

Tom Henfrey Permaculture Diploma Design 1: Action Learning Pathway

Summary

This design began, informally, when I began my diploma in 2010 (in fact, the vision that forms the *inspiration* anchor point took place in late 2008), and continued intermittently throughout my diploma. I first began working on it formally in 2012 and completed the current version in 2020, though it remained in hibernation for long intervals between those times.

It uses the **Design Web** as the design process. The key design tool employed is the use of **patterns**, for both analysis/evaluation and design: mapping existing (harmful) patterns and identifying routes to transforming them into healthy patterns. Identification of patterns built on a **SWOC analysis** (at the *limits* anchor point). These patterns in turn fed into a form of **sector analysis**: identifying important flows already present in my life (at the *helps* anchor point) and harnessing them as three interdependent strands of action that form the core of the design (at the *integration* and *action* anchor points).

Anchor Point 1: Momentum

Key inspirations that motivated me to begin moving along the diploma pathway were:

Grassroots environmentalism, protest and politics

Having grown up in a politically aware, left-wing and environmentally conscious family, I felt a natural affinity with grassroots environmental action as it emerged and matured through my early adulthood. I also took an active interest in anarchism as a body of emancipatory political theory that could inform action for sustainability.

Indigenous knowledge

Time spent living and working with indigenous people in Guyana (while researching for my PhD., between 1998 and 2000), backed up by graduate study in Anthropology, opened me up to the diversity of ways of understanding the world, the practical possibility of reconciling human needs with care for nature, and the importance of cultural diversity as both an expression of the full range of human potential and a vital resource for living sustainability on the planet.

Engaged scholarship

Some fringe academic fields have successfully aligned themselves with environmentalist and social justice causes, notably my own research area of Biocultural Diversity but also activist scholarship in areas such as Medical Anthropology and Participatory Action Research.

Practical action for sustainable living

I saw in initiatives to develop sustainable lifestyles, such as many in the permaculture and ecovillage movements, potential for new hybrid forms of modernity that combine the deep place-based integration of ecology and society characteristic of indigenous societies with appropriate measures and forms of the scientific, technological, cultural and material benefits of industrialised societies, as seeds of a form of post-industrial ecological society.

Permaculture training

On a weekend introductory course led by Wilf Richards in 2008, I first realised that permaculture is not (just) for design of gardens, farms and settlements, but a general design process potentially applicable in all areas of life.

Transition (Towns)

Becoming part of Transition Durham and the wider Transition movement exposed me to a growing network of people and communities self-consciously reinventing themselves in response to

environmental and social challenges, beginning to explore the social change potential of practical action towards sustainable community.

I was already in my life highly committed to the three permaculture ethics, and saw in the design process a way to deepen their expression through a life redesign. Once I had completed my PDC, the diploma programme became a container for this redesign. At this stage, I was particularly inspired by the principle *Integrate not Segregate* – bringing the different strands of my life together in mutually beneficial inter-relationship.

Anchor Point 2: Vision

In October 2008, I saw a message on the North East Permaculture Network about a **sweat lodge** in Teeside. Never having attended such an event before, and interested in deepening my experience of shamanism, I attended, and had a traumatic and liberating experience of figurative death and rebirth, supported by a very lovely group of people (none of whom I ever saw again). I woke the following morning on the floor of a yurt where I had slept, and saw as if floating above me a vision, utterly clear and vivid (although, in a literal sense, invisible) of the path before me. The vision was of my becoming a 'culture gardener': integrating intellectual, spiritual and practical action to create new hybrid forms of transformative environmentalism, in a way consistent with the *Everything Gardens* permaculture principle.

Anchor Point 3: Ideas

The *culture gardener* vision clarified ideas I already held about what I would like to create in my next phase in life:

- I was already committed to action on sustainability and climate change, and saw in the growing scientific case for urgent action and increasing strength and maturity of activists networks the possibility of profound change towards a sustainable and caring society. I wished to find my place in that, and make a contribution that reflected my own distinctive outlook and capacities.
- I saw potential in my academic training and professional roles to which that could lead to become a resource for activism, both directly by providing skills and helping leverage resources and indirectly by helping build credibility and mainstream acceptance. A paper, '*Cultivating Community, Gardening Anthropology*', that I presented at a panel on permaculture at the European Association of Social Anthropologists conference in 2010, summarises my emerging ideas around the time I began my diploma.
- I saw the potential for lifestyles that combine the freedom of social, economic and cultural self-determination enjoyed by indigenous peoples with appropriate use of the technological and intellectual benefits of modernity, and steps towards achieving this already realised in the ecovillage and Transition movements. Having co-founded and lived in an ecovillage in southern Spain (2004-2008), I assumed that I would naturally gravitate towards some sort of eco-community as time went by.
- I recognised the foundational importance of spiritual life and inner work, and wished to deepen my personal commitment to this and effects on both my personal well-being and worldview and nature of my relationships and actions in the outer world.
- I recognised unfulfilled potential for myself as a thinker and writer bridging the worlds of environmental activism, academic inquiry and spirituality.

Bringing these together, I saw potential for a new type of engaged scholarship, grounded in social change efforts and committed to helping create the intellectual, social, cultural and spiritual conditions for a fair and sustainable world. Following the *Obtain a Yield* permaculture principle, it seeks to make all my activities productive towards the three permaculture ethics. Following the principle *Produce no Waste*, it also seeks to mobilise all my previous experience, skills and capacities towards that end.

Anchor Point 4: Limits

A basic SWOC analysis identified key limiting factors in my life at the time, and pointed towards pathways to apply my skills in overcoming them, navigating the strengths and focusing on developing the opportunities.

Strengths My life aspirations are realistic and achievable I am well-resourced in terms of life experience, knowledge and skills, and have access to channels to develop these	Weaknesses High levels of dissatisfaction and frustration with current life situation, especially professional: a sense of not being where I need to be, and to change external circumstances to become more conducive to my aims Various emotional and psychological limitations hinder my ability to act on potential and harness my energies effectively
Opportunities My professional skills align with important edges in the permaculture and Transition movement, where potential exists for me to make significant contributions Great potential for synergy among my personal healing and growth, finding my place in life, and opening my ideal professional pathway	Constraints Clash between personal values and institutional values in university settings: institutional pressures tend to favour elite activities, not easy to reconcile with positive environmental and social action, personal well-being and a healthy inner life Low density of like-minded thought and action in Northeast England: places like Land of Roots and the Place2Be felt like tiny islands of sense in a vast ocean of insanity, insufficient to create the sense of community I wished for and a social environment sufficiently nurturing to support my flourishing on a personal level

Anchor Point 5: Helps

I recognised that Permaculture itself was my key help, as the source of the culture gardening metaphor, the methodology through which to act upon it, a learning programme through which to develop the capacity to put it into practice, and a community of like-minded, supportive and inspirational people with whom to connect and collaborate. The support of Wilf Richards was vital in numerous respects: as a permaculture teacher (tutor on both my PDC and diploma; I later assisted him teaching on three PDCs), a key networker locally (through Transition Durham and the community of friends and volunteers connected with the community smallholding at Land of Roots) and regionally (through the North East permaculture and Transition networks), and introducing me to the Permaculture Association and its national and international networks. As well as the overall container for this diploma journey and the life redesign it maps, permaculture became the main direct learning context for lifestyle designs 6 and 7, and the practical training that preceded them (Branch 1 of my Action Learning Pathway).

Closely related to permaculture, since my arrival in Durham at the start of 2008 I had also started to get involved in the Transition movement, first through local group Transition Durham, later connecting regionally, nationally and internationally. Transition offered a vibrant and dynamic community of action that was pushing the edges of permaculture and other fields, in which I quickly and thoroughly immersed myself at local, regional, national and international levels. Transition became the major context through which I redesigned my professional life as a researcher, progressively and incrementally transforming my academic skills and experience into a resource for social activism (designs 2, 3, 4 and 5).

My academic background - a doctorate in the important but relatively neglected field of Environmental Anthropology, involving interdisciplinary training in both Ecology and Human Ecology and deep understanding of indigenous lifestyles and relationships with nature - had provided me with a distinctive and important set of knowledge, perspectives, qualifications and

access to a professional pathway with potential to support realisation of my vision and ideas. Although always an academic outsider, particularly at Durham University where I was employed at the time, I had significant support from colleagues in Durham and elsewhere who were sympathetic to my political agenda, and was able both to access institutional resources (e.g., academic funding, status and credibility) and find collaborators throughout the set of incremental design processes through which I would reinvent myself as an engaged action researcher (designs 2, 3, 4 and 5).

At the time I began my diploma, the Place2Be community, an informal network in County Durham, linked by a common interest in spiritual practice (in diverse forms) and a notional (and never realised) intention to form an intentional community, was both a valuable help in itself and helped guide me to formal shamanic training. My deepening interest in shamanism was a key part of my permaculture journey, explored in more detail within my Zone 000 design (Design 10) and leading to a writing programme centred on a book on permaculture and shamanism (Design 9) and associated training programme (Design 8).

The principle *Use Edges and Value the Marginal* helped me to understand how these various helps could be brought into mutually beneficial inter-relationship in service of the permaculture ethics, which was the key design goal. Bridging many different fields, I often found myself and my interests on the margins of each; inhabiting this location as a fertile edge became a key design pattern for my action learning pathway, and a design tool I commonly used in my diploma designs, often in the form of **stacking**.

Anchor Point 6: Patterns

Analysis of helps and limits revealed a number of entrenched negative patterns (which I would term *addictions*) that inhibited realisation of my goals. In line with the integral (all-quadrant) analysis presented in my Zone 000 design (Design 10), these patterns were evident both as psychological predispositions resulting from unresolved trauma and behavioural patterns through which this trauma was acted out. Each of these had social correlates, in the form of a tendency for me to encounter situations that apparently reinforced them.

Each of these negative patterns was mirrored by the seed of a more positive pattern that revealed potential for its transcendence and transformation. I identified a series of *Patterns that Connect* common to each of these dyads, which are the core design patterns for my Action Learning Pathway.

Pattern Dyad 1: Incompletion -> Fulfillment

A tendency to begin new things rather than completing those I was already working on, and abandon projects or fields of activity before they reached full maturity. As a consequence, I was burdened with numerous unfinished projects. I experienced these as either energy drains (in the case where I intended to complete the project), or as wasted time and effort. Completion of unfinished projects transforms them into resources on which my subsequent activities can build (expressing the principle *Capture and Store Energy*). In cases where completion is not possible or desirable, accepting this and letting go of past intentions removes the energy drain. In some cases, this reveals the unfinished work to be a resource in unexpected ways.

Pattern Dyad 2: Fragmentation -> Integration

My collection of half-finished projects and half-baked ideas was also highly fragmented: each remaining in the sort of immature state where it both benefits from isolation and has not yet developed a strong capacity for interconnection. Completing projects, or coming to terms with their current state as an enduring condition, allowed me to integrate them into a bigger picture and begin to explore their complementarities and synergies.

Pattern Dyad 3: Illth -> Salutogenesis

Fragmentation would often project and externalise itself in my experiences of the environments where I found myself. With my personal resources poorly integrated and multiple energy drains exposed, I often found both my general life circumstances and specific situations challenging and hostile. Mustering my personal resources better meant I was more capable of locating and creating circumstances conducive to my well-being and flourishing, and engaging with and contributing to them in ways that reinforced that.

Pattern Dyad 4: Outsider -> Edge Weaver

A common feature of my experience was one of marginalisation: struggling to find a place, identity and sense of comfort in environments where I didn't really fit. Better mobilisation and integration of my resources, and the greater sense of comfort and belonging that arose, transformed this into a series of creative edges. Comfortable in diverse settings, and confident in different fields of activity, I became able to weave them into positive inter-relationships in creative and productive ways.

Patterns that Connect: Site Repair

The single pattern common to both Christopher Alexander's original pattern language and Jacke & Toensmeier's pattern language for edible forest gardens, this pattern seems to arise in every pattern language design I undertake. In this case, focussing attention on the most damaged and dysfunctional parts of myself, although intimidating and painful, allowed them to become my sources of greatest strength and the fertile, healthy soil in which I flourish. I thus transformed my own psychological problems into the growing edge of my professional life through a deepening interest in shamanism (Designs 8-10), created external living circumstances that reflect this state of inner health (Designs 6-7) and rehabilitated my academic training by making it the basis of an important contribution to permaculture and related movements (Designs 2-5).

Patterns that Connect: The Solution in the Problem

Each of the key negative patterns identified contained within it, as a mirror, the seeds of its own transcendence and transformation. Focusing on them through application of the *Site Repair* pattern allowed me to uncover and begin to realise this potential.

Patterns that Connect: Sense of Coherence

Cultivating the positive member of each pattern dyad stimulated an enhanced sense of coherence, in which my inner growth, outer experiences and sense of fulfillment and contribution in the world came into alignment as I weaved synergy among the main strands of my work.

Patterns that Connect: Autopoiesis

An increased sense of coherence became a platform for aligned generative unfolding, in which my personal flourishing has taken on its own momentum, in mutually enhancing interplay (structural coupling) with my service to the world.

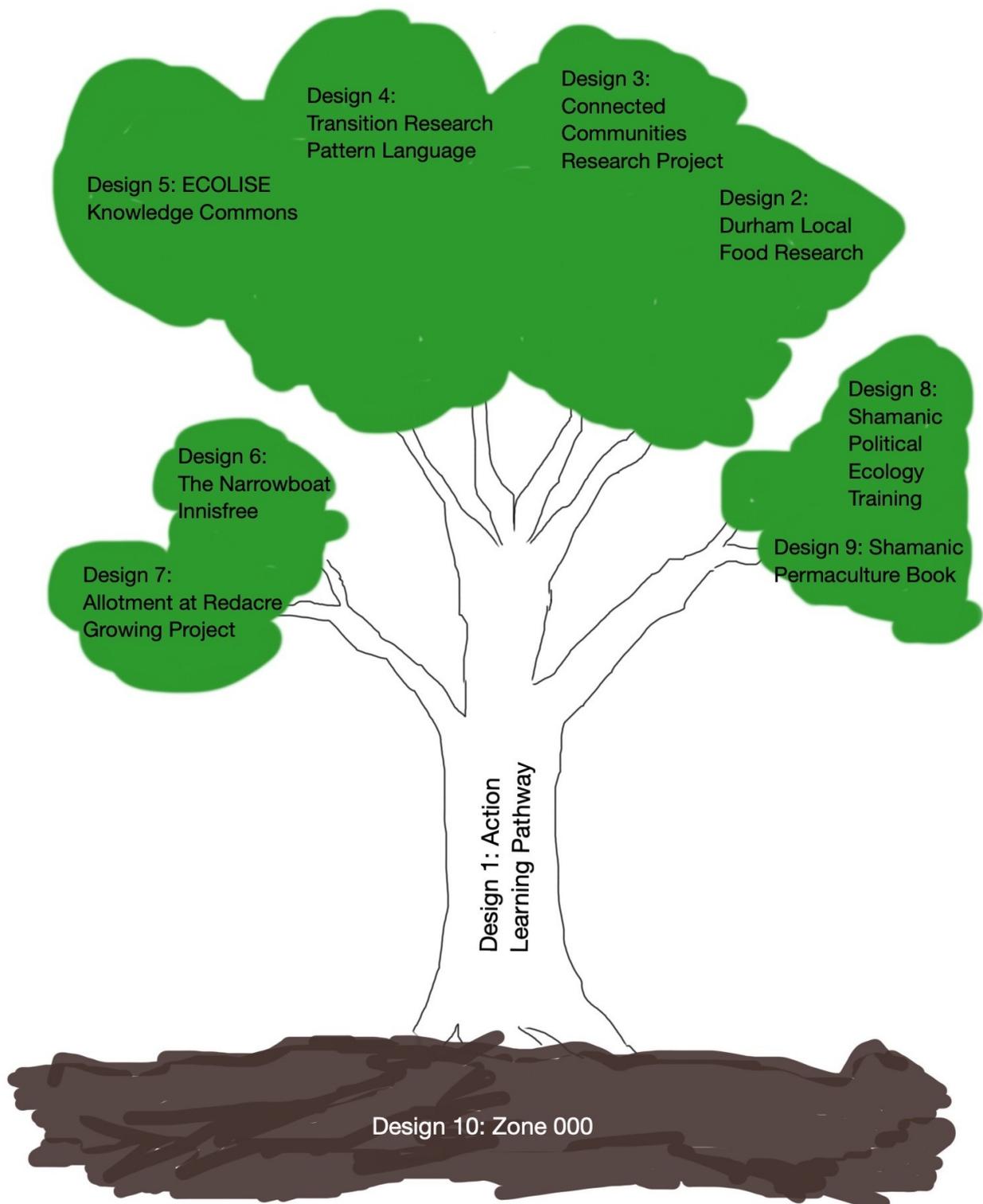
Anchor Point 7: Integration

The central metaphor I chose for my Action Learning Pathway is a beech tree with three main branches. It represents the deep-rooted autopoietic interrelationship of head, hand and heart achieved through the realisation of the four *Patterns that Connect*.

Beech is abundant in the woodlands of Durham, where my diploma journey began and Hebden Bridge, where it moved towards an end, and a species with which I have had a close connection ever since I began working actively with tree spirits when I first developed a practical interest in shamanism. The typical branching pattern of a mature beech, gradually separating into broad boughs, fits well with the structure of my diploma. Three main branches formed by groups of related designs on research (Designs 2-5), lifestyle/gardening (Designs 6 and 7), and shamanism

(Designs 8 and 9) split off from the central trunk of this Action Learning Pathway, rooted in the soil of my Zone 000 (Design 10).

I imagined this beech tree planted alongside my forest garden, sheltering it the way a neighbouring stand of ash does Martin Crawford's famous forest garden at the Agroforestry Research Trust in Dartington and providing me a site to sit, rest, contemplate and draw spiritual sustenance, guidance and inspiration during the course of my work on the forest garden. Each branch of the beech tree represents a thematic sub-pathway within this ALP, and course of action in its implementation.



Anchor Point 8: Action

Branch 1: Research

Recognising my involvement in both academia and practical action as a potentially fertile edge, I created a focus in my university work on participatory action research on community action for sustainability. This meant research could benefit from being embedded in the actual organisation and practice of community action, and at the same time be organised in ways that directly contribute to practical ends. This initially involved local collaborations, particularly with Transition Durham and the Durham Local Food Network (Design 2) along with several funded projects in the community energy sector in County Durham and Newcastle, and involvement in the social enterprise Northern Community Power, and led to adoption of community engagement as a focal area in the newly-established Durham Energy Institute at Durham University. Further work took place at national scale, in partnership with Transition Network (Design 3), and later began to involve collaborators from other European countries (Design 4). The close working relationship with Transition Network and increasingly close collaboration with Gil Penha-Lopes at Lisbon University arising from this, led to me taking an active role in the creation of ECOLISE, a new Europe-wide meta-network for the Transition, permaculture and ecovillage movements. I eventually took a salaried role in ECOLISE as Research Coordinator, focusing on the creation of a knowledge commons for community-led action on sustainability and climate change (Design 5).

Branch 2: Lifestyle and Gardening.

Although I remain nothing more than a hobby gardener, influenced by the permaculture community and my previous close contact with horticulturalists in Guyana and Spain I quickly internalised the importance of small-scale cultivation of edible plants as a vital part of a healthy lifestyle and expression of identity. A relationship with plants, soil and the local ecology, enacted through gardening, I have come to consider as an essential part of a fully adult human life, with actual yields of food a useful and pleasant bonus. Recognising a lack of horticultural skills as an important limitation, I took Patrick Whitefield's sustainable horticulture course in early 2011 and immediately began to implement it through habitually creating a homegarden in whatever growing space I had available, reasonably regular involvement in community growing projects, and occasional garden design work for others. I also took short courses in forest gardening at Old Sleningford Farm in North Yorkshire in 2011 and at the Agroforestry Research Trust in Devon in 2013.

My access to personal growing space and community projects depended on where I was living, which changed several times over the course of the diploma, including two moves to other parts of the country. Recognising my own need to be exposed to a greater range and density of grassroots action that Durham and North East England could provide, and interested in exploring to what extent I could settle and feel comfortable in a conventional settlement rich in like-minded people and community action, I moved first to Bristol in 2013, then in 2015 to Hebden Bridge, where I lived happily until called to make a further move to Portugal (Design 10). Bristol was stimulating, and fine while it lasted, and Hebden Bridge was somewhere I have felt more settled and happy than at any time in my adult life, with a comfortable home on the narrowboat Innisfree (Design 6), moored at Redacre Community Growing Project, where I also held an allotment (Design 7).

The history of my activity as a literal gardener over the course of this diploma is as follows:

- Occasional volunteer in the market garden at Land of Roots, Durham (2008-2013)
- Design and creation of own homegarden, in containers, in the backyard at 23 Prospect Terrace, New Brancepet, Durham (2012)
- Group design for the Place2Be project's community garden in Stanhope (2012).
- Allotment in Bristol, connected with homegarden at Madeira House, Bristol (2013 and 2014)
- Occasional participation in community days at Royate Hill allotments, Bristol, run by Mike Feingold (2013-2015).

- Allotment and other growing spaces at Redacre Growing Project, Hebden Bridge (2015-2020)

Branch 3: Shamanism

I had always had a natural mystical affinity with nature, consolidated through my study of biology at university, which felt like a deeper revelation of the mysteries of nature, and informal study of holistic science and new cosmologies. In shamanism I found a framework and methodology to understand and deepen this, consistent with my natural lifeworld and intuitive understanding of the nature of reality and deeply rewarding as a core spiritual path. I had taken up shamanic practice, in an informal and self-directed fashion, as a means of personal healing and self-knowledge following my diagnosis with chronic fatigue in 1999. I did not find the context to deepen this through formal training until a friend in the Place2Be community, a shamanic practitioner, mentioned that the prestigious shamanic teacher and writer Sandra Ingerman was making a rare visit to Europe to teach her Medicine for the Earth course. I immediately signed up for the workshop, which took place at Lendrick Lodge in Scotland in June 2013, and returned for ongoing training with the resident shamanic teacher Stephen Mulhearn and others on a regular basis for the following three years (a total of 11 separate training courses between then and the end of 2016). I set up a public shamanic practice, leading journeying groups and one-to-one healings in my current home town of Hebden Bridge. In 2016 I received training from Gongmaster Kath Reade and joined her Deepsong Sacred Sound Collective. In 2018 I began a three-year shamanic teacher training programme at Cader Idris Centre for Shamanic Studies in North Wales, through which I developed an original training programme in Shamanic Political Ecology (Design 8). Exploration of the links with permaculture, and environmental action more generally, initially took place in the background but developed into a series of writing projects, notably a book on shamanism and permaculture (Design 9). Shamanism is also the core of my inner work and the centre of the Zone 000 Design that concludes this diploma (Design 10).

Anchor Point 9: Principles (Evaluation 1)

Principles fed into the design in important ways throughout the process, particularly *Integrate rather than Segregate* (Anchor Points 1 and 7), *Everything Gardens* (Anchor Point 2), *Produce no Waste, Obtain a Yield* (Anchor Point 3), *Use Edges and Value the Marginal* (Anchor Points 5 and 6), *Capture and Store Energy, Solution in the Problem* (Anchor Point 6). This anchor point summarises their contributions over the design process as a whole, and also provides a starting point for evaluation of the design.

Everything Gardens

The central concept behind my approach to the diploma, and application of permaculture in all areas of my life, is that ecological gardening (i.e., locating plants and the biotic and abiotic processes that support them in patterns of interrelationship that support their flourishing) is a metaphor that can enhance any field of activity. Gardening myself - through attention to the state of my inner world, personal living circumstances, and quality of professional life - creates a state of ecological harmony that is increasingly reflected in my outer work as an action researcher and shamanic practitioner. This in turn provides me with a more life-enhancing personal environment, and so on in self-generative loops of positive feedback.

Integrate rather than Segregate

My diploma journey began with the three main areas of my life - academia, activism and spiritual practice - in mutual conflict. Each detracted from the other, and their relative importance (in terms of allocation of time and energy) was exactly the reverse of my felt priorities. By weaving them into beneficial inter-relationship in a life design in which they are interdependent facets of a healthy relationship with myself and the world, they became mutually reinforcing.

Capture and Store Energy

I have developed effective inner and outer frameworks to harness my internal energies and the external energy flows with which I come into contact, and direct all of these to beneficial use in service of the permaculture ethics.

Produce no Waste

Aspects of my life and experience whose value I had come to question (such as my academic training) have become reintegrated into a professional role that is in strong alignment with my values and enables me to make the fullest use of my gifts in service to the world. Having identified numerous energy drains, I expend little energy (physical, mental, spiritual or emotional) on activities that are unproductive or harmful to myself or others.

Obtain a Yield

I feel a good bit between my life, in its different aspects, and the needs of the world. My work, formal and informal, makes multiple positive social and ecological contributions, and my professional and other life circumstances are conducive to my own flourishing. Every aspect of my life benefits every other; in giving fully of myself to the world I in turn receive abundantly from the world.

Use Edges and Value the Marginal

Having learnt to explore and navigate my own edges, and create edges between normally separate fields of activity, I have learnt to value my own situation as an edge person and generate a productive situation at the fertile margins of the different fields with which I engage.

Anchor point 10: Appreciation (Evaluation 2)

My diploma journey has been one from one of dissatisfaction with life, frustration at the disparity between my lifestyle and priorities, underachievement, underfulfillment and disconnection from my true calling, to one of comfort and satisfaction with my current state of mind, professional role, accomplishments so far and situation in life. In this respect I consider the design a great success. It has directly contributed to People Care, in terms of providing an effective context for life redesign in ways that contribute greatly to my personal welfare. In relation to Earth Care, although already committed to sustainable living, I have strengthened my skills base in key areas - particularly food production - and completed two designs with focus on personal lifestyle. My new phase of life in Portugal promises to deepen this still further. In relation to Fair Shares, the four research designs in some ways reflect a 'Robin Hood' approaches - directing funds and other resources captured for academic research to support of permaculture, Transition and other grassroots sustainability movements through my professional role as Research Coordinator at ECOLISE (the European Network for Community-Led Initiatives on Sustainability and Climate Change, which I contributed to founding and encouraged the Permaculture Association to join as a founding member). All this has strengthened effectiveness as an activist for environmental, social change and social justice, hence indirectly contributing to all three ethics.

One notable feature of this design is the time it has taken: over ten years since I formally signed up for my diploma in 2012, about twelve years after I first heard of permaculture from an English friend who had spent time in Australia. This could call into question how helpful it has actually been to approach the life redesign described here as an exercise in applied permaculture design. This is the time it has taken for my life to move through this cycle, and dramatic changes and much learning have come about. However, a tighter and more focussed design, setting out a clear and time-limited learning programme at the outset and sticking with it, would have allowed me to complete the diploma earlier, take more advantage of the opportunities (e.g. as a permaculture teacher or diploma tutor) that a completed diploma offers, and in doing so feed back more strongly into the permaculture community at a more grassroots level.

Anchor point 11: Reflection

My key learnings from this design were as follows:

- Permaculture design can be applied to all areas of life - at the broad scale described in this overview design, and in various other designs in this portfolio, more focussed in scope. Every such instance is an exercise in action learning that can push the edges of permaculture. This is particularly the case in new and underdeveloped areas covered in this diploma: research (Designs 2-5) and shamanism (Designs 8-10).
- In learning to design living systems (i.e. ensuring that projects embody and reflect the self-generative, or autopoietic, qualities of life, and themselves promote autopoiesis - e.g. a research exercise being life-enhancing), a grounding in physical ecological systems is crucial. In the context of this diploma, Designs 6 and 7, which directly address my lived physical ecology, are probably the least original of the designs (Design 7 in particular addresses familiar and well-explored areas in permaculture), but are important grounding for all the other designs and for the diploma as a whole.
- Especially in more abstract designs, it is important to retain a strong grounding in the principles and associated design tools. Many design tools most commonly applied in land-based design need modification for concept designs (for example, the unconventional use of sectors in this design), in which case strong metaphorical grounding in their original context ensures retention of their value as tools for practical applications of permaculture principles in real-world contexts.
- The Design Web, although more flexible than most other design processes, can still understate the complexity of a design. In this case, it has a fractal nature only occasionally touched upon in this write-up. Each of the anchor points listed actually contained many of the others, and the actual write-up is a compromise between capturing this complexity and being understandable. This in part reflects a lack of discipline on my part in applying the design process: if I had done so rigorously, the outcome would have been a more focussed design and, most likely, simpler and easier implementation. Some other designs in the portfolio, for example Designs 2, 3 and 4, deepen this lesson, showing how application of a linear design process can be a useful strategy for accommodating the complexity of a social design in the context of a time-limited project.