

An Ecosophical Inquiry into Digital Mediation and Design in Relation to Alternative Food Networks (AFNs) in an ‘Expanded Field’ of ‘Agri-culture’

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Introduction

THIS paper brings together several fields of inquiry, including agriculture, art, digital media, design and philosophy, to make a tentative, exploratory re-framing of Alternative Food Networks (AFNs), and so to re-think and catalyse fresh opportunities for investigation in the humanities. In order to understand the ‘now’,¹ we have to begin with the long view of the agricultural story and, critically, the mediation of this story. We need to understand how sequential economic, socio-technical and other factors encouraged paradigmatic shifts in the ways we produce, consume and perceive our food. Since Medieval times farmers and producers have been testing new (alternative) systems of production, variously encouraged or resisted by the dominant socio-technical regime.² Reaction to the total dominance of agri-industrial farming in the industrialised, northern, western world nations since the 1950s and now globally led to early experiments in different producer-consumer relations, for example through Community Supported Agriculture (CSA) schemes, from the 1980s onwards.³ During the last twenty years these experiments have multiplied under various monikers, such as sustainable farming, bio-farming, organic farming and AFNs to such an extent that they now represent an ‘expanded field’, to borrow a concept from the art critic Rosalind Krauss.⁴ Applying this notion of the expanded field to agriculture leads to

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1. Brian Eno’s definition of ‘now’ centres on the idea of a time frame. “We have the frame we operate in which we call ‘now’. ‘Now’ is all the things that are affecting me. All the things I can affect in a certain time frame I shall call ‘now’”. Brian Eno, in *Time in Design. Eternally Yours*, (Rotterdam: 010 Publishers, 2003), 62-63.

2. Joan Thirsk, *Alternative Agriculture. A History: From the Black Death to the Present Day* (Oxford: Oxford University Press, 1997).

3. See, for example, Jules Petty, *Agri-Culture. Reconnecting People, Land and Nature* (London: Earthscan, 2002) and *Food Practices in Transition. Changing Food Consumption, Retail and Production in the Age of Reflexive Modernism*, edited by Gert Spaargaren, Peter Oosterveer and Anne Loeber (New York, London: Routledge, 2012).

4. Art critic Rosalind Krauss saw the emergence of diverse forms of sculpture in the late 1960s and early 1970s, such as marked sites, site construction and axiomatic structures, which did not fit the classical notion of sculpture. Her

a clarification of the terminology and diversity of initiatives that contest intensive agri-industrial farming. Furthermore, it suggests that we are actually exploring a phenomenon of agri-culture, not agriculture, that is the development of farming and food system practices underpinned by new cultural practices and values.⁵ Zooming in on the AFNs, which focus on developing new producer-consumer relations, it seems appropriate to consider these developments within Felix Guattari's ecosophy⁶ which he proposed as a means to counter the hegemony of Integrated World Capitalism (IWC), or as we know it today, neo-liberal, global capitalism. So, the key questions raised here are how do the AFNs choose to mediate their activities online, whether they embed an ecosophical approach in doing so, and how these might represent new agri-culture. Lastly, I examine the potentiality of design to contribute to amplifying and scaling up AFNs and other practices in 'an expanded field of agri-culture'.

The long view

For most of the human era of existence we were nomadic. A more sedentary life evolved when we developed socio-technical competences to enable farming and here, some 10,000 years ago, are the origins of agriculture. As brand strategist Will Murray posited, this saw a transition from a 'tribal economy' focused on survival, to a 'rural economy' where the focus became civilisation (Figure 1.1, centre).⁷ By the late eighteenth and early nineteenth centuries this was superseded by the 'industrial economy' centred on learning. Here, I might add, was a period of rapid transition in the industrialised nations which divided rural and urban populations. The labour for the factories in the cities was provided by the workers released from the land by the prior mechanisation of farming and dubious legal rearrangements of land ownership.⁸ That is, the industrialisation of farming was a pre-requisite for industrialisation for mass production and consumption for existing and emerging nineteenth-century global markets. Murray also proposed that these new, emerging economies became shorter and shorter in duration, the industrial economy being quickly replaced by the consumer economy, then the knowledge economy (Figure 1.1), driven by a shift in focus to communication then individuality. These Polanyi-like paradigmatic shifts⁹ were enabled by socio-technical and ideological-political changes driven by emergence of the modern government

response was to create a [then] controversial, conceptual model she called 'the Expanded Field' of sculpture. Rosalind Krauss, "Sculpture in the Expanded Field," *October*, Vol. 8 (Spring 1979), 30-44.

5. Cliff Hooker, "Value and System: Notes toward the definition of agri-culture," (Publisher?, 1993), 48, accessed 16 July 2016, www.researchgate.net/publication/265309571

6. Felix Guattari, *The Three Ecologies* (this edition London: Bloomsbury Publishing based on The Athalone Press, 2000, English translation of the original in French, France: Editions Galilee).

7. Will Murray, *Brand Storm: A Tale of Passion, Betrayal and Revenge* (London: Pearson Education)

8. In England between 1604 to 1914 a series of laws, the Inclosures Acts, were passed by parliament. These led to the progressive privatisation of common land, where people had common rights to graze their stock or collect the fruits of the land. This process of enclosure gradually disposed many people of access to land on which to grow food and to maintain a livelihood effectively forcing them to look to towns and cities for employment.

9. The Hungarian-American political economist Karl Polanyi, in his book *The Great Transformation*, saw the rise of active collaboration between the government, the state and the market as a key paradigmatic shift in how the market society, and, hence, economies were constructed. Karl Polanyi, *The Great Transformation*. Foreword by Robert M. MacIver. (Boston: Beacon Press, 1957, originally published in 1944 New York: Farrar and Rineheart).

state and its collaboration with commerce. The priming of this Market Society, as Karl Polanyi called it, was prompted by longer historical currents and strong shifts in our perceptions of space and time. In Charles Jencks's framing of space and time,¹⁰ in the 1450s we moved from cyclic to linear perceptions (Figure 1.1, right). The notion of progress was born and continued apace, then accelerated in the 1960s when cyclic and linear space:time models converged. The modernity project in agriculture, originating in the late eighteenth century in Great Britain, was followed by strong post-World War I and II increases in mechanisation, coupled with high industrial inputs (fertilisers, chemicals) and the breeding of new plant cultivars. All these factors increased agricultural production per unit area. In the USA these developments led to the reality and rhetoric of the Green Revolution, which became a central strategy for the US International Aid and Development programme.¹¹ The net effect of this long view is that, for most people living in the industrialised and consumer economies, the separation from agriculture as a way of being, living and working became complete somewhere in the 1960s and has continued apace.

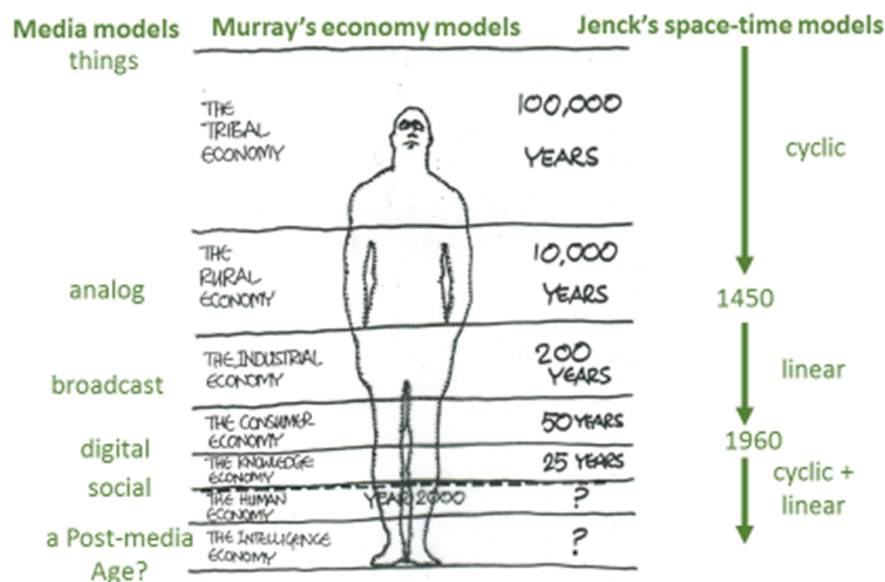


Figure 1.1. The long view: Visualising economy, space-time and media models.

Parallel to this concatenated view of the birth and evolution of agriculture is another story on the development of media, mediation and mediatisation of our daily lives, and, therefore, how and by whom the story of agriculture is told (Figure 1.2). Initially in the tribal economy there were just 'things'. Perhaps the first analogue mediation of these things were the paintings on the walls of caves, recording all things, people, tools, animals, plants, spaces and places. Analogue

10. Charles Jencks, *What is Post-Modernism?* (John Wiley & Sons, 1996, 4th edition).

11. See the Wikipedia article which gives an overview of the Green Revolution, Wikipedia, accessed 16 July 2016, https://en.wikipedia.org/wiki/Green_Revolution.

media – writing, print, and, much later, photography – enabled the mediation of agriculture and, inevitably, these contributed significantly to the modernity project to transform agriculture. Later, new mediation means and tools emerged – broadcast media such as radio in the early 1900s, film in the 1920s, television in the 1950s, followed in the 1990s by digital media through the internet and Web 1.0. Up to this point the mediation *and* mediatisation of agriculture was predominantly controlled by large private or public organisations or entities. This was challenged by the emergence of Web 2.0 and social media, where individuals could broadcast or supply content to other media organisations or entities. Now, for the first time in history, *everyone* has a chance to mediate our individual and collective stories centred on agriculture. Everyone *can* be a story-creator and storyteller in what might now be referred to as a post-media age. This opportunity, as we shall see below, is important for those proposing alternatives to the dominant or hegemonic industrialised agriculture.

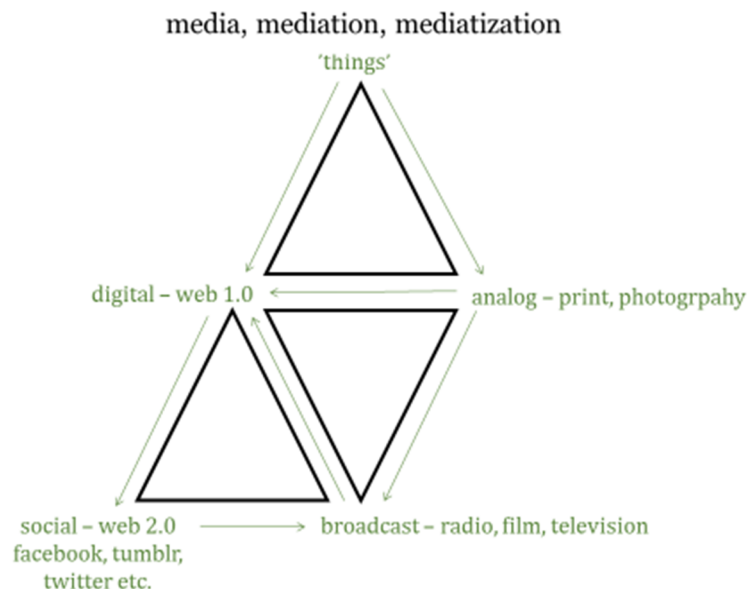


Figure 1.2. The long view: Visualising the development of media, mediation and mediatization.

Agri-culture as an expanded field

Agriculture, the systematic production and subsequent preparation, distribution and consumption of food, is a truly polydisciplinary endeavour in the sense that it involves climatology, meteorology, hydrology, geology, geography, history, economics, politics, science, technology, ecology, agronomy, engineering, design, food science, gastronomy and more. However, the current context and object of study, AFNs, is framed in the ideology of sustainability and borrows a notion origi-

nated by Cliff Hooker that asserts 'It is possible to have agriculture without agri-culture', but 'It is not possible to have a viable agriculture without a viable agri-culture'.¹² Hooker explains:

'To have an agri-culture is, roughly, for a society to have a *viable* culture. . . one whose expressed values in the designs of its institutions and material practices generates a biologically productive practice which is a dynamical microcosm of its culture, i.e. which exhibits the same properties of stability, adaptability and self-organisation in relation to their ecological environment.' (original italics).

And he comments on the value system:

'The Values of a valuable culture are all manifested as systems designs; so we can say that having a valuable agri-culture is manifesting a set of system-atic designs such that our ecological practices form an integral part of a viable cultural system manifesting value. . . The ethics of the [agricultural] professional are the ethics of the design + the nurturing of good design, in a valuable agri-culture.'

Agri-culture, thus described, characterises many AFNs which are organisations trying to introduce new system-atic designs which bring together producers (mainly farmers, but not exclusively) and consumers oriented towards a new value system with a telos involving ecological, social and economic aims. AFNs embed the promise of sustainability, even if the promise might, presently, exceed reality.¹³

AFNs are characterised by: Reconfiguring relationships between food producers and food consumers; trying to 'resocialise' and 'respatialise' food through 'closer' and more 'authentic' relationships between producers, consumers and their food; building stronger ties between food products, people and place; forms of food provisioning that are different/counteractive to mainstream (or conventional) food systems; organised flows of food products on moral/ethical grounds and/or on the fairness of pricing; and being communities of practice, social movements and economic agents.¹⁴ They can be classified into four categories (Table 1.1), namely: producers-as-consumers; producer-consumer partnerships; direct sales initiatives; and specialist retailers. The emergence of these AFNs since the late 1980s, when Community Supported Agriculture gathered momentum in the USA, is expanding our notion of what agriculture can and could be. It therefore seems appropriate to borrow Rosalind Krauss' conceptualisation of sculpture as an 'expanded field' within art¹⁵ (Figure 1.3) and to apply this to farming, albeit with some modifications, and to the emerging phenomenon of AFNs in agriculture.

12. Hooker, *Value and System*, 1993

13. Sini Forssell and Leena Lankoski, "The sustainability promise of alternative food networks: an examination through "alternative" characteristics," *Agric Hum Values* 32 (2015): 63-75.

14. Venn, L., Kneafsey, M. Holloway, L., Cox, R. Dowler, G and Tuomainen, H. 2006. Researching European 'alternative' food networks. Some methodological considerations. *Area*. (2006), 38.3., 248-25.8. Maye, D. 2014?. Moving Alternative Food Networks beyond the Niche. *Int. Jnl. Of Soc. Of Agr. & Food*, Vol 20, No. 3, pp. 383-389.

15. Rosalind Krauss, "Sculpture in the Expanded Field," 1979.

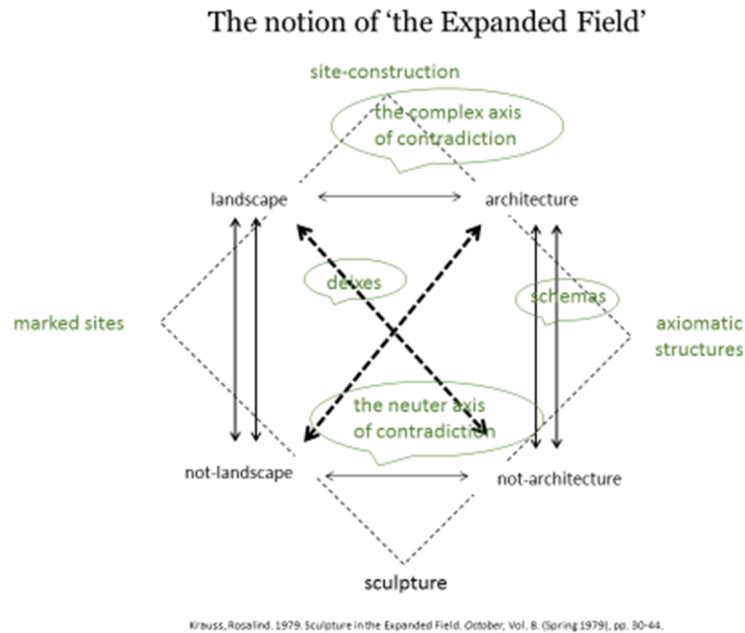


Figure 1.3. The notion of 'the Expanded Field', after Rosalind Krauss.

Table 1.1. Categories of Alternative Food Networks, AFNs.

Category	Explanation	Examples
Producers as consumers	Food is grown or produced by those who consume it; healthy lifestyles; produce sold locally; commercialisation varies.	Community gardens Community food cooperatives Allotment groups
Producer-consumer partnerships	Partnerships between farmers and consumers; subscription or share arrangement; risks shared.	Community supported agriculture (CSA)
Direct sell initiatives	Farmers or producers shorten the supply chain; face to face or online.	Farmers' markets Farm gate sales Mobile food shops Box schemes Producer co-operatives
Specialist retailers	More direct way of selling to consumers; high-value added, quality or specialist foods.	Online grocers Specialist wholesalers Tourist attractions

Venn, L., Kneafsey, M., Holloway, L., Cos, R., Doulier, G and Tuomimäki, H. 2006. Researching European 'alternative' food networks. Some methodological considerations. *Annals* (2006), 38.3., 248-25.8.

If I name Krauss's 'sculpture' between not-landscape and not-architecture, on her neuter axis of contradiction, as 'intensive agri-industrial farming' – reflecting the status quo, as she did – then it sits on an axis between not-diversity agriculture (i.e. monoculture) and not-autonomy agriculture (i.e. dependency) (Figure 1.4). While Krauss opposed sculpture with 'site construction' on the complex axis of contradiction, which embraced landscape and architecture, here we will set in-

tensive agri-industrial farming against 'sustainable farming' whose axis is delineated by diversity agriculture (i.e. polyculture) and autonomous agriculture (i.e. independence).

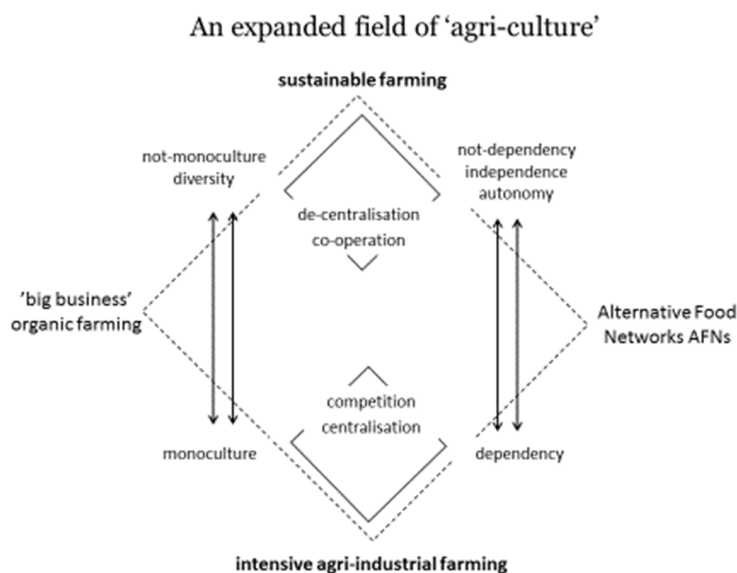


Figure 1.4. An expanded field of agri-culture, setting the framework.

Intensive agri-industrial farming is based upon competition and centralisation characterised by domination of nature, exploitation and vertically integrated supply chains. In contrast, sustainable farming is based upon cooperation and de-centralisation and is characterised by harmony with nature, restraint and Short Food Chains (SFCs).¹⁶ To complete our expanded field of agri-cultures we can name 'organic farming' between the schema of monoculture and polyculture, and 'Alternative Food Networks' between the schema of dependency and independency. While we do not have the strict tension of Krauss' original cross axes or deixes (landscape: not-architecture; and architecture: not-landscape), our deixes (diversity agriculture: not-autonomy agriculture; and autonomous agriculture: not-diversity agriculture), I feel it better reflects Hooker's notion of agri-culture since each schema is clearly defined by values, and, hence, ethics.

Now we have an expanded field of agri-culture, we can populate it with intermediary categories between the four cardinal 'sub-fields' (Figure 1.5). Between sustainable farming and organic farming we have expressions of diversity ranging from permaculture to bio-agriculture, and between organic farming and intensive agri-industrial farming we have 'big business' organic farming, carbon farming and biofuel farming which tend towards monocultures. Between sustainable farming and AFNs we see various combinations of producers-as-consumers and producer-consumer partnerships which challenge traditional modes of farm production. These can be regarded as Civic Food Networks, CFNs – AFNs which bring the role of citizens to the forefront in (re)shaping and

16. Also known as Short Food Supply Chains, SFSC.

reclaiming food systems.¹⁷ Between AFNs and intensive agri-industrial farming we see various types of Short Food Chains (SFCs) such as producer cooperatives, direct sales initiatives and specialist retailers striving to create new relationships with their foci on local and direct autonomy of food production and consumption.

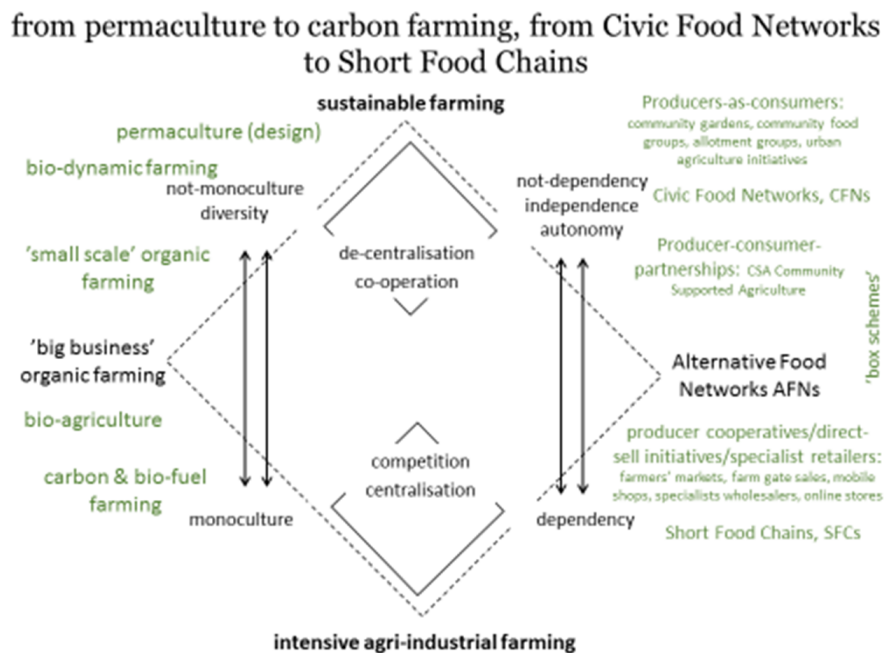


Figure 1.5. An overview of the expanded field of agri-culture

The general thrust of AFNs is to counter, and provide alternatives to, the intensive agri-industrial farming based upon neo-liberal capitalist ideology in an era of globalisation. Felix Guattari proposed his ecosophy as a means to counter-act Integrated World Capitalism (IWC),¹⁸ more widely recognised today as neo-liberal and global capitalism. The next section therefore examines Guattari's ecosophy in order that we can apply this as a lens to understand the degree to which selected AFN case studies enact his philosophy, how this is expressed through their digital media and how design is and could help in accelerating and amplifying AFN activities.

17. iting Renting, H., Marsden, T., Banks, J., 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environ. Plan. A* 35, 393-411, <http://dx.doi.org/10.1068/a3510> in Elizabeth Bos and Luke Owen, "Virtual reconnection: The online spaces of alternative food networks in England." *Journal of Rural Studies* 45 (2016), 1-14.

18. Felix Guattari, *The Three Ecologies*, 2000.

The Three Ecologies

In his book, *The Three Ecologies*, first published in French in 1989 then translated into English in 2000, Guattari laid out the fundamentals of a new ecological philosophy, an ecosophy. He saw the need to develop an entire mental ecology constructed within the three ecological registers (the environment, social relations and human subjectivity) in order to ensure that IWC does not receive our unconscious assent. Ecosophy can be described as:

- a means to ask questions about the damage our present techno-scientific transformations are having on our world
- a concern for biological species, the biosphere
- a concern for 'incorporeal species' e.g. music, the arts, relations with time, love and compassion for others. . . .
- a way of cultivating a dissensus directed at delocalised, deterritorialised capitalist power
- a means for re-constructing the modalities of 'group being'
- an ethico-political articulation
- an ethico-aesthetic aegis

Considering the three registers as Venn circles: one for the mental register or the psyche, another for the social register or socius, and the last for the environmental register or the environment. When all three of these circles (registers) fully overlap the ecosophical potential is at its maximum. Guattari's conceptualisation and philosophical articulation of these registers is lengthy, so a brief summary is given here which it is hoped is sufficient to enable the reader to view the AFN case studies below from an ecosophical framing.

At the core of the mental register is the principle that this is a 'primary process' (Freud), which is 'pre-objectal, pre-personal logic', the 'included middle', neither black nor white.¹⁹ There is a necessity for greyness, which I interpret here as an endorsement of the principle of diverse subjectivity. The social register concerns itself with the development of affective and pragmatic cathexis in human groups of different sizes – a specific qualitative reorganisation of primary subjectivity as it relates to mental ecology.²⁰ Finally, for the environmental register, perhaps the most difficult to fathom, Guattari refers to 'nature' at war with life. Anything is possible. . . from the worst disaster to the most flexible evolutions; a machinic ecology²¹. Implicit in the construct is that humans are not distinguishable from nature. Guattari sees the active formulation of these ecologies as an opening out process, emerging from a praxis made habitable by human projects. Antonioli interprets the ecosophic approach as allowing us to envisage design and perspectives on eco-design 'towards a reinvention or 're-fabrication' of exchanges between nature, culture and the environment.²² This interpretation and ecosophy's combinations of registers places all of us (humans) firmly back within nature, and sees our environment as an intertwining and interweaving of culture, technology, human and other actants coming together in (distinctive?) places. By actants,

19. Felix Guattari, *The Three Ecologies*, 2000, 36.

20. Felix Guattari, *The Three Ecologies*, 2000, 40.

21. Felix Guattari, *The Three Ecologies*, 2000, 45.

22. Manola Antonioli, "Design in Guattari's Ecosophy," In *Deleuze and Design*, edited by Betti Marenko and Jamie Brassett, 58-64, Edinburgh: University of Edinburgh Press, 62.

Bruno Latour invoked a complex descriptor applied in Actor-Network Theory to extend the word actor to embrace human individual actors, non-human and non-individual entities, all these being ‘something that acts or to which activity is granted by others’.²³ Bennett, building on Guattari, Deleuze and Latour, constitutes such socio-material assemblies as vitalised, vibrant matter which challenges our binary notions of biotic and abiotic forms.²⁴ Ecosophy, then, fundamentally challenges us to (re-)constitute relationships *within* an (a)biotic world as a necessary means to counter IWC.

Applying an ecosophical lens to selected AFN case studies

For the purposes of this exploratory study I chose to focus on AFNs which are CFNs (see above). In my expanded field of agri-culture these CFNs sit top right between sustainable farming and AFNs (Figure 1.5) i.e. those organisations which tend towards increasing autonomous agriculture (independence), towards diversity agriculture (polyculture) while striving to re-configure the relationships by involving the consumers i.e. producers-as-consumers; producer-consumer partnerships (Table 1.2). As citizen involvement is key to the effectiveness of CFNs, these types of AFNs are inherently concerned with the socius. Each AFN/CFN category is further subdivided: Producers-as-consumers splits into community gardens, and community food cooperatives. Producer-consumer partnerships split into Community Supported Agriculture (CSA) and community food cooperatives. Three examples were selected from the UK – Incredible Edible Todmorden, OrganicLea, and Chagford Market Garden – and one from Italy – GAS, Gruppi di Acquisto Solidale (Solidarity Purchasing Groups). In order to gauge the degree to which the AFNs had embedded an ecosophical approach, the websites of each AFN were explored, and various video materials from each organisation were viewed. Each case study and video is presented below.

23. Bruno Latour, “On actor-network theory. A few clarifications plus more than a few complications”, in Finn Olsen (special issue of the Danish philosophy journal), “Om actor-netveaerksteroi. Nogle fa afklaringer og mere end nogle fa forviklinger”. *Philosophia*, Vol 24 No 3 et 4, pp.47-64 [article written in 1990]. English version in *Soziale Welt*, vol 47, pp.369-381, 1996. Web edition www.course.fse.ulaval.ca/edcr65804/latour-clarifications.pdf, accessed 01 December 2016.

24. Jane Bennett, *Vibrant Matter: A Political Ecology of Things*, (Duke University Press, 2010).

Table 1.2. Qualitative assessment of the ecosophical registers for four Alternative Food Network case studies.

AFN category	Sub categories	Case studies	Organisation web site & representative video	Social media					Qualitative assessment of ecosophical registers			Challenge to IWC
				Twitter	Facebook	Blogs	YouTube	Other	Mental	Social	Environmental	
Producers as consumers	Community gardens	Incredible Edible Todmorden, UK	http://www.incredible-edible-todmorden.co.uk/ Adam talks about the Daniel O'Rourke pea https://www.youtube.com/watch?v=Fp3KnvIPMkc	*	*	*	*	*	3	3	2	1-2
	Community food cooperatives	OrganicLea, London, UK	https://www.organiclea.org.uk/ Making Local Food Work https://www.youtube.com/watch?v=yv1tO2dwBuk		*	*			1-2 members 3 managers	1-2	2	2
Producer-consumer partnerships	Community Supported Agriculture	Chagford Community Market Garden, Devon, UK	http://www.chagfood.org.uk/ Chagfood Community Supported Agriculture (CSA) https://www.youtube.com/watch?v=AedjaRk6Hx0	*	*			*	2members 3 founders	1-2	2	1-2
	Community food cooperatives	GAS, Gruppi di Acquisto Solidale, Italy – Milano?	GAS, National Liason Network, http://www.retegas.org/ and new site http://www.economiasolidale.net/ GAS , Milano? https://www.youtube.com/watch?v=0ZT5ZCxzjGM	*	*		*	*	1 members 2 coordinators	1-2	1	3

Incredible Edible Todmorden – a community garden

Incredible Edible Todmorden was founded by Pam Warhurst and Mary Clear in 2007 and the first formal meeting to talk about food was held by local residents in the town of Todmorden in 2008.²⁵ The Incredible Todmorden Community Team is now a registered Community Benefit Society whose *raison d'être* is to:

- ‘Grow fruit, herbs and vegetables around Todmorden that are for everyone to share.
- We are passionate people working together for a world where all share responsibility for the future wellbeing of our planet and ourselves.
- We aim to provide access to good local food for all, through
 - working together
 - learning – from field to classroom to kitchen
 - supporting local business

25. Incredible Edible Network, accessed 16 July 2016, <http://incredibleediblenetwork.org.uk> and John Paull, “Please pick me” – How Incredible Edible Todmorden is repurposing the commons for open source food and agricultural biodiversity,” In *Diversifying Foods and Diets: Using Agricultural Biodiversity to Improve Nutrition and Health*, edited by J. Franzo, D. Hunter, T. Borelli and F.Mattei, (Oxford: Earthscan, Routledge, 2013), 336-345.

All with no paid staff, no buildings, no public funding: radical community building in action. Membership: ‘If you eat you’re in’. We also run a wide range of events that help strengthen the local community’.

Incredible Edible Todmorden rapidly became an iconic model for other communities in the UK interested in creating initiatives around food. The Todmorden initiative and activities were the foundation for the growth of the Incredible Edible Network initiated in 2012 whose activities are focused around the concept of three interrelated spinning plates: The Community plate – growing produce and working together; the Learning plate – providing training from field to classroom; and the Business plate – supporting local commerce. There are now over 100 Incredible Edible initiatives in the UK.

The Incredible Edible Todmorden video selected was ‘Adam talks about the Daniel O’Rouke pea’,²⁶ as it invokes the typical spirit of the people of Todmorden. Adam reveals how he took personal responsibility for rescuing a heritage pea variety called King Daniel O’Rouke which was lost for many years in Ireland, but brought back there by a Russian seed savers’ society. Adam found it in Ireland and took it to Todmorden where they have been replicating it around the town and in the Todmorden heritage garden. Adam likens the act of saving, growing and spreading the pea to any act aimed at claiming ownership (he names “flags, deeds and control mechanisms humans have created”) and equates the role of planting more peas as taking responsibility for each of us to look after our biodiversity heritage.

OrganicLea – a community food cooperative

OrganicLea is a workers’ cooperative growing food on the edge of Epping Forest in the Lea Valley, on the outskirts of London, UK. In 2001 volunteers cleared an acre of derelict allotment land, replanting it as a forest fruit garden followed by growing vegetables raised under organic and permaculture production principles. The site became a focus for local training for people to improve their knowledge for growing food. By 2003 conversations were being held about the development of a ‘local food hub’ growing local organic produce, improving people’s skills and promoting food issues. This was initiated in the Hornbeam Centre, where a local weekly market took place. In 2008 the centre was refurbished, monies coming from the Big Lottery’s Making Local Food Work programme. More land at the Hawkwood Nursery was leased from the municipality, Waltham Forest Borough Council, between 2007 to 2010. OrganicLea is built around an ethos of people and community, growing and sourcing locally, access to growing for excluded or vulnerable groups, and rights to land, seed and water. A new initiative, called OrganicLea “Farm Start” in 2015 aims to create new grow-to-sell food growing projects to ensure a more socially and environmentally just food system.

The OrganicLea video²⁷ features Ru Litherland, the manager responsible for growing food at the OrganicLea Food Cooperative, and Melanie Barnett, responsible for creating local food initiatives including a café, fruit foraging and more. Ru outlines the aims of OrganicLea (see above),

26. Adam talks about the Daniel O’Rouke Pea, Youtube, accessed 16 July 2016, www.youtube.com/watch?v=Fp3KnvIPMkc

27. OrganicLea video, Youtube, accessed 16 July 2016, www.youtube.com/watch?v=yv1tO2dwBuk

talks about how the cooperative came into existence as a response to bid for public facilities in the Lea Valley that were being sold off to private bidders under competitive tenders. He describes the diverse areas of production including the glasshouse, traditional field vegetables, salad leaves, a vineyard, an orchard and an apiary. Melanie focuses more on OrganicLea's initiatives around the local food economy looking at the Hornbeam Café they initiated, the local foraging and harvesting of 'Walthamstow Pink' apples for juicing and the importance of connecting people with these stories. Accessibility of their food system to local people of all means, and active participation in catalysing new local growing initiatives underpins their enthusiasm.

Chagford Community Market Garden – a Community Supported Agriculture, CSA project

A public meeting held in Chagford in February 2008, hosted by the New Economics Foundation,²⁸ and attended by residents, farmers and businesses, spawned an idea for a local food initiative based upon SFSCs. The horticultural market garden of the Chagford Community was the first initiative. By 2011 local demand for quality meats initiated another CSA project called Chagfarm. This study focuses on Chagford Community Market Garden which currently supplies fresh organically certified vegetables, fruit and flowers from its five acre site to over 80 local households. It is based upon a standard subscription membership model, where members receive a weekly box, can visit the site and help with harvesting, and are involved in how their food is produced. In line with a typical CSA model, for a set price members get more if there is a good harvest and less if there is a poor harvest, thereby spreading the risk between farmer and consumer. Ten percent of the members' shares are offered to low-income families, to encourage access to fresh produce for all.

Two of the founder-growers, Ed Hamer and Chinnie Kingsbury, set out the story of the Chagford Community Market Garden in the video examined.²⁹ They explain how it was initiated, how it grew, their modus operandi and their personal motivation for being involved in this CSA scheme. Interviews with CSA members reveal their reasons for getting involved and what they get out of it, including a common observation that the produce really tastes good, much better than you can buy elsewhere; that the harvesting days bring people together; and perceptions about local food miles, food security, and transparency in the food chain. The founders go on to describe their bio-diversity strategy, their choice to maintain traditional farming techniques, such as horse power only, and their organic farming principles. They see CSA projects as important opportunities for young, professionally trained growers and emphasise how important planning and local farmer knowledge is to the success of the project. The founders stress the importance of the concept of food resilience.

28. The New Economics Foundation, originating in 1986 in the UK, has consistently explored economic and enterprise models as alternatives, based upon social, economic and environmental justice, to mainstream neo-liberal capitalism, accessed 16 July 2016, www.neweconomics.org/

29. Chagfoods Community Supported Agriculture, Chagford, Devon, YouTube, accessed 16 July 2016, www.youtube.com/watch?v=AedjaRk6Hx0

Gruppi di Acquisto Solidale (GAS) – a food cooperative

GAS, Gruppi di Acquisto Solidale (Solidarity Purchasing Groups) originated in the city of Fidenza in the province of Emilia Romagna in 1994. Today they are found across Italy, with over 1000 solidarity groups registered through the GAS National Liaison Network.³⁰ From 2007 onwards various GAS have been coming together to collectively buy other resources beyond food, e.g. the Gas Energia association which purchases ‘clean energy’. Here the concern is focused on GAS groups organised, often spontaneously, to buy food by applying the principles of fairness, solidarity and sustainability to their purchases i.e. they have a critical approach to production and consumption, although the strength with which this is manifested depends upon each individual group. There is an underlying ethical aspect based upon “being in solidarity with” and groups stress the importance of social and human relations and how these link with agricultural or gastronomic traditions, the local environment and fair working practices. So, there is an emphasis on local products, organically produced foods, fair-trade products, product quality, dignity of work, and returnable or reusable packaging. Furthermore products are sought based upon their overall respect for the environment embodied in the concept of ‘environmental justice’, whose concerns are with the poor, weak and marginalised peoples fighting ecological conflicts³¹ and for an intergenerational view of our environmental health. Groups focus on unity as their strength while striving to practise critical consumption and simultaneously develop awareness and solidarity through the socialisation processes required to coordinate the acquisition and distribution of the food. Sourcing producers that meet the social, environmental and economic requirements of GAS is a challenging on-going task for most groups. GAS see themselves as part of a growing civil economy and wider socio-economic struggle where ‘the market becomes an instrument of relationship and a place of civil and civilising meetings’³².

GAS are organised on a membership basis, but can be structured as associations, informal groups, or industry cooperatives. However they are constituted, they are deemed as a “non-commercial activity” under an amendment to the Finance Act made in 2007, and, so, are non-profit organisations. Groups sometimes coordinate in larger territories giving rise to solidarity economy districts. Groups have developed diverse physical and software management systems for handling the food.

Selecting a representative video is difficult given the high number of GAS groups, but the one chosen³³ reflects the general principles in action for food solidarity purchasing. Francesca from GAS FELTRE and Silvana from GAS Milano 3 introduce themselves and how their GAS operate. Francesca emphasises the importance of the collective act of solidarity with the producers, farmers and the environment, and active contribution by everyone in the group according to each person’s

30. GAS National Liaison Network, accessed 16 July 2016, www.retegas.org and di Laura Antonella Columbo, *The GAS as Laboratories of Civil Economy*, (Aironc Ricerca, 2013)

31. Alier, M. *Environmentalism of the poor. A study of ecological conflicts and valuation*, (Cheltenham: Edward Elgar Publishing, 2002) cited in di Laura Antonella Columbo, *The GAS as Laboratories of Civil Economy*, (Aironc Ricerca, 2013)

32. di Laura Antonella Columbo, *The GAS as Laboratories of Civil Economy*, (Aironc Ricerca, 2013), 3.

33. GAS Gruppo di Acquisto Solidale, Youtube, accessed 16 July 2016, www.youtube.com/watch?v=0ZT5ZCxzjGM

competence. She also mentions supporting worthy producers e.g. sweets made by minorities, such as prisoners. Silvana focuses on relations with the producer as being fundamental to ensure quality, the practice of micro-credit, finding sustainably sourced products, such as anchovies or tuna from Sicily or, for example, a marmalade from a secular woman-led project in Bosnia founded by Rada Zargovich. Ideas of a solidarity economy underlie the key messages.

The ecosophical assessment of the AFNs

A range of criteria were defined for the three registers (Table 1.3). A qualitative assessment was then made of the existence and relative importance of the mental, social and environmental registers in the way these organisations chose to mediate their activities through their websites and videos representative of the ethos of the organisation. A score of 3 indicates a strong embracing of a register, 2 moderate, 1 weak and 0 absent.

Table 1.3. Criteria for the ecosophical registers and challenge to Integrated World Capitalism, IWC: a qualitative scoring system.

The ecosophical registers			Challenge to Integrated World Capitalism, IWC
Mental - psyche	Social - socius	Environmental – the environment	
Asking questions from a personal perspective about the techno-scientific impacts on biodiversity and biosphere health and seeking to take an active role in new restorative relations.	Having a motivation to re-construct the modalities of 'group being' through socio-cultural activities and relations.	Asking questions from a collective and beyond anthropocentric perspective about the techno-scientific impacts on biodiversity and biosphere health and seeking new restorative relations together.	Implement (infra)structural arrangements of the economy to ensure fairer access for all.
Being open and/or contributing to and changing with the effective and pragmatic cathexis of the social group or organization.	Having a strong concern for 'incorporeal species' e.g. the arts, relations with time, love and compassion for others.	Actively trying to re-intertwine or re-weave or re-fabricate new relationships and/or bring in new actants to help rebalance our machinic ecology.	Aim to re-localise and re-territorialise production and consumption in a local economy.
Taking a personal position of dissensus against delocalized, deterritorialised capitalist power.	Developing and having a strong ethico-political articulation.		Aim to re-build an economy based upon strong social and environmental criteria.
Developing individual creative autonomy and an ethico-political voice.	Constructing a dissensus to the delocalized, deterritorialised capitalist power.		
	Developing an effective and pragmatic cathexis in human groups.		
	Developing an effective creative autonomy.		
Scoring: Strong expression of the above criteria=3; moderate expression=2; weak expression=1; if the above criteria are not expressed=0.			

All the AFNs show a contemporary awareness of the digital media environment, with use of Twitter, Facebook, blogs, YouTube channels and other media (e.g. digital books, Instagram, RSS feeds) (Table 1.2). Incredible Edible Todmorden applied all the digital media options with active contributions being made by members across the community. This, perhaps in part, reflects in their high ecosophy mental and social registers scores, as described below. Facebook was the only digital media channel used by all AFNs.

On the basis of the materials viewed Incredible Edible Todmorden stands out as the AFN with the strongest enactment of Guattari's ecosophy, scoring 3, 3 and 2 for the mental, social and

environmental registers respectively (Table 1.2). This grassroots initiative, with an absence of hierarchy in their way of organising, seems to have struck a chord with the community within which it originated and created a genuine pioneering spirit amongst its participants. The high ecosophy score reflects the radical nature of their proposition – growing free food for all. The rapid development of the Incredible Edible Network since 2007, now in 100 towns in the UK, indicates the appeal of this initiative.

OrganicLea also originated as a small grassroots initiative based upon one acre of derelict allotment land, but over a decade slowly grew into a mature organisation managed by full-time employees, aided by Big Lottery funding under the Making Local Food Work project. It is for these reasons that the mental psyche score is divided between managers, who are highly motivated and score 3, and the members, who score between 1 to 2. The socius is less visible than for Incredible Edible Todmorden, and so scores between 1 and 2.

Chagford Community Market Garden reveals the deep personal commitment of its founders and growers, and a greater sense of socius communicated through its individual members, so the scores are 3 and 2 respectively for the mental register. The socius seems relatively well developed, so scores 2.

GAS remains the most problematic to score since individual GAS groups vary widely in their vision and commitment. However, for the material viewed it seems the general mental register scores for coordinators and members was lower than the other AFNs studied because these solidarity groups are a purchasing system based upon well defined social, environmental and economic principles, rather than being a producing (growing) *and* purchasing system. However, being an organisation founded on cooperative behaviour the socius is well developed.

Scoring the environmental register proved the most challenging of all the three registers as the criteria are, arguably, less easy to interpret. However, it is clear that all AFNs studied seek ‘restorative relations’³⁴ between the anthropocentric and biosphere health, typically expressing a desire to use local and heritage varieties, to bring back traditional knowledge and blend it with new knowledge, and to try and re-activate human involvement with local food biodiversity and production. On this basis all AFNs exhibited similar degrees of commitment to the environmental register, even if the detail varied, hence they were all scored as 2.

As Guattari posited his ecosophical approach as a means to contest IWC, it is also appropriate to assess the four AFNs in terms of their critical stance and impact on economic grounds (Table 1.2, right hand column; see Table 1.3 for the criteria). In terms of their politico-economic directionality and impacts, it is clear that GAS, who align themselves with the concepts of the solidarity or civil economy, are orientated to actively constructing an alternative to IWC. As they are by far the largest network, constituting over 1000 GAS, and are now coalescing and organising themselves to lever more purchasing power in, for example, renewable energies, they can be considered the most economically counter-active against IWC and also score 3. OrganicLea also have a political agenda to address how neglected and underused spaces are used in the city (of London and its environs) and are part of the Community Food Growers Network³⁵ which holds events such as Reclaim Our

34. Felix Guattari, *The Three Ecologies*, 2000, p?

35. Community Food Growers Network, accessed 16 July 2016, www.cfgn.org.uk/

Spaces in London. Big Lottery Funding ensured they also have new organisational capacity to initiate Farm Start, new farms in urban spaces. Chagford Community Market Garden is a typical CSA scheme in that it addresses the local rural small-town economy and provides for families and individuals to access affordable, healthy, sustainable food. Incredible Edible Todmorden provides free food, food for all, but one of its three 'spinning plates' is local food businesses, so it promotes these and, hence, is interested in a healthy local food economy. This extends to fighting successfully against new planning applications by supermarkets. So, in their own idiosyncratic ways the ecosophy of these AFNs underpins a counter-economic narrative to IWC. This narrative is multivalent, supporting diverse needs and giving benefits to people, places, plants and profits. The modest successes of all these AFNs shows ecosophical potential to challenge unsustainable intensive agri-industrial farming that is central to IWC and so a median score of 2 in terms of intent is reasonable. However, questions remain as to how these activities can scale-up and, indeed, how they can retain their genuine sustainability if they do.³⁶

Reflections on digital mediation by AFNs

If we reflect on 'the long view' taken as the introduction to this article, we can see that AFNs, particularly those which are CFNs, are centrally focused on creating a new socius based upon (re-)constructed relationships between producers, consumers and the/their environment that contest the intensive agri-industrial farming which dominates our food systems. In this sense digital mediation by AFNs is part of a larger story of diverse counter-narratives and counter-initiatives challenging the hegemony of neo-liberalism.³⁷ Bos and Owen³⁸ suggest that the application of Web 2.0 technologies and online spaces of AFNs directly assists in making a 'virtual reconnection' i.e. that 'the embodied, socio-material reconnection processes that occur *in-place* also occur online'. They cite interviewees from AFNs who say that the online presence helps create relationships, build trust and, for example, through photographs of the different weekly box of vegetables or share of produce, give a quasi-experience of seasonality. They differentiate between AFNs which are CFNs and those which are SFCs, in urban and rural locations, and acknowledge that the CFNs were established more recently, and tend to comprise a younger and more diverse demographic than the SFCs. It is also apparent in their study that CFNs demonstrate stronger material (biological) and social (images of people working together, families and children) connections than the SFCs. They are less sure how improved moral connections are made through the online environments of AFNs. This exploratory study, applying the ecosophical framework of Guattari, suggests that CFNs, as exemplified by Incredible Edible Todmorden and their cogent application of Web 2.0 technologies, offer great potential to develop strong moral connections with place, people, plants, governance, biodiversity, health and sustainability inter-woven as a future projection. Paull notes

36. Forssell and Lankoski, "The sustainability promise of alternative food networks: an examination through "alternative" characteristics," 2015

37. *Agents of Alternatives: Re-designing Our Realities*, edited by Alastair Fuad-Luke, Anja-Lisa Hirscher and Katharina Moebus, (Berlin: AoA, 2015).

38. Elizabeth Bos and Luke Owen, "Virtual reconnection: The online spaces of alternative food networks in England." *Journal of Rural Studies* 45 (2016), 1-14.

that IET fosters contagion by keeping it simple, open, replicable, and non-proprietary, calling it ‘open source food’.³⁹ Indeed the ‘openness’ of food systems links directly to how we might constitute a ‘food system commons’ in a symbiotic relationship with more open source tools, open governance and open data. If this is a useful direction for debate, then the CFNs described in this study can amplify the quiet lead they take on addressing common land ownership or how public or semi-public/semi-private or private land is brought into sustainable food production. This is an active debate in urban agriculture,⁴⁰ one that needs to be extended to our rural, countryside areas too. This contemporary inter-twining of a digital commons (Web 2.0 and beyond) with real land ownership takes us back to the historical disjuncture that took place in pre-Industrial Revolution Britain when the common land was taken from the common people by the Acts of Enclosures (sic. Inclosures) between the seventeenth and nineteenth centuries.⁴¹ It seems unlikely that these fledgling AFNs, studied here and elsewhere, will persist unless new relations of ownership, or extended tenure, over land can be secured. However, that the AFNs demonstrate strong competences to exploit digital media for their cause ensures further debate on these issues.

Can design contribute to better ecosophical futures?

Design is an ‘intra-domain’ mode of thought⁴² and has strong relations to other disciplinary studies focusing on ‘things and systems’.⁴³ So, it seems important to ask if design can contribute to better ecosophical futures. In this section, I briefly present some case studies by designers who address issues of existing and future food production and consumption. Of course design has already been applied by the AFNs – logo, graphic, web, interaction design – but here I look to the independent work of designers and design researchers. The designs presented are conceptual or speculative, prototypical or products already on the market. The ecosophical considerations are briefly outlined.

Three design projects are orientated towards food production and consumption in urban environments. The first is a speculative design concept called Pig City by Dutch architectural practice MVRDV (Figure 1.6), created in 2000 when European conversations about intensive pig production, land availability and swine fever were being voiced. MVRDV calculated with the Agriculture Economics Research Institute, Wageningen, that in 1999 15.5 million humans and 15.2 million pigs were official inhabitants of the Netherlands. Given projections in pork demand and for more organically farmed pork, MVRDV proposed high-rise buildings for pigs, planted with trees, irrigated by rainwater, feed provided by automated grain systems and fresh air being provided by

39. John Paull, “Please pick me” – How Incredible Edible Todmorden is repurposing the commons for open source food and agricultural biodiversity,” 2013.

40. *Second Nature Urban Agriculture. Designing Productive Cities*, edited by Andre Viljoen and Katrin Bohn, (London and New York: Routledge, 2014).

41. See “Inclosure Acts” which gives a general account of three hundred years of appropriation of the common land from the common people of Britain, Wikipedia, accessed 16 July 2016, https://en.wikipedia.org/wiki/Inclosure_Acts

42. Petra Hroch, “Sustainable Design Activism: Affirmative Politics and Fruitful Futures,” In *Deleuze and Design*, edited by Betti Marenko and Jamie Brassett, 219-245, Edinburgh: University of Edinburgh Press, 2015, 220.

43. Alastair Fuad-Luke, *Design Activism. Beautiful Strangeness for a Sustainable World*, (London: Earthscan, 2009), 4.

open-air balconies. Slaughtering would take place locally with pigs riding on an elevator to the butcher's floor. One option is for citizens to look after the pigs. Ecosophically this concept looks problematic as it appears to accept IWC ambitions in terms of scale and production, the organic credentials are questionable and citizen involvement would be necessary to achieve a shift in mental psyche. However, like most speculative designs, the intention is a dialogue about future food production practices, rather than a feasible, implementable design. These are what I call design fictions.⁴⁴

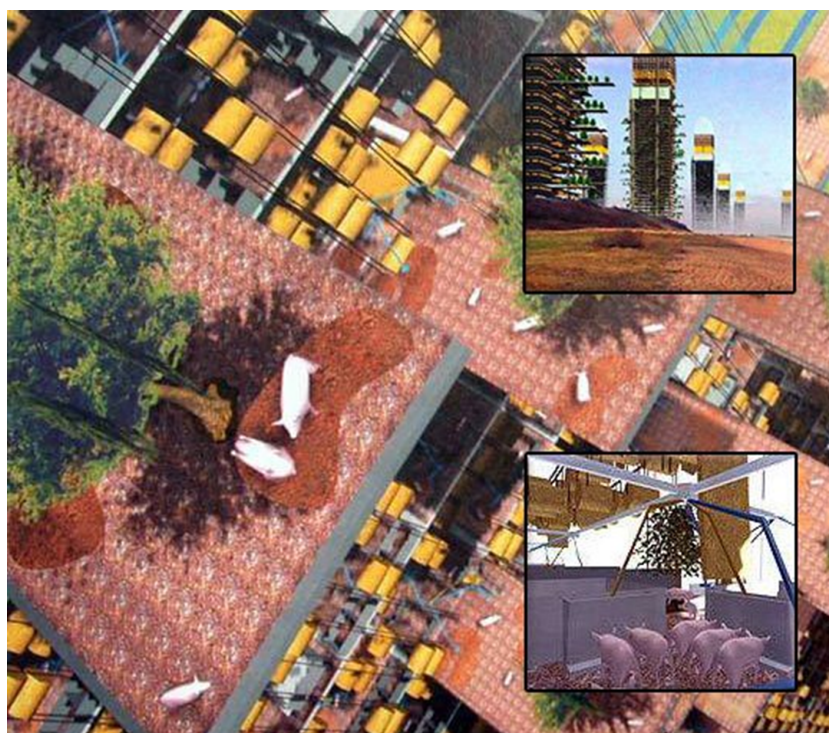


Figure 1.6. *Pig city* by MVRDV.
www.mvrnv.nl/projects/181-pig-city

The second urban case study is an enterprise from 2011 called FARM: London, who have recently raised research and development funding to prototype integrated farming on London rooftops (Figure 1.7). FARM: and FARM: shop are operated by Something & Son LLP, an eco-social design practice run by Andrew Merritt and Paul Smyth who 'combine art, engineering and business know-how to find creative ways to improve the world around us'.⁴⁵ Their proposal integrates plant growing by hydroponics combined with aquaponic fish, poultry production and mushroom

44. Alastair Fuad-Luke, Fictions, frictions and functions: Design as capability, adaptability and transition, in *The Pearl Diver: Designers as Storytellers*. Elisa Berlotolotti, Heather Daam, Francesca Piredda & Virginia Tasserini, eds. 2016, 90-95. Milan: DESIS Philosophy Talks.

45. Something and Son, accessed 16 July 2016, <http://somethingandson.com/>

growing, aiming for a high yield system. They link their farm activities with a shop, development of vertical farm modules and outreach projects, such as mental health therapy through urban farming. They represent an emerging generation of design-inspired multidisciplinary agencies who are active in the eco-social agenda. In FARM: the emphasis seems to be eco-socio entrepreneurial, with strong ecosophical mental registers of the operators, but it is less easy to distinguish the socius and the enterprise's environmental position.



Figure 1.7. *FARM: London*.
<http://farmlondon.weebly.com/>

The final urban case study was a five-year design-research project, 2005-2010, called *Nutrire Milano* (Figure 1.8) led by INDACO, the Department of Design at Milan Polytechnic, in collaboration with the University for the study of Gastronomic Sciences and Slow Food. The project was funded by the Fondazione Cariplo, Comune di Milano, and Provincia di Milano. It was a complex project involving service design, strategic design and design for social innovation with the main goal of creating a sustainable food network in the region with a system of services and infrastructures. This involved embracing existing activities, such as GAS and other production, exchange and consumption networks, evolving these networks into zero food miles services between Milan city and the Parco Agricolo Sud di Milano, encouraging multifunctional agricultural activities through several pilot projects. These prototypes included *Il Mercato della Terra* (a farmers' market), *Local Bread* (a new SFC) and horticulture in farms (food boxes). *Nutrire Milano* touched all three ecosophy registers but, perhaps, the strongest register was the social, because a more infrastructural network brought together disparate socii through a process of social bridging.

An Ecosophical Inquiry into Digital Mediation and Design in Relation to Alternative Food Networks (AFNs) in an 'Expanded Field' of 'Agri-culture'

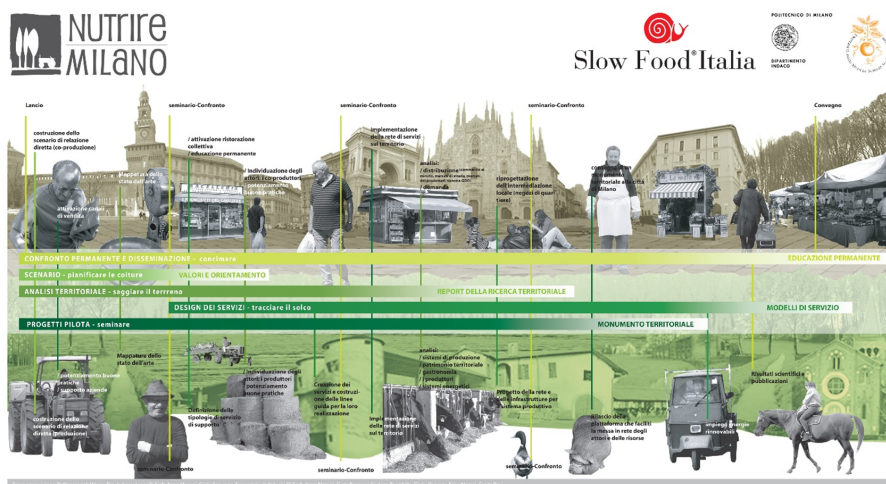


Figure 1.8. *Nutrire Milano*, INDACO, Politecnico di Milano.

<http://desis-foodcluster.org/category/cases/nutrire-milano/>

The next two case studies focus more on biodiversity and issues of participation. Seed Mast by Futurefarmers, a design studio comprising artists, researchers, designers, architects, scientists and farmers founded in 1995, is a project focusing on seed, seed origin and intellectual property rights (Figure 1.9). A wooden mast and spar are filled with seeds collected from ancient grain crops grown in Norway by Futurefarmers' Flatbread Society. This unique seed bank sets out on a journey to return the seeds to their original geographic origins in Jordan. Seen as a reverse migration, this voyage is imagined as a 'rescue' and symbol of resistance to the global seed barons. The physical and networked socius of the Flatbread Society is well developed and clear environmental intentions are espoused. A particular caring mental psyche is also needed to collect and grow these ancient and heritage varieties of grain. Consistent with the ethos of Futurefarmers' work is a strong ecosophical position.



Figure 1.9. *Seed Mast* by Futurefarmers.
www.futurefarmers.com/#projects/seedmast

The second biodiversity case study, called Outside Brewery (Figure 1.10), was initiated by Henriette Waal in 2009-2010, coming out of a cultural programme called ‘Eat-able Landscape’ (*Eetbaar landscape*) hosted by the city of Tilburg. Henriette, a concept and product designer and researcher, developed a mobile brewery which engaged local communities in discovering ingredients in their landscape from which they could make beer. Water from ditches or ponds was purified in natural filters to combine with locally collected herbs, red clovers and other plants to create unique ‘terroir’ beers, ‘landscape beers’. She involved home brewing enthusiasts, residents and festival goers in a participatory process to make the beers. Her approach is highly tuned to ecosophy and makes us look anew at our landscapes and people’s ability to invent.



Figure 1.10. *Outside Brewery* by Henriette Waal.

Photo, Jorn van Eck, www.stroom.nl/paginas/pagina.php?pa_id=752085

The final two case studies involve new product development and differentiation for the market of existing or aspiring food producers. Eglu, a bespoke chicken house, run and feeders (Figure 1.11), was the brainchild of four designers from the Royal College of Art in London who amusingly called themselves Omlet. These designers brought high quality injection-moulded plastic chicken houses to the market by introducing a new aesthetic aimed at those who had, perhaps, never raised chickens before. As part of their service they provided two older, traditional breeds of chickens and detailed husbandry advice. Omlet has now expanded and diversified its product range and now enjoys distribution internationally, demonstrating its entrepreneurial vision. Perhaps their best ecosophical contribution is to motivate and encourage people to produce their own food and facilitate psychological transition from passive consumer to active producer. However, their original vision is somewhat diluted by the product differentiation towards products for the pet care market and classical economic models they aspire to. An ecosophical review of their business might point to the need for new strategies, such as strengthening the socius around home food production and open source knowledge on husbandry techniques.



Figure 1.11. *Outside Brewery* by Henriette Waal.
www.omlet.co.uk/shop/chicken_keeping/

The last case study is a revolutionary re-design of the bee hive, called Flow® Hive (Figure 1.12) which ensures honey can be released from the frames in the hive by a proprietary system of movable offset hexagonal cells. Flow® Hive was invented and designed by Stuart and Cedar Anderson, who had the most successful crowdfunding campaign on Indigogo to date, raising US\$4.2m on a humble target of US\$70.000. The success of the design can be attributed to it being equally beneficial to the bees (no smoke and major disruption) and the humans (easy system even for inexperienced amateurs). This invention will also, hopefully, introduce many people as start-up beekeepers and therefore should help maintain bee diversity and populations. This is a classic case of entrepreneurial endeavour and the patented design follows well-tested patterns of commercial exploitation. As for the Eglu above, their ecosophical credentials, as presented, look weak, but the ecosophical potential is high if other values are strategically developed.



Figure 1.12. Flow@ Hive by Honeyflow.
www.honeyflow.com/

This short summary of diverse projects indicates that those embracing participatory design approaches offer a means to build the socius and help strengthen individuals ecosophical psyche. The more innovative projects, such as the Outside Brewery by Henriette Waal, being about *things* and matters of *concern* rather than *objects* and matters of *fact* (after Latour⁴⁶), tend to poise between order and chaos like Bodies without Organs (BwOs after Deleuze and Guattari).⁴⁷ In doing so they challenge the system, the order, with their gentle antagonism. I refer to these as design frictions.⁴⁸ They not only posit a fiction but enact it through praxis, a key element in making disturbances and creating dissensus to established systems. The design concepts, prototypes, services and products illustrated here challenge normative approaches to food production and, implicitly, consumption. In this sense they offer latent potential to encourage ecosophical endeavours.

Towards a polymodal agri-culture...

Taking the long view, once more, and reflecting on this interweaving of agri-culture, art, design and philosophy, it seems recent developments of AFNs, and their more socius-conscious cousin,

46. Bruno Latour, "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30, 2: 225-248. 2004).

47. Jamie Brassett, "Poised and Complex: The Becoming Each Other of Philosophy, Design and Innovation" In *Deleuze and Design*, edited by Betti Marenko and Jamie Brassett, 31-57, Edinburgh: University of Edinburgh Press, 33, 38-39.

48. Alastair Fuad-Luke, in *The Pearl Diver*, 2016.

CFNs, are challenging us to find our new *Homo ruralis*, the rural human being, or at least to make new relations between *Homo urbanus*, the urban human being, and our ancestral ways of being.

A number of important questions are raised. How can the expanded field of agri-culture and an ecosophical approach, as proposed in this study, offer a means for more polydisciplinary perspective, dialogue, experimentation that could lead to more transformative practices in agriculture and agronomy, art, media studies, design and philosophy? And what might this rethink imply? Can the virtual reconnection fostered by (social) mediation and mediatization of AFNs and CFNs be built into a viable agri-culture? The answer might lie in the genuine intra-domain mode of thought position that design occupies,⁴⁹ a position also occupied by art and philosophy modes. How can these modes work with existing AFNs, CFNs and sustainable farming initiatives to mutually reinforce positive transitional change towards genuinely sustainable agri-cultures? Given the scale of the task, we can turn again to the sage challenge laid down by Deleuze and Guattari in their controversial book, *What is Philosophy?*, that we should be ever vigilant of our own mode of thought by ‘challenging *doxa*, experimenting with intensities, and creating heterogeneous connections in the interest of promoting more equitable forms of future flourishing’.⁵⁰ Hroch frames design activism in Deleuze and Guattari’s terms a ‘minor’ mode of design, although I would argue it has many monikers⁵¹ and is gathering ground, but she also argues that it re-conceptualises *intensively* through a re-consideration of how design works and what it can do, and, I would add, how this changes the way of designing.⁵² Design activism is framed in participatory democracy, agonistic pluralism, utopian logic, motivational framing, radical innovation and sustainability.⁵³ In this sense design activism finds a natural alignment with an ecosophical approach.

To re-think the humanities is to ask how can the modes of thought of agri-culture, art, design and philosophy could help co-create an agonistic polymodal agri-culture which can genuinely challenge the hegemony of global intensive agri-industrial agriculture. That the AFNs are telling their praxis through their own digital mediation, and that design f(r)ictions offer their own narrativity, are encouraging stories of an emerging agri-culture. As James Petty observed, ‘Who gets to tell the stories matters greatly’, noting that a *diversescape*, in contrast to the *monoscape* of industrial farming, has many storytellers.⁵⁴ Food, indeed, for thought and action.

49. Petra Hroch, “Sustainable Design Activism: Affirmative Politics and Fruitful Futures,” 2015, 227-228.

50. Petra Hroch, op. cit. 220.

51. I believe design activism today has diverse expressions and practices, including but not limited by: Adversarial design, Altruistic/pro-bono design, Craftivism, Critical design, Design for... environment/need/sustainability, Dissonant design, Ecological design, Open design, Quiet activism, Relational design, Slow design, Social design/socially responsible design/socially responsive design/socially conscious design/design for social innovation, Transition design and Transformation design.

52. Alastair Fuad-Luke, “Design activism’s teleological freedoms as a means to transform our *habitus*,” In *Agents of Alternatives: Re-designing Our Realities*, edited by Alastair Fuad-Luke, Anja-Lisa Hirscher and Katharina Moebus, (Berlin: AoA, 2015) xxi.

53. Alastair Fuad-Luke, “Design activism’s teleological freedoms as a means to transform our *habitus*,” 2015, 281-294, 286.

54. Jules Petty, *Agri-Culture. Reconnecting People, Land and Nature*, 2002, 23.