

Sveriges lantbruksuniversitet Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences

Paradoxical Permaculture?

 The mainstreaming of permaculture in Sweden. An analysis of discursive practices in the niche-regime interaction.

Guy Finkill

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Guy Finkill

Supervisor: Michael Jones, Swedish University of Agricultural Sciences, Centre for Biodiversity

Examiner: Jan Bengtsson, Swedish University of Agricultural Sciences, Department of Ecology

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Abstract

Permaculture purportedly offers a range of solutions to the negative externalities that arise from the dominant processes of monoculture crop cultivation and industrialised food production. This thesis identifies the discursive practices used by Swedish permaculturists to communicate and promote the advantages of permaculture over the incumbent industrial food production regime.

The study also assesses the identified discursive practices in Swedish permaculturists' online presence in their bid to mainstream permaculture as a social movement and as an alternative form of food production. This assessment is achieved through a multi-modal discourse analysis. The analysis finds a lack of strategic planning and management of the permaculture movement within the niche-regime interaction with one notable exception. This thesis study looks to raise further questions concerning the socio-technological landscapes that the dominant food production regime currently resides in.

This study has identified a pattern materialising where permaculture practitioners are (knowingly or unknowingly) bypassing the incumbent food production regime and directly interacting with the socio-technical landscape. This approach is haphazard and piecemeal in contrast to the specific techniques mentioned in the literature on Transition Management and Strategic Niche Management.

Keywords: Permaculture, Niche, Regime.

Popular Summary

Permaculture purportedly offers a range of solutions to the negative externalities that arise from the dominant processes of monoculture crop cultivation and industrialised food production. This thesis identifies the online methods of communication by Swedish permaculturists to promote the advantages of permaculture over the current industrial processes that are used for food production.

The study also assesses the identified practices in Swedish permaculturists' online presence in their bid to mainstream permaculture as a social movement and as an alternative form of food production. The analysis finds a lack of strategic planning and management of the permaculture movement exhibited by the assessed permaculture practitioners.

This study has identified a pattern materialising where permaculture practitioners are (knowingly or unknowingly) bypassing the incumbent food production regime and directly interacting with the broad socio-technical landscape that encompasses the food production regime. This approach is haphazard and piecemeal in contrast to the specific techniques mentioned in the literature on transformational transitions.

Keywords: Permaculture, Niche, Regime.

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Introduction

Permeating Permaculture

Since the inception of industrial agriculture, the task of feeding the world has been plagued with problems (Foley et al, 2005). These problems include, but are not limited to, losses in biodiversity, soil degradation, heavy pollution of shared water sources (Horrigan et al, 2002), land and water-grabbing, high levels of greenhouse gas emissions and detrimental health impacts (Foley et al, 2005). There is a variety of farming systems that currently exist that could be perceived to be alternatives to the dominant corporate food regime (Horrigan et al, 2002) in the developing world and the industrial food regime (Vivero Pol, 2015) in high income countries. Permaculture and its design principles could be said to be one of these alternative systems (Peeters, 2011). The permaculture model is said to potentially address some of these aforementioned problems that are linked to the agri-business model and to provide a credible alternative to the conventional highly-mechanised (Horrigan et al, 2002) agriculture that continues to be prevalent in modern-day societies, including Sweden (Saifi & Drake, 2008; Brassley, Martiin, & Pan-Montojo, 2016).

What is Permaculture?

David Holmgren and Bill Mollison defined permaculture as an "integrated, evolving system of perennial or self-perpetuating plant and animal species useful to man" (Holmgren, 2002 pp. xix). Holmgren and Mollison are considered to have coined the term permaculture in the 1970s. This definition of permaculture has evolved since the 1970s and has grown to incorporate aspects such as permaculture representing not only an alternative technical approach to farming but also a counterculture against consumption-driven society (ibid). A set of values, ethics and principles are included with sustainability at their core that can take shape and influence many factors of global society as well as agriculture (ibid). Permaculture encompasses an increasingly broad spectrum of benefits that can come with living harmoniously with nature. The permaculture design principles according to Mollison (1988) and Holmgren (2002) are as follows:

- 1. Observe and Interact
- 2. Catch and Store Energy
- 3. Obtain a Yield
- 4. Apply Self-Regulation and Accept Feedback
- 5. Use and Value Renewable Resources and Services
- 6. Produce No Waste
- 7. Design from Patterns to Details

- 8. Integrate Rather than Segregate
- 9. Use Small and Slow Solutions
- 10. Use and Value Diversity
- 11. Use Edges and Value the Marginal
- 12. Creatively Use and Respond to Change

These above principles can be adhered to and interpreted through the application of many design methods. Permaculture design is claimed to integrate the sustainable use of energy and natural resources with sustainable food production that contributes to the diversity, resilience and stability of the respective ecosystem (Ferguson & Lovell, 2014). Landscape modifications, water retention methods, carbon sequestration techniques and the ultimate optimisation of available land as well as resources are paramount to the success of a well-managed and well-designed permaculture establishment (Holmgren, 2002).

Permaculture is characterised by its approach to systems design; this approach is not found in other agro-ecological movements that it is often associated with (Vitari & David, 2017). This approach analyses the metabolic processes of a particular location and through a pattern-based approach that recognises the importance of dynamic symbiotic relationships that are ever-present in natural ecosystems. The approach normally imitates innate natural processes through the use of biomimicry in the design process (Mang & Reed, 2012). Permaculture design is a key component of a regenerative methodology that can be put to optimal use in food production and energy utilisation through living systems thinking (ibid).

Permaculture is not without its critics, it can often be deemed as dismissive of science as some advocates of the concept often only concentrate on simple solutions with an underestimation of how complex integrated systems can be and the difficulty that surrounds that (Toensmeier, 2016). This misappropriation and poor application of permaculture design contributes to the lack of understanding of the concept. However, it is claimed that if applied appropriately in the correct circumstances with the use of biomimicry (Du, 2012) and system optimisation, the sustainable design of permaculture projects has multifunctional purposes that include many desirable attributes including the increasingly important necessity of mitigating the effects of climate change (Zari, 2010). One problem that is often encountered when discussing permaculture is that it is a relatively ambiguous term that is open to interpretation. There are inconsistent definitions of permaculture that can easily cause confusion and hinder academic discussion on the topic.

Permaculture in Sweden

The transition movement in Sweden initiated in 2009 (Magnusson, 2018), and there are now several Ecovillage projects that have a tight connection to move the permaculture movement and transition

networks (ibid). The Swedish permaculture association website currently lists 33 permaculture projects that are active in Sweden (Permakultur.se, 2019). There projects as well as related social movements that are founded in permaculture or at least employ a number of their practices and principles are proliferating across high-income countries (Taylor Aiken, 2017). This is predominately in response to growing awareness of environmental challenges and ecological tipping points as well as the pursuit of vision of living harmoniously with nature (ibid). The transition movement has its heritage rooted in permaculture and the associated ideology (ibid), and their network is prevalent across Europe, including Sweden.

The Industrial Food Regime

The commodification and industrialisation of food across much of the globe can boast some remarkable achievements such as significant increases in yield output, abundant cheap food, and less labour intensive food production (Vivero Pol, 2015). However, there has also been a notable amount of negative externalities connected to the monolithic expanse of industrialised agriculture, including but not limited to "pervasive hunger and mounting obesity, environmental degradation, oligopolistic control of farming inputs, diversity loss, knowledge patenting and neglect of the non-economic values of food." (Vivero Pol, 2015 pp.2).

The industrialised food system has established a dominant regime with a relatively small amount of immensely wealthy stakeholders at the helm (Mann et al, 2014), even some that have no inherent interest in the physically produced goods. "Banks and other investors influence prices despite their lack of interest in the actual physical goods, capitalising on their knowledge, experience and global reach to make windfall profits at times of volatility." (Mann et al, 2014 pp. 20) Despite globalised industrial agriculture making a significant contribution to the breaching of particular planetary boundaries (Rockström et al, 2009), the permanency of the neoliberal industrialised food regime is unfaltering (McMichael, 2005). Alternative Food Networks (AFNs) have attempted to enter the mainstream (Vivero Pol, 2015) with varying levels of success (ibid) ranging from the permeation of the Organic Food Movement (Smith, 2006) to the Transition Movement (Hopkins, 2008). There is a fear that emerging food movements such as permaculture will be co-opted and de-politicised by the corporate food regime and lose its transformative ideology (Mann et al, 2014). This anxiety could be a noteworthy stumbling block that hinders permaculture's mainstreaming as some niche-based actors are cautious of working alongside regime actors in fear of losing sight of the overall goals of the movement.

The niche actors that are unwilling to compromise on the ideology of permaculture for the sake of mainstreaming permaculture can be described as iconoclasts (AtKisson, 2011). To use the 'amoeba model of cultural change' (ibid), iconoclasts can be situated in both the amoeba [niche] and externally [regime]. The iconoclasts are people that will cling onto an idea or an ideology at all costs even if this

unwittingly hinders the overall progression of a movement. While innovators, change agents, and transformers are at the vanguard of the amoeba [niche movement], they can be either bolstered by the influence of the iconoclasts or dragged back to a state of stagnation. There are also actors that can be labelled as reactionaries. These reactionaries are a group that have interests in maintaining the status quo (ibid) and can therefore actively be resistant and work against new developments and innovations that can challenge the permanence of the regime and its practices. In the context of the permaculture movement, the reactionaries would be regime figureheads that have significant assets and interests invested in the current methods of agriculture. Figure one displays a depiction of the 'amoeba model of cultural change' (AtKisson, 2012), it can be a useful tool for understanding the progression of a cultural or social movement as it identifies several forms of actors that are involved in the process. The innovation in the context of permaculture could be the permaculture design principles or any technical innovation that comes to the fore by adhering to these principles. The permaculture practitioners that are analysed in this thesis study can be considered as representing several of the amoeba actors depending on their level of engagement in the global movement. Progressive innovators, change agents, and transformers could be the roles embodied by the permaculturists in question. The actors involved in one example of the assessed data in related to the amoeba model of permaculture are further discussed in the latter parts of this study.

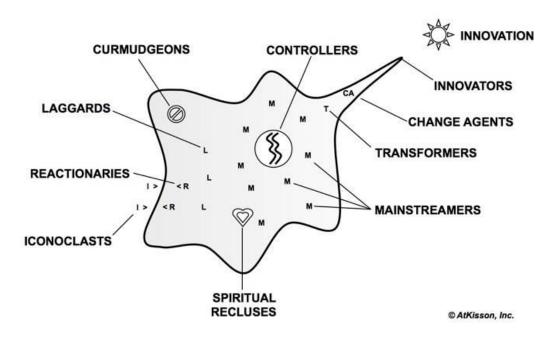


Figure 1 - Amoeba Model of Cultural Change (AtKisson, 2012). The labels refer to the potential stakeholders in a transition.

The industrialised food system embraces the ecological modernisation approach to farming and agriculture (Horlings & Marsden, 2011). When faced with dilemmas concerning the negative

externalities that arise from the heavy use of pesticides (Cowan & Gunby, 1996), a technical solutions based approach is favoured.

"EU Parliament adopted the "Pesticide package" which requires all Member States to set up action plans to encourage the widespread adoption of technical alternatives to the use of pesticides. However, these measures have only had marginal effects and seem unable to trigger deep change in French and European agriculture. Previous studies have revealed how agriculture is trapped in a lock-in situation, as the whole sociotechnical system is organized around high-input farming systems." (Bui et al, 2016 pp.92)

This ecological modernisation approach is prevalent in the realm of climate governance (Bäckstrand & Lövbrand, 2007); it embodies a Promethean worldview (Dryzek, 2013) that looks to manage and govern nature and its ecosystems through a multitude of technical innovations. This reliance on technology and unwillingness to move away from conventional mechanised forms of agriculture cements a level of inertia (Marsden, 2013) that makes it increasingly difficult for niche-level farming practices to enter the rigid mainstream that is reinforced by regime actors (ibid).

History of niche experimentation

Earlier literature on the formation of niches, and their pathways towards becoming mainstream, tend to focus on technological innovations (Kemp, Schot, & Hoogma, 1998). Technological regimes (Nelson & Winter, 1977) can be easily entered from a niche-level if a technological innovation clearly stands as an improvement or enhancement of the longstanding regime alternative. This scope of niche formation broadened to incorporate socio-technical innovation with Geels (2004) at the vanguard of the associated research. Since then, there has been a steady flow of publications on niche-level agricultural food networks and their interaction with the dominant food production regime (Ingram et al, 2015; Bui et al, 2016; Ingram, 2018; Mylan et al, 2018). Growing awareness of the negative externalities that arise from the business and farming practices of the dominant food production regime (McMichael, 2005) has increased the attention given to possible alternatives to consider for feeding the world's population in a manner that can be sustained, ethically, economically, and environmentally (ibid). These alternatives can often be comprised of niche-based socio-technical innovations that offer enhancements or substitutes for current methods of farming and agriculture.

These niche-level innovations can be potentially cultivated and supported until they are ready to enter the mainstream and can ultimately contribute to a transitioning of the regime by aiding the transformation from within the regime (Ingram, 2018). The progression of a niche-level innovation or movement is not a simple one, after all, a socio-technical regime is built up of a set of practices, technologies, and institutions that have been reinforcing their dominance to a point where they can become heavily resilient and resistant (ibid) to change that stems from external actors. This inertia is

not specific to the agricultural industry; institutionalised lock-in has been well-documented in research on the global energy sector (Bertram et al, 2015) and the transport industry (Neves, Marques, & Fuinhas, 2018).

Social Media as a Tool for Change

Some observers discuss social media's power to participate in society to the degree where they can contribute to the inciting of revolutions, furthering an ideology, and advancing the public sphere (Fuchs, 2017). Through the use of visual semiotics (Gee & Handford, 2012) it is possible to portray several discourses simultaneously with the employment of photos and videos. Albeit slightly trite, the analogy of 'a picture is worth a thousand words' is certainly relevant when discussing the competition of discourses in the public sphere. Social media's rapid and meteoric rise towards the ubiquitous role it now plays in the public domain (Shirky, 2011) has opened the door for anybody with an idea or a vision, combined with a stable internet connection, to disseminate their thoughts to the digitalised world.

Aim

The aim of this thesis paper is to analyse the discursive practices used by Sweden-based permaculture practitioners via their online presence. Once the practices are identified via a sociological discourse analysis (Ruiz, 2009), the rationale behind their use is discussed in relation to other niche-level transition movements. This thesis study's unique contribution to the existing body of research on niche-regime interaction (Elzen, Geels, & Green, 2004; Schot & Geels, 2008; Ingram, 2018) is the focus on the use of digital technologies, such as social media and the use of visual semiotics, as part of the niche-regime interaction between the permaculture niche and the dominant industrialised food production regime (Elzen, Geels, & Green, 2004). Permaculture, as a global movement, has the far-reaching goal of questioning the operations of the mainstream agricultural regime while seeking to transform the incumbent agri-food systems that the regime harnesses (Ingram, 2018). However, without the empirical data and statistics at hand to urge conventional farmers to transform their unsustainable practices (Perkins, 2012; Ingram, 2018), permaculturists look destined to be annexed to the niches of food production. The following research questions look to investigate how permaculture practitioners in Sweden seek to contribute to this regime transforming process that underlines permaculture as a global social movement.

The research questions for this paper are as follows:

What are Swedish-based permaculture exponents doing to communicate the advantages of permaculture via their online presence?

How are Swedish-based permaculture exponents using communication tools to promote the advantages of permaculture over the incumbent industrial food production regime?

By focusing on the emergent nature of the permaculture niche and its transformative methods, this thesis study looks to raise further questions concerning the socio-technological landscapes that the dominant food production regime currently resides in. A deeper understanding of the complex and dynamic socio-technological landscapes will assist further research into the management and stewardship of nichelevel counter-cultures. As part of addressing the research questions, the study conducts an analysis of the use of social media, among other online outlets, to further the ideology of permaculture in a Swedish setting.

Main Heading – Theoretical Framework & Analytical Approach

Hegemony and Food

The theoretical framework of this study and its analytical approach stems from a Gramscian concept of civil society as an arena of struggle and conflict where there are power skirmishes between classes in the quest of reaching a hegemonic consensus (Bates, 1975; Holt Giménez & Shattuck, 2011). When we apply this Gramscian concept to the current food regime, one can see examples of hegemonic structures established via the power of institutions and ruling classes (McMichael, 2009). Reformist incursions into the regime can be assimilated and help to advance the progress of the regime, especially technological innovations that offer improvements to efficiency and short-term yield output (Smith, 2003). More transformative changes that lie outside the neoliberal economic paradigm struggle to infiltrate the regime as their inclusion may also be reliant on a major shift of societies away from the market economy (Holt Giménez & Shattuck, 2011) that they are currently embedded in. This dual necessity of shifts required at not only the regime level but within the wider economic and societal landscape is a major obstacle for embryonic social movements that are situated at the niche-level. To put this in the context of global food production, one can have a look at the role that agriculture plays in development. The below quote from Järnberg et al (2018) highlights the manner in which the societal landscape has been sculpted and institutionalised, driven by a strong narrative of growth with little attention paid to ecological consequences.

"... current policies for agricultural development are dominated by an Agriculture as an engine for growth narrative, which focuses on the role of external inputs and commercialisation in boosting agricultural production, so as to drive economic growth. The institutional landscape reflects this, with

the Agricultural Transformation Agency basically being an institutionalization of the narrative, and with an extension system largely geared towards dissemination of Green Revolution type of technologies. Issues of natural resource management are largely decoupled from agricultural production in policy, which is also reflected in the institutional structures where the issues tend to be separated into e.g. different directorates and programs." Järnberg et al, 2018 pp.417-418

A rejection of the modern-day capitalist bourgeoisie (Saad-Filho, 2003) and the stranglehold they have on the means of production (Smith, 1979) would necessitate a social and political contestation that plays out within civil society (Holt Giménez & Shattuck, 2011). The neo-liberalisation of food production and the move towards unfettered markets (ibid) has led to the emergence of several counter-cultures that look to reject this laissez-faire attitude and market fundamentalism (Block, 2008). This process can be succinctly characterised by Polanyi's 'double movement' (Polanyi & MacIver, 1944). The ideological hegemony constructed within a regime (Bates, 1975; Birchfield, 1999) helps to ensure stability while rejecting ideas and concepts that pose a threat to the ideology embedded within the regime. A fluid 'double movement' would be comprised of necessary reforms being enforced as and when required in order to realign balance and bring back the reconciliation of entropy and exergy¹ in the given system (Rezai, Taylor & Mechler, 2013). However, Gramsci would argue that a demarcation between market and non-market strategies is simply untenable due to the "...embeddedness of markets in contested social and political structures and the political character of strategies directed toward defending and enhancing markets, technologies, corporate autonomy and legitimacy." (Levy & Egan, 2003 pp.803) This would indicate that the power elite within the establishment would be resistant to reformist approaches and outright dismissive of transformative alternatives to the incumbent regime, which in the context of this study is the food regime embedded in the neoliberal economic paradigm.

"... the power élite has three allied components: an upper class defined by a network of institutions and the concentrated ownership of wealth; a corporate community of directors, managers, and business professionals with its own set of institutional networks; and a policy formation network of non-profit organizations such as foundations and think tanks that develop and disseminate political strategies and policies." (Levy & Egan, 2003 pp.805)

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¹ The fundamental laws of thermodynamics dictate that within closed systems, there must be a balance between entropy and exergy. Here, entropy is represented by disorder to ecosystems caused by the harmful practices of the regime. Exergy is represented by the measure of wasted surplus energy within the system. By bringing these values down to a balanced level, the system can continue to function (Kay, 2000).

The neoliberal food regime, as introduced in the background section of this study, favours industrialised forms of food production with high inputs and locked-in infrastructure (McMichael, 2009). This goes hand-in-hand with a large-scale devolvement of power to non-state actors in order to reduce the need for government intervention for the issue of food security (Morvaridi, 2012). This is undertaken by shifting significant aspects of governance away from the state and towards the control of private sector interests (ibid). Actors and agents of change do not necessarily require a vantage point outside of an ideology. Instead, they can be posited within an ideology, enmeshed in the structural components of a dynamic niche or social movement (Levy & Egan, 2003).

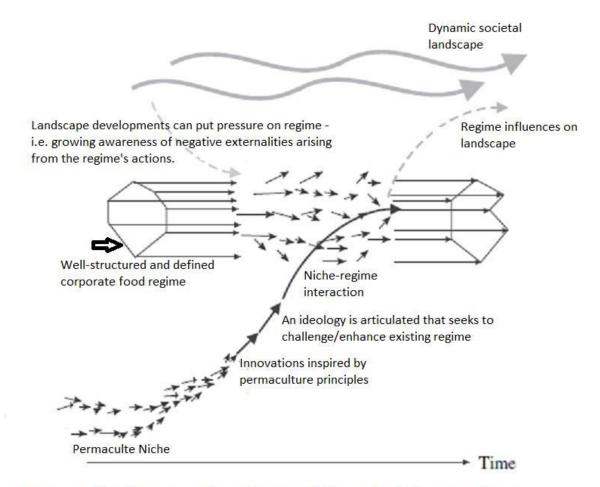
Permaculture, as a social movement, can potentially play a role in challenging the broader societal hegemonic structure by playing a more radical role in transforming the current food regime (Holt Giménez & Shattuck, 2011). However, "Neither reform nor transformation will likely occur without social movements strong and imaginative enough to inspire citizens to action and force governments to act." (Giménez & Shattuck, 2011 pp.134)

Subheading – Socio-technical innovations

This thesis study delves into a socio-technical regime that can often be perceived as stagnant and impermeable (Holt Giménez & Shattuck, 2011; Gaitán-Cremaschi et al, 2019). However, it is possible to see major shifts in the landscape of global food production in relatively recent history ranging from the Green Revolution (Holt Giménez & Shattuck, 2011) from the 1950-60s to the Industrial Revolution (Campbell, 2009). The Green Revolution completely transformed the yield output of developing countries with the adoption of new technologies and innovative methods of cultivation. In little more than a decade, global food production steered towards a highly mechanised and efficient agricultural system that succeeded in staving off vast swathes of famine, predominately across India and China (Nolan, 1993). The First Industrial Revolution, stemming from the inception of the steam engine, opened the door to the Second Industrial Revolution that consequently propelled the world into near exponential rates of growth. Over the duration of a century, innovative concepts such as mass-production and the assembly line joined forces with the economies of scale model to deliver levels of production efficiency never experienced before (Landes, 1969). These major societal shifts can be the sparked from a single technological innovation or social movement. Once normalised and welcomed into the mainstream, transformational effect can be tremendous.

To understand the niche-regime interaction in the context of Swedish permaculture, it is necessary to employ an epistemological framing to lay a theoretical foundation for the study. The following <u>figure</u> (2) is an illustrative depiction of how permaculture, as both a social movement and technical principles, may look to become mainstream by disseminating knowledge and the permaculture ideology into the conventional and incumbent agricultural knowledge system

This <u>figure (2)</u> represents a regime that is complex but ultimately open to transition if an appropriate innovation can manage to navigate its way into the mainstream. As described in the aim, this thesis study investigates the methods implemented by permaculturists and permaculture actors in an attempt to infiltrate the incumbent food production regime that is dominated by agri-business.



Theoretical example of transitional niche-regime interaction

Figure 2 - Illustration depicting a desired vision for permaculture becoming mainstream via niche-regime interaction. Arrows represent the progression and coalescence of the niche movement as it interacts with and disrupts the established regime. Inspired by Geels, 2000.

In order to fully comprehend the methods and techniques in play within this niche-regime interaction, it is necessary to have an understanding of socio-technical innovation theory and how this has been interpreted in forms of transition management and strategic niche management. Socio-technical innovation theory can provide insights into the manner in which an innovation or a burgeoning social movement can attempt to spur change or transformation in an incumbent regime. As awareness grows of potential planetary scale ecological tipping points (Sterk et al, 2017), as does the need for alternative solutions to sustain a global society. One of the imperative questions for the world to answer is how to

feed the world in a sustainable and equitable fashion. This question opens the door of opportunity to alternative food production systems that offer an alternative route to the unsustainable pathway that the current food regime traipses along. However, the adoption and implementation of hopeful alternatives can be hindered by well-established hegemonic structures that are difficult to negotiate with and even harder to dislodge (Ratinen & Lund, 2016).

"... the conceptual and institutional separation of social and ecological systems has contributed and continues to contribute to a misfit between ecosystems and governance systems. This separation is a strong contributor to the path dependence that makes it is so hard to shift to sustainable trajectories." Westley et al, 2011 pp.764

As highlighted by Westley et al, there is a noticeable disjointedness in the governance of systems that possess social and ecological characteristics. This lack of harmony can be linked to the embedded hierarchies prevalent in these institutionalised structures (Friedmann, 2005) that are reliant on high-input systems (ibid) with the goal of perpetual growth (ibid). The permaculture ideology and associated culture directly challenges the fetish for growth paradigm that stems from a neoliberal economic system (Spangenberg, 2008) and is explicitly exemplified in the food production regime (McMichael, 2005).

If the goal of permaculture as a social movement is to navigate its way into the incumbent regime, it must explore the various approaches of mainstreaming a socio-technical innovation. One such approach would be to advocate incremental configurations to existing aspects of a regime (Elzen, Geels & Green, 2004). This configuration, that aligns with the ideology and principles purported by niche actors, can act as a seed implanted into the incumbent regime that can create a space for further configurations to enter until there is an amalgamation of configurations large enough to begin directly influencing other aspects of the regime. This process is summarised in the below quote.

"Configurations that might work become 'configurations that work' as they move in a trajectory from the micro-level of niches to the macro-level of landscapes, gradually representing larger assemblages of practices, technologies, skills, ideologies, norms and expectations, imposing larger-scale impacts on their landscapes until they become constitutive and emblematic of them. Throughout this journey the socio-technical configuration becomes better adapted to its context, becomes more stable (both technically and institutionally) and exhibits growing irreversibility." (Elzen, Geels & Green, 2004 pp.53)

There are successful case-study examples such as 1) the expanse of digital cameras and the infrastructural demands that came with it, (Elzen, Geels & Green, 2004) and 2) the continuous shifting of public consciousness towards the consequences associated with factory farming allowing

opportunities for organic farms to move from the niche to the regime (Smith, 2006). These examples and others that are similar tend to focus upon niches that have managed to become mainstream by offering up these 'configurations' to the existing system. The question for permaculture in both a Swedish and global context, is whether or not their proposed enhancements of the regime can plant a seed that can then 'grow irreversibly' within the boundaries of the regime? To such an extent that will allow the regime to lower its defences and become more permeable for further aspects of the permaculture ideology to enter the mainstream and displace conventional techniques and artefacts of the incumbent regime. There are questions surrounding the reformist nature of this strategy and if it will lead to compromise for the social movement as a whole, especially a movement that is transformative by design. As permaculture and most of its practitioners would advocate (Temper et al, 2018), a more radical transformation of the incumbent food production regime would be more desirable and arguably necessary given the urgency of breaching certain ecological thresholds and planetary boundaries (Rockström et al, 2009). In practice, few configurative concepts, ideas, and innovations that are incubated and developed in a niche go on to become a seed that can grow into a regime transformation (Elzen, Geels & Green, 2004). Nevertheless, niches and the spaces they provide are crucial for system innovations as seeds for change need room to grow outside of the influences of the existing regime that can likely prevent the innovative breakthrough due to being entrenched in a neoliberal growth paradigm.

A possibility that could lead to rapid transformative change can be a triggering point in the landscape that can devalue embedded values prevalent in the regime and simultaneously open up opportunities for niche-level innovation to displace regime artefacts. Triggering points have to be large enough to shift the discursive landscape and can often be unexpected, such as wars or natural disasters (Geels, 2004). Rapid mainstreaming is more common in examples of technical innovation breaking through suddenly from the niche into the realm of the regime. However, by contextualising certain sociotechnical paradigms, one could envisage a situation where the dynamic societal landscape undergoes a major shift due to external pressure and therefore weakens the stability of the incumbent regime. Permaculture as a social movement may seize the opportunity of the growing awareness of climate change and the breaching of numerous planetary boundaries (Rockström et al, 2009). It remains to be seen whether the awareness of climate change spurred by the IPCC's 1.5-degree report will have significant ramifications in the societal landscape to allow the food production regime to be open to the principles and ideology purported by permaculturists. In the context of permaculture, ecological tipping points, caused and contributed to by the actions of the current regime, could prove to be this window of opportunity for permaculture in enter the mainstream as tensions and ripples manifest within the regime. Specific tensions in the dominant regime can be targeted with niche-based enhancements offered as a way of alleviating pressure on the regime from the socio-technical landscape.

"Today, it is the negative consequences of the exploitation of natural resources and environmental services that are introducing analogous tensions

to many socio-technical regimes. The carbon-intensity of the energy and transport sectors is an example, as is chemicals-intensity in agriculture. These observations imply that certain processes of regime transformation operate in a top-down fashion, acting from the landscape downwards into the regime. The important possibility is raised that 'top-down' processes may play a crucial role in generating 'bottom-up' opportunities for 'linking'." (Elzen, Geels, Green, 2004 pp.56)

This quote discusses a very relevant and potentially integral opportunity for permaculture to find an entry-point into the regime. If there can be a combination of top-down change through progressive governance and regulatory policy, it can incentivise the grassroots bottom-up movement of permaculture to join somewhere in the middle in a bid to enhance/shift the currently unsustainable but dominant regime.

Regime structures can be resistant to niche-regime interaction, especially if the niche-level sociotechnical innovation represents a threat to the infrastructure of the current regime (Geels, 2004). This infrastructure can include assets that could be considered stranded if the regime is configured in a manner that undermines their continued use (i.e. mechanised forms of agriculture, high-inputs of pesticides and fertilisers) (Padilla, 2017). The infrastructure and the regime itself can also be enveloped in a broader societal and economic context that may also be under threat from a merging of the niche and the incumbent regime (i.e. the economic model of exponential growth) (Bonanno & Wolf, 2017). Normally, the interdependent and compatible nature of the system buttresses the stability of the regime. The interdependence and shared interests of the regime actors can prove to be a powerful obstacle that often staves off the threat of emergent innovations that are arising from niche-level counter-cultures (Geels, 2004). If actors within a regime and stakeholders with vested interests feel threatened, this can lead to the regime not just displaying stubborn or impermeable characteristics but also being actively resistant (Tilzey, 2018). This resistance can manifest in the form of trying to limit or hinder the burgeoning of a niche-based innovation as the below quote exemplifies.

"Powerful incumbent actors may try to suppress innovations through market control or political lobbying. Industries may even create special organisations, which are political forces to lobby on their behalf, e.g. professional or industry associations, branch organisations" (Geels, 2004 pp.911)

This behaviour from regime actors is increasingly prevalent (Tilzey, 2018) as economic considerations influence the push to cement the stability of the existing regime. Shifts in the regime may render existing technologies obsolete and thus become a sunk investment (Geels, 2004). This is a key aspect of inertia in the global food production regime. Heavy investments have already been made into establishing a

system that is interdependent and is reliant on an unsustainable economics of scale model (McMichael, 2005).

There are examples of agribusiness lobbying across the globe, including the EU where "food multinationals, agricultural traders and seed producers have had more contact with the Commission's Trade Department than lobbyists from the pharmaceutical, chemical, financial and car industries put together" (Corporate Europe Observatory, 2014; Chambers, 2016 pp. 13). However, Scandinavian countries like Sweden have a good record when it comes to ensuring transparency within governance that does much to hinder the effectiveness of agribusiness lobbyists (Chêne, 2011; Chambers, 2016). Therefore, there may be more of an opportunity for niche-based movements to enter the mainstream within the context of Swedish farming and the national food production regime.

Connected to the unwillingness to accept losses on stranded assets and heavy technological investments, there is also an ideological barrier that can stand firm in resistance to burgeoning transformative movements emerging from progressive proto-regimes. Narratives of incessant growth have become quickly embedded and normalised in the food production regime as well as the broader socio-technical landscape in where the regime is situated (Tilzey, 2018). The below quote catalogues how the ideological decoupling of humans and nature can have an influential discursive impact on the regime's management of natural resources and ecosystems.

"In a context where economic growth is the overriding goal and is intimately linked with the legitimacy of the government, it is little surprising to find that issues related to production and productivity consistently supersede environmental sustainability. In addition, government policy is underpinned by a paradigm that treats social (including economic) and ecological domains as largely separate. Thus, although natural resource management is present on the agricultural agenda, it is seen as a means of reducing degradation rather than a crucial component of enhanced agricultural production, which differs fundamentally from social-ecological and sustainable intensification perspectives" (Järnberg et al, 2018 pp.418)

Transition Management and Strategic Niche Management in the context of permaculture

Transition Management

"Transformations generally begin with a perturbation or crisis that serves as an opportunity" (Moore et al, 2004 pp. 3). With this being the case, Transition Management (TM) has the aim of transforming a socio-technical regime; this emergent transformation is guided by a negotiation headed by actors that

are situated beyond the existing regime (Elzen, Geels, & Green, 2004). These social actors have the role of shifting the landscape where the regime is situated due to coordinated pressure that has stemmed from niche-level movements and innovations. The change in the regime than has to be mediated by the key actors and stakeholders involved in the incumbent regime, in this case, the stakeholders involved in the agribusiness dominated food production regime.

"At the heart of these transition management arguments sits the niche-based model of regime transformation. In this model, transition managers support what they hold to be desirable technological configurations by promoting protected institutional and market niches in which favoured configurations are supported and allowed to prosper, enabling them either to replace or transform dominant, unsustainable regimes. Thus experiments within the niche 'seed' processes of transformation within the existing technological regime." (Elzen, Geels & Green, 2004 pp.50)

Permaculture is a much broader concept than a typical technological innovation as it consists of competence networks and dynamic forms of knowledge that are shared across communities of practice (Geels, 2004). Permaculture as a socio-technical system is innovative but also focuses on how its innovative techniques can be built into/replace existing systems by promoting the benefits of their uses and level of functionality, not purely on a technical level. However, regardless of the potential that permaculture may contain as an alternative to the current food production system, it will still have to overcome the "embedded institutional, political and economic commitments to a particular technological regime" (Elzen, Geels & Green, 2004 pp.63). These commitments to existing technology and infrastructural processes are ubiquitous in large technical systems such as the industrialised food production regime, a concept described as Elzen, Geels & Green (2004) as 'institutional entrapment'. Currently, permaculture as a global social movement typically follows a TM approach (Feola & Nunes, 2014) with a meta-vision of creating fundamental change. However, it may benefit from using more specific tactics under a clear strategy using SNM as a guiding framework.

The annotated figure (3) featured below has been taken from Pereira et al's 2018 paper on emerging pathways of transformation. It has been modified for the purpose of this study to be in relation to the context of permaculture as a social movement and its potential trajectories. The key aspect of the figure relates to the 'window of opportunity' that is found hovering in between the meso and macro level and marks the point of crossing the boundary from preparation into navigating the transition. As stated in Pereira et al's study (2018) and in Westley et al (2011), although TM can be successful on a small-scale, it is unlikely to stimulate a wider transformation on a broader societal scale. For this type of paradigm shift, it will require a disruptive innovation that allows the wider system to adjust accordingly. This disruption can manifest in forms such as a breakthrough technological innovation, aggressive

changes in political policies, or some kind of biophysical change that forces actors (internal and external) to make changes in the dominant regime.

Strategic Niche Management

"Strategic niche management is the 'collective endeavour' of 'state policymakers, a regulatory agency, local authorities (such as a development agency), non-governmental organizations, a citizen group, a private company, an industry organization, a special interest group or an independent individual" (Elzen, Geels & Green 2004 pp. 59)

The theoretical background of Strategic Niche Management (SNM) is based on an interpretation of Science and Technology Studies (STS) and innovation studies. STS focuses on the evolution of various technologies that are situated in a niche that is incubated from the mainstream in a niche that allows the technology to develop until it reaches a stage where it can be successfully embedded into the mainstream. This incubation period would normally occur in research and development programmes. Changes and innovations can occur within existing regimes in the absence of outside pressure but radical innovations are created in niches as they are protected and incubated from normal market selection (Schot, 2001).

When applying this theoretical framing to the context of a social movement such as permaculture, the niche-regime interaction is not as clear-cut as a standard process of technological evolution. Permaculture cannot be simply defined as an individual artefact in the way that many technological innovations can be. Permaculture possesses a myriad of characteristics and is thus more complex and tricky to assess for the purpose of analysing / measuring its success of becoming mainstream. There are a multitude of actors and stakeholders involved that can possess views and perspectives that are entrenched in the often polarised sides of the incumbent regime (status quo) and the emergent niche (radical transformation). The ideology of permaculture advocates a major overhauling of the current food regime, the implementation of this would require a dramatic change in not only well-established agricultural infrastructure (Tilzey, 2018), but also a significant shift in power in the agribusiness model (Maye, 2018). It can be argued that if permaculture is to be realistic with its guiding vision and goals as a movement, it "... may want to pursue a 'stretch and conform' approach, they have to temper their desire and choose a strategy to conform to existing rules and regulations in the short run, in order to induce changes that will transform the regime in the long run." (Hermans, Roep, & Klerkx, 2016 pp. 294)

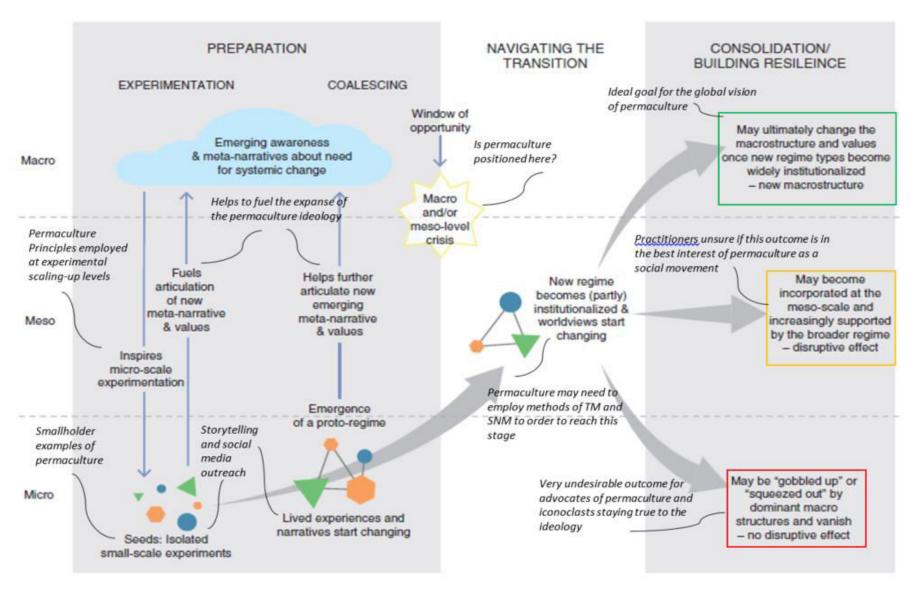


Figure 3 - Pereira et al, 2018 pp.330 - Adapted for a permaculture context. The symbols indicate new configurations, where the social and ecological components of the system are connected. The axis on the left is the three levels of scale. The axis across the top resembles a timeline of the permaculture niche's transition process. The annotations outline the possible paths for permaculture in the process of transition.

Convention Theory

"Convention theory focuses on shared rules and norms in economic coordination and offers a framework for examining how actors negotiate what is right and desirable. By this theory, actors are considered to engage with a plurality of universally accepted notions of worth, organised into different worlds of justification, and to use specific strategies of justification or negotiation to propose and justify different configurations of ideals and their manifestations." (Forssell & Lankoski, 2018 pp.46) Convention theory offers an interesting addition to the analytical approach of this thesis study.

If permaculturists are able to reconfigure the notions of worth of the actors that they engage with, it is theoretically possible that they will be able to garner support in justifying a swift transition of the food production regime towards a more sustainable and regenerative permaculture inspired regime. The dominant regime has well-established norms and a growth-inspired ideology (McMichael, 2005) that will require reconsideration and potential reconfiguration if permaculture is to transcend from the niche to the regime.

Infiltrating the Regime - Identifying and assessing general discursive practices

Permaculture can be defined as a grassroots innovation movement (Hermans, Roep, & Klerkx, 2016) as it directly opposes the incumbent regime of the agribusiness dominated food production regime and its associated agricultural knowledge system (AKS) (ibid). Permaculture is therefore situated within an incubating niche that allows the expansion of shared knowledge through communities of practice and networks of actors.

The methodology section of this study lays out the manner in which the theoretical framework is operationalised through an analytical approach. Table 1 depicts the discursive practices and processes that can be identified in niche development in the context of permaculture. The archetypal table is influenced by the work of Pesch (2015) and his research on tracing discursive space to identify agency and change in sustainability transitions. By identifying general and discursive practices exhibited by permaculture practitioners through their online presence, it allows the study to investigate how permaculture exponents attempt to communicate the benefits of permaculture over the incumbent food production regime. This analysis can shed light on the status of permaculture as a social movement in Sweden and how the movement is utilising (or not) techniques stemming from TM and SNM. Sociological discourse analysis (Ruiz, 2009), makes it possible to make connections between the methods of communication utilised by Swedish-based permaculture practitioners and the social, political, and ecological space from which they have emerged. This is achieved via making inductive inferences (ibid) based upon observations of the digital outreach of said practitioners and a deep

understanding of the socio-political and ecological context that plays host to the niche-regime interaction.

As discourse in the context of permaculture as a social movement can be seen as a form of the civic environmentalism discourse (Blewitt, 2015; Bäckstrand & Lövbrand, 2016), it is part of this study's aim to assess the communicative methods as tools of discourse. The civic environmentalism aspect of the permaculture ideology seeks to act as a potential mechanism of liberation (Ruiz, 2009) with the aim of overhauling and displacing the incumbent regime and the dominant ideology that guides and encompasses it (ibid).

Multi-modal discourse analysis in the niche-regime interaction

The discourse analysis used for the purpose of this study is not limited to an analysis of the online textual output from permaculture practitioners, the study also investigates the use of multimedia, predominately photos and videos uploaded on the practitioners' social media outlets. The presentation and subjects included in these photos and videos can help to bolster narratives (Davies, 2007; Machin & Mayr, 2012) that have been instigated by the textual literature provided by the field of permaculture. "Each image carries traces of meanings from its original context, but acquires additional nuances and associations from its online context." (Davies, 2007 pp. 533) Although, there is a huge array of photos and videos that are uploaded to social media profiles, it is possible for individual images/videos to develop semiotically, based on their location and the context that they are enveloped in (ibid). It is therefore possible for a collection of images/videos to transcend from the everyday functionality of permaculture gardening to a wider framing that can incorporate senses of escapism (Blue, 2016), alternative lifestyles (Vanni Accarigi, Crosby, A, & Lorber-Kasunic, 2014), or even a burgeoning social movement (Fuchs, 2017). The portrayal of ideational meaning and experiential meaning is expressed through the medium of images and videos in order to depict the practitioners' ideas about the world as well as their experiences that are influenced by their worldviews (O'Halloran, 2011).

Permaculturists have embraced the power of social media to promote their counter-discourse contrasting with the incumbent corporate food regime. By embracing the visual semiotic system of depiction (Gee & Handford, 2012), permaculture practitioners can multiply their portfolio of physical material signifiers (ibid) that can be 'read' in accordance with the context in which it lies. If a visitor to the site can extrapolate a meaningful understanding of the heterogeneous elements (ibid) involved in a set of photos and videos, it can help to construct an image of permaculture that is aesthetically and ideologically appealing. This image has aided in the creation of dispersed communities of alternative food networks that embody the ideology of permaculture (Psarikidou & Szerszynski, 2012). In the promotion of the counter-discourse, trends and commonalities occur in the visual representations of permaculture life (Unger, Wodak & KhosraviNik, 2016). Through assessing these commonalities, it is

possible to identify discursive practices used for the purposes of mainstreaming permaculture via the niche-regime interaction. Through the utilisation of photos and videos in online uploads, it can act as a form of empowerment for permaculture practitioners to influence, inform, and educate a broad audience (Pesch, 2015). The photos and videos can also provide renewed agency to the practitioners as social media can transcend the boundary between institutionalised structures of the incumbent regime and the niche-level innovation in the transition arena (ibid) that can create networks for the permaculture practitioners. While undertaking a discourse analysis on the shared publications on social media, Facebook and YouTube for example, it is possible to detect reinforcing feedbacks (Unger, Wodak & KhosraviNik, 2016) from likes and shares of existing members of permaculture communities. These communities belong to a diverse set of geographical locations but are nevertheless insular as they already belong to the somewhat closed-off communities that share the utopian ideology of permaculture (Sargisson, 2007). This reinforcement from numerous sources can give the impression that the permaculturists' publications are reaching a broad audience and disseminating the knowledge of permaculture techniques and principals on a scale that could potentially infiltrate the conventional and incumbent food production regime. However, this may not be the case, as likes/comments/shares can be derived from fellow permaculture advocates that already have an active interest in the discussed content. Further research is required in this field to be able to investigate the credibility of niches' use of social media as a tool in the niche-regime interaction.

Prior discourse analysis in the field of niche-regime interaction, especially in relation to transition management has been well-documented (Moore et al, 2014). It has shed light on the intricacies involved in the mainstreaming of niche innovations and certain socio-technical movements such as the rise of organic farming and its entry into the existing food production regime. However, some of these examples have managed to firmly establish themselves within the regime without much alteration to the regime as a whole, nor the broader societal landscape (Smith, 2006). In the context of the permaculture niche in Sweden, the transformative process that the permaculture ideology embodies may be hard to administer in comparison to other niche-based innovations and movements. Therefore, permaculture practitioners may have to employ techniques of mainstreaming exemplified in literature on TM and SNM. Table 1 in the methods for analysis displays an array of these discursive techniques that can be utilised (wittingly or unwittingly) by permaculture practitioners in their attempt to challenge, enhance, and possibly displace the incumbent food production regime.

Methodology

Methods for Data Analysis

This study is based on an analysis of the discursive practices utilised by permaculture practitioners that are actively engaged in Sweden. At the meso-level, the study identifies these practices and the methods of how they are operationalised through the practitioners' online presence. At the macro-level, the analysis assesses the aspects of discourses that stem from transition management and strategic niche management as components of the niche-regime interaction.

The analytical approach of this thesis study is based upon the theoretical framework outlined in the previous section. This theoretical framework is founded upon Geels' (2004) work on the niche-regime interaction and extends this body of research into the realm of transition theory (Pesch, 2015) and convention theory (Forssel & Lankoski, 2018).

This thesis study has employed a methodology that uses coding (Bhattacherjee, 2012) in order to identify and quantify the examples of discursive practices and communicative methods that are located in the chosen datasets. Once the data goes through the coding process, it is then possible to identify patterns, trends and differences in the assessed data in regards to their utilisation of communication tools in their effort to display the advantages that permaculture possesses in contrast to the incumbent industrialised food production regime. This allows the study to adequately address the first research question of this thesis study. The second research question delves into the use of discursive strategies via the aforementioned communication methods. The results comprise the coding figures that have been extrapolated by the data analysis alongside a patchwork of case studies that are emblematic of each coding identifier as depicted in Table 1. It is possible that there is a degree of crossover of discursive practices when multiple discursive archetypes are on display in the studied artefacts; this is common in multi-modal discourse analysis (Flowerdew & Richardson, 2017) when specific context parameters are set, as is the case in this thesis study. The discussion section, that follows the results, broadens the scope of the study as it draws parallels with TM and SNM with a predominate focus on the transformative ideology of permaculture.

<u>Table 1</u> featured below is a table that has been constructed in order to depict how the methods of analysis will be operationalised during the assessment of the chosen data.

Medium	Discursive Practice	Setting	Positive Claim / Reality Test / Denunciation / Other	Colour
Video / Photo(s) / Text / Audio	Undermining dominant regime	Location	PC/RT/D/O	Red
Video / Photo(s) / Text / Audio	Raising awareness of benefits	Location	PC/RT/D/O	Orange
Video / Photo(s) / Text / Audio	Promoting ideology	Location	PC/RT/D/O	Green
Video / Photo(s) / Text / Audio	Promoting technical principles	Location	PC/RT/D/O	Blue
Video / Photo(s) / Text / Audio	Case-study success stories	Location	PC/RT/D/O	Purple
Video / Photo(s) / Text / Audio	Articulation of expectations and visions	Location	PC/RT/D/O	Yellow
Video / Photo(s) / Text / Audio	Building of social networks	Location	PC/RT/D/O	Brown
Video / Photo(s) / Text / Audio	Symbolic and implicit messaging	Location	PC/RT/D/O	Grey

Table 1 - Tracing discursive space table inspired by Pesch, 2015; Forssel & Lankoski, 2018. The discursive practices are taken from Pesch, 2015. The options available in the fourth column are derived from Forssel & Lankoski, 2018. The colour coding can be visually exemplified in the analysis notes that can be found in the appendix.

Within the table, one can see how discursive practices can be identified in the assessed medium. Once the practice has been identified, it is possible to analyse how the practice plays a role in the nicheregime interaction between the alternative food network of permaculture and the incumbent food production regime. By utilising the aforementioned theoretical framework in combination with this methodology, the study raises discussion points on the permaculture niche's interaction with the dominant regime in relation to TM and SNM. There are further discursive aspects to be found in the gathered data but this table provides a useful analytical toolbox for reference.

The coding matrix in the results (<u>Table 7</u>) is complemented by a number of case study examples that are representative of the various discursive practices used by the investigated permaculture practitioners. These practices and techniques are assessed in relation to their role in the promotion of permaculture in the context of the food production niche-regime interaction and their potential influence on the conventional agricultural knowledge system.

Methods for data collection

The methodology for data collection when dealing with online publications must be carefully planned in order to not be overwhelmed with vast amounts of data that is easily harvested but near impossible to assess in a qualitative manner. For that reason, the methods implemented in this thesis study specified strict parameters in order to return a manageable amount of data that was representative of the typical publications of actors involved in permaculture in Sweden.

The data analysed for the purpose of this thesis study is derived from a keyword search on Google on the 4th of February 2019. The below <u>table (2)</u> details the exact search parameters that were used to return the data for analysis.

Date: 04/02/19	Keywords: permakultur i sverige "permakultur"	Lanugage: Any	Region: Sweden
Last update: Past	49 Results	Search URL	Full list of results in
month			<u>Appendix</u>

Table 2 - Google Keyword Search, 4th February 2019

The parameters outlined in the above table were chosen in order to locate permaculture practitioners that are actively engaged online and are located in Sweden. The collation of results returned various examples of individual permaculture websites, blogposts, social media outlets, online forums, local event calendars, tourism information, as well as two links that did not work when clicked upon and twenty websites that were deemed not relevant to the study. The twenty websites were discounted from the study as the following reasons; 1) Not related to permaculture, 2) Not based in Sweden, 3) No discursive practices to be identified. This left a remaining twenty-one² websites that were assessed with the analytical table depicted in Table 1 in the methods for data analysis. The results ranged in their degree of relevance to the thesis study with much of the analysis being able to focus on the individual permaculture websites and social media outlets that were administered by permaculture practitioners residing in Sweden. For further information, a full list with annotations can be found in the study's appendix.

Once a website had been visited based on the Google keyword search, it was then possible to navigate that particular website and, if available, click on embedded links that were related to permaculture. This consequently expanded the scope of the data collection that consists of an online literature review via a keyword search, including a degree of snowball sampling (Bhattacherjee, 2012) when available.

For information relating to practitioners online presence on YouTube, the online tool <u>SocialBlade</u>³ was used. This tool tracks users' statistics and contains numerous social media related analytics that are derived from the social media platforms' API⁴ services.

² This figure is not 29 because some of the links pointed to the same website.

³ "In order to keep statistical data updated, Social Blade utilizes API services of third parties including but not limited to Facebook, Instagram, Twitch, Twitter, Daily Motion, Mixer and YouTube. Unless specific access is asked for at time of use (i.e. to validate your identity), we are only gathering publicly available data from each of the API services, not anything private about your account." Source

⁴ Application Programming Interface

Due to time constraints, it has been necessary for this study to implement a process of sampling within a section of the data collection. This is because of a large amount of video data harvested from a particular YouTube channel that would be unfeasible to fully assess and analyse within the set time parameters as dictated by the study work-plan. The work-plan (Appendix B) decided upon by the author of the study and the thesis supervisor, has allocated forty hours to the data collection and data analysis processes. In order to stick within these time parameters, it has been necessary to assess a portion of the chosen data instead of the data in its entirety.

In order to make the sampling process transparent and scientific, it was important to choose a sample that is truly representative of the overall data so that inferences that occur from the sample analysis can also be applied to the total collection of data (Bhattacherjee, 2012). The sampling frame of twenty videos uploaded by the practitioner at Ridgedale Farm (ibid) was based upon a primary analysis of three most recently uploaded videos⁵ taken from the YouTube channel titled 'Richard Perkins'. This YouTube channel was the only unit of analysis (ibid) to be derived from one website from the keyword Google search as all the video titles were related to permaculture. The analysis of each video was timed, this allowed an average time to be taken and applied to the expected amount of time it would take to assess the remainder of the 270 uploads from this individual permaculture practitioner. By crossreferencing this expected time of assessment with the time allocated to data collection and analysis as agreed upon with the study supervisor, it was possible to set a total amount of twenty videos in total to act as an appropriate and representative sampling frame. This amount is due to the average time of analysis taking forty minutes per video and two thirds of the data analysis time already dedicated to the remaining 48 websites assessed as part of the Google keyword search. Given a more extensive timeframe or resources at the disposal of the study, it would have been beneficial to implement a process of stratified sampling (ibid) from subgroups taken from the overall cluster of videos based upon the information provided within the videos. However, due to the aforementioned time constraints, a simple random sampling⁶ was selected to ensure equal probability of any uploaded video being analysed. It is noted that each video assessed for the purpose of selecting a sampling frame covered topics related to not only technical principles of permaculture but also topics related to the overall ideology of the permaculture movement. Although this is a positive sign that random sampling is an efficient approach to analysing the chosen data, it may still be considered as a limitation of the study as not all available data harvested through the keyword search could be duly analysed.

The thesis study cannot be considered to have implemented convenience sampling (Bhattacherjee, 2012) as the selected YouTube channel, although prolific in online presence, was only located due to the strictly abided to keyword search on Google as detailed earlier in the methodology.

⁵ As of 25/04/19

⁶ Random numbers generated by this <u>number service</u>.

When necessary, Google Translate was used to translate Swedish text into English in order to be understandable for the author of the study. It is noted that some aspects of the text may have been misinterpreted due to poor automatic translation. This is a recognised limitation of this study.

In summary, the results for this thesis study are derived from an analysis of 49 websites that were visited after a specific keyword search on Google, as detailed in the methods for data collection to section. Of the 49 websites, 2 links failed to work, and 20 websites were deemed not to be relevant for the thesis study as none of the 8 discursive practices could be identified on their webpages. This left a remaining 21⁷ webpages that could be assessed based upon the prevalence of identified discursive practices found in their online presence. The tables in the appendix display the names and URLs⁸ of the assessed and non-assessed webpages.

Table 1 of Appendix A lists the webpages that were assessed for the purpose of this thesis study. The notes from the analysis can be found in the appendix, detailing the reasoning behind the decision to analyse, or not, each individual webpage found via the keyword search. Table 2 of Appendix A lists the two websites that were not assessed due to the URL addresses not completing the connection when accessed during the period of analysis.

The third table of Appendix A lists the webpages that were found during the Google keyword search but provided no identifiable iterations of discursive practices as per the analytical table (1) in the methods for data analysis.

In the 21 webpages where archetypal examples of discursive practices were identified, it is possible to observe patterns and trends that are near ubiquitous in the assessed webpages. However, there are three instances that stand out in the analysis due to their reported successes in building networks and/or being able to establish their permaculture inspired establishments as profitable commercial enterprises. These three examples are Permaculture Association Sweden, Permakultur Stjärnsund, and Ridgedale Permaculture Farm. All pie chart data visualisations can be found in Appendix C.

All of the assessed websites, with the exception of five⁹, displayed examples of 'raising awareness of benefits' related to permaculture. This is detailed in the coding matrix (Table 7). This was predominantly achieved through the medium of text, with notable exceptions that are discussed below. Only one webpage utilised the medium of audio to implement its discursive practice, Ordfront Magazine held a podcast discussing the benefits that can arise from leading a permaculture inspired lifestyle.

⁷ This figure is not 29 because some of the links pointed to the same website.

⁸ Universal Resource Locator

⁹ Växhuset Hostel, Karlskoga High School, Little Green Farm, Focus Green, Gatsmart.

Results and Analysis

In the instances of the Swedish Permaculture Association, Permaculture Stjärnsund, and Ridgedale Permaculture Farm, there are clear displays of the permaculture practitioners articulating their expectations and visions as part of the overall permaculture movement. This articulation is supported by a mixture of building collaborative networks and successful participation in the regime via commercialised aspects of their farms and businesses. Only five webpages of the assessed data had ten or more examples of discursive practices that could be identified during the data analysis process. Ridgedale Permaculture Farm proffered 181 discursive practices that could be identified; this figure would have been considerably higher if the study had assessed the near 300 total videos uploaded to the Richard Perkins YouTube channel. In figures 4 & 5 below, it is possible to see the division of examples by category for the four webpages¹⁰ where between ten and twenty examples of identifiable discursive practices were found.

The 'promotion of technical principles' maintains a relatively consistent prevalence in these four examples, with 'undermining the dominant regime' and 'raising awareness of benefits' make consistent proportional appearances in the research as can be seen in the pie charts in Figure 5. The remaining five practices are scattered sporadically with no discernible patterns to be identified as can be seen by the frequency graph feature below (Figure 4). The scattered nature of these figures may well be due to the webpages being created with differing agendas in mind. For example, the Swedish Permaculture Association are keen on bringing together organisations practising permaculture across the breadth of Sweden and connecting them with international allies. Because of this goal, it is expected that they focus more on building social networks in the permaculture movement. Njordstop and Borrabo are both strong advocates of the permaculture ideology and this is visible in the pie charts displayed in Figure 5. Most of the discussed practices were identified in the format of text, with Permakultur Stjärnsund having a strong visual presence through uploaded photos and videos, both through their webpage and social media outlet. Permakultur Stjärnsund tended to focus more on its successful case studies of permaculture implementation, especially in relation to portraying their sustainable forms of living to capitalise on market opportunities.

It is noted that the analysis of this thesis study identified the promotion of new norms and practices in not only forms of food production but also in a wider context, including but not limited to, sustainable construction and communal living. Some of these norms were identified in the online presence of Permakultur Stjärnsund and one of their pages dedicated to ongoing initiatives that relate to sustainability and ecological projects in the village where the farm is situated. These twelve projects

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¹⁰ Permaculture Association Sweden, Njordstop Permaculture Farm, Permakultur Stjärnsund (Website & Facebook), Borrabo Permaculture Farm

branch off to separate webpages with further information. This section of the webpage is emblematic of the community building aspect of permaculture that advocates local communities coming together to work upon projects that are of societal and ecological benefit, both on the local and the global level. There is a large degree of transparency on display with clear connections made with 'real' food (ibid) depicted in images and videos as well as described in text. These connections to real food can be found in the following videos uploaded by Richard Perkins of Ridgedale Permaculture Farm as depicted in Table 3.

Frequency Graph - Webpages with 10-20 Iterations

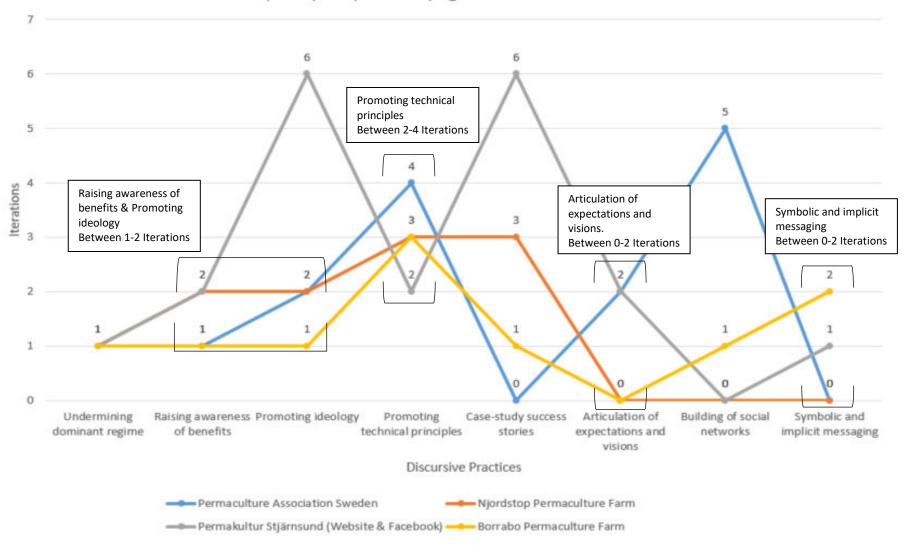


Figure 4 - Frequency Graph - Webpages with 10-20 Iterations. The text boxes and brackets mark the discursive practices that have a range of 1-2 per identifiable discursive practice. The figure displays a scattered frequency of iterations; this may be due to the variable aims of each set of permaculture practitioners.

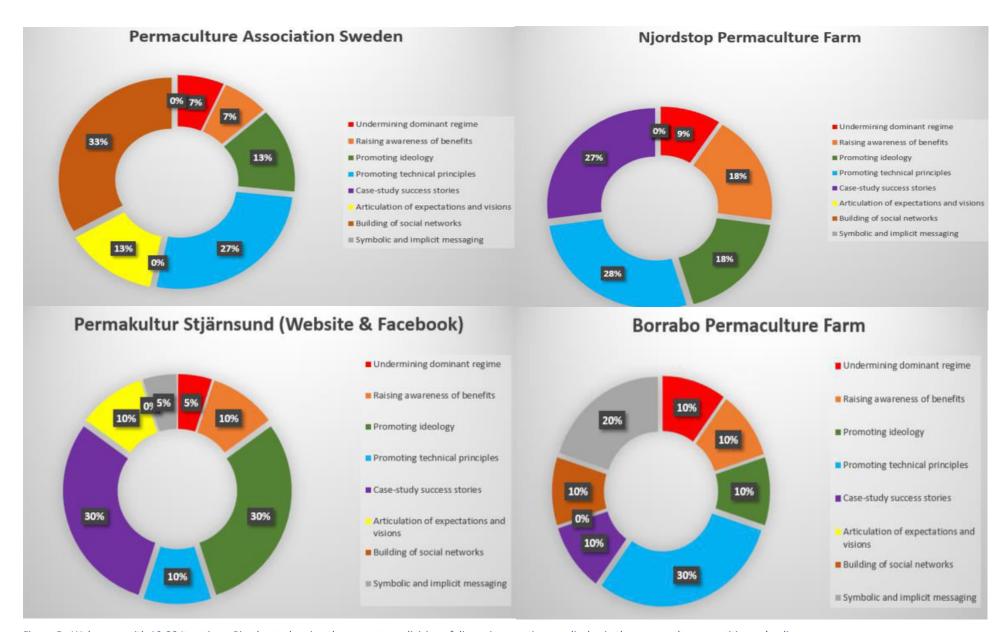


Figure 5 - Webpages with 10-20 Iterations. Pie-charts showing the percentage division of discursive practices on display in the permaculture practitioners' online presence.

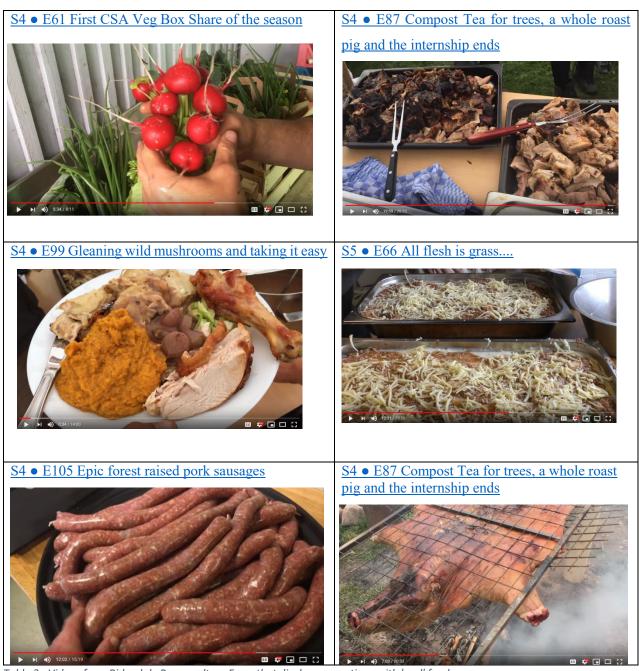


Table 3 - Videos from Ridgedale Permaculture Farm that display connections with 'real' food

Further positive claims are made repeatedly via building awareness of the specific and overall benefits of permaculture; these claims can be bolstered by the portrayal of enjoyment and strong social bonds that are implicitly captured in many of the images and videos uploaded by the permaculturists in question. The table below (4) displays four examples of this portrayal from four separate webpages. For further analysis of the identified discursive practices, refer to the analysis notes in the appendix.

Permakultur Stjärnsund



Ridgedale
Permaculture
Farm



Borrabo Permaculture



Rikkenstorp



Table 4 - Visual Semiotic Examples of Social Cohesion and Communal Living

The prevalence of the discursive practice characterised by 'undermining the dominant regime' was measured at 11% or lower in all of the examples that had ten or more identifiable iterations. The practitioners online presence tended to focus on the promotion of the permaculture ideology, benefits, and technical principles instead of denouncing (Forssell & Lankoski, 2018) the incumbent regime and its dominance of the market. When denunciations were identified, they were global in context predominately with quotes such as "Much of today's modern agriculture depletes and erodes the earth" (Rikkenstorp) and visual examples (Permakultur Stjärnsund) of the wastefulness that is emblematic of industrialised food production processes (Campbell, Evans, & Murcott, 2017). Ridgedale Permaculture Farm goes into more specific details in their attempt to undermine the regime. One example is the critiquing of the forestry industry in Sweden, explicitly mentioning monoculture style plantations for damaging levels of diversity and consequently the ecosystems that are necessary for regenerative food production. Another example refers to technological approaches to fix biological issues instead of working alongside nature and its ecological processes, using the state of soil as a prime example of this. Each of these denouncements are set in the context of finding solutions or alternatives to the practice or failure of the regime that is under discussion.

Karlskoga High School is of notable interest as their page details a permaculture course ran at their school for prospective high school students. The creators of this course have allowed the opportunity for people to get engaged with permaculture from an early age, which they can potentially go on to work with in the future. The course is taught through a state institution and students will receive academic credits that they can use to put towards their overall set of credits for graduation. This is a key aspect of mainstreaming permaculture and acts as an introduction of its principles and ideology into the mainstream educational system. It is not simply a non-certified course that is ran as a PDC¹¹ for interested individuals.

<u>Permakultur Stjärnsund</u> displays some cases of how they have been able to enter the mainstream in regards to commercialising their processes. However, these examples of profit-making enterprises are more related to gadgets, tourism, education, and the construction of TinyHomes instead of the cultivation and production of food. Some of these enterprises are depicted in the below <u>table (5)</u>.



<u>TinyHome listing on AirBnB</u> "A tiny home with view over lush garden"

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¹¹ Permaculture Design Course



<u>Ecotourism and adventure company partner</u> "...helps visitors get a unique nature-related experience and memories for life."



<u>RoxBox – Son of a Birch</u> "From cutting down the tree to installing first class electronic components, the RoxBox is a true local production."

Table 5 - Examples of mainstreaming of permaculture principles not associated with food production.

The promotion of ideology and a worldview that permaculture embodies is rife throughout many of the examples garnered as part of this thesis study with every webpage with more than five iterations of discursive practices making reference to the ideology at least once (Table 7). This focus on the ideology and the general benefits associated with permaculture has perhaps steered attention away from the necessity of compiling standardised data on yield output and enhanced capacity due to diverse methods of cropping and soil management. This can possibly lead to the undoing of the movement as a whole in the Swedish context as this technique lacks strategic planning and management. This is especially true as permaculture has a global goal that is insurmountable for a niche-level movement without crucial intervention by major actors in the socio-technical landscape or the event of large-scale biophysical events.

Table 6 depicts the YouTube statistics of the three channels assessed as part of this thesis study. These three channels are managed by the permaculturists from the respective permaculture establishments that they are representing. As is clearly visible, Richard Perkins from Ridgedale Permaculture Farm has a significant online presence with other three million total views and over forty thousand subscribers that will be notified upon the publication of every new video upload. By building an online followership over the years, it has been possible to disseminate permaculture knowledge, promote its ideology, and undermine the incumbent regime across a broad spectrum without a large degree of resources or communicative input. As can be seen in the left hand column of the table, Ridgedale has managed to obtain advertising revenue from the consistently published videos on their YouTube channel; this revenue can act as a useful subsidy to their overall revenue. Richard Perkins, the permaculturist presenting the videos, often apologises to viewers of the video on the sporadic nature of uploads to the channel, acknowledging the dual importance of engaging with their audience and the added revenue stream which comes as a result from the online advertising.

Richard Perkins	RoxProductions	Räfholmen
Uploaded Videos: 274	Uploaded Videos: 102	Uploaded Videos: 18
Subscribers: 41,259	Subscribers: 182	Subscribers: 48
Total Video Views: 3,716,299	Total Video Views: 152,239	Total Video Views: 2,509
Estimated Yearly Earnings	Estimated Yearly Earnings	Estimated Yearly Earnings
From Online Advertising	From Online Advertising	From Online Advertising
Revenue: \$399-\$6,400	Revenue: \$3-\$52	Revenue: \$0

Table 6 - YouTube Statistics, derived from <u>SocialBlade</u>

Source 1, Source 2, Source 3

Figure 6 depicts the division of identifiable discursive practices on display in the assessed data stemming from the permaculturists at Ridgedale Permaculture Farm. The practices are relatively evenly split in terms of prevalence, with a narrow range of occurrence that varies between 16% (promoting ideology) and 20% (symbolic and implicit messaging) 'Promoting ideology', Promoting technical principles', 'Case-study success stories', and 'Symbolic and implicit messaging'. In the 35 examples of case-study success stories, the Ridgedale permaculturist repeatedly refers to the food being produced at the farm for the purpose of being sold at competitive prices in the Swedish market, both to catering establishments such as local restaurants and individual customers through a CSA initiative, market selling, and online sales that make deliveries across Sweden. This entrance in the market can be

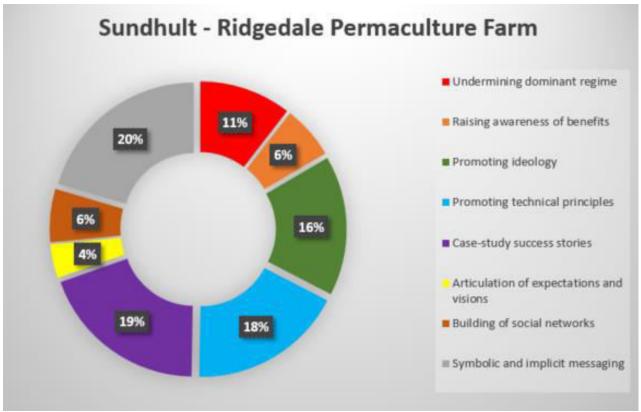


Figure 6 - Ridgedale Permaculture Farm - 181 Iterations

perceived as a working case-study (Schot & Geels, 2008) that can be emulated by other smallholder farmers and aspiring permaculture practitioners. This entrance into the competitive market could be seen as part of the SNM evolutionary approach of overcoming institutionalised 'lock-in' within the regime. Combined with the enhancement opportunities that stem from the socio-technical diversity offered via Ridegedale's examples of non-mechanised and regenerative forms of farming, there is a window for TM's 'strategic envisioning' through transition experiments displayed at the farm. TM can sometimes be critiqued for the credence that it pays to ritualistic transition experiments that serve little purpose other than good intentions to publicly disseminate knowledge. However, in the context of Ridgedale, the extent of the outreach via social media and the meticulous taking of statistics provides a good basis of empirical data that regime actors can consider and potentially act upon, especially when

made aware of the potential solutions to common problems that arise from the incumbent regime's normal practices. The multiplicity of Ridgedale's approach, in contrast to the other assessed webpages, can be considered as following the guidelines of SNM in a bid to be incorporated into the dominant regime with the view of transforming from within (ibid). Although this strategy is not explicitly referred to by the permaculturists featured in Ridgedale's online presence, there are references made to the farm acting as a successful prototype that can be emulated via numerous smallholder practices to spread the use of permaculture across a wider landscape. Richard Perkins, the main permaculturist at Ridgedale, theorises that if some of the farming techniques in use at the farm became widespread common practice, humanity would not be facing many of the present and future crises that are associated with industrial methods of farming and agriculture.

The methods on display from the assessed data that had iterations of ten or more discursive practices hint at techniques of TM and SNM, especially Ridgedale farm but perhaps the Swedish permaculturists online presence be more succinctly characterised by the concept of convention theory. Convention theory, as detailed in theoretical framework, focuses on the construction of new norms based upon what is right and desirable. In the case of permaculture, these new norms would be related to new forms of regenerative and sustainable farming practices that are the 'right' way of dealing with food production. Practices that would lead to 'desirable' benefits for humanity and to stave off high-impacting negative externalities that are caused by the current industrialised food regime, such as large-scale contribution to greenhouse gas emissions (McMichael, 2005), severe biodiversity loss (ibid), and widespread pollution (ibid). These desirables are repeatedly referred to in the assessed data in combination with the promotion of the permaculture ideology and technical design principles. The permaculture practitioners, that uploaded the data assessed in this study, look to influence the socio-technical landscape through a mix of general environmental awareness building, relating this to the current practices of the regime, and the promotion of the potential solutions to these existential issues through the implementation of permaculture on a broader scale. This multi-faceted method of outreach, bypasses the relevance of the regime actors and attempts to create regime tensions (Forssell & Lankoski, 2018) and rifts between the powerful actors at the level of regime and the framing landscape that includes actors from economic, technical, political, and social disciplines.

Website Dieschreine	Undermining dominant regime	Raising awareness of benefits	Promoting ideology	Promoting technical principles	Case-study success stories	Articulation of expectations and visions	Building of social networks	Symbolic and implicit messaging	Total iterations
Permaculture Association Sweden	1	1	2	4	0	2	5	0	15
Njordstop Permaculture Farm	1	2	2	3	3	0	0	0	11
Permakultur Desinger	0	1	1	0	0	0	2	0	4
Permakultur Stjärnsund (Website & Facebook)	1	2	6	2	6	2	0	1	20
Permaculture Association in Skåne	0	3	1	2	0	0	2	0	8
Human ecology blogpost about Permaculture	0	2	1	1	0	0	0	0	4
Foodmaker event list	0	1	0	0	0	0	0	0	1
Borrabo Permaculture Farm	1	1	1	3	1	0	1	2	10
Växhuset Hostel	0	0	1	1	0	0	0	0	2
Karlskoga High School	0	0	3	1	2	O	2	0	8
Rikkenstorp	1	2	1	0	2	0	2	0	8
Ordfront Magazine	0	1	0	0	0	0	0	0	1
Örebro Event Calendar	0	1	0	1	0	0	1	0	3
Little Green Farm	0	0	0	1	1	0	0	0	2
Red Cottage	0	1	0	0	1	0	0	0	2
Blekinge Läns Newspaper	0	1	0	0	0	0	0	0	1
Focus Green	0	0	1	1	0	0	0	1	3
Gatsmart	0	0	1	1	0	0	0	1	3
Sundhult - Ridgedale Permaculture Farm	19	11	29	32	35	7	11	37	181
HonkPlease	1	1	1	0	1	0	1	0	5
En Enkel Man	1	1	0	0	0	0	0	0	2
Table 7 - Coding Matrix. Iterations of Discursive Practices identified in collected data. Full-size table in appendix (link).					294				

Discussion

As can be seen from the assessed data, there is a presence of Swedish permaculture available online. This presence includes interacting with members of civil society that are involved in the broad societal landscape, this is done through outreach and communicating with users that visit their respective webpages and social media sites. There are limited examples found of concentrated efforts being made to actively engage in the niche-regime interaction that is relevant to the permaculture movement if it is to attempt to curb the damaging practices of the dominant industrialised food production regime and provide sustainable and regenerative alternatives to the way that food is produced. To refer to Figure 2 of a transitional niche-regime interaction, based on the data assessed in this thesis study, it could be said that permaculture in Sweden can be positioned at the cusp of entering the niche-regime interaction. Swedish permaculture and its practitioners have embraced the global permaculture ideology and articulated their vision for global food production. However, despite several case-study success stories with innovative technologies and techniques that could enhance some of the common practices in use by the incumbent regime, there is little display of communicating these potential enhancements to key actors and stakeholders that are capable of making decisions at the regime level. Given the rapidly growing awareness of existential risks and the acceptance of humanity entering the Anthropocene epoch (Wallace-Wells, 2018), one may think that the window of opportunity for permaculture to enter, develop, enhance, and challenge the incumbent regime would be wide open and beckoning. However, in the context of Sweden, this context-specific opportunity has not been capitalised on by the principal permaculture practitioners that have been assessed as part of this study.

To consider the sense of agency of the permaculturists in Sweden, one can look to the amoeba model (AtKisson, 2012), as described in the introduction (Figure 1). Richard Perkins, the principal permaculturist in Ridgedale Permaculture Farm's online presence, could be considered as holding multiple roles in the amoeba model of change (ibid). Perkins and his farm could be considered as a progressive change agent that is a driving force of a transition towards sustainable and regenerative food production in the region of Sweden. However, at this juncture of time, it is unfeasible to apply labels to the actors in this process of transition as it has not come to fruition yet, and it may never do so. It is possible that Ridgedale Farm and its host of practitioners could become iconoclasts that ultimately hold back the permaculture movement in Sweden as they belligerently hold onto intricate aspects of the permaculture ideology that would halt its embrace by the transforming regime. It will make for interesting discussion on what roles these actors represent when analysing this period of transition from a position of retrospect.

The apparent focus on promoting the technical principles of permaculture can be interpreted as permaculture practitioners asserting positive claims (Forssell & Lankoski, 2018) via the promotion of

new norms and practices in the food production regime. By utilising the methods of convention theory as described in the theoretical framework, the permaculturists can attempt to shape the values of the actors that they engage with through a strategic and well-positioned display of the discursive practices that are featured in the methods for analysis. However, for this method to be effective in relation to the niche-regime interaction, it will benefit from a more direct negotiation with key regime stakeholders in order to propose attractive configurations to be implemented within the regime.

In the majority of the examples analysed, there are not a great deal of instances of reality tests (Forssel & Lankoski, 2018) that can be identified in the chosen data. Two popular notions that are often bandied about in reference to alternative food networks and niche-level innovations are questions of scalability (Ponte, 2016) and affordability (ibid). These notions are directly challenged by several iterations found in the videos produced at Ridgedale Permaculture farm. This is an unexpected finding in the results and is not directly related to either of the study's research questions but it could be a sign of the permaculture niche transcending from smallholdings and an interest for avid gardening hobbyists to a level that can realistically compete with established regime actors. The notion of sustainable produce being unattainable for the common consumer is implicitly challenged by the principal practitioner on the farm when he discusses the production of meat-based products on the farms, namely pork, sausages, and smoked chickens; stating the overall costs, for both the production process and the end consumer, are competitive on the typical Swedish market. As for the question of scale, this is challenged at various points in the assessed data. One such example being the continuous expanse of the farm into neighbouring hectares in order to provide enough land to cultivate sufficient produce to meet increasing consumer demand. However, the permaculturist often comments on the farm being a working example of small-scale farming that can be emulated in various settings as long as the contextual parameters and permaculture design principles are adhered to. Therefore, individual permaculture-designed farms are not expected to reach a level that would could come under the economies of scale model (Hallam, 1991), and this is repeatedly encouraged by the permaculturist at Ridgedale in his advocacy for smallscale regenerative methods of farming.

The Swedish Permaculture Association predominately focus on promoting the principles of permaculture and building collaborative social networks to expand the global permaculture community. The construction of these networks help to disseminate the permaculture ideology and associated knowledge. However, this network building, although it widens the presence and awareness of permaculture within the broader socio-technical landscape, it does not directly engage with the incumbent regime and its actors. Therefore, this narrowly scoped approach could be critiqued as reaching too far in its ambition. By attempting to build influence on the landscape level, it is theoretically possible that with large shifts in socio-technical landscape (Schot & Geels, 2008), such as food crises (Marsden, 2013) and the forthcoming impacts of climate change (ibid), it will lead to the dominant regime being forced into adopting innovative practices and principles from the niche level

(Schot & Geels, 2008) through regulation and government policy based upon documented societal and environmental effects (Schot & Geels, 2008). However, not directly engaging with the incumbent food production regime, can delay the speed of transition (Kemp, Schot, & Hoogma, 1998) as regime actors are not made privy to the sustainable enhancements that permaculture and its design principles purportedly offer. This could have been achieved in the establishing of a 'transition arena' as recommended by Schot & Geels (2008) as a method of transition management, where actors from the niche and the regime convene with outsiders. Without the coordinated pressure building from actors in the niche, regime, and the broader socio-technical landscape (Elzen, Geels, & Green, 2004), it leaves permaculture in Sweden in a marginalised position on the periphery of the incumbent regime. This could be a point for further research, to investigate the dynamic relations and interactions between protagonists of the permaculture movement and representatives of the mainstreamed and incumbent regime.

Permakultur Sjtärnsund promotes many of the additional benefits of embracing the permaculture ideology in various aspects of sustainable living. However, it does not offer concrete alternatives to producing food on a level that is greater than subsistence farming. In contrast, Ridgedale Permaculture Farm stands as the sole example, found in the data collection process, that can be perceived as a successful case-study of profitable food production that adheres to the permaculture design principles. Ridgedale Farm can be considered as a success story for the permaculture niche but it is only one example and therefore unlikely to provide enough leverage to catapult permaculture and its principles into the mainstream to enhance and challenge the regime. This thesis study contends that it will require a significant amount of Ridgedale equivalents to begin to effectively capitalise on the tensions and cracks appearing in the regime. Permakultur Stjärnsund, from its examples portrayed via its online presence in the results, appears to have found its slot, not within the dominant food production regime but within the broader capitalist driven socio-technical landscape. While existing on the margins of this landscape, it can enter the mainstream economic market with its sustainable innovations, educational classes and courses, and examples of tourism. Stjärnsund use these outlets to spread the ethical principles that permaculture is founded upon, with no great deal of focus paid to the technical principles that are necessary for permaculture inspired food production. It can therefore influence civil society at the level of individual consumers, and small community based projects, but it is unlikely to have an influence on the dominant regime through ideology alone.

As the concept of permaculture and its ideology pushes for a complete overhaul of the dominant industrialised food regime (Tilzey, 2018), one may expect its advocates to be consistently denouncing the failures and ecological shortcomings that the incumbent regime possesses (McMichael, 2009). As mentioned in the results, this was not to be the case in the analysed data with no webpage having more than 11% of their identified discursive practices dedicated to the undermining of the incumbent regime via denouncements of their practices. Ridgedale Permaculture Farm, in their denouncements, did not

simply deal a blow to the credibility of the dominant regime but bolstered the legitimacy of alternative permaculture inspired practices that can act as solutions to the damages wrought by the regime. Through Ridgedale's presentation of the regime's damaging ecological practices, they are able to employ a strategy that is advocated by Per Espen Stoknes (2015) of sticking to positive strategies when addressing issues relating to climate change and other existential issues. By employing this method, it is theoretically possible to break down barriers, such as doom and dissonance, which can be commonplace in climate communication (ibid).

As mentioned in the theoretical framework, niche-level innovations and movements often look to make incremental configurations within a regime in order to plant a seed with the vision of growing the seed along with further configurations that when combined together, can have an influential impact on the regime from within.

Ridgedale is able to exemplify possible configurations (Elzen, Geels, & Green, 2004) that can be made to enhance the incumbent food production regime. These technical configurations are explicitly laid out for viewers of the Ridgedale permaculturist's YouTube channel and in more detail in the courses and educational material that is provided by the farm. Although it is possible for regime actors to engage in this interaction proffered by the farm, with some private interests taking an interest in the technological enhancements, there is a low likelihood of regime institutions and policy makers taking an active interest via this channel of communication.

Conclusion

The significance of this thesis study is that it has been able to conduct a previously unseen study on the specific discursive tools and practices that are used by Swedish permaculturists in their online presence. This analysis has raised discussion points for permaculture as a social movement in Sweden and allowed an insight into the obstacles, at niche and regime level, hindering the widespread adoption of permaculture principles on a technical and ideological basis.

In reference to the first research question of this study, the exponents of permaculture in Sweden are utilising a myriad of discursive practices, as detailed in the coding matrix (Table 7), in a bid to communicate the advantages of the permaculture ideology and its technical design principles. These discursive practices are displayed through the communicative platforms of informative webpages, blogposts, social media outlets and online video channels. Following the identification of the discursive practices on display in the assessed data, it has been possible to conduct a multi-modal discourse analysis to conduct an assessment of how Sweden-based permaculture exponents are utilising the communication tools at their disposal to promote the advantages of permaculture in relation to the incumbent industrialised food production regime.

In reference to the second research question, the exponents of permaculture that were assessed within this study are using parts of transition management tools to further the agenda of permaculture as a social and technical movement through the aforementioned tools of communication. However, they do not display a coherent and strategic approach to entering the mainstream in which the incumbent regime is situated. Ridgedale Permaculture Farm stands apart from the other assessed permaculturists as the lone example that can be considered of employing methods of TM and SNM in their continued efforts to be a working example to be emulated both on the periphery and within the regime. Based on the online presence of the assessed permaculturists, this thesis study contends that Swedish permaculture remains situated in the preparatory meso-level of transition (Pereira et al, 2018), exampled by microscale experimentation (ibid) and talk of building a discourse around a meta-level narrative (ibid). This is due to niche-level actors and innovations not yet being able to enter the mainstream to a point where their practices become institutionalised and can have an influence on the dominant regime from within.

Ridgedale has heavily embraced the power of visual semiotics in their online presence in order to effectively and efficiently display many of the discursive practices that were identified during this study. Through multiple heterogeneous elements across an extensive array of videos, Ridgedale has been able to build a strong narrative based upon their implementation of the permaculture principles. However, Ridgedale and its practitioners do not have control over which sections of society consume the narrative that they have constructed through their online presence. Consequently, it is possible that Ridgedale is strengthening the shared knowledge systems of permaculture (Hermans, Roep, & Klerkx, 2016) across an internationally disperse set of communities that operate on a small-scale, but they are not actively attempting to engage with regime actors that share and implement the practices of the conventional AKS. By following further methods put forward by SNM (Elzen, Geels & Green 2004), this thesis contends that Ridgedale Permaculture Farm can be a working prototype for other food producers in Sweden to emulate in order to induce desirable changes in the regime after the mainstreaming of certain permaculture principles (Hermans, Roep, & Klerkx, 2016).

This study has identified a pattern materialising where practitioners are (knowingly or unknowingly) bypassing the incumbent food production regime and directly interacting with the socio-technical landscape that the regime is situated in. This approach seems haphazard and piecemeal in contrast to the specific techniques mentioned in the literature on TM and SNM. There is a significant risk of permaculturists simply 'preaching to the converted' (Grossmann & Creamer, 2017), something that can help to expand awareness of the niche and its goals, but it is not sufficient to challenge or enhance the dominant regime.

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Appendix

Appendix A

Appendix A - I – Table of Assessed Webpages

• •		1 0	
Holma Folk High School – Permaculture Association Sweden	Njordstop Permaculture Farm	Permakultur Desinger	Natursidan - Permakultur Stjärnsund – Rox Productions
Permakultur Stjärnsund's Facebook Page	Permaculture Association in Skåne	Human ecology blogpost about Permaculture	Foodmaker event list
Sigtuna Garden Fair - Borrabo Permaculture Farm	<u>Växhuset Hostel</u>	<u>Karlskoga High</u> <u>School</u> - <u>Rikkenstorp</u>	Ordfront Magazine
Event calendar in Örebro, hosted by Naturskddsföreningen	Little Green Farm	Alltsomsker Event Calendar	Blekinge Läns Newspaper
Focus Green	Gatsmart	Sundhult – Ridgedale Permaculture	<u>HonkPlease</u>
En Enkel Man			

Table 1 – 20 Assessed Websites. 294 Iterations of Discursive Practices Identified

Appendix A – II – Table of Webpages with Faulty Links

http://framtiden.a.se/kalendarium/tisdag-29-	https://eva-pettersson.se/recensioner/
<u>januari</u>	

Table 2 – 2 Websites where link was faulty at the time of analysis

Appendix A – III – Table of Non-assessed Webpages

1 1		1 5	
Vaken	Trädgårdsbloggen	Ängelholm Program	Irisro Trädgärd
Studie Främjandet	<u>Bokus</u>	MyNewsDesk	Aspo Sverige
Medborgarskolan	<u>TripAdvisor</u>	Camino	Hallandsposten
Pinterest (1)	Pinterest (2)	Digitalising and the	Stockholms Initiativet
		Environmental Goals	
Mundekulla	<u>LinkedIn</u>	Alternativ	Pias Författarsida
Höglandet Nu	Sebastien's Food Blog	Karlstad Garden	Allsta Gård
		Society	

Table 3 – 20 Websites with no identified discursive practices

Appendix B

Appendix B - I – URLs visited during data collection process.

- I. https://www.holmafolkhogskola.se/permakultur/
 - a. http://www.permakultur.se/
 - i. http://www.permakultur.se/foreningen-medlemskap/vad-gor-foreningen/
 - ii. http://www.permakultur.se/foreningen-medlemskap/samarbeten/
 - iii. http://www.permakultur.se/report-from-ecolise-training-in-brussels/
 - iv. http://www.permakultur.se/certifiering-och-diplom/
 - v. http://www.permakultur.se/permakulturprojekt/
 - vi. http://www.permakultur.se/land/
 - vii. http://www.permakultur.se/land/land-kriterier/
 - viii. http://www.permakultur.se/kontakt/
- II. http://www.njordstorp.se/
 - a. http://www.njordstorp.se/kurser
 - b. http://www.njordstorp.se/services
 - c. http://www.njordstorp.se/onlinebutik
 - d. http://www.njordstorp.se/besokare/besok-njordstorp
 - e. http://www.njordstorp.se/besokare/vara-djur
 - f. http://www.njordstorp.se/besokare/praktisera
 - g. http://www.njordstorp.se/besokare/jordbruk
- III. https://www.permakulturdesigner.com/
 - a. https://www.permakulturdesigner.com/permakultur/
 - b. https://www.permakulturdesigner.com/kurser-evenemang/
- IV. https://www.natursidan.se/tag/permakultur/
 - a. http://xn--stjrnsund-x2a.nu/
 - i. https://youtu.be/ecVr1WnfqpA
 - ii. http://xn--stjrnsund-x2a.nu/permakultur-stjarnsund/vad-ar-permakultur-2/
 - iii. http://xn--stjrnsund-x2a.nu/permakultur-stjarnsund/biblioteket/
 - iv. http://xn--stjrnsund-x2a.nu/permakultur-stjarnsund/boendemojligheter/
 - v. http://xn--stjrnsund-x2a.nu/permakultur-stjarnsund/eko-projekt/
 - https://www.airbnb.se/rooms/8201857?location=Stj%C3%A4rnsund %2C%20Sverige&adults=1&guests=1&sl_alternate_dates_exclusion =true&source_impression_id=p3_1557778406_VQ3K6t1F0DaFU3z_K
 - 2. http://visit.xn--stjrnsund-x2a.nu/
 - 3. https://roxproductions.se/product/roxbox-son-of-a-birch/
 - vi. http://xn--stjrnsund-x2a.nu/permakultur-stjarnsund/boka-en-guidad-visning/
- V. https://www.facebook.com/permakultur.stjarnsund/
 - a. https://www.youtube.com/watch?v=MEteyIqwQ5g
 - b. https://www.facebook.com/pg/permakultur.stjarnsund/about/
 - c. https://www.facebook.com/pg/permakultur.stjarnsund/videos/
 - d. https://www.facebook.com/pg/permakultur.stjarnsund/photos/
- VI. http://www.permakulturiskane.se/wordpress/?page_id=40
 - a. http://www.permakulturiskane.se/wordpress/
 - b. http://www.permakulturiskane.se/wordpress/?page_id=186
 - c. http://www.permakulturiskane.se/wordpress/?page_id=8
 - d. http://www.permakulturiskane.se/wordpress/?cat=7

- VII. http://www.fristads.fhsk.se/kurser/foodmaker/
- VIII. https://www.xn--trdgrdsmssa-m8agi.se/program-sigtuna.php
 - a. http://www.borrabo.se/
 - i. http://borrabo.se/ny%20om%20oss.html
 - ii. http://borrabo.se/kurser%20och%20bes%C3%B6k/index.html
 - iii. http://borrabo.se/kurser%20och%20bes%C3%B6k/heldagskurs/index.html
 - iv. http://borrabo.se/kurser%20och%20bes%C3%B6k/en%20guidad%20tur%20i %20v%C3%A5r%20permakulturtr%C3%A4dg%C3%A5rd/index.html
 - v. http://borrabo.se/gallerian.html
 - vi. http://borrabo.se/permakultur-2.html
 - vii. http://borrabo.se/borrabo%20hem%20f%C3%B6rs%C3%B6k/om%20permakultur%20p%C3%A5%20n%C3%A4tet.html
 - viii. http://borrabo.se/historia/index.html
 - IX. https://www.svenskaturistforeningen.se/anlaggningar/stf-soderhamnvaxhuset-vandrarhem/
 - X. https://www.folkhogskola.nu/sok-skolor/Orebro-lan/Karlskoga-
 - folkhogskola/Kurser/2019vt/agroekologi---smaskalig-odling-i-praktik-och-perspektiv/
 - a. https://www.rikkenstorp.se/
 - i. https://www.rikkenstorp.se/lantbruket/andelsjordbruk/
 - ii. https://www.rikkenstorp.se/besokare/
 - iii. https://www.rikkenstorp.se/lantbruket/
 - iv. https://www.rikkenstorp.se/om-oss/
 - v. https://www.rikkenstorp.se/historik/
 - 1. http://ekomuseum.se/besoksmalen/finngarden-rikkenstorp/
 - vi. https://www.rikkenstorp.se/kretslopp/
- XI. https://ordfrontmagasin.se/podcast-2/
- XII. http://littlegreenfarm.se/about.html
- XIII. https://www.alltsomsker.nu/event/grundkurs-i-ekologisk-odling/
- XIV. http://www.blt.se/olofstrom/kulturvaren-2019-bjuder-pa-hela-varlden/
- XV. https://www.fokusgront.se/pagang/
 - a. https://www.fokusgront.se/om-fokus-gront
 - b. https://voutu.be/0-IWEsZ7qnA
- XVI. http://gatsmart.eu/category/applen/
 - a. http://gatsmart.eu/inspiration-2/olika-odlingstekniker/permakultur/
- XVII. http://blogg.sundhult.com/category/skog-gard/sjalvhushall/
 - a. http://www.ridgedalepermaculture.com/
 - i. http://www.ridgedalepermaculture.com/10-week-internship-may-jul-2019.html
 - ii. https://makingsmallfarmswork.shop/collections/all
 - iii. http://www.ridgedalepermaculture.com/open-day.html
 - iv. https://www.ridgedalebutik.se/
 - v. http://www.ridgedalepermaculture.com/online-training.html
 - vi. https://www.youtube.com/channel/UC3111rvadtBPUY9JJBqdmzg
 - vii. https://www.youtube.com/user/mrintegralpermanence/about
 - viii. https://www.youtube.com/channel/UC3111rvadtBPUY9JJBqdmzg
 - ix. https://www.youtube.com/watch?v=ElZOm0H9X4g
 - x. https://www.youtube.com/watch?v=veIhJpUHF2U
 - xi. https://www.youtube.com/watch?v=4CRDcrKtHH0&t=1s
 - xii. https://www.youtube.com/watch?v=MxBrut9SY1s
 - xiii. https://www.youtube.com/watch?v=6K-zxZDYsKc
 - xiv. https://www.youtube.com/watch?v=HSLzkyWr0k4
 - xv. https://www.youtube.com/watch?v=cqmLfyxVlXs

xvi. https://www.youtube.com/watch?v=OEvenZHeA0c https://www.youtube.com/watch?v=fMdt9SrbNeE https://www.youtube.com/watch?v=0K7-DumNUn0 xviii. xix. https://www.youtube.com/watch?v=eVQSSCqARms xx. https://www.youtube.com/watch?v=CgUEQMsqdiY xxi. https://www.youtube.com/watch?v=P1MFFqHwNYw xxii. https://www.youtube.com/watch?v=TI7MziwLPdg xxiii. https://www.youtube.com/watch?v=xD86sJS1hyA xxiv. https://www.youtube.com/watch?v=tbpA k5sNH4 xxv. https://www.youtube.com/watch?v=tqn3votsMvo xxvi. https://www.youtube.com/watch?v=Cqj5wUqyyec xxvii. https://www.youtube.com/watch?v=nKB1SIoh7As xxviii. https://www.youtube.com/watch?v=ZrZIKMh8xiw xxix. https://www.youtube.com/watch?v=0i979i0r9A4 xxx. https://www.voutube.com/watch?v=EZ8dhw5ri34 xxxi. https://www.youtube.com/watch?v=C1m1XPftda8

XVIII. http://enenkelman.se/om/

a. http://enenkelman.se/tag/permakultur/

Appendix BII - Thesis Work Plan Extract

Om detta är en reviderad arbets- och/eller tidsplan, ange orsak till uppdatering (ifylles endast i förekommande fall)

Time allocation for data collection/multi-modal discourse analysis: 40 hours.

Appendix B - III – Data Analysis Notes

The results comprise of 49 websites found via a Google keyword search as specified in the methods for data collection. The following units of analysis bore relevance to the remit of this thesis study, as it was possible to identify and analyse the discursive practices that are detailed in the <u>table</u> within the methods for analysis.

The websites have been ordered in the same order in which they appeared on the keyword search, with affiliated websites in between each website when necessary. The analysed websites with a brief description are as follows:

I. Holma Folk High School

- a. This website features a one-sentence description of permaculture along with a solitary link to the official Permaculture Association based in Sweden.
 - i. The Swedish Permaculture Association outlines their working groups that were established in 2015 and have various goals including, but not limited to, social media communication, regional contacts, skills development for teachers, newsletter, and a magazine. This would indicate that the association is actively engaging in outreach and knowledge dissemination.
 - ii. This outreach exemplifies the discursive practices of 'raising awareness of benefits', 'promoting ideology', 'promoting technical principles' 'building of social networks', and 'articulation of expectations and visions'.
 - iii. The permaculture association has running collaborations with the European Permaculture Network (EuPN), the Nordic Institute, and ECOLISE, a coalition of organisations engaged in promoting and supporting local communities

across Europe in efforts to build pathways to a sustainable future. These collaborations mainly consist of broadening the educational capacity of the permaculture movement and disseminating knowledge across a wider spectrum. ECOLISE seeks to establish a common agenda across Europe in order to create a platform for collective action. These collaborations are part of the 'building social network' process that is deemed to be imperative in the transformative process of bridging the divide between the niche and the regime.

- iv. The website features a blogpost that displays a high level of self-awareness as an advocate of the permaculture movement. The blogpost analyses the marginal walls between cultures (niches and regimes) that hinder the broader sections of society engaging in permaculture practices. These walls are purported to be the political and corporate structures that frame the way in which our society operates, with policy-making seen to be a potential barrier or gateway to the bridging of cultures depending on its use. This can be seen as an example of niche actors fundermining the dominant regime and farticulation of expectations and visions.
- v. The permaculture association encourages site visitors to undertake trainings in permaculture through permaculture design courses (PDCs) and certified permaculture diplomas.
- vi. The permaculture association also has an interactive map that displays many of the registered permaculture projects / farms that are dotted around Sweden. This allows users to learn about which forms of permaculture are active around their area, it also provides contact details of these various projects for the benefit of the user.
- vii. The website also has a page dedicated to the LAND network (Learning, Activity, Networking, Demonstration). Permaculture Sweden, along with the namesakes in Denmark, Finland, and Estonia have teamed up to construct a portfolio of demonstration sites that they believe will be used with the aim of making permaculture more understandable and accessible to a wider audience. To be a member of the LAND network, you must fulfil eleven criteria points as detailed <a href="https://learning.network.netw
- viii. The website also contains some recommended reading material for the user to familiarise themselves with the concept and ideology of permaculture, not only the technical principles involved.
- ix. The website provides contact details for regional contact persons for sixteen locations across the breadth of Sweden, for people interested in permaculture to contact in order to learn more.

II. Njordstop Permaculture Farm

- a. Njordstop Permaculture Farm's website is predominately dedicated to an online shop that offers products that have been cultivated on the farm, a summer café, and courses related to self-sufficiency, organic farming, craft knowledge, and sustainable lifestyles.
- b. One of the services offered by the farm, among many, is permaculture and agroforestry training/consulting. There is also a more specialist service that focuses on permaculture orchard consulting.

- c. On the website's online boutique section, it is noted that the rabbit meat sold is KRAV certified. Another example of eco-certification acting as a manner in which to build credibility and consumer acceptance of niche-level food production.
- d. There are also several payment options, and shipping provided for the convenience of the prospective customer. A critical analysis of this interaction between a self-proclaimed permaculture farm and the consumer market could claim that the permaculture actors involved are being co-opted into the dominant agribusiness influenced regime that is heavily influenced by the capitalist economic system.
- e. The farm also offers visit opportunities and study visits where they offer to explain many of the permaculture processes that are employed. There is also very affordable and simple accommodation on offer for any guest that would like to spend some time at the farm in order to learn more and get involved. This rustic cottage is also accessible via the AirBnB website.
- f. The website features a page that concentrates on the animals bred at the farm. The page promotes the climate and health benefits of sustainably rearing rabbits opposed to the more conventional and impactful sources of meat. The page cites the director of Wildlife and Fish Research at SLU¹² to support its claims about the importance of investing in rabbit breeding. This page hints at challenging the methods of livestock husbandry used in the dominant and incumbent food production regime while offering credibility to their methods with statistics and references to experts in the field.
- g. The farm welcomes volunteers and apprentices to come and stay at the farm. They are connected to the WWOOFing community. They encourage volunteers to visit that are keen on learning more about permaculture, transition and agro-forestry. They are keen to disseminate knowledge about permaculture and sustainable living to all of the guests that they welcome to their farm.
- h. The website has a small page describing the concepts of biodynamic farming and agroforestry, both of which are techniques used at the permaculture farm. The page offers an overview of how these alternative methods of cultivation work in practice.

III. Permakultur Desinger

- a. Blogpage of self-proclaimed permaculturists and permaculture designer.
- b. Owner of the site is a certified (PDC) permaculture designer and is working towards receiving a diploma in permaculture.
- c. The website offers the site owner's interpretation of permaculture. She interprets permaculture as a sustainable design system but also states that it goes beyond a collection of sustainable land-use techniques. Her interpretation goes on to declare that permaculture is "... about finding systems where people, nature and wildlife live in harmony and have their natural place." It mentions a few other technical principles that are efficient and sustainable before affirming that permaculture is way of helping to "build the Earth instead of depleting it".
- d. The website offers information on upcoming events in the permaculture calendar, hosted by the site owner as well as other permaculture contacts.
- e. The site owner welcomes volunteers through the HelpX community.
- f. The site owner is keen to hold lectures, workshops, and courses to help raise awareness about the multi-faceted benefits of permaculture.

IV. Permakultur Stjärnsund

- a. Eco-community in Southern Dalarna.
- b. The eco-community offers TinyHome accommodation opportunities through the AirBnB website. It offers guests the chance to experience the "tiny house lifestyle".

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¹² Swedish University of Agricultural Sciences

- c. The farm offers courses, workshops and lectures in cooking, construction, and permaculture. There are also guided tours of the establishment on offer.
- d. The website offers a description of permaculture, stating that is about "using nature as a model for designing systems that make both people and nature feel good, both now and in the future". There is a brief historical overview and a description of the main ethical principles that permaculture adheres to. The same page provides descriptive quotes from famous permaculture practitioners that touch upon the ideological and solution-based nature of permaculture.
- e. The farm boasts the only and therefore largest library in Sweden that is dedicated to literature and educational material on permaculture.
- f. There is a featured event calendar that displays upcoming courses and guided tours that are a commercial venture for the farm.
- g. The farm makes several recommendations for places to stay nearby when visiting the farm for the purpose of attending a course there. It is a well-established and managed commercial entity.
- h. The website has a page dedicated to ongoing initiatives that related to sustainability and ecological projects in the village where the farm is situated. These twelve projects branch off to separate pages with further information. This page is emblematic of the community building aspect of permaculture that advocates local communities coming together to work upon projects that are of societal benefit, both on the local and the global level.
- i. The organisation has set up their own permaculture association that is joinable for an annual fee and expected responsibilities to engage with. These responsibilities are mostly to do with the organisation and participation in common working days and contributing to the local newsletter with relevant events and information.
- j. Discourse analysis conducted on this <u>video</u>, titled 'summarium addendum'. Full analysis can be found in the video analysis section of the appendix (link).
 - i. Throughout the video, there are simultaneous attempts to undermine the incumbent regime and to promote the technical principles and ideology embodied by the permaculture concept. The undermining is achieved by highlighting the wastefulness that is emblematic of industrialised food production processes.
 - ii. Symbolic and implicit messaging is rampant throughout the duration of the video, ranging from exemplifying strong local and social cohesion while innovating and constructing sustainable projects to extensive footage of plants growing and direct human interaction with animals and nature.
 - iii. Although there are no explicit case-study success stories depicted in the video, the entire video acts as a successful case-study as it summarises many of the concurrent projects that are underway at the farm, interspersed with natural beauty and a jovial atmosphere.

V. Permakultur Stjärnsund's Facebook Page

- a. Discourse analysis conducted on this <u>video</u>, titled 'Permaculture in Sweden The joy of transition'. Full analysis can be found in the video analysis section of the appendix (link).
 - i. The use of hashtags alongside the video post may be an indication that the practitioners are attempting to modernise and tap into the viral nature of social media as a way of disseminating their message.
 - ii. This aesthetically pleasing aspect of the video helps to construct the positive narrative around the alternative lifestyle that permaculture offers.

- iii. There is an interesting juxtaposition between thriving community engagement at festival dance with cat lounging in the sun. Epitomising the nature of permaculture and the transformative nature that it has emblazoned on its vision.
- b. Discourse analysis on <u>photo page</u>, 609 Photos split between 20 albums. Full analysis can be found in the photo analysis section of the appendix (link).
 - i. Photos portray a feeling of getting back to rustic nature, showing freshly grown and healthy looking produce in a human hand, this makes a visual distinction from the image of conventional monoculture farming.
 - ii. Some photos are used as newspaper cut-outs to display how their projects and alternative lifestyles are garnering interest in the local and national news outlets. These photos are of particular interest as they offer credibility and legitimacy to the permaculture niche, the news coverage allows the niche a platform to articulate their expectations and visions.
- c. Link to video on Omställnings nätverket that features a news video from SVI on Remakultur Stärnsund with David and Eliza Roxendahl that live there and practice a life under the principles of permaculture. David has also lectured at <u>CEMUS</u> before on the importance of sustainable food production and the principles of permaculture.
- d. The farms holds course and training on the importance of permaculture, they also host festivals. This outreach and engagement with the wider world shows a conscious and determined effort to disseminate the knowledge, principles and ideology of permaculture to a broader audience. Whether or not these efforts can be translated into influencing the incumbent regime remains to be seen.
- e. Potential for breaking into the regime from the niche via innovative commercialised goods such as Rox Productions.

VI. Permaculture Association in Skåne

- a. The homepage of the website offers a summary of what the permaculture association's goal is: "Our goal is to disseminate knowledge, experiences and ideas on how permaculture can serve as a design tool for a sustainable society where consideration for nature, animals and people is crucial. We are part of a national and international network where courses, gatherings, certifications and diplomas are some ways in which we develop our competence together with other permaculture enthusiasts. We hope that you get the benefit and inspiration from the website and we look forward to contributing with your experience in permaculture so that together we can develop our knowledge bank. Welcome!" This introduction to the website clearly defines the goals of the association and openly welcomes newcomers to join and contribute their knowledge and competencies to the global permaculture network. This network building is an integral step for the niche to take if it is to enter the mainstream and enhance the incumbent food production regime.
- b. There is the chance to become a member of the association from 150-300SEK¹³ per annum. Once again, this can be perceived as being a tactic of building networks within and across related niches.
- c. The website has a knowledge bank that offers users the opportunity to share and disseminate permaculture knowledge, a useful heuristic tool that can be utilised by permaculture communities. However, there is no indication of trying to share this knowledge bank with the conventional agricultural knowledge system or actors in the dominant regime.
- d. The website also offers a list of external links that are inspired by the concept of permaculture. Seven of the sixteen links do not work or are not relevant to this study. The remaining nine links are made-up of eco-villages, sustainable tourist spots, and

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¹³ Swedish Krona

- gardening projects, all of which possess a certain affiliation to permaculture. Further information can be found in the appendix (link). One link is for Rikkenstorp, a permaculture farm in Grängesberg. This website also appeared on the Google keywordsearch and is assessed later in this section as part of the Karlskoga high school analysis.
- e. The website features a calendar that details the yearly programme that consists of courses, tours, and workshops, some of which have associated costs. The courses are on technical principles of permaculture as well as looking at social design through permaculture. This outreach and educational opportunities show a clear intent of raising awareness of permaculture and promoting its ideology.

VII. Human ecology blogpost about Permaculture

- a. Although this webpage is simply a blogpost from a previous student of human ecology, it offers a relatively in-depth explanation of what the permaculture consists of. It delves into the importance and benefits of the symbiotic and circular nature of permaculture and closed-loop ecosystems.
- b. The blogpost concludes by recommending that municipalities and industries alike should follow the principles of permaculture in order to ensure a more sustainable future.
- c. It is unlikely that this blogpost will reach a large online audience but it is still a conscious effort made by the blogger to disseminate permaculture knowledge and urge others to implement its principles on a level that is far beyond the remit of food production.

VIII. Foodmaker event list

a. A compilation of sustainable food making classes/workshops as part of a food sanctuary course, one of which is connected to the concept of permaculture. This seminar offers attendees the chance to learn about a "garden that breathes permaculture" from experts that have written a popular book on the topic. This is a small but clear example of practitioners attempting to raise awareness of the benefits that come from implementing the permaculture design principles.

IX. Borrabo Permaculture Farm

- a. Interestingly, this farm is run by the hosts of the event featured in the VIII Foodmaker event featured previously.
- b. There is a link to purchase their book that was published in late 2017, the book acts as a manual of how to grow and live sustainably by mimicking the way ecosystems work.
- c. Borrabo offers full-day intensive courses and guided tours of their permaculture garden.
- d. Use of photos to display some of what they have going on, displaying permaculture structural layout, implicitly countering the monoculture narrative.
- e. The course on offer teaches about permaculture principles and how to cooperate with ecosystems (opposed to dominating/managing them), paying attention to borders and niches (in gardens), and showing the benefits of diverse cropping.
- f. There are case study examples of both the technical principles of permaculture and the visual narrative promotes the ideology of the permaculture movement by implicitly opposing the incumbent regime. However, only appealing to like-minded/interested citizens and consumers.
- g. The website has a thorough explanation on why they adopt permaculture principles. To move away from fossil fuel reliance and closing the loop on their food production system. Extensive permaculture knowledge shown with clear examples of permaculture zonings in use.
- n. It also has links to other permaculture operations that are active in Sweden as well as English-language pages for an international audience.

X. Växhuset Hostel

- a. This website is about a hostel in Söderhamn, as listed by the Permaculture Association in Skåne, which is promoted as a completely organic hostel based on the principles of permaculture and the idea of a sustainable system.
- b. By bringing permaculture ideals and techniques into the tourism industry, it could act as a bridge between the niche and the broader societal landscape, negating the need to interact with the food production regime. However, this approach could hinder the overall aspirations of the permaculture niche as it attempts to reach too far before being firmly established as an alternative food network. As permaculture is a concept that stretches much further than food production, this may be an inevitable consequence of its outreach.

XI. Karlskoga High School

- a. The school is offering a course titled "Agro-ecology Small-scale cultivation in practice and perspective" with permaculture as a central component to the technical principles being taught.
- b. The course is taught through a state institution and students will receive academic credits that they can use to put towards their overall set of credits for graduation. This is a key aspect of mainstreaming permaculture and it is introducing its principles and ideology into the mainstream educational system. It is not simply a non-certified course that is ran as a PDC for interested individuals.
- c. As it is hosted for high school students, it allows the opportunity for people to get engaged with permaculture from an early age, which they can potentially go on to work with in the future.
- d. The course is associated with NOrdBruk, which is part of the global movement, La Via Campesina.
- e. Have "themes based on agro-ecology, food sovereignty and global solidarity.", key aspects of the permaculture ideology.
- f. The course touches on the different forms of social cultivation connected to permaculture, and the importance of connecting consumers and producers.
- g. Some of the field word is done at Rikkenstorp, a permaculture farm that appeared in a previous website that was assessed.
- h. A mix of theoretical and practical throughout the duration of the course.
- i. The course is CSN eligible, meaning that students qualify for student finance and loans as part of taking the course. This makes it accessible to any student in Sweden.

XII. Rikkenstorp

- 1. Rikkenstorp specialises in permaculture and have been hosting a course named "" Agro-ecology Small-scale cultivation in practice and perspective ", the same course advertised on in the analysis of the Karlskoga High School webpage.
- 2. One of the practitioners at the farm is part of the NordBruk, part of the international farmers' network La Via Campesina.
- 3. The other main practitioner is a trained environmental scientist, and is also a board member of the Swedish Association of Farmers. She is working alongside Örebro University, helping a research project that focuses on sustainable food production in Sweden.
- 4. It is possible to order a box of vegetables from the farm as part of a CSA initiative
- 5. The farm welcomes visitors to come and learn more about the farm processes and enjoy the natural beauty of the site. A cabin is also available to rent via the AirBnB website.
- 6. The website undermines the dominant food production regime at one section, stating; "Much of today's modern agriculture depletes and

erodes the earth. We want to work in a way that rebuilds the earth so it gets better and better! We do this through different ways, for example, we work with: Agroforestry, Permaculture, Agrocology and Hygiene-free forestry. It must also be regenerative on a larger, social level and therefore we are very much involved in politics and social issues"

XIII. Ordfront Magazine

- a. A Swedish Podcast compilation with one dedicated to the topic of permaculture, raising awareness of the benefits.
- XIV. Event calendar in Örebro, hosted by Naturskddsföreningen
 - a. Event listed that refers to a lecture given by permaculture practitioner that is based at Rikkenstorp permaculture farm. The lecture covers principles, approaches and how you can get involved.
- XV. Little Green Farm
 - a. Farm ran by Danish permaculturists that moved to Sweden in November 2017.
 - They run the farm as a commercial entity with all of their produce stemming from cultivation that adheres to the permaculture principles.
- XVI. Alltsomsker Event Calendar
 - a. Event listed hosted by the Red Cottage at the Kvarnarp Farm in Eksjö.
 - b. Event is an introduction course to permaculture and the basics of organic-biological cultivation. Course has three eco-certifications to establish credibility.
- XVII. Blekinge Läns Newspaper
 - a. News article about a spring cultural program that will include permaculture tips. Another small-scale intro event that helps to raise awareness about permaculture.

XVIII. Focus Green

- a. Focus Green is run by a trained gardener and environmental scientist. She started Focus Green because she wanted to make a difference and create beautiful functional gardens with diversity and balance.
- b. The website features a video about how to think about, plan, and design a kitchen garden according to permaculture design principles.
 - i. Video has examples of implicit messaging that can be related to shortening the divide between food and the end consumer.
 - ii. Instructional video with many examples of permaculture design principles.
 - iii. Style of video promotes the ideology of permaculture with getting back to nature vibe.

XIX. Gatsmart

- a. Blogpost that focuses on permaculture and organic farming.
- b. Full description of concept that both promotes the ideology and the technical principles of permaculture.
- c. Close up photos included of plants and flowers thriving, one of which has a bee perched in the middle of the flower. Implicit messaging of how permaculture inspired sustainable cultivation is a positive for biodiversity and the maintenance of local bee populations.

XX. Sundhult

- a. <u>Ridgedale Permaculture Farm</u>
 - i. Sharing knowledge via videos presented by Richard Perkins of Ridgedale (<u>YouTube channel</u>), one of the most prominent practitioners of permaculture in Sweden.
 - ii. <u>Bio of Ridgedale</u> "As one of the few profitable Permaculture farms on the planet, and as the northernmost example, we are excited about facilitating the next generation of entrepreneurial young farmers. Our foremost responsibility

- is regenerating our landscape, ecosystem processes and soils through resilient, replicable, scalable and profitable farm enterprises. Our secondary function is to educate and empower people into action through regenerative design, enterprise and holistic decision-making that stimulates local community and economy whilst building soil. Subscribe to learn about the decisions and economics of Farm Scale Permaculture Design, Regenerative Agriculture, Keyline Design, Agroforestry, No-Dig Market Gardening, Pastured Livestock Enterprises, On-farm Slaughter facilities and Holistic Management."
- iii. "Richard is an internationally regarded teacher, innovative farmer and Permaculture leader. He is also Author of the internationally acclaimed work Making Small Farms Work. He has worked professionally in every major climate zone across several continents consulting to projects, farms and industry. He has also led 50 solo Permaculture Design Course's as well as dozens of other specialist courses, practicums and seminars. Richard's project work includes design and site visits on over 160 varied projects in various climatic zones as well as contributing to over 1000 course participants' site plans."
- iv. Richard also holds a Diploma in Applied Permaculture Design (UK), HND Organic Crop Production (UK) and has studied extensively in the fields of Keyline Design, Holistic Management, Ecology and Anthropology.
- v. Farm offers yearly 10-week internships that offers interns chance to learn many aspects of the permaculture life.
- vi. "Despite the trends and beliefs permeating conventional agriculture you can earn a wholesome decent living with an unparalleled quality of life from farming, whilst serving your community with incredible food and regenerating soils and habitats at the same time. We are doing just that, from a very rural location at 59°N in one of the most expensive and heavily regulated countries on the planet. This is the most comprehensive online training run by a successful small farm by an experienced designer and educator available, and we have crafted this training specifically for those interested in pursuing profitable small scale regenerative agriculture." Quote from the online training page, declaring that it's possible to run a profitable business through regenerative agriculture via permaculture design.
- vii. Open-days throughout the year, photo analysis of page
 - 1. The photo page has an array of examples of children engaging with animals on the farm, implicitly promoting the reconnection to nature ideology purported by permaculturists.
 - 2. There are also aerial views of the layout of the farm so a website visitor can see the carefully designed permaculture layout that has been adhered to, although there are no annotations of the specific permaculture zones.
- viii. The farm sells an array of self-designed farming machines and merchandise.
- ix. Richard Perkins' YouTube channel has uploaded 270 videos, has 39,179 subscribers and has had 3,544,837 video views as of 27/03/19.
 - 1. 23 videos analysed, all videos, with the exception of the oldest, included stylised and branded fonts that accompanied a quickly familiar intro montage of clips overlooking the farm and the various projects that are occur there.
 - 2. Many of the videos make reference to the existing book published by the main permaculturist (Richard Perkins), titled 'Making Small Farms Work' and the upcoming book titled 'Regenerative Agriculture'. Both

- these books act as a way of disseminating knowledge of permaculture design principles and how they can be applied to a small-scale (although scalable) commercial enterprise. The revenue from the books can also help to bolster the overall income of the farm.
- 3. One of the taglines of the videos is "Farming, Innovating & Educating for the benefit of all"
- 4. The videos often display non-mechanised ways of improving efficiency while cultivating the land and planting crops, consistently maintaining the no-dig policy.
- 5. Continuous updates on what is happening with particular projects and processes at the farm, building a narrative for subscribers to follow, learn from, and engage with.
- 6. Viewers are encouraged to sign up to online trainings that are now provided by the farm with certified courses. Simultaneously increasing revenue for the farm and spreading knowledge about the technical principles of permaculture.
- 7. There is an explanation of the various methods used at the farm due its contextual parameters, climatic and geographical. The practitioner goes on to declare why this is important and how patterns of observation are integral if one is to adhere to the permaculture principles. Undermines the dominant regime here by contrasting their permaculture and regenerative methods with the excessive high-input systems used in the regime.
- 8. The practitioner also explains how the digging and tilling methods used in conventional agriculture has very degenerative consequences, both on a micro and macro level.
- 9. Permaculturist states that the produce derived from the farm should be 'better than organic' and that they respect all ecological processes in order to be fully regenerative.
- 10. The business makes a conscious effort to make their books affordable and therefore have a set price for worldwide shipping, incorporating a loss on their side, but something they think is worthwhile in order to not support corporate superpowers such as Amazon.
- 11. The practitioner also states in one of the newest videos that the farm is partnering with the sustainable equivalent to the Google search engine, titled Ecosia. Building networks with like-minded businesses that are finding success in niche-born enterprises and are entering the regime on a competitive standing.
- 12. The farm declares that they are "Europe's leading example" and that they offer the "Most comprehensive and low cost training in regenerative culture you will find online"
- 13. One of the videos provides an overview of the merchandise that is for sale through the farm website, including tools and apparel.
- 14. The YouTube videos act as a taster for viewers to engage more and potentially sign up for on-site or online trainings that provide business templates and over 80 hours of teaching footage.
- 15. The permaculturist is keen to point out that well-designed and efficient systems often turn-out to be low-cost as well as more sustainable than conventional methods.
- 16. One video details the rationale behind why they choose to farm in this regenerative way using permaculture design principles; this in turn

- bolsters the ideology of permaculture and raises awareness of its benefits.
- 17. The farm displays various case-studies at the site which are forms of making a profitable income from small-space intensive farming but through sustainable and regenerative practices.
- 18. Repeatedly declares that it is possible to obtain an economic return while appropriately caring for the land and producing top grade food. This is a key sign that the farm perceives itself as a working example that can enter, compete in, and ultimately enhance the incumbent food production regime. Ridgedale Farm is the only example in this thesis study that makes this statement, both explicitly and implicitly.
- 19. Although there are numerous examples of successful profit margins being made on the farm, there is also mention of crowdfunding and kickstarter opportunities for those who would to support the work being carried out at the farm. It is unclear how reliant the business is on this type of funding.
- 20. The farm offers veggie boxes as part of CSA (Community Supported Agriculture) initiative, they have orders across Sweden for this produce, a couple of the videos detail the variety of produce that goes into one of these boxes. If viewers of the YouTube videos are also consumers, it gives them an intrinsic connection to the food that they are ordering. Something that is amiss within the dominant food regime.
- 21. The videos are often rife with culinary tips, information about health benefits, as well as information on how to emulate methods implemented on the farm.
- 22. The farm also sells 'wonky boxes', comprised of vegetables that are misshapen and are not as aesthetically pleasing as the produce commonly found in the mainstream supermarkets in Sweden, this is a clear undermining of the incumbent regime.
- 23. The farm runs a yearly internship program, a chance for people to amass a wealth of knowledge in permaculture principles and techniques that can then be shared on a broader spectrum once the internship comes to a close.
- 24. Many of the videos show cooking of the produce grown/reared on the farm, a lot of examples of meat being cooked. These videos offer the full history of the animal, the process that it has been through, culinary tips, and advice for fellow commercial entities that have similar livestock arrangements.
- 25. A couple of the videos make reference to offering an experience to customers where consumers get the opportunity to learn more about the ideology, the farm processes, and topped off with a social dining experience. "Selling the idea" is a statement used by the practitioner. This is potentially a key aspect of trying to enter the mainstream, not questioning the capitalist paradigm that the incumbent food production regime is situated in, but showing manners in which it can be done differently, and ultimately enhanced.
- 26. Many of the videos show large feasts, all of which is supplied by home-grown produce from the farm, large social gatherings with a strong community feeling. Implicitly selling the idea of the permaculture ideology.

- 27. Practitioner often discusses his lifetime of experiences and how he has dedicated his working life to learning and perfecting farming techniques. Techniques for the purpose of achieving regenerative agriculture through permaculture principles. He states that he works extremely hard and commits a large proportion of his time to improving the farm and its processes, to such an extent that it has caused issues in his personal relationships, as discussed in one video. There is a clear sign that the farm follows an ideology of optimisation and improvement, similar to capitalism (which is widely renounced by the permaculture community), but still adhering to ecological boundaries and methods of regeneration.
- 28. There is a multitude of examples within the videos of implicit messaging that can be considered to be selling the way of life, these examples often include small children and domesticated animals running around the general processes of the farm. The young children are often engaged with as part of the videos. There is one example of the permaculturist riding a cow at the opening of the video, displaying a fun, easy-going attitude to farming life.
- 29. The practitioner often cuts his train of thought when explaining about some technicalities to pass judgement on the current state of affairs in relation to global issues associated with industrialised agriculture. There are comments that undermine and explicitly criticise the forestry industry in Sweden, global animal husbandry, and general soil and plant cultivation.
- 30. Many of the free-range animals of the farm are shown running around freely in large pasturelands, implicitly undermining the common aspects of the global food regime where this freedom does not exist.
- 31. There is footage of tracking data of the weights of turkeys that have been processed in order to be able to provide consistent and empirical data that can be used in accounting and the soon-to-be-published book. These figures are absolutely integral if permaculture is looking to enhance the incumbent regime with reliable and verified statistics.
- 32. The permaculturist is aware of his broad online audience from many geographical backgrounds, so much so, that when he provides temperatures, he gives it in both Celsius and Fahrenheit. A conscious effort to adequately inform an extensive audience.
- 33. Some videos have direct engagement with close family members such as the permaculturist's partner, building the social narrative that is related to the permaculture ideology.
- 34. There are budgetary tips and advice on managing investments as part of a small-scale farming business.
- 35. Some of the videos touch upon windows of opportunity to stimulate sustainable business models in the field of farming and food production.
- 36. The practitioner makes reference to collaborating with fellow farmers for the purpose of sharing their combined agriculture knowledge. Theoretically, this could possibly influence actors in the dominant regime if the network of knowledge sharing grows.
- 37. The permaculturist discusses the importance of learning from nature and how successful farmers can implement its lessons through an array

- of permaculture design methods and techniques, with particular reference to soil management.
- 38. The permaculturist focuses on the importance of business management and entrepreneurialism in making companies like this succeed.
- 39. Closed-loop systems are explicitly and implicitly encouraged throughout the videos, one example being utilising the waste wood from a local timber yard to construct various buildings and attachments on the farmland.
- 40. The practitioner is often keen to emphasise the social cohesion and the farm and how people's time there has helped others go on to study agro-ecology and form different projects together.
- 41. From assessing a series of videos, it is clear that there are interns and employees from all over the world, clearly building networks to disseminate the permaculture knowledge on a very wide scale.
- 42. The videos often give social updates concerning the friends and family associated with the farm, such as an announcement of a child being born. This announcements help viewers to feel more connected to life at the farm and reinforces the dual business and social narratives that are prevalent in the series of videos.
- 43. The practitioner recognises the importance of the farm being used as a working case-study for others to emulate; "farm is becoming very valuable as a demonstration for small-scale farming. Has better figures than any other farm on the planet, that I know of"
- 44. There are several examples of upcycling throughout the videos, especially converting disused products into more useful items, such as a converted wagon being made into a sauna for the employees to enjoy.
- 45. There are case-study examples shown within the videos that if emulated, would have a global impact on some of the largest problems that huimanity is currently facing. One such examples is displaying the success of topsoil building over the years at the farm, combatting the issue of CO2 emissions that arise from land-use change. One video includes a statement that "nature can take care of itself" and therefore simply needs our support to go through its natural ecological processes.
- 46. All of the videos are always just filmed at arm's length, like a selfie style of filming. More intimate than conventional filming. Builds a rapport and relationship with viewers over the duration of numerous uploads. Mentions in occasional videos about the importance of commenting on the videos, as it is good to receive continuous feedback.
- 47. There is a recognition that past core participants that have engaged with the farm have gone on to create their own successful projects. Building a network of experts around this way of farming.
- 48. In one video, the permaculturist states that they are "Cutting away the fluffy parts of permaculture", focusing on the technical principles of permaculture. Perhaps integral if to influence, enter, and influence the dominant food production regime, both in Sweden and globally.
- 49. When interacting with the general public, there is an undermining the dominant regime by saying that customers had the choice to cross the street and go to the supermarket, but instead, they choose good quality sustainable products. They provide a place where they can talk to

people, swap recipes and have a good communal feeling instead of purchasing produce in a "concrete wasteland".

- x. Total iterations to be identified throughout the 23 videos:
 - a. Undermining dominant regime 19
 - b. Raising awareness of benefits 10
 - c. Promoting ideology -
 - d. Promoting technical principles 28
 - e. Case-study success stories 32
 - f. Articulation of expectations and visions 7
 - g. Building of social networks 10
 - h. Symbolic and implicit messaging 36

XXI. HonkPlease

a. A website that focuses on:

TECH - New technology that drives community development.

SOCIETY - All types of social change, often linked to entrepreneurship.

LEARNING - Learning processes and learning conditions in today's society.

CHANGEMAKERS - People who drive society forward in innovative ways.

- b. Includes an article on how permaculture can be utilised as a support for people with mental illnesses. Related to Swedish Changemaker project.
 - i. It is promoting the social benefits of permaculture that are not offered via the conventional food production regime.
 - ii. The cited permaculture mind project is partnered with various organisations across Europe that work in mental care and education.
 - iii. It is a two-year project that receives funding from Erasmus, a sign of being ingratiated into the mainstream processes of the societal landscape, albeit outside of the dominant food production regime. The project looks to promote not only the ideology of permaculture but also the benefits that it can have on a multitude of social levels.

In total, there were 286 iterations identified by operationalising the analytical <u>table</u> detailed in methods for data analysis. The division of these iterations can be seen clearly outlined in the coding matrix to be found in the results section. The data is also visualised by the use of pie charts, these can be found in the <u>appendix</u>.

Appendix B - IV - Video Analysis Notes

Permakultur Stjärnsund - summarium addendum Length: 12:20 / Published 06/08/14

7.366 views on YouTube

Uploader – RoxProductions (David Roxendahl)

Approx 1 hour to assess.

Notes:

- Video begins with calm and relaxing music interwoven with picturesque images of the surrounding area with northern lights apparent. Instantly setting the scene for a video which will encompass an "at one with nature" vibe.
- Displays manual labour with repeated examples of teamwork (spanning different agegroups) while putting together a new building (that later turns out to be a TinyHome, one of the defining features of the farm). Includes a lot of laughing and social cohesion, doesn't appear to be work, more like a communal hobby,
- Examples of utilising waste from a large company that is involved in the retail component of the incumbent industrialised food production regime. Manages to swiftly undermine the current regime by displaying its wastefulness while simultaneously showing the ingenuity

- and resourceful displayed by the niche-level movement and therefore bolstering the ideology through symbolic messaging.
- Montage of construction process of several projects ongoing at the farm with upbeat and positive music. This is a combination of promoting the technical principles through case-study success stories.
- Montage clips interspersed with more spanning shots of the surrounding nature.
- Extensive footage of plants growing, human interaction with animals and insects (bees), implicitly signalling the reconnection between humans and the food that they consume. The disconnection is a common critique of the incumbent regime.
- Aerial shots of the farm to portray the carefully crafted layout that has been designed in adherence to the permaculture principles. Further credibility offered to the technical nature of the permaculture niche.
- Footage of intricate techniques used in both construction and farming methods, displaying a move away from the conventional mechanised methods. Once again, undermining the incumbent regime and bolstering the ideology of the niche.
- Use of renewable energy displayed via the use of solar panels, showing the more sustainable nature of permaculture design.
- Conventional livestock animals such as pigs and chickens shown having free-reign of the
 farm, running amongst the daily business and ongoing projects. This is an examples of
 further symbolic messaging, triggering thoughts about the high-inputs and lack of animal
 welfare exhibited in factory farming, commonplace in the dominant food production regime.
- Examples of retrofitted waste being upcycled into practical tools that can be easily utilised. Undermining the throwaway society associated with the incumbent regime and raising awareness of the benefits of the permaculture lifestyle.
- Towards the end of the video, there is a collection of footage that exemplifies the fruits of the labour that had been exhibited earlier in the video. Finished projects, swathes of crops in full bloom, examples of harvesting especially the methods used to ensure provisions for the winter months.
- Video closes with the logo of the farm and the in-house company behind the video production, branding the permaculture processes displayed earlier.

Permaculture in Sweden - The joy of transition Length: 3:46 / Published 02/01/19

100 views on YouTube, 1,800 views on Facebook

Uploader – <u>RoxProductions</u> (David Roxendahl)

Approx 30 minutes to assess.

Notes:

- Similar style to the other video assessed produced by RoxProductions. Positive upbeat music accompanying community themed activities. Some of which include creating and playing homemade instruments. Succinctly capturing several ideological principles that are embodied by permaculture, namely upcycling, localised production and community involvement.
- The video is accompanied by some hashtags (#stjärnsund #permaculture #permaculturefestival #nordiskapermakulturfestivalen). This may be an indication that the practitioners are attempting to modernise and tap into the viral nature of social media as a way of disseminating their message.
- Repeated images of plants and vegetables thriving in the summer, animals happily scurrying
 around amidst the permaculture designed garden areas, young children playing and having
 fun. This aesthetically pleasing aspect of the video helps to construct the positive narrative
 around the alternative lifestyle that permaculture offers.
- Wood burning rocket stove used for the purpose of cooking home-grown food to be consumed at a local village festival. Displaying why permaculture principles (both technical and ideological) can be beneficial for the local community.

• Juxtaposition between thriving community engagement at festival dance with cat lounging in the sun. Epitomising the nature of permaculture and the transformative nature that it has emblazoned on its vision.

Köksträdgården: Planering och första spadtaget (Avsnitt 11) Length: 5:09 / Published 12/01/19

236 views on YouTube

Uploader – Räfholmen

Approx 20 minutes to assess.

Notes:

- Opens with a close-up of caterpillar exploring some soil contained in a pair of human hands, presumably the permaculture practitioner. Clear indication of getting back to nature and bringing the consumer closer to the food that they consume. Implicit messaging.
- Predominately the video consists of a guide on how to lay out and arrange the garden for the purpose of cultivating certain produce.
- Clear explanation of plan and its connotations with permaculture principles.
- Video concludes with view from inside the house looking out unto the permaculture design garden. Again, implicit messaging about the localisation of sustainably cultivating food through permaculture principles.

Paperpot transplanter in lumpy compost Length 13:23 / Published 16/04/19

6,228 views on YouTube

Uploader – Richard Perkins

Approx 25 minutes to assess.

Notes:

- Quick intro to the topic to be covered in the video.
- Stylised and branded fonts with introduction music, quick montage of clips overlooking the expanse of the farm.
- "Making Small Farms Work".
- "Farming, Innovating & Educating for the benefit of all"
- Displaying a non-mechanised way of planting paperpots through an efficient tool which is considerably quicker than planting each one by hand.
- Displaying the intricacies of the process.
- Extensive footage of the processes.
- Gives updates on all the projects ongoing at the farm at the start of the growing season.
- Explains the nuances of the non-dig setup in this form of paperpot planting –
- Makes reference to the book that he is on the cusp of publishing.
- Engages with the feedback and comments that he is getting from the online community, helping to build networks but also goes a step further and allows external engagement with the projects ongoing at the farm.
- Closing text at the end of the video encourages viewers to join their online training for more details, a successful case study of educating the public, promoting the principles and the ideology of permaculture and raising awareness of its benefits.

Producing all our starts up at 59°N Length: 23:35 / Published 03/04/19

7,541 views on YouTube

Uploader – Richard Perkins

Time: Approx 50 minutes to asses

- Makes reference to his new book named "Regenerative Agriculture"
- Changes being made in the seeding room at the farm.
- Little intro montage with the familiar music that is used on all uploads. Same tagline texts as per the previous assessed video.

- Need artificial lights in order to start growing seedlings early enough to be ready for the season as there is a lack of daylight due to the latitude of where the farm is situated in Sweden.
- Explains about cold climate
- Talks about the specific technicalities of the bulbs and the flexibility of their position in relation to the plants.
- Energy efficient, low cost way of carrying out this process.
- Makes reference to changes in climatic patterns based on one's latitude.
- Explains about use of wood stove instead of propane or excessive use of energy to keep a certain location warm.
- Big job at the garden is "careful observation every day", undermining the methods used in the dominant regime.
- Permaculturist gives an overview of some of the gardening products that they sell through their website. Commercialisation of the venture, a successful case-study of mainstreaming the technical principles of non-mechanised gardening techniques.
- Discusses concerns that fellow farmers have about being certified organic. He states that he doesn't care about that as he wants to be "better than organic". Respecting ecological processes in order to be regenerative.
- Says that market garden is most labour intensive of all forms of farming.
- Discusses how digging and tilling will lead to a contrasting degenerative situation.
- They sell microgreens to local restaurants and businesses.
- Talks about shipping the regenerative agriculture book when published, shipping fees etc.
- Wants to make Amazon obsolete, and is therefore taking a loss on the shipping as part of undermining the capitalist regime.
- Partnering with Ecosia, the sustainable tree-planting alternative to the Google search engine.
- Closing text mentions "peer learning", "business templates" "over 80hrs of teaching footage".
- From "Europe's leading example"
- "Most comprehensive and low cost training in regenerative culture you will find online"

Farming for the future Length: 24:14 / Published 25/03/19

7,924 views on YouTube

Uploader – Richard Perkins

Time: Approx 45 minutes to assess

Notes:

- Displaying the penultimate copy of his book "Regenerative Agriculture"
- Farming ecosystem practices, a lot of technical principles and hard data included in the book but the context of the information is the most important.
- Says that we can gleam a lot of information from the images included in the book.
- Includes a section on the current state of farming, undermining the dominant regime.
- Talks about why they choose to farm in the way they do, bolstering the ideology of permaculture and regenerative agriculture.
- Talks about making an income from small-space intensive farming with the case-study of indoor grown oyster mushrooms.
- Talks about the financing of the different enterprises ventured on the farm.
- Talks about how the book can be used as a good to obtain an economic return while caring for the land and making high-quality food.
- Mentions crowdfunding and kickstarter campaigns, looks like they are still dependent on external funding for some of their educational projects.

S4 • E61 First CSA Veg Box Share of the season Length: 08:11 / Published 14/06/17

5,850 views on YouTube

Uploader – Richard Perkins

Approx 20 minutes to assess

Notes:

- Intro montage of video is different from ones analysed previously, same theme tune but different interspersed clips, a sign of keeping the YouTube channel new and fresh. As Richard Perkins receives a huge amount of YouTube views, enough to obtain advertising revenue from the website. He makes reference to YouTube as part of the commercial enterprise of the farm in a previously assessed video.
- Talks about still selling produce that isn't as aesthetically pleasing as much of the produce
 that we find in the common supermarket. In their 'wonky boxes', they are able to still sell
 this produce. This notion undermines the dominant regime, which is renowned for wasting/
 not selling a large section of produce that does not meet the aesthetic standards set by the
 market
- The video has a diverse set of subjects on display that make up the components of a "CSA (Community Supported Agriculture) Veg Box". The CSA concept is an explicit undermining of the dominant food regime.
- Running through the health benefits, culinary tips and general tastes and tips associated with several of the vegetables that are to be included in the CSA Veg Box.
- Describes how some crops that have grown in a manner that wasn't expected can still be utilised in the making of kim chi, something that they will consume throughout the year as it is preserved.
- Showing the packing process of the veg box, minimal plastic packaging, all fresh produce, hand-picked.
- Encouraging viewers to check out more aspects of the website and to buy their first book "Making Small Farms Work".

<u>S4 • E87 Compost Tea for trees, a whole roast pig and the internship ends...</u> Length: 20:33 / Published 29/07/17

10,204 views on YouTube

Uploader – Richard Perkins

Approx 35 minutes to assess

Notes:

- Explaining about the interns that are working at the farm, learning about the processes and accumulating permaculture knowledge that they can take elsewhere.
- Showing on-site cooking of black pudding and other meat/dairy based food that has all been sourced from the farm.
- Technical principles on how to efficiently prepare a pig carcass before cooking.
- Talking about the celebration of spending time with the interns and the journey they've been through together.
- Talks about the pricing of selling the pork per kilo.
- Talking about tours of the farm combined with having a dining experience with all food produced on the farm. Creative commercial venture.
- "personal story that they're selling, why they're doing this, why it's important"
- Technical compost tea information.
- Technical principles on mushroom cultivation.
- Array of food made available made for the feast for all the workers at the farm, all looks healthy and delicious.

This makes Microgreens a breeze! Length: 15:46 / Published 14/08/18

8,671 views on YouTube

Uploader – Richard Perkins

Approx 40 minutes to assess

- Clip of permaculturist riding a cow in the pasture, showing an intimate relationship between the proprietor and the animals that the farm keeps.
- Running through the technicalities of slaughtering turkeys and processing them in a clean and efficient manner.
- Technical principles of landscaping for the purpose of being able to welcome large vehicles onto the site, a further sign of the farm's expanse and success of commercialisation. Not simply a small-scale permaculture venture.
- Explains about how he will not cut down oak trees as is there a severe lack of them in a landscape, which should house a large amount. This, he goes on, is due to monoculture style spruce plantations. "This is not forestry".
- "Big money people with big land, with not so much care for the environment"
- "these aren't forests like they should have been"
- "mixed forests would have a lot more wildlife and a lot more diversity"
- Footage of poultry scattered around the raised beds of different types of vegetables, free roaming and not confined to small spaces or cages. Implicit messaging.
- Talks through planting a tree two years earlier, seeing it grow and blossom, then eating one of the fruits on camera as he continues with his tour.
- Footage of the practitioner's young child playing with the produce as it grows, implicit messaging.
- Technicalities of cutting microgreens with small electric powered machine.
- Selling machinery, designed by the farm as part of their business.
- Footage of tracking data of weights of turkeys that have been processed in order to be able to provide consistent and empirical data. Absolutely integral if permaculture is looking to enhance the incumbent regime with reliable and verified statistics.
- Mentions of large birds of prey in the area, keen to display the diversity of nature around the site
- Mentions t-shirts as form of merchandise for the farm.

Making epic BACON! Length: 22:02 / Published 16/11/18

7,013 views on YouTube

Uploader – Richard Perkins

Approx 35 minutes to assess.

Notes:

- Discussing the health benefits to be derived from the bacon that is produced on site at the farm
- Making 800 Euros worth of bacon.
- Raising pigs in the forest, "no concrete, no pens, no drugs, no nonsense"
- "Pigs are designed to live in forest systems"
- Permaculturist's son present and helping out in the kitchen with preparing the bacon.
- Acknowledges his American audience on YouTube and therefore gives temperatures in both Celsius and Fahrenheit.
- Careful explanation of every step of seasoning and preparing the bacon. Explaining the importance and benefits of each step.
- Explanation of the smoking process and how the previous processing of the chickens has the benefit of impregnating the wood in the smoker with more smoke and therefore more flavour for the bacon.
- Talking about the health benefits, especially when consuming the fatty bits over the winter.
- Showing the permaculturist and his wife consuming the bacon.
- Closing text encourages viewers to sign up to the online training by clicking the link featured in the video notes.

Crop and Season planning Length: 20:41 / Published: 20/01/19

8,372 views on YouTube

Uploader – Richard Perkins

Approx 25 minutes to assess

Notes:

- Video in wintertime, discussing all the planning that occurs during the down season.
- Going through cash flow analysis for the whole farm, mentions that this planning sheets are included in the online training.
- Good for balancing cash flow and managing investments, general budgetary work.
- Talking about how the winter break is good time for spending time with family.
- Showing flyover view of the farm with explanation of planning for the year ahead, with technicalities around perennial crops and other bio-intensive annual crops.
- Showing the planning around the specifics of spacing and exact figures on how to implement the paper-pot cropping, information that will be made available as part of the online training programme.
- Gives overview of how many crops it's possible to sustain in all of the farm's planting beds with an associated calendar with every intricate detail.
- Talks about planting methods that are different from conventional formats, these alternative methods cause less disturbance and are more sustainable in the long run.
- Discusses crop rotations and how its importance falls when implementing a no-dig policy on the farm.
- Aware of his responsibilities when informing people of different techniques.
- Mentions holistic management trainings that will be made available at the farm as well as other associated trainings.

S5 • E60 Urban and Rural entrepreneurship Length: 20:18 / Published 21/07/18

6,610 views on YouTube

Uploader – Richard Perkins

Approx 35 minutes to assess

- Talking about the trainings on ecological processes and regenerative design
- Discussing opening doors and windows on how to stimulate sustainable business models in farming.
- Listing all the delicious food that they've been consuming as part of the trainings.
- Says that they cover an entire human diet with produce solely from the farm.
- Collaborating with fellow farmers and sharing their combined agricultural knowledge.
- Run through of produce being gathered together to sell at the market.
- Showing the children learning to cycle amongst the various aspects of the farm, reinforcing the feeling of being connected to nature and the food that is being produced. A community vibe.
- Filmed being chased by the turkeys, fun and comical way of introducing produce that will ultimately be slaughtered as part of the commercial enterprise.
- Showing their cat that has killed a vole that has been a pest at the farm, natural way of dealing with pests instead of chemicals and inhumane traps.
- Showing many people helping themselves to a large healthy-looking buffet, the wife of the main permaculturist with their child in a sling around her back. Implicit family community messaging.
- Introducing business marketing techniques as part of the training sessions.
- Talking about learning from nature and how a market garden can implement its lessons in tree systems, keyline designs, forest ecology and how this is all connected. Focusing a lot on soil management.
- Gives historical and global context on state of soil, criticises that we use technological solutions to fix biological problems,
- Business, entrepreneurialism and financial planning are stated as the key aspects that make this style of farming work as a commercial enterprise.

• Quick clip at the end showing eating the forest-bred pork, "it is epic!"

S4 • E47 Free Timber, Tree Planting, and 800 Free Strawberries Length: 12:18 / Published: 19/05/17

18,439 views on YouTube

Uploader – <u>Richard Perkins</u>

Approx 16 minutes to assess

Notes:

- Building infrastructure with the waste from a local timber yard, that would normally be pulped and burnt. Much more sustainable to build structures with it.
- Permaculture techniques for supporting young trees' growth.
- Going into a lot of detail about use of bacterial fungi used to support the growth of young trees
- "gotta accept some losses, very normal with this type of thing" a realistic acceptance of losing some produce and plants to pests and other natural external factors. Implicitly undermining the regime that is heavily dependent on high-input systems.
- Techniques for planting different types of vegetables that will be transplanted.

S4 • E11 Exciting announcement from the farm today Length: 07:33 / Published: 02/03/17

5,576 views on YouTube

Uploader – Richard Perkins

Approx 10 minutes to assess

Notes:

- Permaculturist has his daughter help him announce the release of a video that has been made by a farm friend, documenting some of the projects on the farm.
- Giving updates about different guests that have been to the farm and contributed to its ongoing projects.
- Keen to emphasise the social cohesion and the farm and how people's time there has helped others go on to study agro-ecology and form different projects together.
- Announcement about another child being born for the permaculturist and his partner. Part of the communal aspects of ideology.
- Interns and employees from all over the world, clearly building networks to disseminate the permaculture knowledge on a very wide scale.

S4 • E89 Taking Busyness to the next level Length: 42:27 / Published: 02/08/17

8,636 views on YouTube

Uploader – Richard Perkins

Approx 70 minutes to assess

Notes:

- Permaculturist sharing the information that it is unclear whether or not he will stay in Sweden, potential relationship issues suggested.
- He has "objectives that are much greater than this farm"
- Running through a lot of figures to do with the finances of the next year
- Lecture based video recording of his off-the-cuff plan for the next year presented to the interns at the farm.
- "farm is becoming very valuable as a demonstration for small-scale farming. Has better figures than any other farm on the planet, that I know of"
- Videos are "raw, simple, and from the heart"

Raising €25,000 of birds in ONE BROILER PEN... Length: 19:36 / Published: 29/08/18

9,638 views on YouTube

Uploader – Richard Perkins

Approx 22 minutes to assess

- Demonstration on moving the homes of the hens at the farm, a non-mechanised teamwork activity.
- That allows the birds to have more room to enjoy life and to fertilise this land.
- Training the individuals on the farm as well as the viewers watching the YouTube video.
- Intricacies explained and why it's important for the birds, their welfare, and fertiliser distribution.

S4 • E99 Gleaning wild mushrooms and taking it easy Length: 14:00 / Published: 27/08/17

6,179 views on YouTube

Uploader – Richard Perkins

Approx 19 minutes to assess

Notes:

- Showing feast of farm-grown food being eaten by all at the farm.
- Explaining the use of different mushrooms in culinary dishes.
- Showing which mushrooms are poisonous and deadly.
- Foraging for edible mushrooms around the vicinity of the market garden.
- Showing ducks and geese running amongst the people working along the farm, implicit messaging.
- Talks about buying a few hectares off a neighbouring farm, sign of the business expanding
- Explaining about fungi families to inform the viewers.
- Showing food preparation with a pig from the farm, mixed with the freshly picked mushrooms.
- Shows a homebuilt sauna that was made out of a converted wagon. Example of upcycling.
- Encourages viewers to subscribe and to purchase their book when it's available again.

S5 • E66 All flesh is grass.... Length: 20:30 / Published: 28/07/18

8,301 views on YouTube

Uploader – Richard Perkins

Approx 25 minutes to assess

Notes:

- Discussing how sustainably produced meat is reconstituted grass and plants.
- Keen to say that all perspectives on diets are to be respected but they produce meat on the farm for reasons of efficiency.
- Harvesting carrots and other veg from the greenhouses, ruffling them with his hands, implicit messaging.
- Making a 'Ridgedale' lasagne.
- Got a superficially damaged oven for a greatly reduced price.
- Taking the view through the whole cooking process, with ingredients and instructions clearly explained.
- Why it's important that the beef is 100% grass-fed
- When they do buy products in, they always choose organic and bio-dynamic produce.
- Declaring the importance of producing and eating 'epic food'.
- Explains about waiting for the first major rainfall of the season, clearly dependent on it and rainwater harvesting, in contrast with the methods of the dominant food production regime.
- Communal eating with the young farmhands that are from a variety of countries.

S4 • E29 800 Laying Hens arrived today Length: 09:39 / Published: 20/04/17

22,167 views on YouTube

Uploader – Richard Perkins

Approx 14 minutes to assess

Notes:

• Showing how they prepare the laying hens on their 'egg mobile'.

- Explains how it takes a while for the hens to accustom to free-range life after being raised in hatching barns up until 6-weeks old.
- Explaining about how to keep away pests with electric fences.
- Self-designed homes for the hens to roost. Upcycling example.
- Showing new constructions on the farm, sign of improvement and expansion of the farm.
- Reminders to subscribe and purchase the 'making small farms work' book

Simon Dale talks about his experience with natural building in the UK.mov Length: 12:05 / Published 22/12/13

44,245 views on YouTube

Uploader – Richard Perkins

Approx 16 minutes to assess

Notes:

- Much older video than the others assessed.
- A video detailing the construction of an eco-home in the UK
- Interviewing the proprietor of this site, built on permaculture principles.
- Simon Dale's child running around while he explains about the construction process.
- Advocating the ideology embodied by the permaculture movement.
- Criticising the capitalistic societal landscape.
- Peaceful backing music playing throughout.
- Doing it in order to meet sustainable goals.
- Criticising the status quo and its limitations on social and technical innovations.
- Directly challenging the array of regimes enveloped in the socio-political and socio-technical landscape.
- Working and building alongside nature, utilising biomimicry and learning from natural and ecological processes.

S4 • E105 Epic forest raised pork sausages Length: 15:19 / Published: 10/09/17

7,274 views on YouTube

Uploader – Richard Perkins

Approx 18 minutes to assess

Notes:

- Processing of sausages from pigs reared in the forest at the farm.
- Stating why it's important to raise pigs in the forest.
- Ingredients and cooking guidelines carefully talked through.
- Explaining that took a hard day's work to process seven pigs in order to have enough sausages to contribute to their 6 month diet over the winter period.
- Engaging with partner and child while doing taste test on the sausages, implicit community building messaging.
- States that recipes are provided online for the benefit of YouTube viewers/subscribers.
- Explains about the value of the sausage meat based on Swedish prices, a reminder that this is a successful profit-making venture.

S5 • E3 Grow soil not plants... Length: 09:02 / Published: 08/01/18

8,982 views on YouTube

Uploader – Richard Perkins

Approx 14 minutes to assess

- Talking about how important it is to grow and cultivate soil, probably much more important than the cultivation of the produce.
- Describing the tools and functions of them, non-mechanised, and how they work in their context.

- Explains the science behind the cultivation of the soil and how it benefits the growth of plants.
- Showing success of topsoil building over the years at the farm, states that if this were to be emulated worldwide, we wouldn't have the issue of CO² emissions that arise from land-use change.
- Distinction between turning soil over and breaking it up from below.
- Describes why keyline methods are also very important for the structure of the soil.
- States that carbon being sequestered from the atmosphere is a key component of regenerative agriculture, saying that many of our global humanity problems would be alleviated, such as climate change, issues with pests and diseases in crops, health issues that stem from food.
- "Nature can take care of itself"
- Encourages viewers to purchase the book to learn more about this important topic.
- Utilising natural microbiology is the secret to good farming, he concludes with.

S5 • E29 It's Pastured Poultry season Length: 20:13 / Published: 02/05/18

5,366 views on YouTube

Uploader – Richard Perkins

Approx 27 minutes to assess

Notes:

- Fun intro, riding quadbike with son perched on his lap strong implicit messaging on how engaging it is to be involved in this type of farming.
- Technical principles on the structures of pens for poultry.
- Explanation on layout of the surrounding area in relation to the poultry, for fellow practitioners to emulate if the context suits.
- Son roaming around the poultry structures, more implicit messaging.
- A note for all videos, always just filmed at arm's length, like a selfie style of filming. More intimate than conventional filming. Builds a rapport and relationship with viewers over the duration of numerous uploads. Mentions in occasional videos about the importance of commenting on the videos, as it's good to receive continuous feedback.
- States how climatic context is key based on each site's circumstances.
- Reminds viewers how important observation is so one can tailor the permaculture design to the contextual circumstances.
- Talking about timings of feedings of the birds and how this scientific and experimental model
 can be emulated elsewhere. How their case studies have worked and not worked. A carefully
 observed heuristic process.
- Quick non-related clip showing son discovering small lizard and observing its actions. Connection to nature and family vibe.
- Explaining plan to process around 3000 birds.
- Talks about scaling down overall produce of birds but changing the method of processing (including smoking the birds) to increase overall revenue.
- Ad hoc attachment to quadbike for use in collecting eggs, displaying ingenious methods of utilising resources available.
- Stating how the chickens are enjoying their time out and about in the farm.
- Reminds his son not to touch electric fence, dual farming/parenting displayed in the video. Combining social/professional lives.
- Video includes son playing with the new chickens.
- Birds are fed in a way to optimise their nutritional and health value.
- Quick 2 second clip of cat perched on balcony.
- Urged to purchase and read 'make small farms work' book.

S5 • E18 Some dates and announcements... Length: 14:18 / Published: 23/03/18

2,876 views on YouTube

Uploader – Richard Perkins

Approx 18 minutes to assess

Notes:

- Transplanting to maximise cropping efficiency.
- Public open days announced for the forthcoming season, both raising awareness of benefits, building networks and successful case studies for educational programmes.
- Announcement of certified PDCs hosted in the farm.
- "Cutting away the fluffy parts of permaculture", focusing on the technical principles of permaculture. Perhaps integral if to influence, enter, and influence the dominant food production regime, both in Sweden and globally.
- States that past core participants that have engaged with the farm have gone on to create their own successful projects. Building a network of experts around this way of farming.
- Encourages more comments on the videos so they can keep improving their educational processes.
- Free open days for everyone to come and learn more about the intricacies of the farm.

S5 • E23 Here's to Caterpillar Tunnels for EU market gardeners... Length: 10:44 / Published: 17/04/18

6,574 views on YouTube

Uploader – Richard Perkins

Time

Notes:

- Information about use of poly-tunnels, with all the technicalities and rationale behind their use.
- Crumbling the soil through his hands, very natural vibe, while describing the value of no-dig farming.
- Showing the well-designed and intricate systems that allows for optimal use of certain aspects of the farm.
- Video shows dog running around while sped-up video plays on the process of putting together a poly-tunnel.
- Encourages viewers to engage with all aspects of social media that Ridgedale is involved in, as well as advice to buy the book.

S4 • E65 REKO was awesome... Length: 10:57 / Published: 21/06/17

5,108 views on YouTube

Uploader – Richard Perkins

Approx 15 minutes to assess

- Showing son getting messy while eating his breakfast, cute start to the video.
- Running through an array of vegetables recently harvested from the farm.
- Showing the packing processes as part of a market that they're heading to.
- Running through all the components used for retailing produce and the delivery process.
- Decided not to purchase a refrigerated vehicle due to price and wanting to keep business on a local level.
- Queue shown lining up for the Ridgedale van in the car park at the market, very successful.
- Undermining the dominant regime by saying that customers had the choice to cross the street
 and go to the supermarket, but instead, they choose good quality sustainable products. Where
 they can talk to people, swap recipes and have a good communal feeling instead of
 purchasing produce in a concrete wasteland.
- Footage of the farm's cat catching a pest vole.
- Showing farm employees relaxing in the sauna at the end of the day, reflecting on selling the produce at the market. All very good feedback.

Appendix B - V – Photo Analysis Notes

Permakultur Stjärnsund Facebook Photos Page created: 11/03/13

609 Photos split between 20 albums

11/03/13 - 17/12/18

Time to assess: 30-40 minutes

Notes:

- Photos are more sporadic, but this is commonplace on the timeline album of a Facebook page. Photo albums offer more specific narratives to the page visitor.
- Some photos are used as newspaper cut-outs to display how their projects and alternative lifestyles are garnering interest in the local and national news outlets.
- Predominately the photos are not annotated unless they are providing information about a certain event or they are tagging some of the people that are featured in the photo.
- Similar to the video layout, there are collections of photos that show communal work on sustainable projects and the finished product at the end.
- Many photos of nature in full bloom and animals enjoying the outside.
- Numerous examples of planning and project work, depictions of plans, displaying a continuous expansion and improvement of the farm.
- Most of the albums are dedicated to certain events and projects that act as a visual timeline of the event/project.
- Some of the albums are a collection of professional-looking photos, clearly taken on a SLR camera with an eye for framing and painting a narrative with the style of photography.
- Particular photos focus on the social aspect of the permaculture ideology, characterising the social benefits of being involved in this form of alternative lifestyle and food production. This is one particular <u>example</u>

Appendix C

Appendix C - I – Coding Pie Charts (begins on next page)

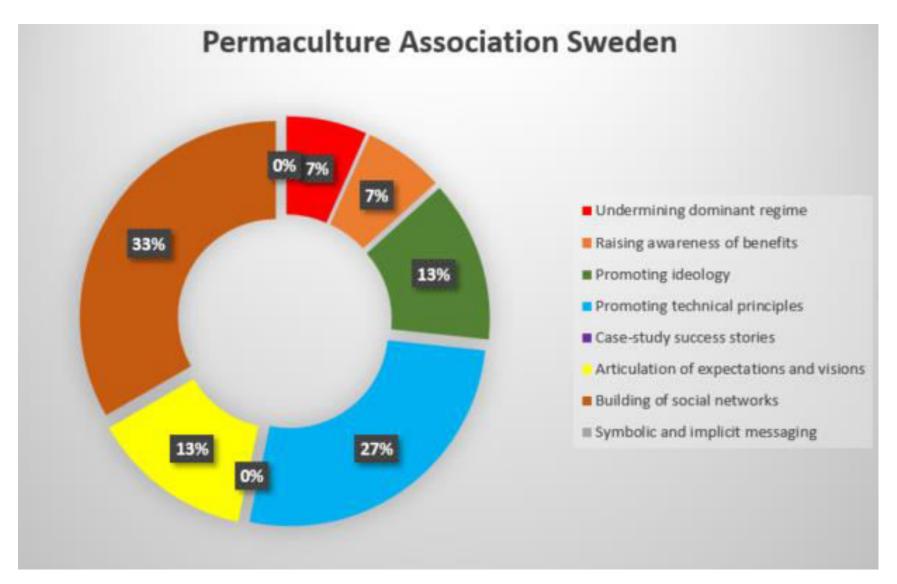


Figure 1 - Iterations 15

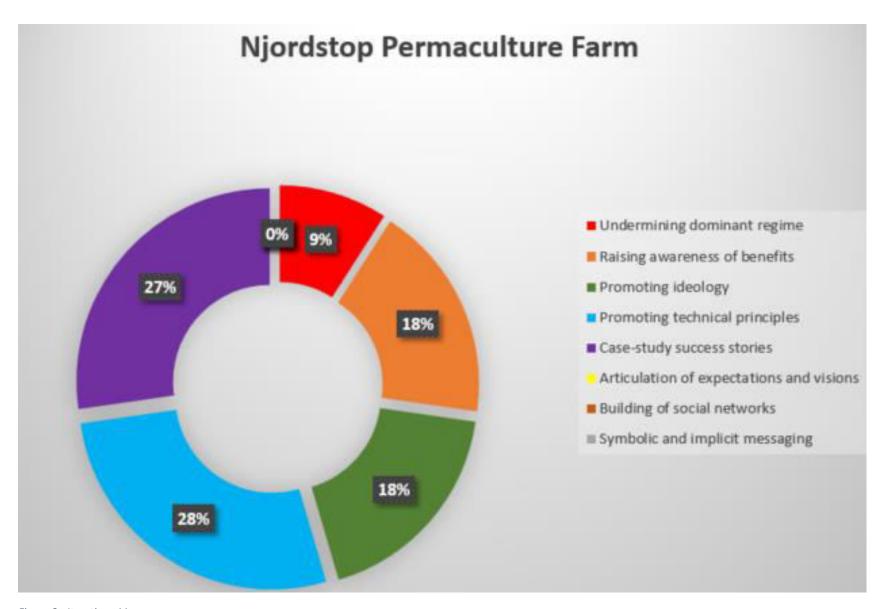


Figure 2 - Iterations 11

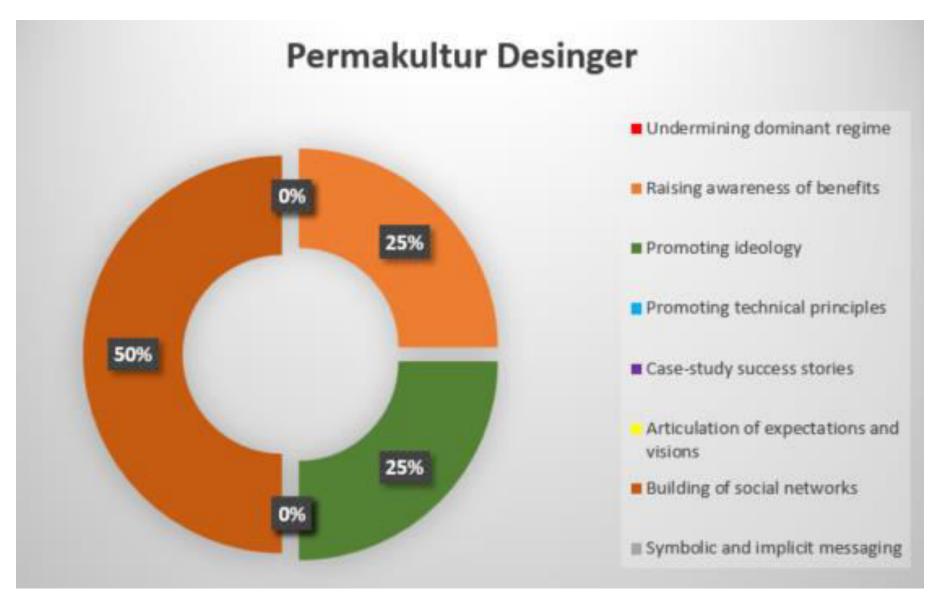


Figure 3 - Iterations 4

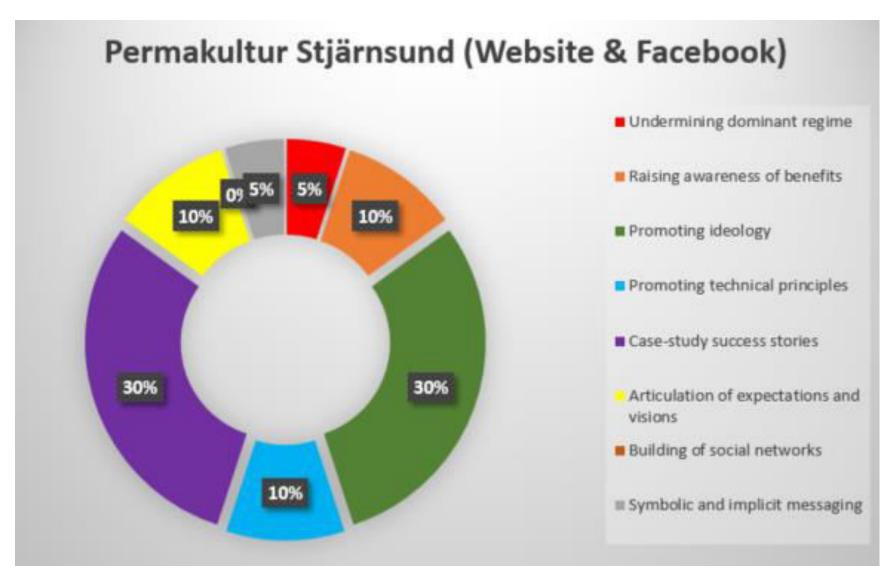


Figure 4 - Iterations 20

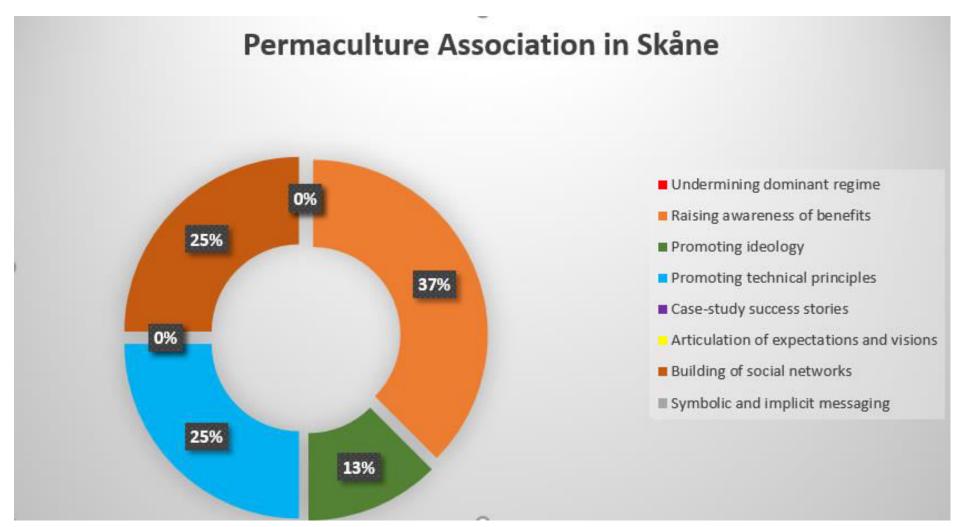


Figure 5 - Iterations 8

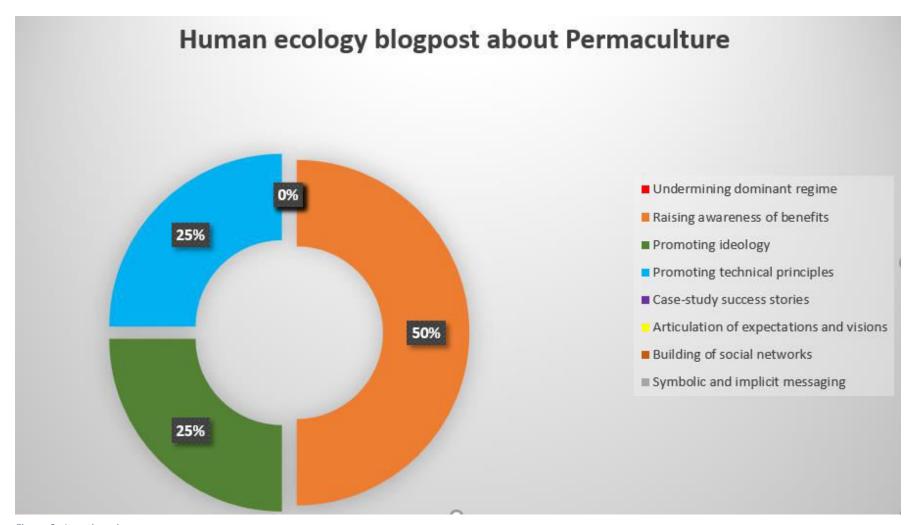


Figure 6 - Iterations 4



Figure 7 - Iterations 1

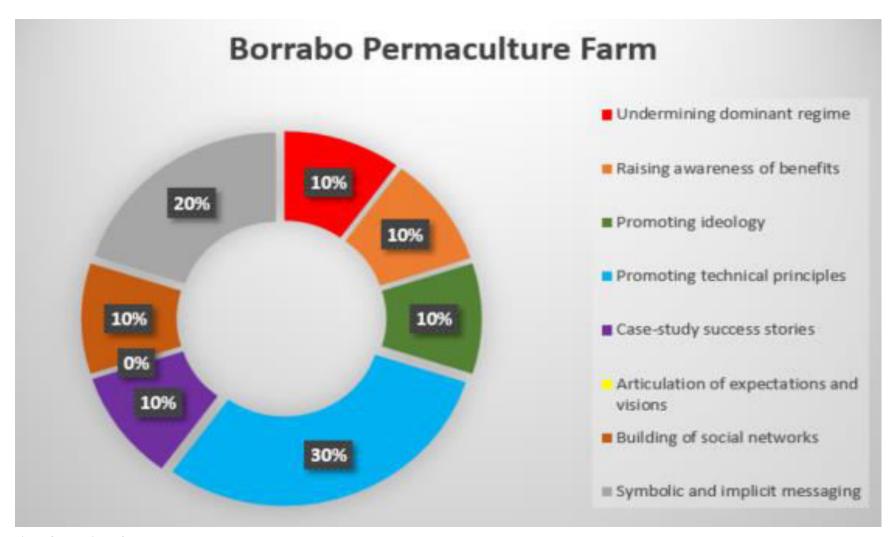


Figure 8 - Iterations 10

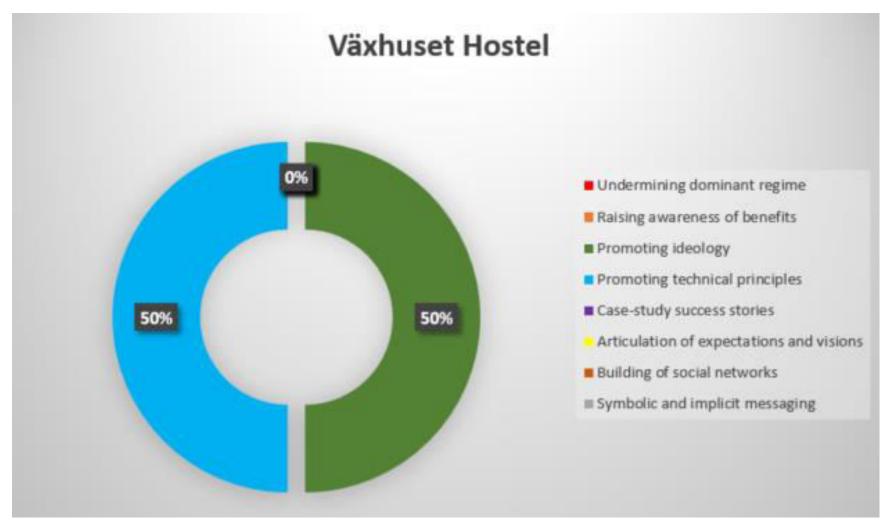


Figure 9 - Iterations 2

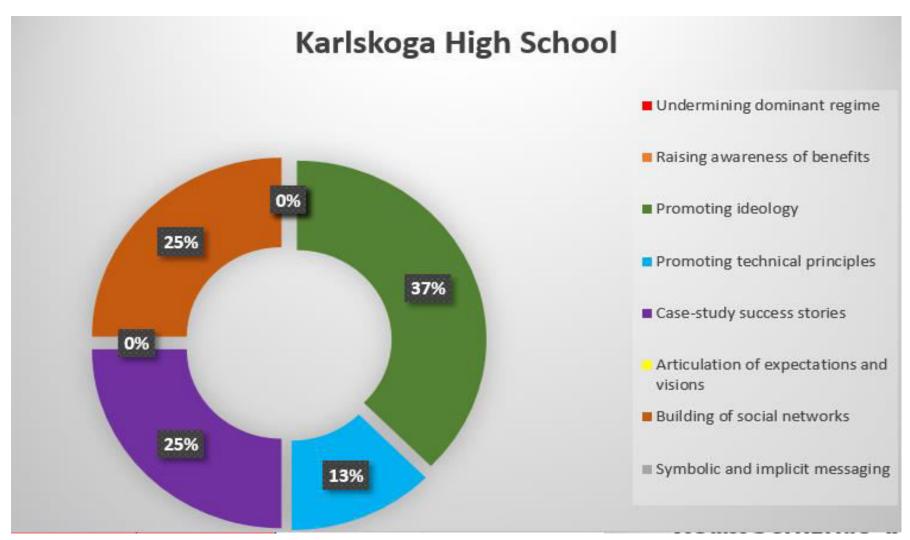


Figure 10 - Iterations 8

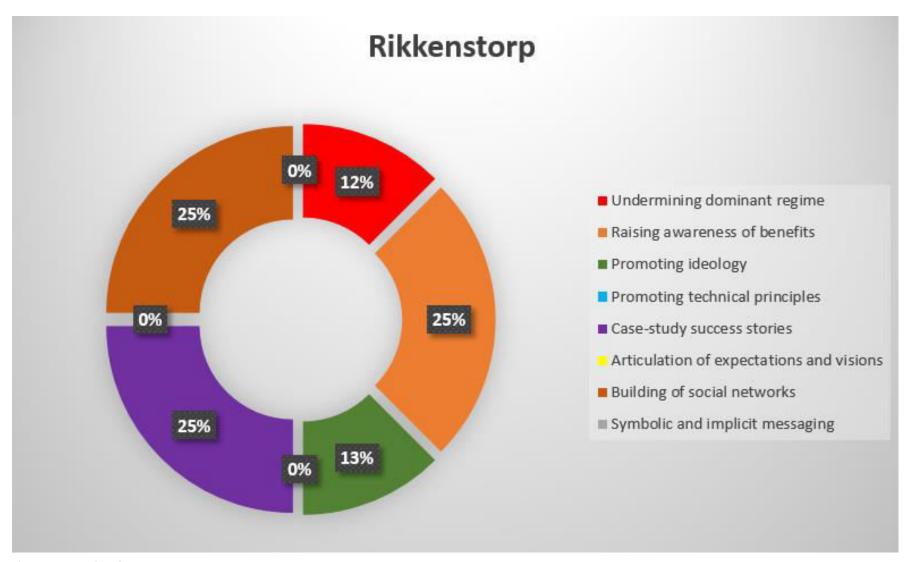


Figure 11 - Iterations 8

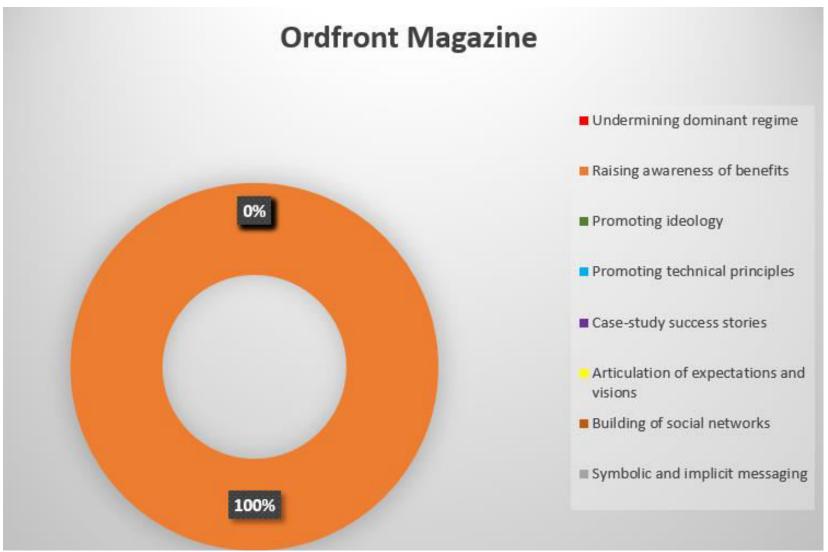


Figure 12 - Iterations 1



Figure 13 - Iterations 3

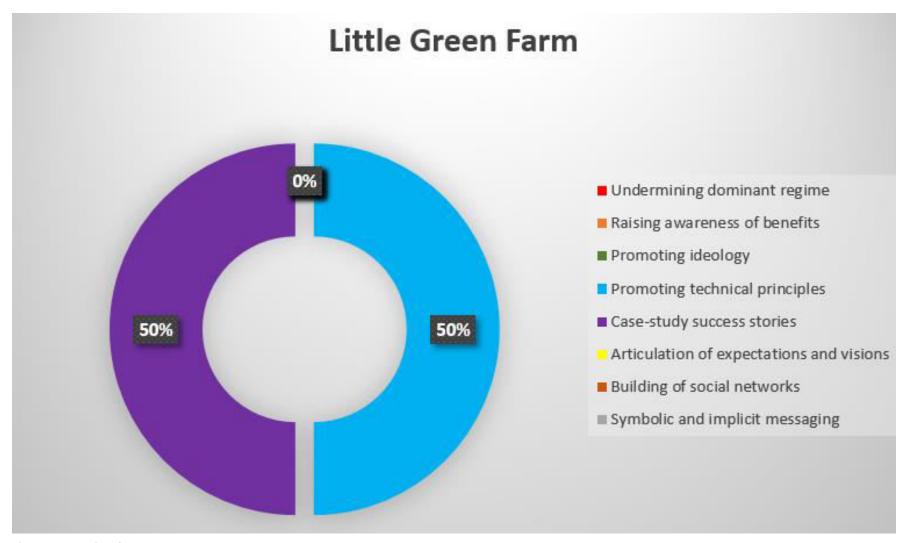


Figure 14 - Iterations 2

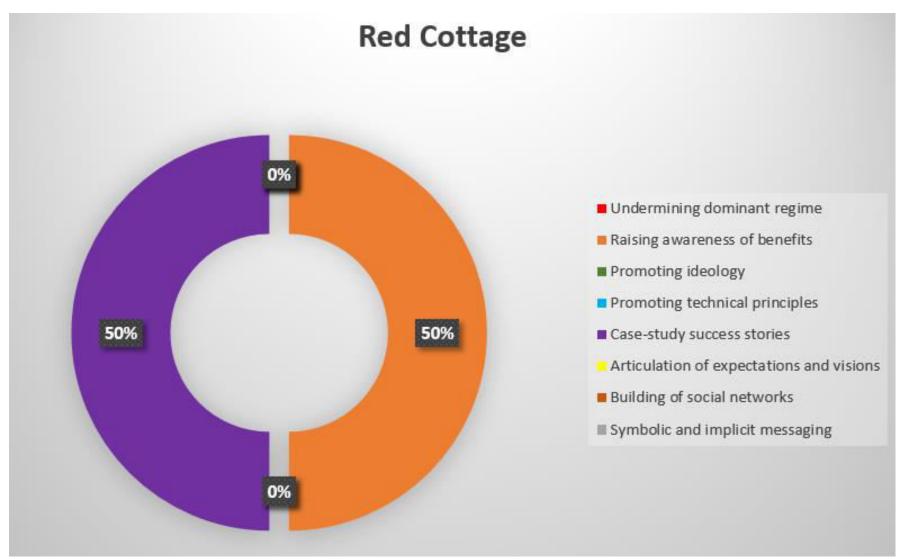


Figure 15 - Iterations 2

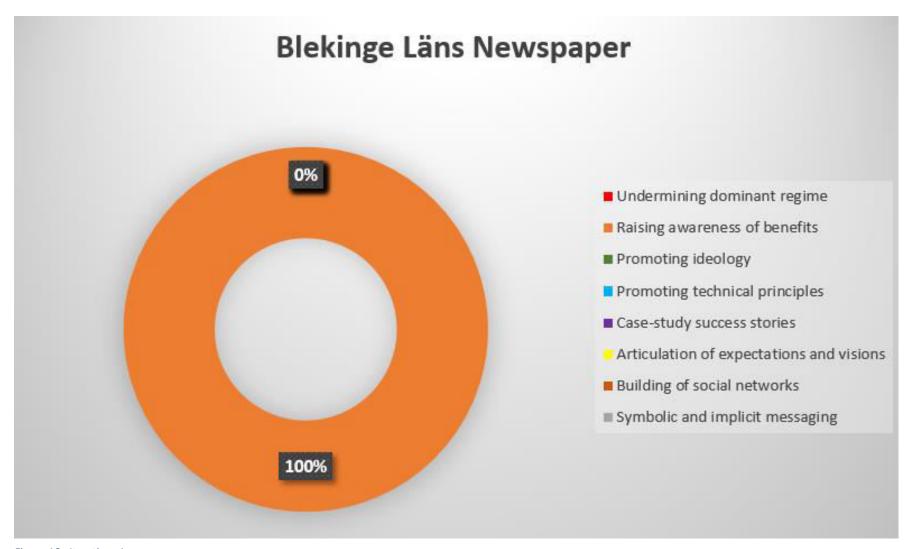


Figure 16 - Iterations 1

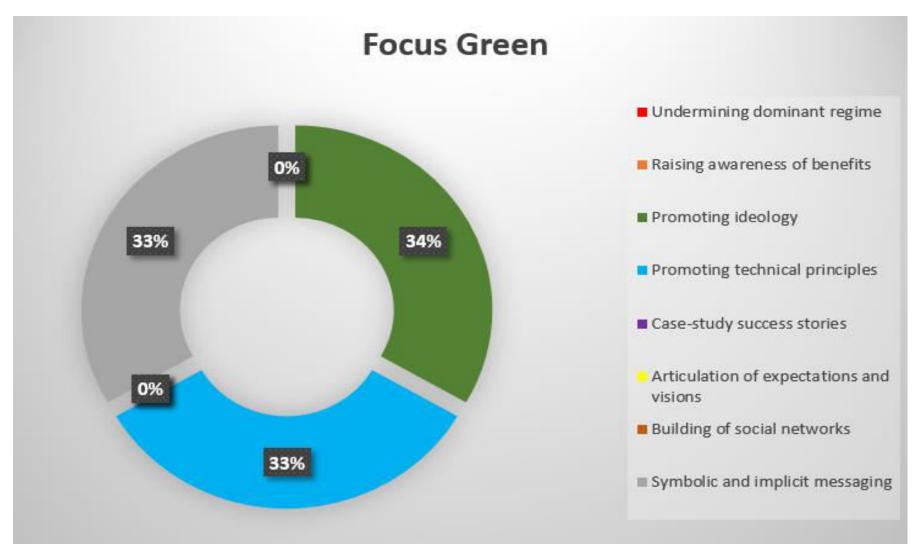


Figure 17 - Iterations 3

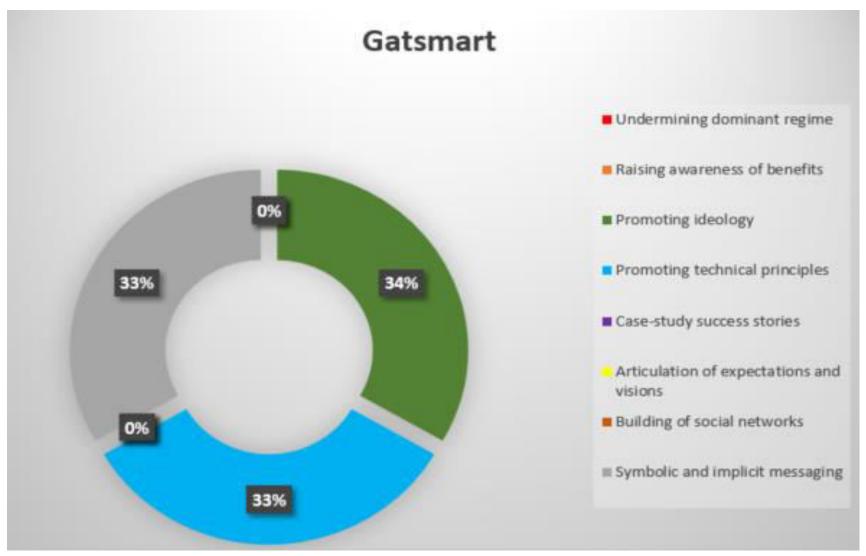


Figure 18 - Iterations 3

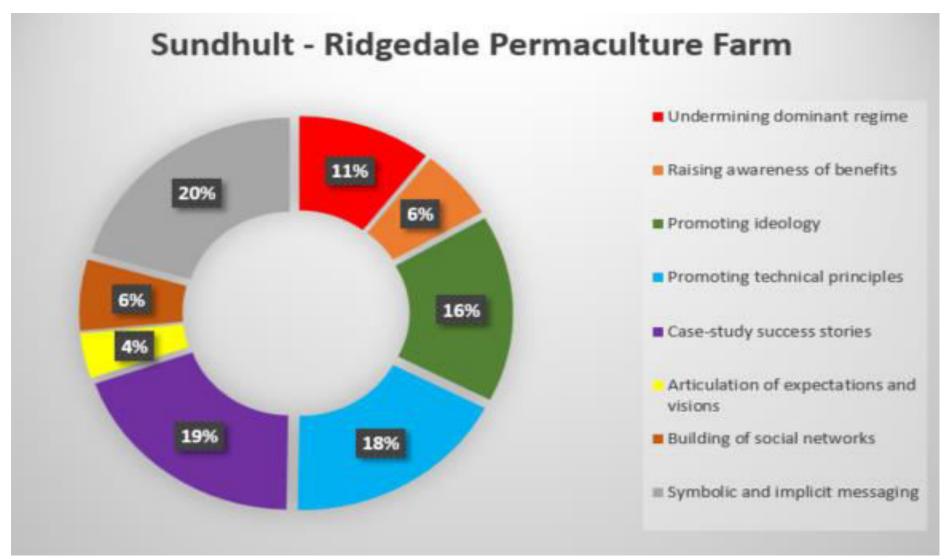


Figure 19 - Iterations 181

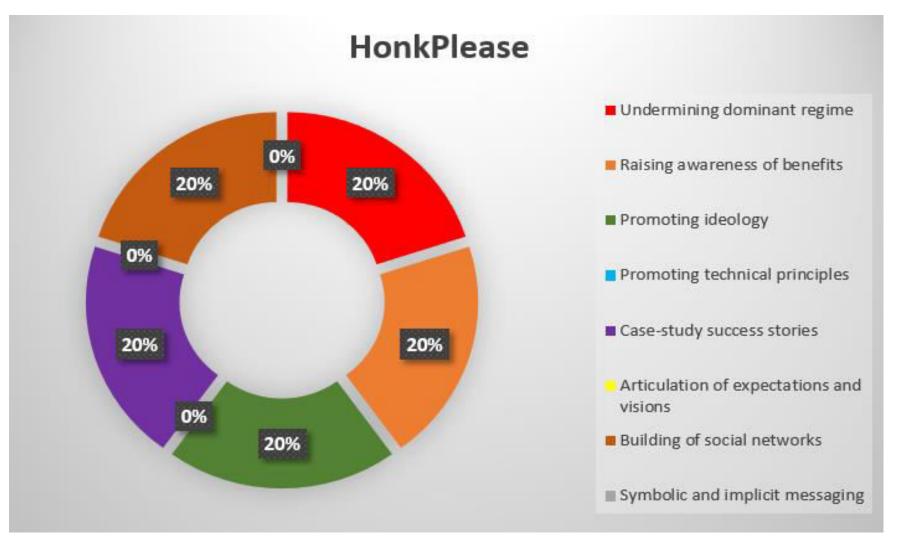


Figure 20 - Iterations 5

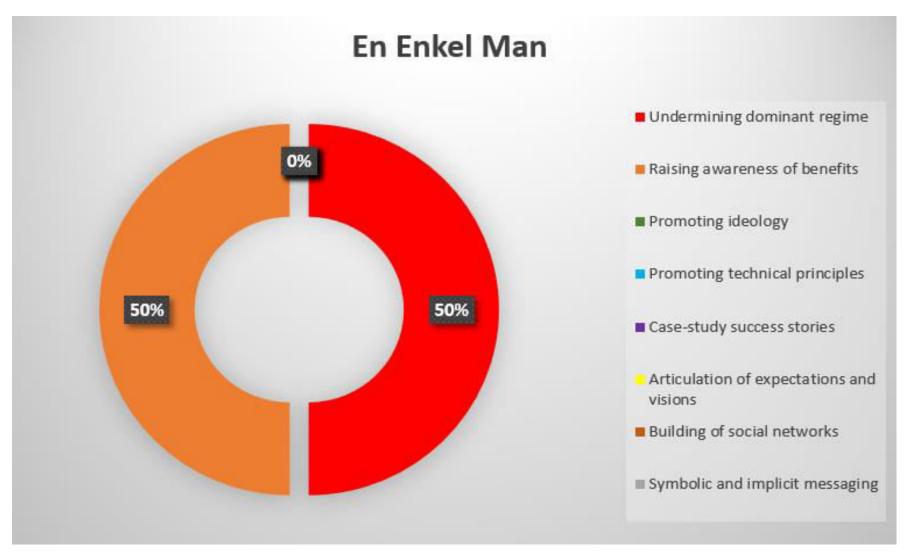


Figure 21 - Iterations 2

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Website Practice	Undermining dominant regime	Raising awareness of benefits	Promoting ideology	Promoting technical principles	Case-study success stories	Articulation of expectations and visions	Building of social networks	Symbolic and implicit messaging	Total iterations
Permaculture Association Sweden	1	1	2	4	0	2	5	0	15
Njordstop Permaculture Farm	1	2	2	3	3	0	0	0	11
Permakultur Desinger	0	1	1	0	0	0	2	0	4
Permakultur Stjärnsund (Website & Facebook)	1	2	6	2	6	2	0	1	20
Permaculture Association in Skåne	0	3	1	2	0	0	2	0	8
Human ecology blogpost about Permaculture	0	2	1	1	0	0	0	0	4
Foodmaker event list	0	1	0	0	0	0	0	0	1
Borrabo Permaculture Farm	1	1	1	3	1	0	1	2	10

Växhuset Hostel	0	0	1	1	0	0	0	0	2
Karlskoga High School	0	0	3	1	2	0	2	0	8
Rikkenstorp	1	2	1	0	2	0	2	0	8
Ordfront Magazine	0	1	0	0	0	0	0	0	1
Örebro Event Calendar	0	1	0	1	0	0	1	0	3
Little Green Farm	0	0	0	1	1	0	0	0	2
Red Cottage	0	1	0	0	1	0	0	0	2
Blekinge Läns Newspaper	0	1	0	0	0	0	0	0	1
Focus Green	0	0	1	1	0	0	0	1	3

Gatsmart	0	0	1	1	0	0	0	1	3
Sundhult - Ridgedale Permaculture Farm	19	11	29	32	35	7	11	37	181
HonkPlease	1	1	1	0	1	0	1	0	5
En Enkel Man	1	1	0	0	0	0	0	0	2

Colour scale of red-green shade represents range of 0-total quantity of iteration.