that "unfortunately, the most familiar attempts to bring style to sustainability have become aesthetic clichés. Hemp shirts, rattan furniture, unbleached paper, wood-pulp walls...all these suggest that "earth friendly" should look earthy." The appeal of the handmade aesthetic mirrors, in this way, the appeal of permaculture itself, in its referencing of a slowing down, a turning away from mass production and consumption, and is in this way a stylistic representation of both the appealing and the off-putting elements.

The Northey Street City Farm logo (Figure 26) carries a clearly hand-drawn aesthetic both in the black line work of the images of fruits, flowers, native and food plants, but also in the font for the name. Reconciliation (between indigenous and other populations of Australia) and inclusion also feature in the art work. There are no straight lines but rather the spaces are delineated by the black line work on the images. It has a 'retro' feel; the dot work around the hands and making an outline of the sun (or moon) in the background, the colour orange, particularly prevalent in design and art work in the 1970s, and the inclusion of a butterfly also reference a counter-cultural past. It encapsulates a specific counter-cultural, anti-mass consumerist and community-based, abundant, nature-focused nostalgia, for times in the past when there seemed to be more individual freedom.

The country boot in the Fairharvest logo (Figure 27) is a recognisable symbol of a 'close to the land' attitude. These boots (when not a fashion trend) have been worn by drovers, farmers, shearers, and people involved in other occupations and pursuits on the land in Australia. This is a more contemporary feeling logo, with its use of white space and focus on the font of the brand name, but it still foregrounds the inclusion of nature and natural forms, as well as hinting at the idea, in the leaves around the boot, of a harvest or alternatively of not seeing anything as waste, and of enjoying and utilising all stages of natural cycles.

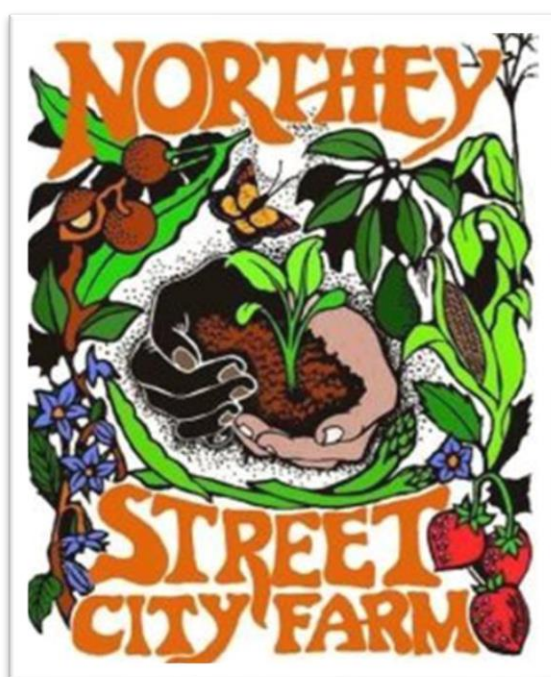


Figure 26: Northey Street City Farm logo

Again the font is recognisably hand-drawn and represents a craft ethic. The colour choices of the particular blues and greens are contemporary and on trend but also reference the surroundings of the farm, in a heavily forested coastal area, famous for surfing, wineries, and a particular kind of 'bush experience' which values good food, wine, design, and also nature. The word 'fair' is foregrounded in this logo – the concept of fairness is itself a cultural touchpoint in Australia: whether true or not, it is seen, and sees itself, as a land which offers opportunity regardless of background. The 'fair' part of the logo therefore bridges the nostalgia and the image of Australia as

a progressive nation. The success of Fairharvest Farm mirrors the elements of its logo – it offers camping and glamping, yoga sessions and retreats, and other mainstream (if ecologically-referencing) activities alongside its permaculture training.



Figure 27: Fairharvest logo

One of the permaculture principles is diversity, and most permaculture businesses are made up of several business elements working in synergy. However as Fairharvest Farm continues to become better known, including to those outside the permaculture movement, it is notable that its logo and branding, while referencing nature, also references a more aspirational 'good life'.

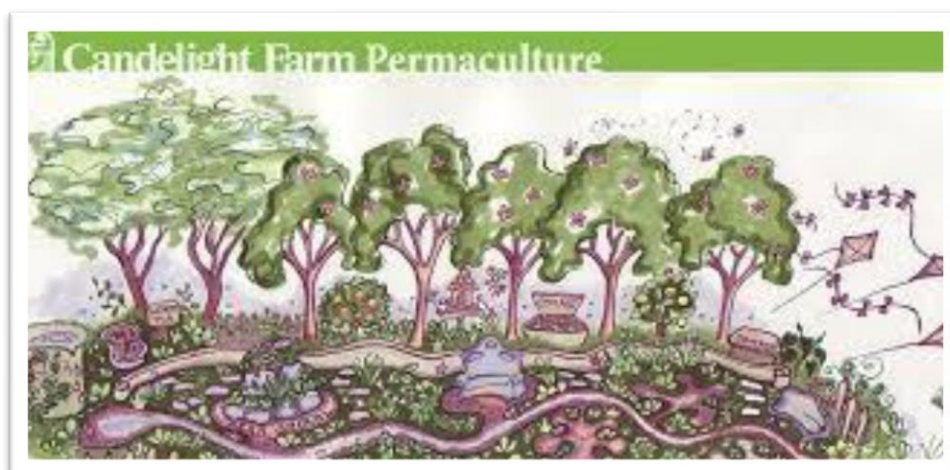


Figure 28: Candlelight Farm logo. Hand drawn, curved patterns

Candlelight Farm's logo (Figure 28) reflects the hand-drawn, do-it-yourself ethos to the point of non-replicability. There are no straight lines and the elements within the image all reflect elements within permaculture, to the extent of being labelled ('worm farm', 'compost', 'herb spiral'). The image reflects a verdant and productive landscape with wildlife, water, and wind all catered for. It does not appear to have been created for the purposes of branding. It is interesting that some of the diversification elements of Candlelight Farm's owner's business include a water consultancy, Water Installations, and a nursery, Red Planet Plants, whose logos (Figure 29) look very different:



Figure 29: Candlelight Farm's diversification business logos

It is clear from the differences in the styles of logos that Candlelight Farm's logo intentionally references the hand drawn, busy, colourful, non-linear style in order to reflect a particular ethos, and to attract those who are drawn to this ethos, in contrast to the business-facing branding of the other business elements.

The logos for each of the participants interviewed, when read as artefacts, had a nostalgic element, from the slightly "bubble"-type font in the Northey Street logo, reminiscent of the 1970s, to the use of the culturally nostalgic iconic Australian work boot in the Fairharvest Farm logo, to the "hand drawn" appeal to craft and materials of the Candlelight Farm logo. These are all in

addition to the lush vegetation present in each logo image, which is already an appeal to an Edenic narrative of verdant unspoiled nature. Each logo specifically referenced the nostalgic elements of nature and abundance, with Northey Street's logo also referencing community, Fairharvest's agency (the work boot), and Candlelight's freedom in its DIY execution.

Another area in which the interface between permaculture and the wider society is mediated by design elements which can use nostalgia as a component is in magazines, specifically covers. In Australia permaculture is published regularly within other magazines which cover, for example, organic growing. Mention of permaculture in UK magazines outside of the dedicated Permaculture magazine is extremely rare. In Australia it is possible to find more than one style of magazine covering permaculture, and the covers of these magazines compared to evaluate the presence of nostalgia in the branding.

There were broadly two types of design of magazines, one of which, shown in the image of the magazine Grass Roots (Number 243, Oct/Nov 2017), conformed to the hand-made ethos of the logos— both the cover and the interior were do-it-yourself in style. The magazine interior is black and white on low-grade paper, and the editorial at the beginning is entitled 'Gumnut Gossip', a nostalgic echo of colonial, country ways of speaking. The edition (Figure 30) has an orange and yellow colour theme, reminiscent of popular 1970s schemes, though the colour of the banner changes for each edition. Grass Roots magazine was founded in 1973 and covers subjects such as self-reliance, gardening, Eco living, DIY, craft, and cooking, and includes a kids' page and a large letters section. The magazine retails for AUD\$7.50.

Earth Garden magazine, titled 'Australia's quarterly journal for simple living', was founded in 1972 and retails for AUD\$11.95 (Figure 30's image is of Number 181, Sept-Nov 2017). The content of the magazine is extremely similar to that of Grass roots, but the look is much more contemporary, inside and out. Thicker paper, colour pages, and much more white space and images – a designed layout rather than the DIY style of Grass Roots - mean that Earth Garden is aimed at a more modern audience.

Hooker (2014) suggests that, despite the cleaner lines and space in contemporary magazine design, the refreshed look, textural photography, and the name specifically referring to the environment of a magazine refresh like this is meant to appeal to new audiences of predominantly young working adults. The content of the two magazines is similar, but the rebranded appeal of Earth Garden, while still nostalgic (the article titles inside the magazine each have a different and hand-made-looking title fonts), is meant to appeal to a younger, wider audience, whose nostalgia is more cultural than personal.



Figure 30: Australian eco-magazines, Sept-Nov 2017

This approach is mirrored in the redesign of Permaculture magazine, an international magazine produced in the UK. The rebranding extends to the slogan of permaculture itself – the ‘fair share’ element of ‘Earth Care, People Care, Fair Share’ has, over the past few years, been altered by various groups who attempt to highlight a different aspect. Permaculture magazine styles the slogan ‘Earth Care, People care, Future Care’, which will appeal to the new wave of ecological consciousness particularly concerned with what the future will hold if current practices persist.

The cover in Figure 31 shows the redevelopment of the Hampton Court Palace walled gardens into a no-dig productive food-growing space (no-dig and mulch is part of the permaculture growing strategy, though these walled gardens are not permaculture as such). The parallel of the modern approach to gardening in a historical recreation – part of the heritage industry inescapably tied with nostalgia – to the contemporary redesign of an approach (permaculture) subject to nostalgias is fitting.

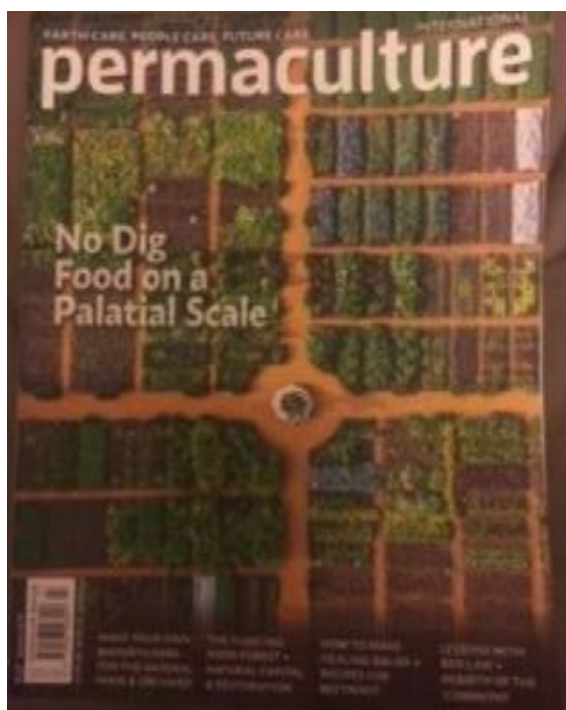


Figure 31: Permaculture Magazine (UK), Autumn 2018

With Australia being the birthplace of permaculture it has been through several generations and iterations of perception – as Mars of Candlelight Farm and others pointed out, early perceptions of permaculture tended to be about straw mulch and messy gardens, but new interest in permaculture provided an opportunity to present a different character. During the research visit it was noticeable how mainstream gardening programmes, for example, provided regular segments on permaculture, an occurrence that was not common in the UK (though it has been interesting to note during the course of this project between 2016 and 2019 a growing mainstream coverage on the same sort of gardening programmes in the UK). In some ways the

visibility confers some relevance to what might otherwise be seen as a counter-cultural activity. Within these programmes permaculture is presented as a contemporary approach rather than one rooted in the past. The nostalgia within perceptions of permaculture does not reside within the treatment of permaculture in the main but rather in the elements within permaculture which are subject to nostalgia, and which work alone or in tandem to give permaculture a nostalgic aura.

Stage 2 UK and Australia: Elements of nostalgia - permaculture sites and areas

Permaculture is very much a 'situated' practice, and one which emphasises taking time. Where permaculture sites and communities have been situated, the interaction with the wider community could influence the mainstream culture. For example, it was interesting to note landscaping like that along the banks of the river in Brisbane (Figure 32).



Figure 32: Planting the public spaces along the banks of the Brisbane River: nature and community. Photograph by author Sept 2017

It is not possible to specifically test the influence of Northey Street City Farm on the city of Brisbane, but given the close relationship between the Farm and the City Council and infrastructure, it is reasonable to assume that Northey Street City Farm has had an effect on Brisbane. Similarly, other

places in which permaculture had visibly been practiced for some time could evidence similar effects.

One of the most well-known permaculture sites in Australia (among permaculturists) is the Crystal Waters eco-village near Maleny in the Glasshouse Mountains area of Queensland, in an area known as the Sunshine Coast. Before European settlement the whole area was comprised of sub-tropical rainforest, which was logged to almost complete removal in the late 1800s-early 1900s. In the 1980s Crystal Waters is set nearby in around 650 acres and is home to approximately 200 residents. It was founded and designed in 1988 using permaculture principles. It was not possible to gain an interview with a very well-known permaculture teacher and practitioner living there due to scheduling conflicts, but a visit to the area in September 2017 was planned in order to investigate influences from permaculture in the surrounding area.



Figure 33: Flier for shop in Maleny. Abundance, nature, community. Sept 2017

Maleny, the nearest town, is a tourist destination, on part of the Hinterland tourist drive but also because of the number of cooperative enterprises and art galleries, health and organic produce shops, alternative medical centres, and intentional communities of which Crystal Waters is one.

It has a village feel, quite a purposefully created one, and real attempts to create a community. Independent shops are valued and there were protests over a Woolworths opening in Maleny in 2006 and a petrol station and convenience store in 2008. In July 2019 Maleny Forums was set up as a mechanism by which any of the 160 local community groups and organisations, or any individual, could voice concerns or ideas (Glasshouse Country News, 2019, p8). There is a high degree of community awareness and skill in facilitation, both of which are taught as a specialised area of permaculture in Crystal Waters.



Figure 34: Iconic native birds and corrugated iron houses, nostalgic triggers in Australia, on the main street in Maleny. Photograph by author Sept 2017

Whether permaculture has influenced Maleny, or whether the character of Maleny was a match and therefore an attraction in terms of the siting of a permaculture eco-village, the pertinent point for the research is that a set of nostalgic attractors are part of the appeal of Maleny and places like it and in permaculture.

In the UK a comparable place is Totnes in Devon. Totnes is possibly best known now as the birthplace of the Transition movement and was the first Transition Town. The Transition movement is now more familiar than permaculture and has a worldwide profile, but was initiated by a permaculture teacher, Rob Hopkins, who had arrived in Totnes after teaching permaculture in Kinsale in Ireland. Totnes is a small town which is close to the site of the Dartington Estate Experiment in community regeneration throughout the 20th century and which eventually led to the development of Schumacher College, a learning community offering ecology-centred courses. As in Maleny, independent shops are valued in Totnes, and there have been considered attempts to maintain its village feel, to mitigate traffic, and to create and maintain a sense of community through various initiatives.

Todmorden in West Yorkshire has similar aspects to Maleny and to Totnes in that it is commonly visited by students as part of the Leeds Permaculture Design Courses, as well as by people around the world as possibly the only 'Vegetable Tourism' destination. Incredible Edible Todmorden was started in 2008 by a few residents of the declining, once mill town in the Calder Valley, who decided to take over disused and untended public spaces and plant food in them. Local residents now not only grow vegetables but litter pick, place public benches, and even have 'guerrilla gardened' the spaces outside the police station. Their motto, "if you can grow it in Todmorden, you can grow it anywhere", is applicable to more than just food, as there are currently as many as 500 groups worldwide using the Incredible Edible name. In approximately 70 sites around the town, on every first and third Sunday of the month, volunteers (there are as many as 300 in the town of 16,000) get together to grow and share food and company (Larsson, 2018). The model

of Edible Todmorden has not only been an inspiration around the world but has increased both the sale of local produce and the number of people growing their own food in the town (Larsson 2018).

These places, and others like them, may have attracted people who were interested in permaculture by sharing a concern with the similar elements of nostalgia which are attractors for permaculture; or permaculture practiced nearby may have influenced values and concerns for the towns. Either way, the nostalgic attractors are defining features of these places. The values and concerns fall into nostalgic categories which were delineated by the end of Stage Two of the research project.

4.3.3 Stages 1 and 2 Summary: nostalgia as an attractor

In Stage One and Two, the focus had been on discovering whether people were drawn to permaculture because of some sense of nostalgia, and on where that nostalgia might be situated. **RQ1** asked “Does nostalgia draw people towards the concept, use, or experience of permaculture?”

Throughout the early parts of the process results were mixed, with some data showing that particular aspects of nostalgia could be a barrier rather than a draw to permaculture, but as the data accrued, as participants had considered the question for longer periods, and as two expert level designers (AG and FH) had expressed explicit agreement with the idea of permaculture having elements of nostalgia within it, there was evidence to support the first hypothesis.

The data showed that, for people who are drawn to permaculture, part of that draw can be nostalgia. Not only people who are drawn to take up permaculture as a practice, but also people drawn to permaculture designs, particularly – but not always – designs which exist in the natural world, such as gardens and farms. The nostalgia for connection often showed in more social permaculture design, such as in CM’s art works, as well as SG’s examination of what drew him to permaculture. There appeared to be a

‘perfect storm’ of nostalgic appeal in designs, like Northey Street City Farm and Fairharvest Farm, which combined the two.

Elements of nostalgia: Stages One and Two

The data indicates that nostalgia is an element associated with permaculture at certain points, in certain ways, and with certain people. Whilst the manifestation of nostalgic elements can be expected to differ between situations – because of cultural differences, for example - there is enough commonality to table conceptual areas in which nostalgia is a factor. These conceptual areas are: children, nature, abundance, community, agency, and freedom.




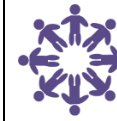


name	country						
PDC	UK						
B	UK						
AG	UK						
NS	Aus						
FH	Aus						
CL	Aus						
SG	UK						
KB	UK						
CM	UK						

Table 8: Spread of participants' responses concerning the location of nostalgia in permaculture – Stages 1 & 2

The conceptual areas are common across the two countries and cultures examined in the research project. Further study is required to consolidate whether the conceptual areas are common across other cultures as well.

RQ2, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?” was provided with data from permaculture garden designs and interfaces (as with Brisbane city) and from design elements in both Australia and the UK such as logos and magazines, along with areas in both countries which have been developed in proximity with permaculture. In all these situations or artefacts nostalgia can be noted as a factor, and therefore the data supports the hypothesis that permaculture designers use nostalgia, even if unconsciously, when designing.

Stage 2 Elements of nostalgia: UK

The conceptual areas in which nostalgia is a factor in the appearance and appeal of permaculture is common across the two cultures in the study, but appears slightly different in each, as nostalgia itself is attached to different cultural readings in each culture. A map of these areas for each culture – which may be altered for new cultures as they begin to be examined – is a tool which can be used to establish in what ways nostalgia may not only be assessed as having an effect, but further on used as the basis for imaginative ideation or co-design with clients (as in Stage Three).

Each element overlaps – has a connection with another element - on either side. Children are connected conceptually with nature and with freedom; abundance is associated with nature and with community; agency is seen as being coupled with both community and with freedom. Designs and designers may work across all areas of nostalgic affect, or may concentrate on one or two areas. Where the attention is more concentrated it is likely that the nostalgia nevertheless impacts and is affected by at least two other areas as indicated in the diagram.



Figure 35: The Permaculture Nostalgia Flower

The nostalgic factors within the diagram are briefly fleshed out for each culture separately, while the basic areas of the diagram remain integral. For each element the nostalgic impetus for each area is discussed in the light of what the data indicates, as well as suggestions for how a designer might work with these elements in a permaculture design within each culture.

In analysing the UK data the perceptions of nostalgia within permaculture are grouped as follows:



Children: adult-less adventure, safe to wander in a benevolent natural arena, the ability to play and explore without the use of mediating devices - KB



Nature: relationship with the Earth as known or imagined in previous eras of community, the rise in foraging – wild food, as opposed to intensive agriculture, a transformative feeling of wellbeing from the relationship with nature – PDC, B, SG, KB, CM



Abundance: foraging, walled/veg gardens, easy abundant food, being able to supply own needs, the sense of surplus when engaged in growing, a more supportive social environment and greater wellbeing – PDC, AG, SG, CM



Community: Connection (community, engagement) – the ‘village’ with people making decisions together for the good of the community, a sense of people helping each other out, a sense of engagement beyond the immediate circle – PDC, B, AG, SG, CM



Agency: Self-sufficiency, the skills and knowledge to be able to gain a yield from gardens or from other activities from which the skills are now less well-known, a reduction in dependence on structures with which one has little sense of connection, the ability to transcend difficult personal or social conditions – AG, SG, KB, CM



Freedom: from consumption systems, to partake in the natural world, to explore without limits, from social and structural limitations – B, KB

Within these categories of nostalgia affective states – pleasure, authenticity, memory – are elicited (Routledge, 2016), which engage affective, social, and self-related functions such as meaning-making, self-continuity, social motivation and social connectedness, and self-growth.

Stage 2 Elements of nostalgia: Australia

The Australian data was grouped into the same categories, with some responses the same and some slightly different qualities or examples differentiating them from the UK responses.



Children: experience of nature, a ‘natural’ childhood of outdoor play, the experience of childhood agency without adults, the ability to explore and play without the use of mediating devices – NS, FH, CL



Nature: Bush tucker, native animals as opposed to intensive agriculture, being able to experience nature instead of a purely urban existence, a transformative feeling of wellbeing from the relationship with nature, the feeling of being connected with systems beyond the cultural - NS, FH, CL



Abundance: working with nature to ameliorate drought, flooding, etc to create soils and to gain a yield, the creation of lush surplus when surrounded by difficult conditions, a more supportive social environment and greater wellbeing – NS, FH, CL



Community: Connection (community, engagement), the ‘village’ as opposed to a feeling of a rushed, soulless, superficial urban lifestyle, a sense of people helping each other out, a sense of engagement beyond the immediate circle – NS, FH, CL



Agency: the colonial past and the ability to make one's own way on the land, of making a place, of being in control of one's destiny, self-sufficiency, the skills and knowledge which are now less well-known, a reduction on structures with which one has little sense of connection, the ability to transcend difficult conditions - NS, FH, CL



Freedom: from consumption systems, from the 'nanny state', to explore without limits and to partake in the natural world, from social and structural limitations, from other people's rules and expectations and moral choices – NS, FH, CL

Key points

- Stage Two of the research established that nostalgia was an element which drew people towards permaculture.
- If the affective states which nostalgia inspires are understood and integrated into a design brief with the intention of increasing user engagement and/or satisfaction with a design then the inspiration of reflective nostalgia is positive and clear. T
- The Permaculture Nostalgia Flower is firstly a framework for the categorisation and examination of the ways in which nostalgia is perceived in permaculture. It can be of use when designers are unconscious of using nostalgia when ideating and therefore are consciously unaware of using these attractors.
- It has possibilities for being used as an organising framework for noting and utilising the categories as a beginner permaculture designer developing a design.
- Therefore the next step in the research was to test this hypothesis by introducing nostalgia as a design element in permaculture scenarios to see whether engagement and/or satisfaction was affected.

4.3.4 Stage Three: permaculture utilising nostalgia

One of the primary information-gathering tools for the permaculture designer in the “survey”ⁱ stage of the design process is the client interview. When observing and analysing a site in preparation for designing, a client interview is treated in the same way as other kinds of site surveys (site surveys are extensive in permaculture plot design). It contains elements such as:

- 0.** (Preparation)
- 1.** What is the current arrangement?
- 2.** Needs and wants
- 3.** Values and vision
- 4.** Lifestyle
- 5.** Limiting factors
- 6.** Resources available
- 7.** Site questions and site knowledge held by client (e.g. what site is like in other seasons)
- 8.** Timescale
- 9.** Open question: anything else? (Aranya, 2012, p123)

Although ‘needs and wants’ and ‘values and vision’ offer some opportunity to examine the affective reasons behind a client’s design requirements, there is otherwise little engagement with elements of emotional (particularly subconscious) motivations towards design preferences.

ⁱ Permaculture, like some other forms of design, commonly adopts the action framework SADIMET. SADI (from landscape architecture) – Survey, Analysis, Design and Implementation has been combined with the further stages MET – Maintenance, Evaluation, and Tweaking. As Aranya (2012) points out, the whole process is actually Design, so some practitioners substitute Decisions – the point where specific choices are committed to – instead.

In a time when significant consideration has been paid to subconscious drivers for general and specific consumption and choice patterns, it is interesting that permaculture has not engaged with this element of affect. This research represents the first attempt to place nostalgia as an affective (and effective) element within the permaculture design process, strategy, experience, or toolkit, in order to increase engagement with the ideation stage, or with the design itself. The initial trial of this took the form of inserting a nostalgic elicitation into the client interview.

Stage 3: Using nostalgia in a client interview - CE

C and E, in their mid-20s, participated in a client interview examining what they wanted in their plot, a small yard in London. The couple are trying to live without (single use) plastic and were in the middle of a “no spend” year, but are not specifically permaculturists. C is an Applied Drama facilitator and E is an ecologist. Their flat in Walthamstow is rented and is part of the Warner Estate designed social housing from the late 19th and early 20th century. These were houses which were split into two flats, with green painted doors and paintwork giving the estate a uniform appearance.

The flats were designed for a certain amount of community cohesion – the Warner Company provided social housing for over 110 years in Walthamstow, at rents which were slightly higher than other local landlords because of their desire to attract a “better class of tenant”; many have shared entranceways, back gardens were shared between two flats, and fencing between properties was low in order to encourage people to get to know their neighbours (Guardian: Warner Estate 2016).

Their client interview followed a regular path of client interviews for permaculture designing, with the addition of questions about nostalgic forces affecting their perception of gardens in general and in their garden wants in particular. When asked to consider what they wanted from their garden without any affective prompts, their answers were hesitant, in part because they had had no previous experience of gardening for themselves. When asked to think about what elements of nostalgic memory from their past

were relevant to their desires for a contemporary garden, their responses had a different, more enthusiastic sense, and they immediately identified some elements.

At this point C evinced a different, confident energy from her previous hesitant answers. She was immediately reminded of her Granny's garden and recognised that during the client interview when she had identified that she would rather not have a straight path down the garden, she had unconsciously been invoking the garden of her memory:

"...if I was creating my utopian garden it'd be a bit rambling, and that totally comes from Granny's garden because there were so many nooks and crannies...and so many corners and so many bits to investigate, and different things you might find...I like the idea of being able to walk through my garden and go, 'Oooh...squash has got big, or that flower has come', or 'oooh in that corner there's something there now that wasn't there before'..."
[all interview data 7 September 2018]

She also identified at this point that her 'waste not, want not' mentality, evidenced in the no-spend, plastic-free year and a general frugality, had come from her other grandparents. When asked whether this was part of a nostalgic impulse or just a general interest unrelated to nostalgia, she related a story about looking that morning at a website for yarns (she is a knitter) and seeing a picture of an old fireplace and sofa, and feeling a yearning for a farmhouse which she and E had no expectation of being able to own, but of loving the idea of it.

"... nostalgia can be projected into the future right? Like... it's not all about looking back... I guess I have this kind of picture of myself when I'm fixed in a place...I like roses and I like the idea of having an allotment and that kind of thing...my interest in gardens feeds into the kind of lifestyle I would like to have in maybe 15 years' time. And it's very much a constructed one...Oh, it's interesting to think about though, isn't it...on an everyday level you don't think about, or make the connections in your head..."

C's mental picture was of a particular kind of traditional style of living which had to do with living off the land in some way (she wanted an allotment) and hand crafts, a slower pace of life than that of London, which can be categorised as nostalgic and having to do with nature, abundance, and agency (and freedom, particularly financial freedom).

C's interview had moved quite quickly from her memories of gardens which had been important to her into gardens as part of a lifestyle she wanted to create in the future. The link between past and future, or between memory and what a client wants to create in the present, was evident, and for this client at least, easily evoked. Asked what she wanted from a garden design without any affective context and the answers were much more limited. With the inclusion of the sights, sounds, smells and feelings from the past evoked by nostalgia, garden ideas, and crucially the reasons for them, came much more easily.

E's responses were similarly much easier and fulsome when asked about his memories as opposed to what he thought he could achieve in the garden as it was. When asked about his nostalgic memories of a garden he said he thought of his parents' house where he grew up, which was not particularly large but

"...packed full of stuff...just a sense of abundance and there was no sort of regularity to any of it...but at various times of the year there'd be lots of colour, lots of foliage... And actually smells...smell in the garden was quite a big thing."

E remembered always having bird feeders and there almost always being birds in the garden, latterly chickens as well, sometimes hedgehogs, many insects including plenty of bees because there were often flowers in the garden so there was a constant source of food for them. He identified that growing up with a garden like this made him feel that having a garden full of things growing was a natural state of affairs for gardens.

“...having a productive part of the garden was quite good. I did like that. So maybe what I would feel we're lacking that I look back on and think was nice (is) just the sense of abundant foliage and...life...” [all interview data 7 September 2018]

During their client interview, which focused on details such as how many resources they had to give a garden and the limiting factors facing them in creating and maintaining a garden, both C and E had a few ideas about what they could achieve and what they wanted, but as novice gardeners they could not, for example, name many plants they would like beyond what they had already grown. It was difficult for them to imagine the kind of garden that could be made when they were focused on the kind of garden they currently had.

Asking about gardens they had nostalgic memories of provoked an entirely different response. They each seemed to find it much easier to remember a garden in all its emotional impact, than to imagine a garden from the bones of what they had already. The important thing about this is that the memories then gave rise to much clearer knowledge or understanding of what it was they would like to create. Looking at their nostalgia gave them important clues as to what they felt was currently missing, and therefore what they would like to create. C wrote in a message later:

I love the colours and shapes of squashes and that family...growing them on an archway...the idea that it would serve both an aesthetic purpose and a functional one really appeals to me... It fits with my make-do-and-mend approach, which is very nostalgic in itself. I think I saw something similar... as a late teen/early adult...squashes decorating a Christmas tree...So maybe I associate them with comfort and cheer.

It seems obvious that anyone planning a garden would need to consider the nostalgic motivation behind what they're

planning...it provides a large part of the 'why'...once you've figured out why you want your garden to be a certain way, you can probably realise it more effectively.



Figure 36: Walthamstow garden. Private photograph sent to author Sept 2019

C also subsequently sent an image of a garden in Walthamstow which had the kind of rambling abundance that C and E had both identified as what they would like from a garden design. It sat outside a row of cottages in the older part of Walthamstow, on a pedestrian-only street. The garden would only have made up part of the nostalgic effect but the overall feel of what sort of plants would create the effect she wanted was more easily discernible to C after the nostalgic elicitation in the client interview.

Key points

- This first attempt at using nostalgia as an element within the permaculture design process had increased engagement with the ideation stage of the design.
- This exercise provide the first affirmative data in support of **RQ3**, “Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the

ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?”

- The client interview had been improved by its inclusion. Although more work can be done to refine the approach, for clients whose response to nostalgia is positive, it is a useful addition to design ideation in permaculture.

Stage 3: Using nostalgia as part of a visioning exercise - LPS1

Using nostalgia as part of a client interview for a permaculture design for an individual provided useful detail in terms of its potential to allow clients to more freely access their underlying desires – the ‘why’ before the ‘what’, as C had expressed. A further opportunity to test the hypothesis that permaculture can use nostalgia to increase user engagement and satisfaction with designs was initiated in September 2018 at the Leeds Permaculture Network social evening at the Hollybush Conservation Centre in Leeds.

The exercise followed the Consensus workshop format, with the nostalgic elicitation as the stimulus or inspiration provided by the nostalgic feelings of the participants. The best ideas were written on slips of paper and then placed on the floor. After all the ideas had been placed on the floor, the group placed them into clusters (anyone could move a piece of paper into or out of a cluster), and then named.

The clusters comprised of lists, collated by the group as a whole by consensus, which have now been further placed into the following categories. Where there is more than one list within a category it is separated by a semi-colon.



Children: forest gardens in all schools, CiP book to schools, permaculture GCSE



Nature and Abundance: organic and local everywhere, productive and abundant, trees everywhere, local and sustainable food everywhere, fresh fruit and veg from North Yorks/North for all, food everywhere, 'chicken in the city', 'street goat' (& pigs), roof top gardens on every new tower, veg on the corner, roof aquaculture



Community: socially connected, lots of laughter; safe, secure, low impact housing (HOMES), examples of non-land-based permaculture; visibility in unexpected places, accessible to everyone, permaculture not a mystery word, forest gardens in parks, a land centre in south Leeds, Leeds =10 towns ~ 145 neighbourhoods, we are an equitable city; a diploma group (co-designing)



Agency: sociocratic or at least participatory governance structure connecting action teams across Leeds – mutual aid!, dynamic culture city reinventing itself, place-based lifelong learning, permaculture places with clear explanations, demonstration and training space in every neighbourhood, we are a learning city; new producers/growers with pilot land and support to start, trained people in every town and neighbourhood; loads less cars and more bikes; loads of co-ops – co-ops be the norm!



Freedom: a sense of endless possibilities, belonging, not just helping, calm spaciousness

In this scenario there was a conflation between nature and abundance in the clusters as decided by the session participants. Further work would be required to decide whether the two would always be conflated in this way, and/or whether the nostalgic elicitation had anything to do with the way in which visions of the future were full of abundant nature.

It was agreed that the session would carry on in the next social gathering, where the attendees would look again at the clusters and see if the groupings were still the way people would cluster the ideas (a refinement or revisioning, or more than one, of the clusters and their names, is good practice for consensus workshops). The idea of leaving time between the initial and subsequent clustering is not one that the facilitators had tried before but was in response to the small amount of time available for the exercise.

At this point it was not possible to tell what either the Dragon Dreaming or the nostalgic elicitation had provided which was in addition to the consensus workshop. People had been engaged and had not had any trouble envisioning what they wanted to see in a future Leeds, but it is possible that the Technology of Participation would have achieved this on its own. Reflection on what nostalgia had brought to the process would come later, in an interview with a participant who had attended both this session and the November one.

Stage 3: Using nostalgia in an Open Space event - LPS2

When planning the session the facilitators had hoped by the end of the second session to get to a group consensus on what concrete actions the group could commit to doing, how to bring the visions to life within LPN. However in the event, neither of the questions for discussion were really designed to point to concrete action, but rather to gain a consensus of what LPN actually was, and what a permacultured Leeds should look like. According to Open Space principles, whatever happens is the only thing that could have – that is, the people who attended were concerned with the two topics, which were of a visioning and historicising nature.

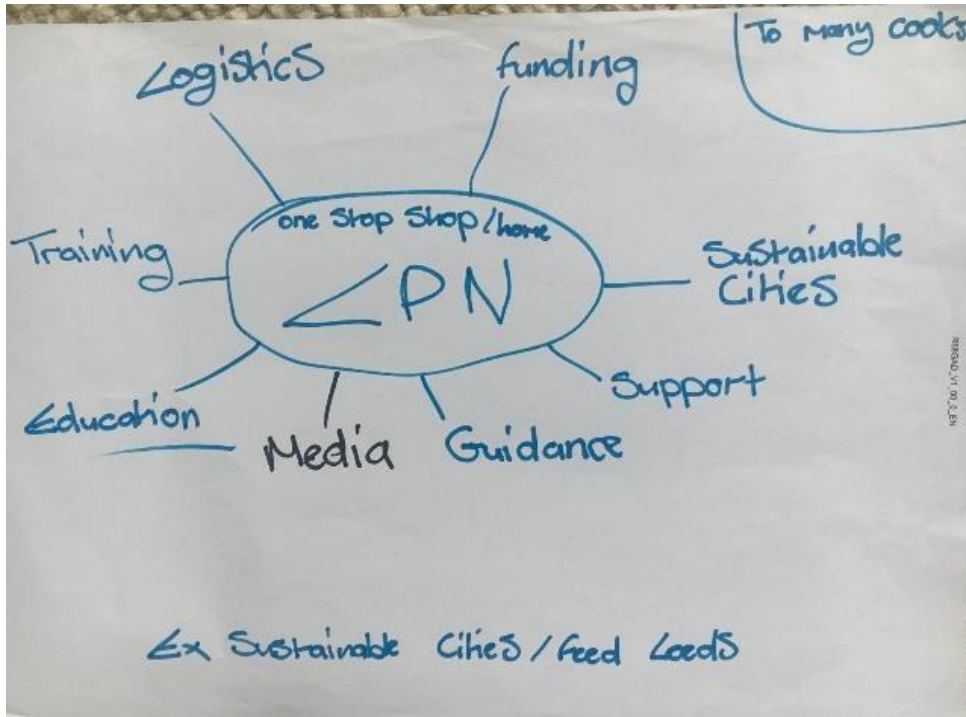


Figure 37: LPN - its history and story. Photograph by author Nov 2018

The image shows Leeds Permaculture Network as a hub for a number of other initiatives and possibilities, as well as its history in other groups (Sustainable Cities and Feed Leeds). This conversation became a serious discussion which questioned the role of and need for Leeds Permaculture Network – too big a discussion for this session, but useful and interesting questions were brought into the open.

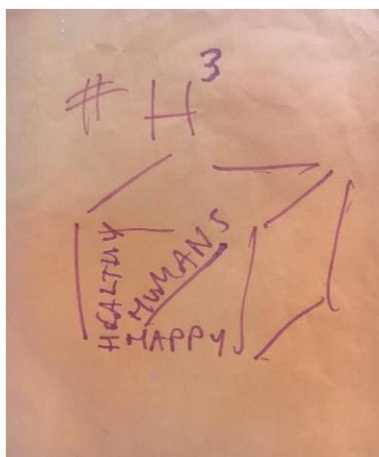


Figure 38: A bigger picture of permaculture in Leeds - discussion by group, LPN social. Photograph by author Nov 2018

The second topic had a smaller group size (of two people) and the conversation was wide in its range, eventually resolving in the diagram representing humans in a state of healthiness and happiness given the possibilities for the improvement of their lives with permaculture.

In summing up the findings from the group nostalgic elicitation exercises it is clear that more research will be required to ascertain whether the nostalgia elicitation has an effect on the planning aspect or the action aspect of either consensus workshops or Open Space technologies. However what did appear different was the way people spoke of the future – they had clear images in mind for what they wanted to see and create, and they made connections between what they wanted to create and how those things would make them feel.

This affective element engaged people in thinking about their deeper unmet needs. Both consensus workshop and Open Space technologies are visioning techniques designed to engage participants more deeply with codesign processes. Where forecasting employs logic and limitation in trying to predict the likely future if the current state of affairs continues, backcasting employs a measure of imagination and hopeful (not wishful) thinking, leading to greater range in ideas, greater engagement, and more innovative approaches. Elicitation of nostalgic memories, as an affective aid to clarity in identifying what participants truly value, adds another layer and level to this process.

“...for me, nostalgia is...the idea of harking back to something that was better in the past than it is now, and in some ways, I think that’s really useful, because...we’re exploring our experience and thinking about the things that we like from the past – whether or not they were even completely real, it doesn’t actually matter – what matters is there’s something that has a meaning for people, which feels good. It’s something they like about their perception of the past. So in some ways they are things that we would like in the world.” (AG interview 2016)

Stage 2: UK Follow-up interview - H

In order to evaluate whether the inclusion of nostalgia elicitation during group workshops had had an effect beyond what the workshops would ordinarily elicit, a final interview was arranged.

H was a new attendee at the Leeds Permaculture Social events, who approached the researcher after the second LPS visioning session, expressing an interest in the subject of nostalgia as it related to permaculture. The researcher, during the sessions, had explained the purpose of including the nostalgic elicitation and had invited feedback on the sessions and/or the work in general. H made a direct and specific link between nostalgia and permaculture and was keen to elucidate the nature of this link.

H explained that she had first heard of permaculture when in London studying. She struggled in London, finding it difficult to live in an urban, and as she found it, transient and isolating place. Partly, she explained, she found it transient because she was continually moving between London, the North, and Paris, and living out of a suitcase, and partly it was because all the people she socialised with were students who were similarly transient; there for a temporary period. H felt there was a lack of an authentic community connected to place.

At the same time she volunteered at a Montessori nursery where she did feel people were connected with their local place, and in addition they took the children to the nearby city farm, and provided nature works and forest school activities for the children, which she felt was a very healthy way to educate a child. She noted that she saw parallels now with how Montessori education works and how permaculture functions.

H had identified children, nature, and community as important elements in her own past – for which she felt nostalgic – which she also felt permaculture could provide.

During her holidays, H had also decided to go WWOOFing (World Wide Opportunities on Organic Farms, or Willing Workers on Organic Farms, allows volunteers free room and board on organic farms in exchange for work) in Denmark, and stayed on a smallholding, which she loved.

“I loved how they lived, their value system, their priorities, how they treated others...you could tell they were in love with the way that they did things and where they were in the world...it just felt so loving. Full of love and warmth and stability and knowledge, but an openness to learning more all the time.”

[all interview data 9 January 2019]

Although it was a permaculture farm and the term was mentioned, H did not go there to learn about it; it was more something that permeated the whole way of life. And one of the things she most appreciated was how the owners of the smallholding worked in traditional ways when those ways were effective, but were open to learning and working in different ways when that was more effective. She said she felt the security of the loving and traditional way of life on the smallholding and the curiosity that led to continual learning.

“So it was one of those interesting situations that you come across sometimes, situation or a person that seems so grounded, so stable, so rooted, but can still evolve and move on and is not wallowing in the past but has a real respect for tradition and the good things of the past.”

When asked whether H thought permaculture was nostalgic, the reply was that she felt that nostalgia was about feeling connected to a place – urban or rural, natural or constructed – and about knowing that place very intimately, and understanding how it functions. This echoed CM’s sense that permaculture created a knowledge for a place which was similar to knowledges which people in earlier times or cultures would have had about how to live connected to a place. When talking about this intimate knowing of a place, H went on to say that it seemed obvious to her that the majority of nostalgic feelings are linked to childhood. She drew the link between deep knowledge of a place and, as a child, having a deep-seated connectedness

with one's own physical self and surroundings and not realising it or being aware of it.

"...the tiniest tiniest thing can be a whole world when you're a child and for me that has a sense of nostalgia...you have no idea that...state might change and as you get older you realise the instability of that..."

Here the sense of loss inherent in nostalgia is clarified as an understanding of the loss of a deep embodied connectedness, which H had identified with something permaculture had the potential to engage with.

"I think that's something that a lot of us do kind of yearn for – that stillness and connectedness...I think permaculture is about being connected and aware and observant and integrated with your surroundings and the people that you live with on a day to day basis."

Childhood as a feature of nostalgia had by now been firmly established by H, aligning with the data from KB and from the Australian interviews. What h provided was the recognition that not only was permaculture something which was seen as having the potential of providing experiences for children which fulfilled parents' nostalgic impulses, but for H part of the attraction of permaculture was that it provided a direct link between the missing sense of safety and connectedness for which she was nostalgic.

H was an articulate, reflective and insightful interview subject who had considered her relationship with nostalgia prior to the LPN socials, and who very much resonated with the nostalgic impulse. She had taken up the invitation to get in contact after the LPN social meetings and had emailed of her interest saying she felt nostalgia was almost a sickness. It could be brought on by a smell or a view, the way a road bends, a tiny trigger which brings on a wave of emotion which she identified as not being simple at all but comprising joy mingled with loss and grief, which she compared to the first feeling of being a little child and getting homesick:

“...it's this complete, stomach-churning, heart-wrenching longing like, "I just want to go home and to go somewhere that I know and then I'm safe"...it goes a bit deeper than that because you're able to observe it rather than just feel it... it can take you to memories that you don't know that you have as well...”

H had not read Boym's (2001) work on restorative and reflective nostalgia but nevertheless identified that she did not think it a good idea to try to recreate whatever it was that felt missing, partly because it was irrevocably gone, and partly because it was difficult to identify exactly what it was. However, she recognised that part of her experiences with nature and community made her feel more “human”. She also recognised that her increasing fear and sadness about the state of the world, and her sense of a lack of agency to change anything, contributed to her desire to return to a feeling of safety and wholeness. She felt that the sense of situatedness she had mentioned allowed her to feel differently.

“What is happening in your on your street, in your town, in your city, and how can you find other people who are thinking the same things, and want to do something...what is in this little local corner of the globe that I can focus on and that I can feel I'm part of something bigger?”

H stated that the sense of isolation in the helpless feelings was paralysing and could make people sick. The alternative, having a sense of agency provided by the situated action, was connected as well to a sense of community.

“A sense of community, feeling like I'm doing something even if it's tiny and doing it with other people... and I think that sense of nurturing something. It does link back to the whole nostalgic feeling of wanting to be nurtured... Nostalgia makes you want to be nurtured by something or somebody else... a way to bring that forward and evolve it, rather than being like, "Oh I'm so alone..." is to be like, okay. So what could I take care of...what can I give nurture to?”

Here H articulated the nostalgic elements of agency and community and related them to her attraction to the elements of permaculture which led to social projects and helping other people in a sense of community. When asked if permaculture had a nostalgic aura to it, H replied that she felt the 60s and 70s, from the outside, seemed a great time (though having recently read a novel about Vietnam she recognised they probably were not), but she saw the 1960s and 70s as being an era of freedom, and of burgeoning ecological awareness (“getting back to nature”) and social connection. However she also placed nostalgia in the early 1700s with Rousseau and with the idea of living more communally, and with the idea of having common land.

“...in that time you were so in your little village...you were so connected and you were so with those people for your whole life and you were sharing everything, you were sharing buildings and land and resources...just an element of it as a golden easy time...”

Here the nostalgic vision was one of easy abundance and community.

However H also identified that this “idyllic England of 1700” could also be problematically nationalistic and isolating to people from other ethnic and cultural backgrounds, just as had been identified in the PDC questionnaires. At the same time she felt that the idea of the commons, or of common ground, was not just a nostalgic ideal but also a fertile expression.

“Common ground...we use that expression because it goes right back to when there was the commons...When we want to come to a consensus with a group or an agreement with another person, you have to find the common ground; that is what we're doing verbally but it's probably what people would do physically back when it existed more...if you want to have a fruitful conversation with somebody it's not just meeting them metaphorically on common ground; it might also be useful to have more physical common space to go and meet in and go and have those conversations...walking in a common space where anybody could be...it is like you've met them halfway already.”

H was articulating that elements of permaculture, people care and fair share which emphasised the rights, responsibilities, and care of everyone rather than concentrating on private acquisition and ownership, related to her nostalgic sense of a pre-Enclosures Act, pre-industrialised Britain. Her sense of nostalgia was for a free spirit and new thinking, allied with a traditional way of living in community which provided safety and abundance. She also made the connection between these elements and permaculture.

“I think permaculture can provide common ground between people just in the same way that nostalgia can... to take a practical example, if you are starting a new project, you need everybody to have some common goals, some common ideals that everyone's going to strive towards...being able to connect with things that people feel strong emotions about can be a very positive thing and can really motivate people...”

She felt that a very specific type of nostalgia could be potentially damaging or exclusionary in this scenario, or simply not connect with certain members of a group. This would indeed be the difficulty and a concern with using nostalgia as an approach, specifically in group work. However her feeling was that allowing people a sense of rootedness, of connectedness to place was very important. Unless people feel grounded and connected to place it was, she felt, difficult for them to care about the place or to think longer term. Using nostalgia, she felt, could provide

“tapping into those feelings of rootedness and stability and community and safety, reassurance and feeling comfortable and loved and all those sorts of things - if you can somehow connect those two.”

H identified that the workshop exercise in which she participated was an attempt to use nostalgic memories and emotions to influence visioning forward into the future. In assessing whether looking backwards to something that we felt comfortable, that we would still want, would open up a better route to creating it in the future, H's opinion was that this was of definite benefit.

“I'm just thinking back to that particular exercise. I think it put everybody in an interesting space because I think on one level it was making people comfortable, safe, happy, then I think ...the people that were involved in those particular memories will have experienced that sense of loss, of grief, and I think that makes people feel more vulnerable, which I don't think is a bad thing necessarily...”

H felt that the sense of vulnerability created broke down barriers, and that getting people to share their memories and their vulnerability, as in the dragon dreaming exercise, made them less inhibited but also gave a window into their values and priorities. It was true that people had identified, in identifying their important nostalgic memory, what was of most importance to them. H felt that this gave a better understanding of how to communicate with that person, and also what a safe space in memory might be for that person if things were stressful in group work.

“I thought it put everybody in a really good place to be very open and not feel inhibited, not feel embarrassed and just...say things that they genuinely believed rather than thought people wanted to hear.”

In terms of whether the nostalgic elicitation was helping people create a future in their minds that they wanted to work towards, H suggested that there was a situation in people's minds that they will have been reaching for, even if subconsciously, evident in the ideas that people were contributing. She also felt that this took people outside of the present reality, and felt that this was necessary for envisioning something. It meant that people were not bound up in logistics or in hopelessness or discounting an idea because of potential difficulties. The aim is to get people to step outside of present blocks or issues and *“thinking about things that are half imagination and then half reality of a past time that I've probably idealised a lot anyway...”*

This was precisely the aim of the exercise. While thinking of what cannot be done, or considering the barriers which currently exist, the freedom and creativity necessary to imagine futures is inaccessible. The affective response, with the emotional rather than the rational impetus, is designed to

clear the way towards greater creative freedom and imagination. In the same way that “writing” is actually two different processes – the generative act of creating words, and then the logical act of editing them for sense making – the act of visioning needs to be set free from logic in order to be truly generative. The backcasting stage of designing futures, where plans are made concerning how to get from the present to the envisioned future, is the necessary logical element of the process, but it is more effective to separate the two processes. It is even more effective to include an affective element to the generative part of the process, leading to a deeper, more connected understanding of values and priorities, as H had identified had occurred in the LPNS workshop.

Towards the end of the interview H shared her post-it note completed on the night of the second LPNS workshop, where she had been asked to draw or write something about her nostalgically elicited memory. She had written:

“... total physical well-being. No desire to be anywhere else. Floating free and fearless. Hope and certainty. The future bright and followed. But obviously for some reason I was already thinking about the future when I was in this kind of nostalgic place, which is quite interesting...”

H’s response here identifies the generative potential of nostalgia. Given the parameters of the exercise, it is possible that the nostalgia itself had been directed to an extent, to relate to the act of future visioning. However, it is likely that any nostalgia for hope in the future is a common one. It is also interesting that H’s nostalgia was for a place and a time, but what she wrote about was an affective state. The act of imaginative memory had unleashed a longing which pointed to the values and needs she could then work towards serving, in a way which could sidestep barriers to creativity or to knowing what her longing was for.

H identified another effect of the nostalgia elicitation exercise which related to SG’s concerns about the shadow side of permaculture, of being accepted into a group. She said that she had had concerns about being accepted in the group, about whether she was “the right type of person”, but that after

she had shared her nostalgic memory with others, and heard theirs, she felt much more relaxed, more willing to share ideas and less self-conscious. She liked that it was not sharing a whole life story but just a snapshot, but one which, as she had noted, gave information about people's values. She said the snapshot-style information shown by the elicitation was "quite ambiguous", which meant that she felt safer sharing, and also that there was room to interpret other people in a way beyond the normal introduction information used in group situations. It had had positive results for the group activity which followed, she felt, and she endorsed it as a strategy by saying, *"...I definitely felt much more relaxed after the activity...I thought it was a really productive fruitful session, conversation... And I went away from it feeling very uplifted."*

Key points:

- The interview with H had covered her own personal experience with nostalgia and provided more corroboration of **RQ1**, that nostalgia draws people towards the concept, use, or experience of permaculture.
- However because H had also attended the group elicitation exercise her interview data also provides evidence of the usefulness of nostalgia elicitation as a tool in group work and corroborates **RQ3**, "Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?"
- Thinking of the past did not result in participants not being able to think forward into the future; in fact in H's case quite the opposite occurred. Its use as a generative tool for visioning, where it functions as a short cut to values and needs identification, and opens up channels of imagination and creativity, is a strength which could be used in individual, group, and social design.

Elements of nostalgia: Stage Three

The elements of nostalgia as they appeared within permaculture in Stage Three corresponded with the elements as they appeared in Stage Two and in the Permaculture Nostalgia Flower.







name	country						
CE	UK						
LPN1	UK						
LPN2	UK						
H	UK						

Table 9: Spread of participants' responses concerning the placement of nostalgia in permaculture - Stage 3

4.3.5 Stage 3 Summary

- The nostalgia elicitation exercises in Stage 3 produced mixed results which nevertheless strongly suggested that the addition of nostalgia in an ideation process produced an affective relationship, at least within the ideation process.
- Although further research is necessary to consolidate the ability of the nostalgic response to encourage commitment to a final design, the positive responses in individuals both in a client interview and group work situation strongly supported the hypothesis that nostalgia increased engagement and created benefits for the designer and audience alike.

4.4 Findings that concur with the hypothesis

4.4.1 Stage 1: Nostalgia is inherent in perceptions of permaculture

During the past 20 years (notably spearheaded by Boym 2001) there has been a gradual reassessment of, and reengagement with, nostalgia as something other than a superficial or regressive form of engaging with the past. Fields engaging with nostalgia include psychology and the social sciences, where examination of nostalgia reveals results concerning nostalgic affect and the self (Sedikides *et al.* 2004; Wildschut *et al.* 2006; Sedikides *et al.* 2008; Barrett *et al.* 2010; Routledge *et al.* 2011; Turner *et al.* 2012; Juhl *et al.* 2013; Lasaleta *et al.* 2014; Van Tilburg *et al.* 2015; Sedikides *et al.* 2015; Sedikides & Wildschut 2016a), where evoked nostalgia reinstates psychological equanimity, elevating mood, self-esteem, and social connectedness, increasing a sense of meaning in life (often by creating or maintaining a perception of continuity between past and present), and motivates into prosocial behaviours. This provided a basis for a more positive evaluation of the use of nostalgia. This research represents the first application of the affective element of nostalgia to permaculture design.

Human geographers' and environmental psychologists' studies of the importance of childhood landscapes, how attachment to them develops and is maintained, and how they are related to identity, in theories such as Gayton's (1996) 'primal landscape', have not previously been identified as a nostalgic element within permaculture. The literature suggested that there were components of permaculture which were subject to a nostalgic impression. The elements of 'children' and 'nature' as included in the Nostalgia Flower represent the first inclusion as nostalgic elements of landscape in permaculture of these theories.

Stage 1 data from questionnaire and interview showed that participants had a range of conscious responses to the concept of nostalgia in design. Initial discussions in the permaculture classes of the PDC, for example, revealed that referring to traditional cultures and practices as inspirational or with

regret for their lost practices exposed widely differing responses from group members, inviting further investigation. This led to interviews with a trainee and an expert designer.

The study set out to investigate the proposition that nostalgia can draw people towards the concept, use, or experience of permaculture (**RQ1**). Following the literature review, data collection and analysis it was established that nostalgia is a factor, whether positively or negatively viewed, in the perception of permaculture both in the wider public and in novice designers.

4.4.2 Stage 2: Designers, clients, stakeholders respond to nostalgia

After the Stage 1 data collection it had become apparent that there was evidence for nostalgia being something which attracted some people to permaculture. However, nostalgia at ideation stage remained unexamined, primarily because it is not currently a feature of permaculture design practice. Further examination of the presence and placement of nostalgia within permaculture continued in Stage 2 in order to answer **RQ2**, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?”

Dorst’s ‘design thinking’ (2011) suggests that there were significant differences in the way designers responded to design challenges depending on their level of experience. Novice designers try to match a design object (for example a garden) with a set of principles (as provided by permaculture) and try to match these to a value (a desirable space with several functions and outputs). However experienced designers start with the value and construct a framework to accommodate this. This explains why experienced designers may be using nostalgia in their design ideation without being consciously aware of it – if an affective response to a design is part of the value, and there is already a nostalgic element inherent in permaculture, this will be part of the design.

Data showed that the more experienced a designer, the less likely they were to have consciously considered the role of nostalgia in their designs – the data indicated, however, that some outputs have been invoking or evoking nostalgia nonetheless. Data analysis supported the original theory that nostalgic elements are present in practices or rhetoric around permaculture but are not consciously noticed.

The study found that clients or stakeholders respond to nostalgia in permaculture design. Given the recognition that permaculture was perceived as containing elements of nostalgia, mapping the ways in which nostalgia is a driver for permaculture design allowed for analysis of whether and in what ways a designer was conscious of using nostalgia at the ideation stage, and in what ways clients and stakeholders related to nostalgia in permaculture. The Nostalgia Flower is a first mapping of these ways of relating to nostalgia in permaculture and can be used to elucidate where people are more closely aligned with a yearning for some sense of the past.

Stage Two developed from both analysis of the data methodological modifications. The use of a questionnaire was altered to concentrate on interviews which provided a more detailed response so a nebulous concept, nostalgia. Though the interviews could not point to direct evidence of nostalgia at the ideation stage of permaculture design, the results of the qualitative studies aimed to capture attitudes of permaculture designers towards nostalgia and evaluate any impacts on permaculture design and its appeal.

Results indicated that nostalgia can attract people towards permaculture, and some participants recognise the relevance of nostalgia as a driver of others towards permaculture or its outputs. Across two countries and a spread of participants, common threads of nostalgic memories could be grouped into headings. Although the specific manifestations or cultural readings of these responses could show differences, the responses clustered within six areas:



Children



Nature



Abundance



Community



Agency



Freedom

Within these categories of nostalgia, affective states – pleasure, authenticity, memory – are elicited (Routledge 2016), which engage affective, social, and self-related functions. These may increase engagement with permaculture either in the material or manifested designs, or within a client interview scenario.

Providing a map of the areas of permaculture in which nostalgic responses are likely to occur in the Permaculture Nostalgia Flower is a first step in understanding and using nostalgia and other affective techniques to identify real needs and building towards providing for them.







name	country						
PDC	UK						
B	UK						
AG	UK						
NS	Aus						
FH	Aus						
CL	Aus						
SG	UK						
KB	UK						
CM	UK						
CE	UK						
LPN1	UK						
LPN2	UK						
H	UK						

Table 10: Spread of participants' responses regarding the placement of nostalgia within permaculture - Stages 1, 2 & 3

Nostalgia remains of contested value across different groups of the data sets. Not only the multiple meanings of the word but also pre-existing value judgments affected how willing permaculturists were to accept its presence as an integral part of permaculture. Respondents at Northey Street City Farm and Candlelight Farm said they would not have described themselves as being affected by nostalgic impulses, but interviews nonetheless when analysed showed a nostalgic urge for either initial interest in permaculture or

for the kind of vision of a world that permaculture might provide – fair, or ‘green’, or healthy for children, as examples.

The (firstly) mapping, and (secondly) use of nostalgia as an affective tool in design ideation has not previously been studied. Permaculture design which includes opportunities for nostalgic affordances (for example, a scent memory, or a wildlife corner which invokes a childhood memory) increase affective response. The elements of nostalgic perception categorised by the analysis become mapped as the Permaculture Nostalgia Flower which then becomes a tool both as a guide to how nostalgia could be attracting people to a permaculture design, and as a map of areas which could be investigated for nostalgic memories in order to engage people’s emotions and imaginations in the design process and increase satisfaction with the design. This model could be inserted into client interviews, or into group work and co-design strategies which are already used in permaculture.

The Permaculture Nostalgia Flower can be used in a permaculture design ideation scenario by examining each ‘petal’ for ways in which nostalgia might be present to the client or stakeholder. If, for example, the client or stakeholder has nostalgic memories of the freedom of childhood, it may be of importance to build areas in which to ‘play’, to get lost in a garden design, for example a tree house for writing in, or a labyrinth to walk, or a secret place inside a copse of productive trees, or a cave: whatever emerges from working with the client or stakeholder’s nostalgic memories can be further developed by the designer. If the memories are of the abundant and delicious greengages which used to be available, the designer might work on heritage fruit tree planting, or on a community orchard, or on produce swaps, or on working with local councils or landowners on planting schemes and access rights. Again the details would be part of the design ideation, informed by the map of areas of possible nostalgia in the Flower.

RQ2 asked, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?” The data showed that

nostalgia had a role in people's attraction to and engagement with permaculture, but that this was not always conscious. People felt drawn to a certain aspect of permaculture, but could not always articulate the nostalgic element of that impulse.

Following the data collection in Australia it had become clear that the hermeneutic and the interview data were at times at odds with one another, and analysis pointed to different findings. Specifically, two out of three experienced permaculture designers said that nostalgia played little or no part in the design ideation, where textual analysis findings, in combination with the literature on such areas as emotional responses to the natural world (see Section 2.1.3), showed a different result. Further investigation was required, to either clarify whether researcher bias was skewing the analysis, or alternatively whether the designers were unaware of the nostalgic impulses either in their own designs and/or ideation, or in permaculture in general. One experienced designer [FH] had clearly identified, and identified with, nostalgia in permaculture design and in its appeal to others, which was sufficient to be able to cast enough doubt on researcher bias to further interrogate this. It was felt that the use of nostalgia, while apparent to the researcher, could be unconscious to the designer or to the client or stakeholder, and whilst interviews often shed light on this relationship, this was often the first time that the respondent had considered it.

This project therefore undertook to discover and evaluate whether and in what ways a deeper understanding of the value of nostalgia as a clearly defined design tool could be more consciously utilised by designers at the ideation stage of permaculture designs.

4.4.3 Stage 3: Nostalgia's strategic use in permaculture

RQ3 asked "Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?"

Therefore the data collection activities of Stage 3 were intended to examine the potential and use of nostalgia at the ideation stage of permaculture design. The discovery that people were drawn to permaculture by nostalgia led to the development of a methodology whereby engagement with permaculture ideation could be tested by eliciting a nostalgic memory. Since there was no existing data relating to this, the intention was to adapt methods in use at the ideation stage to include the use of nostalgia. This therefore was the most experimental and emergent phase of the project in terms of methodology.

The client interview provided data which confirmed that nostalgia could be used as a tool for design ideation, in two ways: firstly, specifically it could be used to identify the look or feel of a garden with which the client resonated, and elements of a garden design extrapolated from that, and secondly it suggested that introducing an affective (memory and pleasure) element into the ideation process engaged a different way of thinking about and casting forward into the future intended design.

There were initially similarities between metaphor elicitation and nostalgic elicitation. Originally a further process of introducing images to elicit nostalgic responses was envisaged. However what emerged from the experimental client interview was not so much aligned with Zaltman's approach and more aligned with the work of Transition Towns, and particular with the more recent work of its co-founder, Rob Hopkins (2019) on the central importance of imagination to empathy, to envisioning, enacting, and creating positive futures. It was not that a survey or interview was 'verbocentric', as Zaltman suggested; it did not have to do with the difference between words and images. When asking participants what they wanted in a garden, as the usual client interview does, the answers came from a conceptual place. When clients were asked about their memories of gardens, or a particular garden, it became clear that the answers were coming from a different place, and one which was more clearly aligned with affective responses. It was not the fact that the interview used words (in fact the intention was to use images in the client interview, but it became

unnecessary and superfluous). It was that the interview used affect and imagination rather than conceptual knowledge. This was a challenge to the idea of using metaphor elicitation and involved another modification to the proposed development of metaphor elicitation as a method.

Even if the method was not metaphorical elicitation it remained clear that it was elicitation. However it concerned the elicitation of nostalgic states – memories, emotions, desires – and placing them within a context of moving forward, or throwing imagination forward, a kind of enacting of the future in order to be able to incorporate that in design. There was no need to provide nostalgic metaphors as a springboard – participants had their own, very clear nostalgic impulses. The methods developed therefore used a looser metaphoric revisioning or reimagining from past to present/future. The client interview showed that metaphor elicitation was unnecessary, as nostalgia functions as a metaphor. The richness of detail provided by metaphor elicitation was here being provided by affective memory and nostalgia.

The literature review had identified backcasting as a strategy with potential for being developed with the focus of nostalgia as a unifying strategy/focus. There are some techniques used in some backcasting activities which ask participants to remember the past – however the emphasis on the use of nostalgic memories in particular, with their construal make-up, has not been used before. The elicitation of nostalgic states – memories, emotions, desires – and placing them within a context of moving forward, or throwing imagination forward, a kind of enacting of the future in order to be able to incorporate that in design, has not previously been used to such a degree. Although this cannot be termed a novel standalone framework, it is a novel addition to already existing frameworks of client and stakeholder needs assessment, and as such represents an element of new knowledge.

The affective element in nostalgia elicitation engaged people in thinking about their deeper unmet needs. Both consensus workshop and Open Space technologies are visioning techniques designed to engage participants more deeply with co-design processes. Where forecasting

employs logic and limitation in trying to predict the likely future if the current state of affairs continues, backcasting employs a measure of imagination and hopeful (not wishful) thinking, leading to greater range in ideas, greater engagement, and more innovative approaches. Elicitation of nostalgic memories, as an affective aid to clarity in identifying what participants truly value, added another layer and level to this process.

What appeared different from previous experiences of these technologies was the way people spoke of the future – they had clear images in mind for what they wanted to see and create, and they made connections between what they wanted to create and how those things would make them feel, confirming the difference the construal make-up of nostalgia provided to the exercise.

The affective state of nostalgia provides a particular mix of cognitive features that both distinguish it from other autobiographical memories and provide the combination of abstract and concrete mental representations – what is referred to as a unique construal make-up (Stephan *et al.* 2012 in Routledge 2016: 21). This research represents the first mapping of the research on this construal makeup, the combination of the abstract and the concrete aspects of nostalgic memories, onto design ideation strategies in which nostalgia elicitation acts in a way which both frees the imagination and produces concrete ideas. The client interview (C&E), with the modification of the insertion of the nostalgic elicitation into the process, produced markedly different ways of responding in a client brief.

The study found that nostalgia offers the potential of new, added value to the permaculture design process, in particular by its inclusion as an affective elicitation at the stage where co-design ideation takes place, or where the designer is eliciting client requirements. The use of nostalgia at this stage allowed for greater access to a kind of concrete imagination which is the unique construal make-up of nostalgia.

This research represents the first mapping of the research on this construal makeup, the combination of the abstract and the concrete aspects of

nostalgic memories, onto design ideation strategies in which nostalgia elicitation acts in a way which both frees the imagination and produces concrete ideas. The client interview, with the modification of the insertion of the nostalgic elicitation into the process, produced markedly different ways of responding in a client brief, where nostalgia functioned as a metaphor. The richness of detail provided by metaphor elicitation was provided by affective memory and nostalgia, which led to deeper engagement or insight.

According to Boym, “Longing is connected to the human predicament in the modern world, yet there seems to be little progress in the ways of understanding it” (2001: 351). In developing the nostalgia elicitation insert for the group visioning and Open Space sessions, the three facilitators, in discussing the desirability for this element, expressed the problem in this way: “You need to find the why before you think about the what.” In other words, the nostalgia elicitation gave the participants a key to examining their motivations in order to most closely meet their universal human needs, a novel element within permaculture.

The hypotheses – that nostalgia is an attractor to permaculture, that clients or stakeholders respond to nostalgia in permaculture designs, and that nostalgia offers the potential of new, added value to the permaculture design process by affectively and effectively engaging clients or stakeholders in ways which are specific to nostalgia, were each supported by the data. The next chapter draws specific conclusions regarding the significance and value of the research outcomes.

Chapter Five: Discussion

“One way to look at how a thing means is to look at what it needs to mean in a given context. In order to understand desire we must first comprehend what is missing.” (Bick & Chipper 2007: p17)

5.1 Introduction

This chapter has been divided into five sections to create precision in the discussion:

Discussion: this is a discussion of the results, drawing a connection between research aims, the literature review and the data analysis.

Conclusions: a concise statement regarding the conclusions made by this research

Research limitations: an examination of the limitations of the research project

Contributions to research: the new and original knowledge generated by this work

Future research ideas: a description of future research opportunities

5.2 Discussion

The objectives of the study were:

- To explore the extent to which nostalgia draws people towards the concept, use, or experience of permaculture
- To test the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating
- To examine whether nostalgia might be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the

design itself, thereby creating benefits both for the designer and the intended audience/s.

The first objective for this study was to investigate the relationship between nostalgia and permaculture design. The literature suggested that nostalgia had social and self-related functions and affective consequences, and these aligned with permaculture. However, this research represents the first application of the affective element of nostalgia to permaculture design.

The task therefore was to assess in what ways this link between permaculture and nostalgia were explicated in design systems and materialisations.

Through the literature review the perception of nostalgia within permaculture was given a measure of affirmation: it was established that permaculture ethics of Earth care, people care, and fair share were related to nostalgia in a number of broad conceptual areas including phenomenological aspects of looking at and experiencing nature, identity, and community. Nostalgia is implicit in certain interactions/processes, such as rewilding, designing for children in natural spaces, shared community structures, and others, and therefore embedded in the objects, processes, and social structures of permaculture design. Therefore the literature supported the hypothesis that nostalgia draws some people towards permaculture.

Through primary data collection and analysis, the study found that there was a perception of nostalgia within permaculture which drew novice designers to its study and practice. Moreover, the data showed that experienced to expert designers were aware of nostalgic elements which attracted stakeholders to permaculture design, whether or not they themselves felt permaculture was nostalgic.

Mapping the ways in which nostalgia is a driver for permaculture design using the data displayed as the Permaculture Nostalgia Flower allowed for analysis of whether and in what ways a designer was conscious of using nostalgia at the ideation stage, and in what ways clients and stakeholders related to nostalgia in permaculture. This previously unexplored area could

be more consciously utilised, in particular by novice designers, at the ideation stage of permaculture designs.

It is easy to understand why some permaculture designers are wary of nostalgia. Not only is there justified concern that perceptions of nostalgia will deter people who are averse to nostalgia from exploring or using permaculture, but nostalgia for many people is linked with inertia, with 'wishful thinking' as opposed to clarity and action, both of which are hallmarks of permaculture design. However, because permaculture is so rooted in systems thinking, expert designers understand their situatedness within even counterproductive systems, and their flexibility means that they can use – and are using – aspects of the nostalgia inherent in the field within their permaculture designing. Permaculture designers may still find the explicit mapping of the nostalgic areas within permaculture helpful, and the use of the nostalgia elicitation exercise useful. Novice designers, with more need of clarity around processes, may find these of use when creating designs – the Permaculture Nostalgia Flower explicates where clients or stakeholders may be influenced by nostalgia, leading to the opportunity to examine these areas to create satisfiers.

For example, the segments of the Permaculture Nostalgia Flower may be used as categories for questioning stakeholders in a more open way about their desired for a design. Instead, for example, of asking what plants the stakeholder might want to see in the space, the question might be concerning Abundance, and what kind of elements of a design would provide that feeling; or it may focus on the kind of planting that would provide the experience stakeholders remember fondly as children, or want children to be able to experience. In terms of group design – for example the design of cohousing – instead of asking what materials are available as the initial question, the Permaculture Nostalgia Flower might be introduced as a way of categorising how the stakeholders see Agency being provided by the housing (for example the provision of wide doorways in case of later need for wheelchairs), or Freedom, where the balance of the constraints of

community living can be balanced (for example with personal space and privacy).

In this way, the ideation stage is opened out beyond the choice between elements available in the present to a more imaginative and open way of thinking about what is wanted or needed. We need new techniques to get to what people don't know they know, as Zaltman suggested (in Pink 1998). People do know what they need but they often are seduced by the pseudo-satisfiers promoted to them. What emerged is something which had not been previously researched, namely that using affect and imagination rather than conceptual knowledge is a reason for the deeper clarity around client needs evinced in the interviews.

The study found that clients or stakeholders respond to nostalgia in permaculture design. the role of nostalgia in the ideation phase of permaculture can be answered affirmatively: it can have a role in generating questions and solutions in design for sustainability, and it can be an intuited factor in elements of permaculture design.

The (firstly) mapping, and (secondly) use of nostalgia as an affective tool in design ideation has not previously been studied. The study furthermore found that nostalgia offers the potential of new, added value to the permaculture design process by its inclusion as an affective elicitation at the ideation stage, where co-design ideation takes place or where the designer is eliciting client requirements.

The nostalgic elicitation exercise is an addition to an established toolkit for using nostalgia at the ideation stage in permaculture in client interviews, or in group work and co-design strategies such as visioning and/or consensus techniques. Significantly, the characteristics of nostalgia as a generative tool had not been researched by other scholars. Through the questioning of participants it was confirmed both that nostalgia was present in permaculture and that it could be used as a generative tool to distinguish what real satisfiers were required in a design.

The client interview showed that the elicitation of nostalgic states – memories, emotions, desires – and placing them within a context of moving

forward, or throwing imagination forward, used a looser metaphoric revisioning or reimagining from past to present/future, where nostalgia functions as a metaphor. The richness of detail provided by metaphor elicitation was here being provided by affective memory and nostalgia.

As previously noted, it was not that the interview was 'verbocentric'; it did not have to do with the difference between words and images. When asking participants what they wanted in a garden, as the usual client interview does, the answers were akin to choosing from a shopping list. The client was constrained by making a choice between elements they saw as possible, a limiting strategy in particular with clients who have little gardening experience, but limiting in any case to a set of pre-selected choices. When clients were asked about their memories of gardens, or a particular garden, the answers came from a different place, and one which was more clearly aligned with affective responses. It was not the use of words; it was that the interview used affect and imagination rather than conceptual knowledge.

The elicitation of nostalgic states – memories, emotions, desires – and placing them within a context of moving forward, or throwing imagination forward, a kind of enacting of the future in order to be able to incorporate that in design, has not been used to such a degree before. There are some techniques used in some backcasting activities which ask participants to remember the past – however the emphasis on the use of nostalgic memories in particular, with their construal make-up, has not been used before.

The use of nostalgia at this stage allowed for greater access to a kind of concrete imagination which is the unique construal make-up of nostalgia. This research represents the first mapping of the research on this construal makeup, the combination of the abstract and the concrete aspects of nostalgic memories, onto design ideation strategies in which nostalgia elicitation acts in a way which both frees the imagination and produces concrete ideas. The client interview, with the modification of the insertion of the nostalgic elicitation into the process, produced markedly different ways of responding in a client brief, where nostalgia functioned as a metaphor.

The richness of detail provided by metaphor elicitation was provided by affective memory and nostalgia, which led to deeper engagement or insight. When clients were asked about their memories of gardens, or a particular garden, the answers came from a different place, and one which was more clearly aligned with affective responses. It was not the use of words; it was that the interview used affect and imagination rather than conceptual knowledge. This insight into nostalgia as a metaphor which can be elicited in similar ways to other metaphor elicitation techniques represents new knowledge.

5.3 Conclusions

In this section, a precis of the research conclusions arising from the study will be presented.

Following the results from Phases One and Two of the fieldwork, **RQ1** has been addressed. **RQ1** asked “Does nostalgia draw people towards the concept, use, or experience of permaculture?” The results from this research question were crucial for the further development of the project, as without a connection being able to be drawn between nostalgia and the perception of permaculture no further exploration of the nostalgic element would have been relevant. However, the results established that nostalgia is a factor, whether positively or negatively viewed, in the perception of permaculture both in the wider public and in novice designers.

RQ2, “What is the position of nostalgia in the design ideation phase of permaculture design, including whether designers might be using less conscious and more intuited nostalgia when ideating?” was addressed in interviews with permaculture designers in the UK and in Australia. Results demonstrated that within the established and expert designers there was less of an initial perception of nostalgia within permaculture; most of these experts saw permaculture more as a progressive rather than regressive practice, and initially eschewed the idea of permaculture as subject to a nostalgic perception. However, on further examination, some of the experts saw either that the public perception of permaculture had a nostalgic

element, and/or saw the potential for nostalgia to be included as part of the design ideation process. Some also, after reflection, saw the potential for the framing of permaculture as nostalgic as potentially beneficial in certain circumstances.

Results with novice designers were mixed but on balance showed that nostalgia had been a factor drawing them towards the practice of permaculture. Novice designers in general more readily accepted nostalgia as a factor in the perception of permaculture, but lacked a framework for categorising nostalgic aspects or for including it in the permaculture design toolkit.

The results showing nostalgia as a factor in the perception of permaculture were distilled and then envisioned as a flower shape including the different aspects within which nostalgia appears in permaculture, alluding to both the perception of nature within permaculture and to Holmgren's Permaculture Flower of elements in permaculture design. This is a graphic representation of the results, but also intended as a guide that could potentially be used in future in the ideation process. These aspects are:

Children – permaculture is aligned with the exploration and experience of nature and the natural world, and of benefit to children's development. The contemporary experience of children, perceived of as lacking in this natural exposure, and compared to participants' experience and/or nostalgic memory of nature, is mentioned as a driver for the interest in permaculture.

Nature – the ability of people in contemporary culture to engage with nature is seen as being lacking, but necessary to the core sample. Permaculture is perceived as a way of engaging with nature, and members of the sample identified with a nostalgic response to this element.

Abundance – the possibility of seeing sustainability initiatives as providing an excess of positive elements (material, social, psychological) as opposed to constraints, drew some of the core sample to permaculture and related to personal or cultural nostalgic memories.

Community – some of the participants perceived a sense of lack in terms of community, or community feeling, and identified an attraction to a nostalgic perception of the community focus of permaculture, or a positive benefit of working permaculture designs which had nostalgic elements within its expression or perception, as an attractant.

Agency – the focus on self-sufficiency, or alternatively a DIY ethos, within permaculture was identified by members of the sample as a positive nostalgic element.

Freedom – permaculture was seen by some participants as providing a freedom – either from mainstream ways of designing or even thinking, or from following a damaging unsustainable path.

Individually, these themes offer a **focus on and for the direction of perceptions of permaculture**. The Permaculture Nostalgia Flower offers potential here to be used for **organising questions and responses within the client interview or group work**. This led to the development of the experimental element of Phase Three.

In the experimental section, nostalgic elicitation drew results deemed to be significantly different from other tools used in the client interview or the group ideation meeting, providing support for the hypothesis that nostalgia could usefully be utilised at the ideation stage of permaculture design. When nostalgic elicitation was included within parts of the ideation process, a different – more expansive, imaginative, affective – response allowed for a deeper recognition of what a client desired from a design and the potential for designing for a deeper engagement and affective response. This offers potential for nostalgic elicitation to be included in the permaculture design toolkit, either as a strategy for novice designers, or an element for experienced designers to consider when ideating. In this way, **RQ3**, “Could nostalgia be positioned within the permaculture design strategy, experience, or toolkit, to increase engagement with the ideation stage, or with the design itself, and create benefits both for the designer and the intended audience/s?” was affirmatively answered.

5.4 Research limitations

The research assumed that there are layers of meaning and interpretation to be considered when analysing responses to open questions. MacKay and Weinstein (2002: 6) state that an effective interview will be based on analysis of the following:

“What is the respondent actually saying?

What do they seem to be trying to communicate?

What can be inferred from the way they communicate and the words they use? What do they convey by their whole manner of approach to the subject?”

The research assumed that participants’ responses to nostalgia may be read and interpreted within and through artefacts, including designs, as well as from answers to interviews, and triangulated with comparative cultural analysis. The resulting analysis was intended to answer both the areas of research questions concerning whether there was a nostalgic element of attraction to permaculture, and also those concerning whether nostalgia could be used as an affective element in permaculture design. However the limitation implicit in this approach is that interpretation is necessarily qualitative, and further interpretations of the work, through further iterations of the approach, would give greater solidity to the results.

In psychological terms nostalgia is seen as self-relevant, as the self is principal in the individual narrative, but also social, since the nostalgic self is almost always surrounded by others (Hepper *et al.* 2012). In psychology there has been a strand of research focused on identifying what triggers nostalgia in individuals and groups of people. In a sociological sense the triggers for individuals can be extrapolated to those for cultures as well, potentially pointing to some explanation for nostalgic social movements and events.

However Kansteiner warns that using concepts from individual psychology is of limited value in looking at social memory as it “misrepresents the social

dynamics of collective memory as an effect and extension of individual, autobiographical memory” (2002: 179), when the process and use of collective memory-making is not purely subject to the laws of the psychological unconscious but rather represent an intentionality on the part of dominant or powerful groups who want to see the past represented in particular ways.

Samuel (2012: 211) notes, “In any given period, conservation, and with it ideas of ‘heritage’, will reflect the ruling aesthetics of the day.” There are valid criticisms of the heritage industries and their role in supporting and promoting dominant narratives of white, middle-class histories at the expense of other, less pleasant or more complicated ones (Samuel 2012; Wright 2009). In these critiques nostalgia is a literal whitewash, employed to serve the ruling classes of the day.

Social memory is important for looking at nostalgic design as it “comprises that body of reusable texts, images and rituals specific to each society in each epoch, whose ‘cultivation’ serves to stabilize and convey that society’s self-image” (Assman & Czaplicka 1995: 132), making design both subject to and a driver in cultural creation and stabilisation. The difference between individual memory and nostalgia and collective memory will be important for designers in identifying both affective and ethical approaches to individual and group or collective designs.

Although mindful of Kansteiner’s concern about individual psychological readings of collective memory, it is nevertheless true that collective memories are crucial for the construction and maintenance of groups such as families, believers in a religion, or social classes (Holtorf 2000). When nostalgia is culturally invoked it can function as a metaphor for a positive history, a strong homogenous nation, a past without problems or at least in which problems are overcome, which has repercussions in backcasting when considering the inclusivity of visions of the future.

Although it is true that permaculture is a small but limited field, it is possible that elements of both the categorisation of nostalgia and the nostalgia

elicitation exercise may be extrapolated and applied to other design scenarios.

5.5 Contributions to research

After analysis and critical reflection, it is determined that the key contributions made by this thesis are:

1. The establishment of nostalgia as an implicit or explicit factor in the perception of permaculture, amongst the wider public, potential permaculture trainees, and novice to experienced permaculture designers;
2. A framework of six main areas within which nostalgia is particularly relevant for permaculture, and permaculture designers;
3. The development and addition of an original and transferable methodology of nostalgic elicitation within the permaculture design ideation process.

A descriptive account of these contributions now follows.

Permaculture is viewed nostalgically: The study found that clients or stakeholders respond to nostalgia in permaculture design. The study revealed that nostalgia is a driver for permaculture design, in that it draws some people towards an interest in or engagement with permaculture, or is already a factor in why some people are interested in permaculture.

Categories of nostalgic perception of permaculture:

Mapping the ways in which nostalgia is a driver for permaculture design allowed for analysis of in what ways clients and stakeholders related to nostalgia in permaculture and whether and in what ways a designer was conscious of using nostalgia at the ideation stage. The Permaculture Nostalgia Flower is a first mapping of these ways of relating to nostalgia in permaculture and can be used to elucidate where people are more closely aligned with a yearning for some sense of the past.

Studies of the importance of childhood landscapes, how attachment to them develops and is maintained, and how they are related to identity, in theories

such as Gayton's (1996) 'primal landscape', have not previously been identified as a nostalgic element within permaculture; the elements of 'children' and 'nature' as included in the Permaculture Nostalgia Flower represent the first inclusion as nostalgic elements of landscape in permaculture of these theories.

Providing a map (the Permaculture Nostalgia Flower) and a technique for inclusion in permaculture design strategies is a first step in understanding and using nostalgia and other affective techniques to identify real needs and building towards providing for them.

Designers may use nostalgia unconsciously when designing but a conscious technique was not yet developed

Dorst's taxonomy on the evolution of a designer (2008) suggests that the more experienced a designer, the less likely they were to have consciously considered the role of nostalgia in their designs – the data indicated, however, that some outputs have been invoking or evoking nostalgia nonetheless. Data analysis supported the original theory that nostalgic elements are present in practices or rhetoric around permaculture but are not consciously noticed

Nostalgia can be used as a generative element in the ideation stage of permaculture design

This project examined this previously unexplored area to see whether and in what ways a deeper understanding of the value of nostalgia as a clearly defined design tool could be more consciously utilised by designers at the ideation stage of permaculture designs.

Significantly, the characteristics of nostalgia as a generative tool had not previously been researched. Through the questioning of participants it was confirmed both that nostalgia was present in permaculture and that it could be used as a generative tool to distinguish what real satisfiers were required in a design.

The (firstly) mapping, and (secondly) use of nostalgia as an affective tool in design ideation has not previously been studied. Permaculture design which

includes opportunities for nostalgic affordances (for example, a scent memory, or a wildlife corner which invokes a childhood memory) increase affective response. There are some techniques used in some backcasting activities which ask participants to remember the past – however the elicitation of nostalgic states – memories, emotions, desires – and placing them within a context of moving forward, or throwing imagination forward in order to be able to incorporate that in design, has not previously been used to such a degree. Although this cannot be termed a novel standalone framework, it is a novel addition to already existing frameworks of client and stakeholder needs assessment, and as such represents new knowledge.

5.6 Future research ideas

“The ultimate, hidden truth of the world is that it is something that we make, and could just as easily make differently.” - David Graeber, The Utopia of Rules

Further research in practice/practice-led research would add to the evidence that engagement and satisfaction are affected by the elicitation of nostalgia at the ideation stage of permaculture design. Using the Permaculture Nostalgia Flower framework for eliciting or drawing out nostalgic memories would allow for replication of the methodology. The developing methodology could be recorded in practice reflections and shared amongst practitioners. The client interview showed that metaphor elicitation was unnecessary, as nostalgia functions as a metaphor. The richness of detail provided by metaphor elicitation was provided by affective memory and nostalgia, which led to deeper engagement or insight. However, the use of metaphors in futuring/visioning techniques is an area which could be usefully researched, particularly in response to those for whom nostalgia is not an attractor or is actively off-putting. Research could include an exploration of what metaphor elicitation techniques would enable the same or similar emotional imaginative response, leading to the explication of previously hidden satisfiers of fundamental needs.

Indigenous knowledge: Lachlan McKenzie's current work in Timor Leste (see McKenzie and Lemos 2008, for examples of the work) shows that there is a possibility to examine Indigenous practices and to reframe these as progressive - in other words, to capture practices at a moment of nostalgia, with their emotional and affective draw, and by reframing them take away the stigma attached to them as 'primitive' or lacking in scientific basis. McKenzie notes that, in working with Timorese populations and explaining permaculture principles and techniques, the reflection from the older members that the 'new' techniques aligned with traditional ways of doing things had led to a reassessment of the previous sense that developed-world techniques were necessarily superior, and a re-engagement with traditional practices (McKenzie in conversation with the researcher, September 2017).

Goldring's well-balanced and knowledgeable overview of permaculture practices and projects globally countered the criticism of permaculture as a middle-class, privileged pastime for white people. In the developed world most of the permaculture is based on access to and use of land, which many people don't have, and creates the conditions for seeing it as middle-class. But in countries like Madagascar and Timor Leste, permaculture is aligning with traditional and indigenous knowledge and practices, leading not only to an ability to slot in to cultural nostalgia for these in situ and in places like Australia, but also to a re-evaluation of the idea of progress. Progress does not have to be the dominant hegemonic developed world idea of skyscrapers and roads: permaculturists working with an understanding of nostalgia – potentially using the Permaculture Nostalgia Flower – could invite Indigenous populations to re-value their own traditional practices as progressive.

Another aspect of Indigenous knowledge which is recently attracting some attention is the different relationship to time evidenced by Indigenous cultures (as described in O'Sullivan 2018). The link is already proposed between Indigenous conceptions of time and Brand's (1999) *The Long Now*, where a far more long-term relationship to futures is invoked. Permaculture

concepts such as stacking could be applied to time as well (Bastian 2014: 5), where multiple processes and rhythms are experienced simultaneously. The use of looking backwards to project forwards to work backwards as a guide to present and future action has potential for further exploration within this area.

Cultural maps: The conceptual areas in the Permaculture Nostalgia Flower are common across the two countries and cultures examined in the research project. However further study is required to consolidate whether the conceptual areas are common across other cultures as well. This extension of the study could be undertaken in similar ways and with similar data sets as with the two countries which are the focus of this study.

Action research: given the longitudinal potential of study and the relationship with the data set which may include collaborative change effected with the participants, an action research methodology would have added a degree and type of data and information not possible with this project. The parameters for this type of research design would need to be set at the beginning of the process, perhaps as a design strategy to create a nostalgically-inspired design or set of designs in permaculture which could be initially evaluated as nostalgic in intent and ideation, and periodically assessed throughout the research project for the benefits (or otherwise) such an approach would bring to the designs as they matured.

Areas of design for wellbeing have to do with affect and the self where evoked nostalgia reinstates psychological equanimity, elevating mood, self esteem, and social connectedness, increasing a sense of meaning in life and motivates into prosocial behaviours. This is an area in which the social science research on nostalgia (Routledge 2016) would be well-paired with permaculture design projects to make material tests for the affective elements which have been the subject of social science experiments.

Co-design: There is also the potential for developing the nostalgia elicitation tool in the development of co-design methods with individuals and groups. The techniques and activities used in the LPN Social meetings are part of a wide range of co-design, visioning, consensus, and future-making

techniques or technologies which can be used in co-design. As grassroots, socially distributed, protest, or other forms of self-organised groups seem to be increasing, the need for conscious co-design of groups, activities, events, and consensus will also increase. Similarly, in situations where central funding for services decreases or even where co-design of services is seen as a positive development, service or systems co-design will increase. For full benefit from co-design practices to occur, it will be important to engage fully with the most effective satisfiers in order to fulfil the correct need. The use of nostalgia as an affective clue to the most effective satisfiers in a codesign situation is one which would have positive yields.

Previous limitations of size of sample study as well as length of study, in addition to lack of replicable or generalisable results, would be ameliorated by further study in these areas.

Permaculture is not bound by nostalgia: it is a science and a design practice concerned with the future. There are many within the permaculture world for whom nostalgia is irrelevant or who are wary of some of the properties of nostalgia. This research has not attempted to reframe nostalgia itself – there are aspects of restorative nostalgia in particular which are linked to populist movements which are problematic. This research has sought to reframe a certain aspect of restorative nostalgia as regenerative rather than reactionary, and to use a particular way of looking at the past as a tool for looking into, and creating, the future.

Whether we are ready for it or not the future is coming. And as Donna Haraway said, we have to stay with the trouble. However, far from being an escape from the trouble, nostalgia can provide a focus for a future – not an unattainable imaginary one, but one which gives us the emotional pull to work towards until it is achieved.

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Appendix A

Permaculture Principles (Holmgren, 2011)

1. **Observe and Interact** – By taking time to engage (with nature) we can design solutions that suit our particular situation.
2. **Catch and Store Energy** - By developing systems that collect resources when they are abundant, we can use them in times of need.
3. **Obtain a yield** – Ensure that you are getting truly useful rewards as part of the working you are doing.
4. **Apply Self-Regulation and Accept Feedback** – We need to discourage inappropriate activity to ensure that systems can continue to function well. Negative feedback is often slow to emerge.
5. **Use and Value Renewable Resources and Services** – Make the best use of (nature's) abundance to reduce our consumptive behaviour and dependence on non-renewable resources.
6. **Produce No Waste** – By valuing and making use of all the resources that are available to us, nothing goes to waste.
7. **Design From Patterns to Details** – By stepping back, we can observe patterns in nature and society. These can form the backbone of our designs, with the details filled in as we go.
8. **Integrate Rather Than Segregate** – By putting the right things in the right place, relationships develop between those things and they work together to support each other.
9. **Use Small and Slow Solutions** – Small and slow systems are easier to maintain than big ones, making better use of local resources and produce more sustainable outcomes.
10. **Use and Value Diversity** – Diversity reduces vulnerability to a variety of threats and takes advantage of the unique nature of the environment in which it resides.
11. **Use Edges and Value the Marginal** – The interface between things is where the most interesting events take place. These are often the most valuable, diverse and productive elements in the system.
12. **Creatively Use and Respond to Change** – “Vision is not seeing things as they are but as they will be” - We can have a positive impact on inevitable change by carefully observing and then intervening at the right time.

Appendix B: Ethics Documents

B1 Ethics Information Sheet

Project: The Use of Nostalgia in Design

Researcher: Mary Loveday Edwards, University of Leeds

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

The research project is concerned with nostalgia and its possibilities, especially as a way of thinking about design.

You have been chosen because you are part of a group that has expressed an interest in design and/or nostalgia.

The interview will last for between ten and twenty minutes and you will be asked a series of questions and invited to discuss them in the group. You can answer the questions in any way you want and you do not have to answer any questions you don't want to. Whilst there are no immediate benefits for people participating in the project, it is hoped that this work will lead to a clearer understanding of what people get out of nostalgia, and how that might help designers make better choices in including what people want in designs.

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form) and you can still withdraw at any time up until January 2018. You do not have to give a reason.

The audio recordings of your activities made during this research will be used by me only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. You will not be identified in the research and your quotes, if used, will be anonymised. The results may be published in a dissertation and/or conference papers between now and 2019.

You will be given a copy of the information sheet and the signed consent form to keep.

Contact for further information

Mary Loveday Edwards
24 Arley Terrace
Leeds LS12 2PA
0113 263 1649
sdmle@leeds.ac.uk

Alternatively: Dr Bruce Carnie
0113 343 3777
B.W.Carnie@leeds.ac.uk

This study has been reviewed and given a favourable opinion by _____ Research Ethics Committee on [date], ethics reference [ref]

B2 Consent to take part in Nostalgia in Design project

School of Design



UNIVERSITY OF LEEDS

Consent to take part in Nostalgia in Design project

	Add your initials next to the statements you agree with
I confirm that I have read and understand the information sheet dated [x] explaining the above research project and I have had the opportunity to ask questions about the project.	
I agree for the data collected from me to be used in relevant future research.	
I agree to take part in the above research project and will inform the lead researcher should my contact details change.	

Name of participant	
Participant's signature	
Date	
Name of lead researcher	Mary Loveday Edwards
Signature	
Date*	

*To be signed and dated in the presence of the participant.

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/ pre-written script/ information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be kept with the project's main documents which must be kept in a secure location.

B 3 Ethics approval

Performance, Governance and Operations
Research & Innovation Service
Charles Thackrah Building
101 Clarendon Road
Leeds LS2 9LJ Tel: 0113 343 4873
Email: ResearchEthics@leeds.ac.uk



UNIVERSITY OF LEEDS

Mary Loveday Edwards
School of Design
University of Leeds
Leeds, LS2 9JT

**PVAC & Arts joint Faculty Research Ethics Committee
University of Leeds**

26 April 2016

Dear Mary

Title of study **The use of nostalgia at the ideation stage of design**
Ethics reference **LTDESN-047**

I am pleased to inform you that the above application for light touch ethical review has been reviewed by a School Ethics Representative of the PVAC and Arts (PVAR) joint Faculty Research Ethics Committee. I can confirm a favourable ethical opinion on the basis of the application form as of the date of this letter. The following documentation was considered:

Document	Version	Date
LTDESN-047 MLE ethics application March 2016.docx	1	25/04/16
LTDESN-047 MLE ethics application March 2016 signed.pdf	1	25/04/16
LTDESN-047 Final MLE ethics projectinfosheet.docx	1	25/04/16
LTDESN-047 Consent to take part in Nostalgia in Design project.docx	1	25/04/16

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval as all changes must receive ethical approval prior to implementation. The amendment form is available at <http://ris.leeds.ac.uk/EthicsAmendment>.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited. There is a checklist listing examples of documents to be kept which is available at <http://ris.leeds.ac.uk/EthicsAudits>.

We welcome feedback on your experience of the ethical review process and suggestions for improvement. Please email any comments to ResearchEthics@leeds.ac.uk.

Yours sincerely

Jennifer Blaikie
Senior Research Ethics Administrator, Research & Innovation Service
On behalf of Dr Kevin Macnish, Chair, [PVAR FREC](#)

Appendix C: Example Questionnaire (Participant 1)

Is nostalgia useful when considering design?

It isn't something I ever thought about before, not something I would normally think about when designing. I'm assuming nostalgia is thinking fondly about the past, maybe that's not what you mean?

What is your response to the permaculture emphasis on using knowledge from previous cultures and eras to inform its approach?

I think this a very positive and helpful approach to design because we don't re-invent any wheels and we don't make the same mistakes as others have done. I'm reminded of Andy's story of the community with no old people which didn't work till they had a better range of ages. It makes you think of aspects of a design that you might not have considered before.

How could your nostalgia be used in thinking about the future?

I come from a relatively poor but resourceful and inventive family. I grew up in a culture of make do and mend and make things yourself so I tend to use this approach to most things. I find this a very satisfying and enjoyable way to live and apply this approach to all my future plans.

What are the benefits of thinking about design through a nostalgic lens?

Using what you've learnt through life, thinking of past artifacts and ways of doing things to design. I remember a neighbour tying black cotton over his vegetables to deter birds which is a very permaculture approach! Permaculture design uses lots of simple ideas based on the waste not want not approach of the past.

What would be the shortfalls of this approach?

Maybe failing to take account of new technology and inventions.

Any other thoughts?

Permaculture Design is a process based on systems thinking which is quite a rigorous approach. Nostalgia is distinctly non-rigorous (I think) and could be complementary by bringing in a personal element to the design process.

Appendix D: Example Interview transcript C&E

M: [00:00:11] So...I guess, I guess the first overarching question is what are your needs from a garden?

E: [00:01:08] Ummm, I think a place to eat is probably one of the main things.

C: [00:01:17] Um a pretty place in which to relax, yeah.

E: [00:01:21] Ah, wildlife friendly, most certainly, with places that aren't necessary just dedicated to us.

C: [00:01:32] Yeah, that's more of a thing for E than it is for me.

E: [00:01:34] Yeah

C: [00:01:35] But I'm not, it's not like I would actively not want those things. I'm definitely more focused on the pretty than the bugs.

E: [00:01:46] Yeah.

C: [00:01:51] Quite like to be able to grow edible things, bit of space for growing edible things in as well would be good. So I don't know I, I like pots and things with pretty stuff in but I wouldn't go for whole beds of just pretty - I'd go for whole beds of squashes...they're pretty too.

M: [00:02:16] Mmm. Mmhmm

C: [00:02:16] And runner beans and stuff. Yeah.

E: [00:02:21] Yeah. And it not - it being a thing that's not gonna demand too much work and attention because I'm just naturally not inclined towards giving anything too much work

C: [00:02:34] Yeah

E: [00:02:35] So realistically it couldn't be too high maintenance.

C: [00:02:40] I think I have this idea in my head that that that gardens that are are fruitful just require absolute, an absolute outpouring of dedication and commitment almost at the obliteration all other interests.

M: [00:02:56] Mmmmmm. How, how do you feel about putting some work in to set it up?

C: [00:03:00] Yeah, um, I mean, I think I responded very enthusiastically when you had said to me that permaculture is basically, put the work into setting it up and then it's meant to sort of take care of itself.

M: [00:03:14] Most design, particularly garden design, is 20%

C: [00:03:18] Hmm.

M: [00:03:19] Original design and 80% maintenance and permaculture is supposed to be the opposite, so 80% setting the system up and then 20% maintenance.

E: [00:03:27] Perfect. Yeah

C: [00:03:27] That just sounds like a...

M: [00:03:27] Does that sound like something you'd be interested in?

C: [00:03:27] Yeah

E: [00:03:27] Yep

M: [00:03:34] Ok. So how well is the garden meeting your needs at the moment?

C: [00:03:40] As in our actual functional needs of a garden or our utopian needs of a garden?

M: [00:03:44] Both I guess. I mean I've seen it's got space to hang your washing and it's got a space for table and chairs.

C: [00:03:51] Yeah. So in that respect, it's great.

E: [00:03:53] It is low maintenance.

C: [00:03:56] It's low maintenance because we don't do anything to it otherwise.

E: [00:03:59] Yep...cut it once or twice, the lawn.

C: [00:04:03] Yeah. Well

M: [00:04:04] There is no lawn.

C: [00:04:07] No, it's, just, you know, we every now and then we'll periodically hack back whatever is growing there.

M: [00:04:14] What do you hack it back with?

E: [00:04:18] Um, a lawnmower , bas...one of those sort of...

M: [00:04:19] Hover

E: [00:04:19] Holder things, which is rubbish, I usually just kind of pick it up and drape,

M: [00:04:24] Sure

E: [00:04:24] and go places, so it doesn't really function without it being kind of lawn thing

C: [00:04:26] Last time E did it, he did it sort of systematically, so that there were path ways...?

E: [00:04:37] Well, yeah, I left some areas long to grow a bit more wild and then did some bits short just go for a bit of variety. Yeah it functioned as a space to eat outside....

C: [00:04:50] Yeah. Um, and in spring all down the left hand side there were loads of bluebells, which was nice. We like that.

M: [00:05:01] Okay. Okay.

C: [00:05:02] And we enjoy them when they're there

M: [00:05:06] In terms of the layout. How does that work for you?

E: [00:05:17] Yeah, there's not much to it. It's just yeah path down the middle. Things either side...

C: [00:05:26] I mean if we were going to try and and bring to to fruition our utopian ideal of a garden of our dreams, I probably would want a wavy path.

M: [00:05:37] Hmm.

C: [00:05:37] That made it actually look like there was a bit more garden as you walked down it.

E: [00:05:41] And at the moment we keep the table and chairs on the path because that's the only sort of solid flat bit which actually means we don't walk on the path, we walk beside the path, probably noticed the flattened patch....

M: [00:05:53] Well there's a desire line basically that goes underneath the washing line.

E: [00:06:00] Yeah

M: [00:06:00] You can see that the path that people respond, yeah...

C: [00:06:02] Yeah. Oh that's a point actually if I'm taking food out there or anything I only walk on the right.

E: [00:06:09] Yeah. I think the other side has always been slightly rougher in terms of vegetation.

C: [00:06:16] Oh okay

E: [00:06:20] Because there's slightly more grass around the right hand side, which might be why we

M: [00:06:20] Mmmmm, I wonder if it's got something to do with that bench down the end as well, that looks like a destination. Because you're not allowed to use that shed are you?

C: [00:06:26] We don't have access to it.

M: [00:06:28] No.

E: [00:06:28] No, yeah, that's just a thing that's there

M: [00:06:34] That shed is just an object in the garden that has no functional use.

C: [00:06:36] I've sat on that bench one...errr... now and then a few times and had grand designs at the start of the summer of very much tidying it up and moving it onto the concreted bit at the top but just never got around to it. M: [00:06:53] Hmm, but that bench - because I because I've only been there today and sat in sat in the garden today, I don't know where the sun light hits, I don't know where the frost pockets are. So I'd be looking at you guys to let me know, you know, I can, I can map this sun points where the sun hits but it's better if you tell me where, where it's always cold, where the warm bits are. So I sat there like four o'clock this afternoon,

five o'clock this afternoon and the sun hits the top of the house at the back of the house. It doesn't tend to go down, you know it's still not shining in the window of your bathroom

C: [00:07:32] Yep.

M: [00:07:32] Particularly...there's a little bit of sun that goes directly on those trees. So again, it's not getting to you.

E: [00:07:39] I think that has just about become true, I think the sun is just started getting that much lower.

M: [00:07:48] Okay

E: [00:07:49] Particularly in the, in the sort of more midsummer. It's still...say if you're looking at the right hand side there, what is the northern side

M: [00:08:04] Yes.

E: [00:08:04] It's got a lot more of the heat and sunlight.

M: [00:08:06] Right.

E: [00:08:07] So the, the left hand fence just below that is sort of the coldest shadiest bit.

M: [00:08:13] Right.

E: [00:08:14] And just, sort of yeah just behind the shed as well, that's got a bit of sort of covering from the ash tree, although that has become more exposed since the ash tree got chopped back. So that corner of the garden still looks like it's a bit more shaded than it actually is, just cos it was overshadowed for so long, that it has since been...

M: [00:08:36] Mmmhmmm. And when the ash tree drops its leaves?

E: [00:08:41] Now doesn't really affect it much because they tend to, yeah pretty much all leaves are going elsewhere. Before when it dropped the leaves, um a good half of the garden was just a carpet of leaves I think pretty much

C: [00:08:58] Oh yeah, yeah

M: [00:08:58] Okay.

E: [00:08:59] But yeah, since, since it's gone...

M: [00:09:01] And what about the light when it drops its leaves?

E: [00:09:03] Um, not really...

M: [00:09:03] Because there's an appreciable amount of ivy on that.

E: [00:09:09] Yeah. There's not really much, um difference when it's there and when it's not because the ivy's always there

C: [00:09:18] Um, the, before they cut back the ash tree it was so massive it pretty much shaded the entire garden, like we would be sat...

M: [00:09:22] Well it still is over half the garden

C: [00:09:25] Yeah, but we would literally be sat under branches in the middle where that, where the table is.

M: [00:09:30] Yeah. Sure. Sure. Sure. Do you ever use the side gate?

E: [00:09:36] Occasionally.

C: [00:09:36] I don't. I think I've walked up there once..

E: [00:09:40] There was a couple of times when I've had particular bits of kit from work, um newt traps that have been stored in the garden for a while.

C: [00:09:49] Oh, yeah. I helped to ferry them to and from the garden, car, between the garden and the car, yeah, that was it.

E: [00:09:52] Next door use it a lot more I think.

M: [00:09:58] Ok. Are there any plants that you particularly like in the garden or that you don't like in the garden?

E: [00:10:01] That are currently there? Um, I like the, the shrub, um that has just started a second flowering, the first one you come to the glossy green leaf.

M: [00:10:12] I think it's a hebe or something like that. No, not a hebe but it's something, yeah okay

E: [00:10:16] It's got a nice, nice scent, particularly when it gets covered in flowers.

M: [00:10:17] Yeah. I'll have a look and find out what it is

C: [00:10:24] I did like the bindweed when it was flowering and climbing up over the table and stuff, that was quite pretty, several people have remarked on that, actually. Next door, upstairs next door before they moved out were like yes, that's cute, we're with that, and then new people who've moved in upstairs have mentioned it haven't they

E: [00:10:47] Yeah. Um, I did intend to control it a bit more. It has just come up to that side on the left now.

M: [00:10:55] Hmm.

E: [00:10:56] It's probably other stuff straying on the pavement. I quite like the, um, on the right hand side, the non-bindweed side, um the cinquefoil, when you get all the little yellow flowers coming up from that.

M: [00:11:07] Yeah, ok

E: [00:11:07] Oh we quite enjoyed that we had a little variety of different coloured flowers coming up.

C: [00:11:12] Yeah, yeah

E: [00:11:15] Like the, the yellows and whites.

M: [00:11:16] And in terms of site maintenance...?

C: [00:11:20] E just [inaudible]

M: [00:11:24] Alright!

E: [00:11:26] So once, maybe twice this year I've plunked the mower on top of it in various places, and kind of beaten it back.

C: [00:11:37] That is the site maintenance, isn't it

E: [00:11:37] I did, I did prune the, um

E: [00:11:37] The shrub, or whatever it is, and brought that back up.

C:[00:11:43] And that went in a pile down the end, didn't it, to make a habitat

M: [00:11:44] what you mean the very back. Yeah. Yeah. Okay. That pile of woody stuff.

E: [00:11:58] It's also a pile of the old blinds

M: [00:12:09] Oh is it? Is that wooden then?

C: [00:12:09] So our landlady said just dispose of them as you wish and E whipped out all the string and stuff which we then used to make our Advent calendar with last year.

M: [00:12:14] Yeah

C: [00:12:15] Um, and trotted off down to the end of the garden to make a habitat.

M: [00:12:18] So it's a pile of wood and then cuttings on top. Okay, okay that's good to know and the wood is okay?

E: [00:12:27] I don't know. It don't know what it is, to be honest.

M: [00:12:28] Don't know if it's toxic or anything like that?

E: [00:12:30] No, I just assumed...

M: [00:12:34] Okay, and how much time do you spend in there? And how much time would you be prepared to spend there? How interested are you in in, like a, and this is a definite question rather than a question for you to...Yeah, rather than a dreamy thing.

C: [00:12:58] We probably spend through when the weather's nice a few hours a week, maybe. If E's working from the office and he's at home and the weather's warm and sunny, we will set out there to eat our dinner through the week.

E: [00:13:13] Probably every dinner and probably lunch and dinner.

C: [00:13:16] Probably lunch and dinner at the weekends, yeah. Through the winter we don't go out there at all.

E: [00:13:21] No. Like, we don't - I think that's probably partly because we - the only sort of use we have for it at the moment, or the main use we have for it at the moment is the washing or eating.

C: [00:13:32] Yeah,.

E: [00:13:33] Um, that's the only thing that takes us out. if there was more to it, we might be more inclined to...

C: [00:13:35] But then speaking realistically we're only going to be here for another couple of years, it's not actually our actual garden that we own so... we might we might grow sweet peas in a pot next summer.

M: [00:13:51] So the lifestyle limiting factor is that you don't want to do any hard landscaping.

C: [00:13:56] Yeah.

M: [00:13:56] You don't want to do anything you can't take with you or that isn't going to be just sort of an annual.

E: [00:14:01] Possibly.

M: [00:14:01] Mmmmm.

C: [00:14:03] I really like the idea of putting in work for maybe, yeah, maybe a whole weekend's worth of work over something that we could enjoy for maybe a year or two and then it'd be like, oh Jane your next tenants will get a lovely garden. But the likelihood of that actually happening is [whispers].

C: [00:14:33] What do you think?

E: [00:14:35] I think if, if we think what we're going to get from it is enough then it will make sense to actually, to do it.

C: [00:14:43] Yeah.

E: [00:14:46] I mean at the moment the only effort we put in is sort of putting a few things in pots to grow veg. But we've kind of only, we haven't really put a lot of effort into it, cos we never know, we kind of know we're really not going to get a lot out of it, anyway.

M: [00:14:59] Okay, so le... So let's talk about your limiting factors, um there...are there physical issues like the lack of energy, something like that.

C: [00:15:12] Yeah. And just lack of time.

M: [00:15:12] So just being tired and lack of time?

C: [00:15:15] I get home at half six and by the time I've had my dinner and done, you know, I'm just ready to collapse - I don't go out there when I'm a weekday evenings when I'm at home by myself.

M: [00:15:27] Yeah sure and is the, and what about emotional limiting factors, like you do you have a lack of confidence or a lack of motivation or um, those kinds of emotional...

C: [00:15:40] I would definitely say I've a lack of confidence in my gardening knowledge full stop. Like I don't have any.

M: [00:15:47] Yeah, okay.

C: [00:15:48] So I think that's probably why I'm saying that the commitment for me you would have to be.

M: [00:15:56] You'd have to get some results.

C: [00:15:58] Well, it would more, it would...no, I think, I think it would have to be the knowledge that I'm, I know I'm invested in this place for X number of years.

Therefore, I can start the journey of learning how to make that you know, because I know it's going to take a long time to get those skills.

M: [00:16:12] Yeah.

C: [00:16:13] I don't know if it's the same for you - probably not.

E: [00:16:18] I think I've got some more confidence because I've had some more of that growing up and I just tend to be, I, I have that much more to do with outdoorsy things anyway.

M: [00:16:34] Yes, that's right, the physical world yes, all of that

E: [00:16:35] Yeah and mainly using tools...

M: [00:16:35] So in terms of the mental issues and like understanding how things grow you're you're feeling a little bit more...you have that.

E: [00:16:49] Yeah, I think so.

C: [00:16:49] Yeah, you're probably a bit further along in that respect whereas I'm kind of like - I'd have to start by reading simple books.

M: [00:16:57] Yeah sure.

E: [00:16:58] I think my, my most honest limiting factor is just a tendency towards laziness.

M: [00:17:04] Which I don't see in you but yeah ok, ok...Lack of, let's call it a lack of motivation... and then let's talk about money as well, cos you're on this no spend year.

C: [00:17:16] Uh-huh.

M: [00:17:16] So there's, there's I guess we would call it the lack of a network that lets you get these free things, that, um that you could possibly use in the garden while you're on a no spend year basically.

C: [00:17:32] Right, yeah, yeah

M: [00:17:32] so that, so there is a) a certain lack of money, but also b) a lack of desire to spend any money on anything new.

C: [00:17:42] Yeah. Yeah.

M: [00:17:44] In the, in the garden, So there's, that's quite a limiting factor in terms of getting anything up, but you have those pots and things like that...

C: [00:17:53] I think, um, I think ah, because the people who live in the ground floor flat next door, they are very much into their garden and discuss how much she's growing veggies and stuff. Cos she was telling us - we were peeking over the fence about their plot. Um, and she was telling us what was where and we were sort of making envious noises... I don't think she would be averse to lending us stuff if.

E: [00:18:23] And we, we borrow their shears

M: [00:18:24] Well we're on to the next section now, what resources do you have? So you have a neighbour who would lend you stuff. Potentially you've got food collecting ability from your veg box I guess, and things like that.

E: [00:18:39] Possibly.

C: [00:18:39] Possibly, yeah, I hadn't really thought of that

M: [00:18:42] So you've got a neighbour that will lend you stuff and you've got some motivation, particularly if stuff is cheap or free.

C:[00:18:49] Yeah. Yeah.

M: [00:18:49] And your, and your motivation runs to "maybe we would spend a weekend...

C: [00:18:56] Yeah. Yeah.

M: [00:18:56] Setting stuff up.

C: [00:18:58] Yeah.

M: [00:18:58] If we would get some kind of return on that."

C: [00:19:01] Yeah, so maybe we would spend a weekend digging a veg patch, having borrowed things and I mean like seeds - seeds are - seeds wouldn't count for me as a new thing in terms of um, the idea of buying nothing new because of what they represent I think.

M: [00:19:23] Okay.

C: [00:19:24] Um

E: [00:19:24] Yeah.

C: [00:19:31] Yeah. And that would probably be quite fun. So if it was in, in, if Jane allowed us to dig up say half of whatever is our side of the back garden.

M: [00:19:46] Hmm.

C: [00:19:47] I would probably be quite up for it?

E: [00:19:52] Yeah...

M: [00:19:53] How would you feel about, say, for example, not digging but getting straw bales and growing in that as a medium. Would, would they count as buying things or does a growing medium count?

C: [00:20:08] I don't think so because...like it's...yeah...straw... also straw bales are, they probably don't have a very big imprint on the earth's resources, do they. So so that wouldn't be, they wouldn't be a new thing like like going and buying a new pair of jeans that were you know, um

M: [00:20:33] No and it depends what straw you use, depending on what straw you use, it's a waste product.

E: [00:20:41] Yeah.

C: [00:20:41] So, no, that would that would that would be fine for us.

M: [00:20:47] Okay. Do you have any network of other people that you know, that can use their skill or their energy or their...

C: [00:20:55] Or, or knowledge?

M: [00:20:56] Labour or knowledge, that kind of thing.

C: [00:20:59] Um, my Gramps is very knowledgeable in, in that area. He actually gave us the bean plants that we grew last year. So we didn't grow our runner, our beans from seed last year. We tried broad beans from seed this year. and we got...five. Five beans out of two pods. Yeah, but last year we went to stay with them for the weekend without the intention of coming back with a car full of....

M: [00:21:32] Sure.

C: [00:21:33] Runner beans they started but yeah, so he has the knowledge and he probably has tools that yeah we could borrow...

E: [00:21:41] and my parents are very much...

C: [00:21:45] Knowledgeable. But equally they're

E: [00:21:47] Knowledgeable and practical and...

M: [00:21:47] A long way up

C: [00:21:47] A long way a long way away. So in terms of the practicalities of tools and time and that kind of stuff

M: [00:21:53] Yeah

C: [00:21:53] That's not...

E: [00:21:55] if they came down to visit on a weekend, a weekend when we're working things, or

C: [00:21:57] If they'd work for a weekend.

E: [00:22:01] Or they could just come down and visit and we could go, Oooh! We happen to be doing something in the garden this weekend! That might be fun. So they, they, they've been doing a lot

C: [00:22:02] Polyunnel and all sorts

M: [00:22:15] That's a possibility - and any kind of labour swaps with friends who want gardening done as well? Or would you just not be into that?

C: [00:22:20] I think that would be less likely.

M: [00:22:24] Ok

C: [00:22:25] I can't I don't think we've really got any.

E: [00:22:27] Yeah you know that lady...Pablo.

C: [00:22:28] Yeah. We were just getting to the point where we were starting to build quite a good relationship with Emma and Pablo when they moved and Emma's really good at her gardening stuff, but otherwise

M: [00:22:43] That's a kind of 'no', okay.

C: [00:22:45] That's a no, yeah, yeah

M: [00:22:47] And in terms of financial budget? 0 to...? [pause] As close to zero as possible, we know that.

E: [00:22:59] Yeah, but...

C: [00:22:59] I mean presumably, I mean presumably to ask the question, what's the average for the expense of things it would be very difficult to answer...

M: [00:23:09] A) there's no average, b) you're looking at doing something different anyway, you know, you're not looking at doing a ground, a ground, Ground Force thing. You're not looking at blitzing it for a weekend and making it look like a show home. That's not what you're after, I don't think, reading what you're, reading into what you're saying at all.

E: [00:23:28] I think, think we have to spend something. I mean it, it's gonna, gonna be something

C: [00:23:34] Yeah like, when you say spend something....

E: [00:23:36] Yeah I don't know, I hadn't thought of anything

M: [00:23:42] Okay, that's fine that we just explore possibilities at this stage then, rather than doing any specific planning. So...security issues.

C: [00:23:52] Oh the family of foxes - they're a security issue, are they not?

M: [00:23:58] Well, they're a wildlife issue.

C: [00:24:00] [laughs] Okay. Yeah as in people - I can't see that anyone that would....

M: [00:24:06] [laughs] I can't...There's a bike there, that's been there...it's not locked, it's been there since you've been here.

C: [00:24:10] Yeah, yeah, exactly, yeah we would be really unlucky to put that work in and then someone come and sabotage it...

M: [00:24:09] Ok and so energy sources and resources that are currently being used on site and how much? I know the hover thing will be electric, but anything else?

E: [00:24:30] Um, I mean we...most of the,, most of the water we're watering things with comes from the dehumidifier, so we're actually just using the by-products

C: [00:24:40] Yeah, so through the summer we basically pour, pour the water out the dehumidifier into the watering can when the [] fills up, and then watered our beans with that.

M: [00:24:50] Okay

E: [00:24:50] And then that was enough for all the pots.

C: [00:24:51] And we actually, we haven't really bothered growing anything this year apart from the broad beans but last summer we grew sweet peas and we had things in the window boxes as well. And that was enough to water them wasn't it? We had sweet peas, runner beans, a few different types of herbs and the two window boxes.

E: [00:25:23] We don't use anything else, I don't think

M: [00:25:31] Okay. And your time scale is you're going to be gone in a couple of years.

C: [00:25:41] Mmm. M-hmmm.

M: [00:25:42] Okay. But basically you're allowed to do stuff to the garden.

E: [00:25:49] We'd ask Jane first, but I don't think she's actually

C: [00:25:50] Yeah...we don't know really at this point how much she'd, but I don't, I can't see that she would be - if we said, do you mind if we use the garden to grow some vegies or something, I can't see that she'd be like, well I have massive problems with that.

E: [00:25:50] No. I mean she'd, I think she would be prepared for the next time, um, when she has the next tenants in, there might not be

M: [00:25:50] No I don't think there's anything for them

E: [00:26:12] Yeah I think she would be prepared to just sort of have someone come in and returf it if she wanted to when we moved out.

M: [00:26:28] Hmm, Okay.

E: [00:26:29] So I think, I think she'd probably be happy because we, we haven't asked her to turf it or do anything with it, she'd probably be happy for us to do...stuff...

M: [00:26:34] Yeah, ok. And Mr. Upstairs just hangs his washing.

C: [00:26:41] Every now and then yeah,

M: [00:26:43] And leaves his underpants if they fall off...

C: [00:26:44] Yeah. Yes. We've put them on the side and he's obviously come out that because we put them nicely on the step... But yeah, just underpants on the... apparently that clapped out washing machine has nothing to do with this flat or Jane, and neither's the bike. So.

M: [00:27:02] Okay. Okay.

C: [00:27:03] I kind of thought about making a feature of the washing machine.

M: [00:27:08] Yeah. Well, I mean what else, what other choice do you have ultimately?

C: [00:27:11] Yeah.

M: [00:27:12] Okay. So that's all, that's all very good to know, that's your client interview. So what I'd like to do now is kind of separate you out and just ask you one at a time to do this kind of metaphor elicitation jobbie as well.

E: [00:27:25] Ok. I don't really mind, I can, I can

C: [00:27:25] I was gonna say, can I go first and then I can jump in the shower

M: [00:27:25] Yeah good idea - but I can't see that we're gonna be any more than 5-10 minutes, and it might be substantially less, I don't know! So, that'd be great...

E: [00:27:25] [unintelligible in background]

M: [00:27:25] I don't know, it might be...might be...yeah...ok. So I think what I, what I want to do is just have a think about just basically nostalgia and how that would relate to your desire for the garden space, so if you can have a think about what, what do you think, um what your memories of gardens are, what your pleasant memories of gardens are, you know any kind of nostalgic view that you have on gardens and how you think that relates to what you want out of the garden space, that would be brilliant.

C: [00:28:32] The, the immediate memories that come to mind when I think 'gardens' would obviously be Granny's garden, and, and Nan and Gramps's garden as well. Those are the gardens I grew up in at the end of the day.

M: [00:28:49] Yeah. And what are the things that you remember about the garden - and that could be physically what you remember in the garden or emotionally what you remember about the state of yourself in that garden, or... Do you know what I mean?

C: [00:29:07] Yeah, yeah...ummmmmm

M: [00:29:08] What, what do you relate? What emotions, what sensations, what, you know smells, sights, all the rest of it. What, what, what comes to mind when you, when you think of those gardens?

C: [00:29:32] Ooooh. Um, it's probably sound really weird, but I, um - a smell that comes to mind would be like hot paving stones.

M: [00:29:42] Oh brilliant, ok

C: [00:29:43] In my grandparents' garden, because they've got, out the front a whole turfed bit and then as it goes around the corner, it's completely paved and um, so I guess I probably associate the smell of petrichor with it. Yeah, and one of the memories I have as a kid is watching - cos they're very pale paving stones - watching them change colour as the, as the raindrops hit, and just finding that interesting, and feeling the heat of them underneath my bare feet.

M: [00:30:18] And smelling the smell.

C: [00:30:20] Yeah, and then when I was very little Dad and Gramps built me a little Wendy house underneath the cherry tree, which was just my pride and joy, and I just loved and spent, when I was at that house spent so much time in it.

M: [00:30:40] Mmmm. And can you can you recall at all why you spent so much time in it? Do you think it was because they built it for you, or it was a little house of your own, or....

C: [00:30:50] I mean, I was very little like...

M: [00:30:53] Yeah, I've seen the pictures. Two, I would have thought.

C: [00:30:56] Two probably yeah, like toddler two, three, four would have been the age that I was most in it. I guess it was C's space. I don't know - also, I was kind of spoiled when I was, when I was a toddler, like, so it would be a, 'oooh C's expressed a desire for this thing, so we must make it happen for her.'

M: [00:31:18] Right. So a kind of control?

C: [00:31:20] Maybe, I don't know, I don't know.

M: [00:31:20] An issue of being able to control the environment, or having some kind of fulfilment of your desires or something like that?

C: [00:31:29] Maybe actually. Umm....mmmm, yeah, maybe...and I recall it having a little window and it just being a really fun place to go to the end and finding it amusing that I can fit in it, but the grown-ups couldn't.

M: [00:31:51] Yes good. Uh-huh

C: [00:31:52] And then going back when I was, I mean, and then you know Gramps used it as storage, when I'd kind of grown out of it, but then then going back when I was older and big enough to be kind of bothered by bugs and stuff and being going in and being completely freaked out by the wood lice because that was not what I remembered.

M: [00:32:13] Okay.

C: [00:32:14] And being Big in it, which I had never been in my memories.

M: [00:32:21] Sure, yeah, yeah going back to your primary school going, oh, this has shrunk...

C: [00:32:22] Yeah, and then Granny's....[pause] I think Granny...Granny's garden was my fairy land. And it was where I would leap over the, her pathway being Pocahontas... I ran around on a, on a broomstick that Grandad had made for me, and I would leap off the bank by his shed because it was quite a drop and pretend I was flying...and um, er, down the end, oh I've forgotten...the firs down the end...what was it called, the jungle or something and there was, you know, and that was Granny anyway, so she'd give all these things names and there were the fairies that she, that she would put in the beds and stuff, and the Magic Tree. Yeah. Yeah and all that kind of something, uh, something a bit special or exciting or unexpected will happen in Granny's garden kind of a... knowledge...and it would kind of be a disappointing visit if something hadn't...um...and um, getting my fingers in mud in that garden, ummm, even though I was a very clean hands kind of a child I still...I don't know...getting muddy fingers would be a sensation, I remember in Granny's garden, I wasn't just completely...

M: [00:34:00] In your head

C: [00:34:02] Play, yeah. Were you asking about how that relates, or how I think that might relate to...

M: [00:34:16] That might come later...are there any, are there any visual memories that you - no, this is yeah, this is kind of where we go into, is there anything that you think relates to anything you've just said or anything that you now think of from those gardens that give you any impetus for anything that you want to recreate or anything...

C: [00:34:38] Well actually thinking about it, and it was, certainly wasn't a conscious thing when I said it earlier on, but where I said about I'd rather instead of a straight down path down the garden like we have now, if I was creating my utopian garden - it'd be a bit rambling, and that totally comes from Granny's garden because there were so many nooks and crannies in Granny's garden and so many corners and so many bits to investigate, and um different things you might find and stuff. And I like, I like discovering stuff. So I do, I like the idea of being able to sort of walk through my garden and go, 'Oooh that wasn't there a few days ago, like oooh that, that...squash has got big, or that, you know that, that flower has come', or you know looking at 'oooh in that corner there's something there now that wasn't there before or something that, you know, umm yeah. Yeah.

M: [00:35:29] [pause]

C: [00:35:44] Don't think about Nanna and Gramp's [unintelligible - necessarily?] I guess because they've always grown a lot. And I know that my kind of 'waste not want not' mentality very much comes from them.

M: [00:36:02] Well, I'd imagine all of them.

C: [00:36:04] Yeah, yeah. Yeah. Hmm.

M: [00:36:11] Okay. Well if you think of anything else, feel free to let me know, because, because I think when you first - this is a new thing, and when you first get asked it - this is, this has been my experience with other people when I've asked them about nostalgia - is 'we've never thought of it before in those terms' and then they keep thinking of things as it comes back. So feel free to let me know if there's anything else but I think that's a great start, and it gives me something to think of in terms of garden design, it's quite...there are some threads that I'm pulling in here of, of what you might want in a garden design based on, on your nostalgic, um...The only other thing I would ask is...gardens in general, um, and gardening in general, is there any nostalgic form of garden, or nostalgic look of garden, or nostalgic feel of gardens, if you say go through the park or go through gardens and things like that, is there anything about those that feels like it's nostalgic, that calls to you, that you might like to explore in a garden? And again, if you can't think of it now and you want to drop me an email when it comes to it, then that's fine. But we can, we can explore it now.

C: [00:37:45] Could you repeat the question please?

M: [00:37:46] Well, we we went through a garden today, on our way to the William Morris house, so it's not like you're disinterested in gardens, you know, and we went through a park, and then you look in other people's gardens and see the roses and things like that, you know, so you're not entirely disinterested. So this idea of whether there's, whether you, you feel that is a nostalgic impulse at all or whether it's just an interest, which is absolutely fine. Or whether there is a kind of...there's a thing called legislated nostalgia, which is stuff that you feel like you have to feel nostalgic about because you're British or whatever, um, whether there's any kind of nostalgic impetus or impulse in any garden interests that you have or desire that you have...

C: [00:38:31] Yeah...yeah, ah probably massively actually, I mean I have - and this will sound like a bit of a departure but it's not, I'll... this might just be a bit of a roundabout way of getting to my point but I was looking on the Rowan Yarns website this morning and there was a picture of an old fireplace and a sofa and a

whole buttload of yarn of different colours in front of it and I went, ohhhh, I just know we're never going to own a lovely farmhouse, but I just love the idea of it. And I guess in that respect my - I have this image and - nostalgia can be projected into the future right? Like you're, you're yeah, it's not all about looking back. It's, it's, it's yeah, so I guess I have this, this, this picture of, this kind of picture of myself when I'm fixed in a place. So for instance, if we, if we settle long-term in Bristol, we would like to live on a canal boat and have an allotment so I - but I, I so I guess what I'm saying is I like roses and I like the idea of having an allotment and that kind of thing. So I guess my interest in gardens feeds into the kind of lifestyle I would like to have in maybe 15 years' time. And it's, it's, it's very much a constructed one.

M: [00:40:16] And it sounds traditional.

C: [00:40:19] Yeah. Yeah.

M: [00:40:20] A particular kind of traditional that has to do with living off the land in some way and, ah hand crafts, and those kinds of, that particular lifestyle that is, that is....

C: [00:40:32] Yeah. Yeah. Yeah. Yeah. Yeah.

M: [00:40:39] That feels nostalgic to me.

C: [00:40:43] Yeah, and I've always been very interested in it, but it's come to the forefront this year in particular.

M: [00:40:52] But that, to you that feels like a looking backwards in order to proj - and projecting that forwards into a life that you want to move into.

C: [00:41:00] Yeah, I think so.

M: [00:41:01] Hmm. Cool. Cool. Excellent, brilliant.

C: [00:41:08] Cool.

M: [00:41:09] Shall I swap you now then? I'll just leave it on.

C: [00:41:13] Yeah? I'll go and get him.

M: [00:41:15] Thank you. Thank you very much.

C: [00:41:18] Oh, it's interesting to think about though, isn't it...you don't...

M: [00:41:27] Well it is to me....

C: [00:41:27] I mean on a daily ba..., on an everyday level you don't think about, you, or make the connections in your head that, of the things that are popping into your head.

M: [00:41:32] Hmm. {E comes in}

M: [00:41:48] Hello. So, I'll just ask you the same kind of questions that I asked C which is that, if you're thinking about...well, just asking you what your memories of gardens are that might feed into things that you then want to recreate in the garden

that you have - or actually just starting with asking you what your nostalgic memories of gardens are. So are you okay with nostalgia, or do you want me to, to kind of give you a working definition?

E: [00:42:28] Um working definition would be...

M: [00:42:31] Okay. So looking back fondly with a sense of, maybe with a kind of slightly melancholy sense of loss or that sort of fond, er you know fondness or loss or, or something that isn't present now.

E: [00:42:46] Yep.

M: [00:42:47] That you, that you miss or wish you could have.

E: [00:42:51] Okay. So I basically just think of the garden that was at my parents' house where I grew up. And that was probably about, maybe about twice the size of the one we have here in total, but packed full of stuff. Um, Mum always - well she didn't always do a lot of work, she a few times a year did a weekend of a lot of stuff, so she had a couple of roses, but it was more just a sense of kind of abundance and there was no, no sort of regularity to any of it. It's very much a sort of free...I think...but at various times of the year there'd be lots of colour, lots of foliage, and there was a small lawn but that was basically just a place where the dogs did their business.

M&E: [00:43:59] [laughter]

E: [00:44:03] And they seemed to prefer that to anywhere else and it was easiest to clear it up from that one spot, so that's what that functioned for. And actually smells, there were usually, I think there were a couple of clematis, and a few other things. So smell in the garden was quite a big thing. And latterly, um so in the last few years of that garden, they got the chickens at the top. So having a productive part of the garden was quite good. I did like that. So I think yeah, maybe sort of what I would feel that we're lacking that I look back on. and think was nice because kind of just the sense of abundant foliage and...life.

M: [00:45:05] Hmm. Was there a lot of wildlife in that garden, or...? Do you think, I mean do you think it influenced you at all to do what you're doing now?

E: [00:45:14] Possibly. We always had bird feeders, so there were almost always birds in the garden. We had...we'd have a couple of hedgehogs, sort of very infrequently. Lots of insects, there were plenty of bees about so we'd see flowers at most time, times of the year when flowering things are about, so there was a fairly constant source of food for them. So, yeah, it was quite a lot of insect life. Yeah, and then the birds were always there.

M: [00:45:52] Was there a particular smell - you mentioned the clematis, but is there a particular sense of some kind of smell that you would like to recreate in a garden, or...

E: [00:46:05] Not sure really. Might even be difficult to get a finger on.

M: [00:46:13] But you would like something that smells.

E: [00:46:16] Possibly...although I think probably not really asking for that so much at the moment, because the shrub, when that's flowering has a nice scent, and when we've got the jasmine flowering at the front when you walk in the door, when that's all out, that's a fantastic smell. But when that's out I get sort of a daily dose of fragrant flowers.

M: [00:46:39] So colour and productivity is the, is the kind of thing.

E: [00:46:47] Yeah.

M: [00:46:48] Ok. And then, the other question is that, so that's your personal nostalgia for a particular garden that you knew. In terms of, so we went through the garden today. Is there anything in...I guess English gardens or gardening that you, that you feel a sort of sense of nostalgia about, that, that you would like to recreate at some point or - I'm not asking necessarily in terms of this particular garden, just do a - you know, you're obviously interested in gardens because we went through that, through that garden today. Do you feel that's anything to do with nostalgia or is it more scientific interest, or what is it that brings you to gardens like that?

E: [00:47:42] Ummm...probably a combination, um, so that's, particularly the bit we went through is probably the more wildlife-friendly part of the, the maintained part of the park, but I think, um, I don't know, I think it just largely comes from growing up and taking for granted that having a garden full of stuff growing is just kind of natural, sort of the way it is.

M: [00:48:15] Yeah. So that, so having a garden feels normal to you, and then you will have gone through a few studenty years without....

E: [00:48:25] Yes, and having a concrete slab at the back, which...yeah...and my first year in Bristol, sort of, being a sort of probably working adult was just a concrete slab out the back and that was, sort of, yeah, rubbish, just felt it was really lacking something, because it was basically just the easy choice for the landlord to concrete over it, so don't have to maintain anything. So just having some sort of greenery outside is important.

M: [00:49:00] Ok. I said to C, quite often when I ask people about nostalgia it's not something they have considered before and they keep going back to it, and say "oh...oh", so if anything occurs to you, just drop me an email and that's absolutely

fine. If it doesn't then that's absolutely fine as well, but just if anything does occur and you, you're like oh, actually this is something that um, that has occurred to me, then feel free to drop me a line, but otherwise, that's very great. Thank you very much for answering my questions

Appendix E: Whitewashed Hope

Whitewashed Hope

A message from 10+ Indigenous leaders and organizations

Regenerative Agriculture & Permaculture offer narrow solutions to the climate crisis

Introduction

Regenerative agriculture and permaculture claim to be the solutions to our ecological crises. While they both borrow practices from Indigenous cultures, critically, they leave out our worldviews and continue the pattern of erasing our history and contributions to the modern world.

While the practices 'sustainable farming' promote are important, they do not encompass the deep cultural and relational changes needed to realize our collective healing.

Where is 'Nature'?

Regen Ag & Permaculture often talk about what's happening 'in nature': "In nature, soil is always covered." "In nature, there are no monocultures." Nature is viewed as separate, outside, ideal, perfect. Human beings must practice "biomimicry" (the mimicking of life) because we exist outside of the life of Nature.

Indigenous peoples speak of our role AS Nature. (Actually, Indigenous languages often don't have a word for Nature, only a name for Earth and our Universe.) As cells and organs of Earth, we strive to fulfill our roles as her caregivers and caretakers. We often describe ourselves as "weavers", strengthening the bonds between all beings.

Death Doesn't Mean Dead

Regen Ag & Permaculture often maintain the "dead" worldview of Western culture and science: Rocks, mountains, soil, water, wind, and light all start as "dead". (E.g., "Let's bring life back to the soil!" — implying soil, without microbes, is dead.) This worldview believes that life only happens when these elements are brought together in some specific and special way.

Indigenous cultures view the Earth as a communion of beings and not objects: All matter and energy is alive and conscious. Mountains, stones, water, and air are relatives and ancestors. Earth is a living being whose body we are all a part of. Life does not only occur when these elements are brought together; Life always is. No "thing" is ever dead; Life forms and transforms.

From Judgemental to Relational

Regen Ag & Permaculture maintain overly simplistic binaries through subscribing to good and bad. Tilling is bad; not tilling is good. Mulch is good; not mulching is bad. We must do only the 'good' things to reach the idealized, 99.9% biomimicked farm/garden, though we will never be as pure or good "as Nature", because we are separate from her.

Indigenous cultures often share the view that there is no good, bad, or ideal—it is not our role to judge. Our role is to tend, care, and weave to maintain relationships of balance. We give ourselves to the land: Our breath and hands uplift her gardens,

binding our life force together. No one is tainted by our touch, and we have the ability to heal as much as any other lifeform.

Our Words Shape Us

Regen Ag & Permaculture use English as their preferred language no matter the geography or culture: You must first learn English to learn from the godFATHERS of this movement. The English language judges and objectifies, including words most Indigenous languages do not: 'natural, criminal, waste, dead, wild, pure...' English also utilizes language like "things" and "its" when referring to "non-living, subhuman entities".

Among Indigenous cultures, every language emerges from and is therefore intricately tied to place. Inuit people have dozens of words for snow and her movement; Polynesian languages have dozens of words for water's ripples. To know a place, you must speak her language. There is no one-size-fits-all, and no words for non-living or sub-human beings, because all life has equal value.

People are land. Holistic includes History.

Regen Ag and Permaculture claim to be holistic in approach. When regenerating a landscape, 'everything' is considered: soil health, water cycles, local 'wildlife', income & profit. 'Everything', however, tends to EXCLUDE history: Why were Indigenous homelands steal-able and why were our peoples & lands rape-able? Why were our cultures erased? Why does our knowledge need to be validated by 'Science'? Why are we still excluded from your 'healing' of our land?

Among Indigenous cultures, people belong to land rather than land belonging to people. Healing of land MUST include healing of people and vice versa. Recognizing and processing the emotional traumas held in our bodies as descendants of assaulted, enslaved, and displaced peoples is necessary to the healing of land. Returning our rights to care for, harvest from, and relate to the land that birthed us is part of this recognition.

Composting

Regen Ag & Permaculture often share the environmentalist message that the world is dying and we must "save" it. Humans are toxic, but if we try, we can create a "new Nature" of harmony, though one that is not as harmonious as the "old Nature" that existed before humanity. Towards this mission, we must put Nature first and sacrifice ourselves for "the cause".

Indigenous cultures often see Earth as going through cycles of continuous transition. We currently find ourselves in a cycle of great decomposition. Like in any process of composting there is discomfort and a knowing that death always brings us into rebirth. Within this great cycle, we all have a role to play. Recognizing and healing all of our own traumas IS healing Earth's traumas, because we are ONE.

Where to go from here?

Making up only 6.2% of our global population, Indigenous peoples steward 80% of Earth's biodiversity while managing over 25% of her land. Indigenous worldviews are the bedrocks that our agricultural practices & lifeways arise from. We invite you to ground your daily practices in these ancestral ways, as we jointly work towards collective healing.

- Learn whose lands you live on (native-land.ca), their history, and how you can support their causes and cultural revitalization.
- Watch @gatherfilm and Aluna documentary.
- Amplify the voices and stories of Indigenous peoples and organizations.
- Follow, support, donate to, and learn from the contributors to this post.
- Help republish this open-source post: <https://bit.ly/IndigenousWorldViews>

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Our intention is to invite proponents of western ecological agriculture (e.g., regenerative ag / permaculture) to go deeper and encourage their peers to go deeper—to not just ‘take’ practices from Indigenous cultures without their context, but to also encompass the deeper Indigenous worldviews... inspiring a consciousness shift that hopefully will support us to go from a dominant culture of supremacy and domination to one founded on reciprocity, respect, and interrelations with all beings—including, of course, among all humans.

Post end. _____