
A 100 YEARS OF CARE

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Does Design Care... ? is one of the initiatives of the Design Research for Change programme initially delivered under Paul Rodgers' AHRC Design Priority Area Leadership Fellow (AH/P013619/1 and AH/P013619/2). This programme, which includes the ongoing *Does Design Care... ?* series of events, aims to "achieve real and long-lasting transformation and impact, to enact alternative, positive, and help achieve real developments within the culture of design research that will equip it for the challenges of the future".

PREFACE
DOES DESIGN CARE ... ?

Care... ? [3] was held at Ulster University, Belfast, Northern Ireland in 2023. Each workshop welcomed over 30 researchers and practitioners from a wide range of disciplines (and from a wide global community including the USA, New Zealand, Australia, India, Pakistan, Hong Kong, Israel, Iran, Sweden, UK, Jordan and Japan) to explore, discuss, and debate what it means to care. *Does Design Care... ? [3]* was funded by the AHRC Impact Acceleration Account held by Ulster University [AH/X003361/1], as part of Work Package 3, Humanising Healthcare.

Does Design Care... ? is an international workshop series of design thinking, making, and acting that runs irregularly every couple of years. *Does Design Care... ?* workshops provide a positive space for all to explore different ways to conceptualise, provoke, contest and disrupt care, and serve as a venue for synthesising future visions of care. We do not limit interpretations, boundaries, and sectors when we use the word 'care'. Each *Does Design Care... ?* workshop is highly interactive, with participants producing a range of outputs, including journal and book publications, working papers, and other creative outputs.

The first *Does Design Care... ? [1]* workshop was held in 2017 at Imagination, Lancaster University, UK. *Does Design Care... ? [2]* was held at Chiba University, Japan, in 2019. And *Does Design*

Publications and Outputs of the workshop series to date:

Does Design Care... ? [1] 2017

- The Lancaster Care Charter, *Design Issues* (Vol. 35, No. 1) doi: 10.1162/desi_a_00522

Does Design Care... ? [2] 2019

- An Illustrated A to Z for the Design of Care Book
- The Chiba Care Protocol
- *Does Design Care... ?* Head-to-Head debates

Does Design Care... ? [3] 2023

- The Department of Care (forthcoming by Routledge/Taylor & Francis)
- 100 Years of Care

Craig Bremner, Paul Rodgers,
Giovanni Innella, Justin Magee

INTRODUCTION

A 100 YEARS OF CARE JOURNEY

- In this exercise we asked the workshop participants to envision a “100 Years of Care Journey” for which we suggested five simple questions could be useful prompts;
- Where do the major points (obstacles, problems, opportunities) lie?
 - Are there periods of more and/or less care?
 - What do we need at what points?
 - Different priorities for different care journeys?
 - Would a tool like this help?

How might we think about our own prompts? Taking the first—“Where do the major points (obstacles, problems, opportunities) lie?”—then with regard to care and design its possible that design is lunging at the opportunities while doing its best to avoid confronting the obstacles and problems. From our workshops it is clear that the jump into care by design is mostly opportunistic, which is a problem in itself. And the major problem design will have to contend with in its relationship with care is the slippery concept of empathy—the word most often used by design to describe how it interacts with care.

The second prompt—“Are there periods of more and/ or less care?”—is interesting for the story of design since until very recently if there had been any relationship between design and care it was not evident. Design had tied its varying fortunes to a lot of descriptors, but paradoxically for the longest time to sustaining the unsustainable (Rodgers & Bremner) (that is if we omit profit, which has always lubricated design), but the idea and practice of care was owned by health and social care. As design

matured into the design of services and rapidly into the design nothing (Rodgers & Bremner) those needing the service of care suddenly appeared to also be in need of design that is to be delivered through empathy. So from the point of view of design we are going through a period of more care and in typical design positivism the more care that gets designed the better.

The third prompt asks—“What do we need at what points?”—is perhaps the most difficult to forecast because there is so much to care about; ourselves, others and everything on the one planet we share. Plus we need to care about design itself but differently from the many so called ‘peak bodies’ that have managed design as no more than good for business.

The fourth prompt asks what might be—Different priorities for different care journeys?—and like the prompt above this too is difficult for design because it has only very recently made moves to team up with the health and social care sector and this gives the appearance of design as more selfish than selfless.

With the final prompt we asked “Would a tool like this help?” By tool we mean this exercise a “100 Years of Care Journey” and which we will answer at the end of this introduction.

The 100-year time frame invites future projections (something design claims to do well) and one approach to the future would be to focus on future limits and find ways to push past them; what is generally identified as a technocentric strategy. The other approach would be to learn to live within these future limits; what is generally identified as a sociocentric perspective. And what measures might we use to account for the next 100 years

of care? Donella Meadows offers sage advice when she writes “Indicators arise from values (we measure what we care about), and they create values (we care about what we measure)” (Meadows, 1998, p.2).

For the future of the design of care do we push past the current limits or learn to live within them? Environmental care certainly has limits and we know about these only too well. The limits shape the design response, and we can only respond, causing us to perhaps reprise the gesture of stewardship. And we emphasise gesture because, as Vilém Flusser (2015) explains, we are projects who express our being-in-the-world through gestures. The gesture of care.

We could also look to milestones about care. One hundred years ago, in 1923, a Nobel Prize was awarded for the discovery of insulin. What will win a Nobel Prize in 2123? If we take the technocentric line then most likely something from the transhumanist impulse will take the prize. After all, as Jeanette Winterson (2019) wrote “nothing is more human than the desire to transcend humanity.” As Yuk Hui puts it “we will be able to enhance our immune system against all viruses or simply flee to Mars when the worst cases hit.” (Hui 2020). But as he wrote a few years later “Ultimately, both techno-optimism (in the form of transhumanism) and cultural pessimism meet in their projection of an apocalyptic end” (Hui, 2023).

If we look at the sociocentric approach to the future—working within the limits—then in 1923, in the unstable years between the two world wars, no Nobel Peace Prize was awarded. In the same year the Nobel Prize in Literature was awarded to the

poet William Butler Yeats, who wrote in his poem *The Second Coming* (1919) “Things fall apart; the centre cannot hold;” which sounds just as baleful as it did then. Its apparent that 100 years ago the sociocentric limits were very precarious just as they seem to be today. And if we project forward 100 years inside a by then mature transhumanist impulse under the watch of an out-of-control artificial intelligence then the future for humanity looks equally precarious. However, when you trawl the web for future projections about care you only get a technocentric future of health and social care as projected by healthcare professionals with several common themes. It seems we will have;

- personal genomics
- real-time monitoring
- AI-enabled robots (in fact AI-enabled everything)
- advancements in regenerative medicine that will extend the average lifespan through cellular regeneration and tissue engineering.
- more remote care
- more reliance on technology
- we will each have an avatar therapist

When it comes to environmental care according to a recent editorial from the European Environment Agency published on 21 June 2023 “Caring for the environment is caring for ourselves.” But we seem careless with the environment as we model possible futures as Geoff Mann explains;

“When the models run hundreds, even thousands of times, each time using slightly different parameters, it is as if there were dimensions parallel to our own, all with of more or less plausible futures, from which our own world is assembled. Modelling supposedly gives us access to the full range of these futures, so

we consider them without having to actually experience them. But in our collective reality, we don't get thousands of runs at life and future. We just get one." (Mann, 2023).

If, as it seems, we are careless with the world are we then careless with other? And what about ourselves? The maps within this publication illustrate that we are not completely careless but care is complex and when you boil it down there we can only affect gestures of care for self, others and the world.

At the beginning of this introduction we listed the prompts we gave the workshop participants leaving the final prompt to

now... We asked "Would a tool like this help?" By tool we mean this exercise a "100 Years of Care Journey." In a 2016 journal article titled "The Care of the Possible" Verena Andermatt Conley anticipated an response to our prompt. She was not writing about design per se but its possible to apply her thoughts to what it means to be a designer at this point in time... taking her idea of care for the possible we could say as designers we are "situated so as to bring forward, in theory and in practice, a care of the possible in view of what can be prevented and, in the same gesture, of what can be invented. With care comes the bonus of collaboration, passion, and perhaps, even in these at times seemingly dark days, a modicum of enjoyment." (Conley 2016).

REFERENCES

- Donella Meadows, *Indicators and Information Systems for Sustainable Development: A Report to the Balaton Group*, The Sustainability Institute, Hartford, Vermont., 1998
- <https://www.eea.europa.eu/en/newsroom/editorial/editorial-caring-for-the-environment>
- Geoff Mann, "Treading Thin Air: Catastrophic Thinking", LRB, 7 September 2023 <https://www.lrb.co.uk/the-paper/v45/n17/geoff-mann/treading-thin-air>
- Vilém Flusser, (2015) *Flusseriana: an intellectual toolbox*. Edited by Stegfried Zielinski, Peter Weibel, and Daniel Irgang., Minneapolis, Univocal Publishing, p.192-194
- Reyhhan Harmanci, "Here's What It Takes to Look and Feel 18 Again," *Bloomberg*, 25 January 2023., <https://www.bloomberg.com/news/newsletters/2023-01-25/here-s-what-it-takes-to-look-and-feel-18-again>
- Yuk Hui, "One Hundred Years of Crisis", *e-flux journal*, # 108, April 2020
- Yuk Hui, "ChatGPT: or the Eschatology of Machines", *e-flux Journal*, issue # 137 06/2023
- Jeanette Winterson and Mark O'Connell on the Future of Humanity in a Tech-Dominated World, Literary Hub, October 1, 2019, <https://lithub.com/jeanette-winterson-and-mark-oconnell-on-the-future-of-humanity-in-a-tech-dominated-world/>
- Verena Andermatt Conley, "The Care of the Possible", *Cultural Politics*, Volume 12, Issue 3, November 2016, pp. 339-354

Dr. Kyle Boyd, Belfast School of Art
Ulster University

LIFELONG CONDITIONS, BUT LIFELONG CARE?

As someone who was born 10 weeks premature, was in intensive care for the first few months of his life and then diagnosed with Cerebral Palsy aged 18 months I am no stranger to healthcare and the wonderful National Health Service in Great Britain.

To them I owe so much.

To the Consultants, Doctors, Nurses, Physiotherapists, Occupational Therapists and many others who cared for me during the major surgeries I received when I was 3, 5 and 8 years old I say thankyou. Without your dedication and innovative medical care I wouldn't be where I am today. Put simply I would not be able to walk.

From birth until I was 16 it was an endless routine of doctors appointments and therapies. All working in tandem to make my quality of life better, to prepare me for the future. Whatever I needed I got, wheelchairs, bicycles, medical procedures and rehabilitation. Care when I needed it, with a clear course of future care planned. It was wonderful.

From the visual opposite you can see an intense amount of care for the first decade of life. Annually, bi-annually and weekly appointments to meet a range of specialists. As a child of course this should happen.

Then I turned 18.

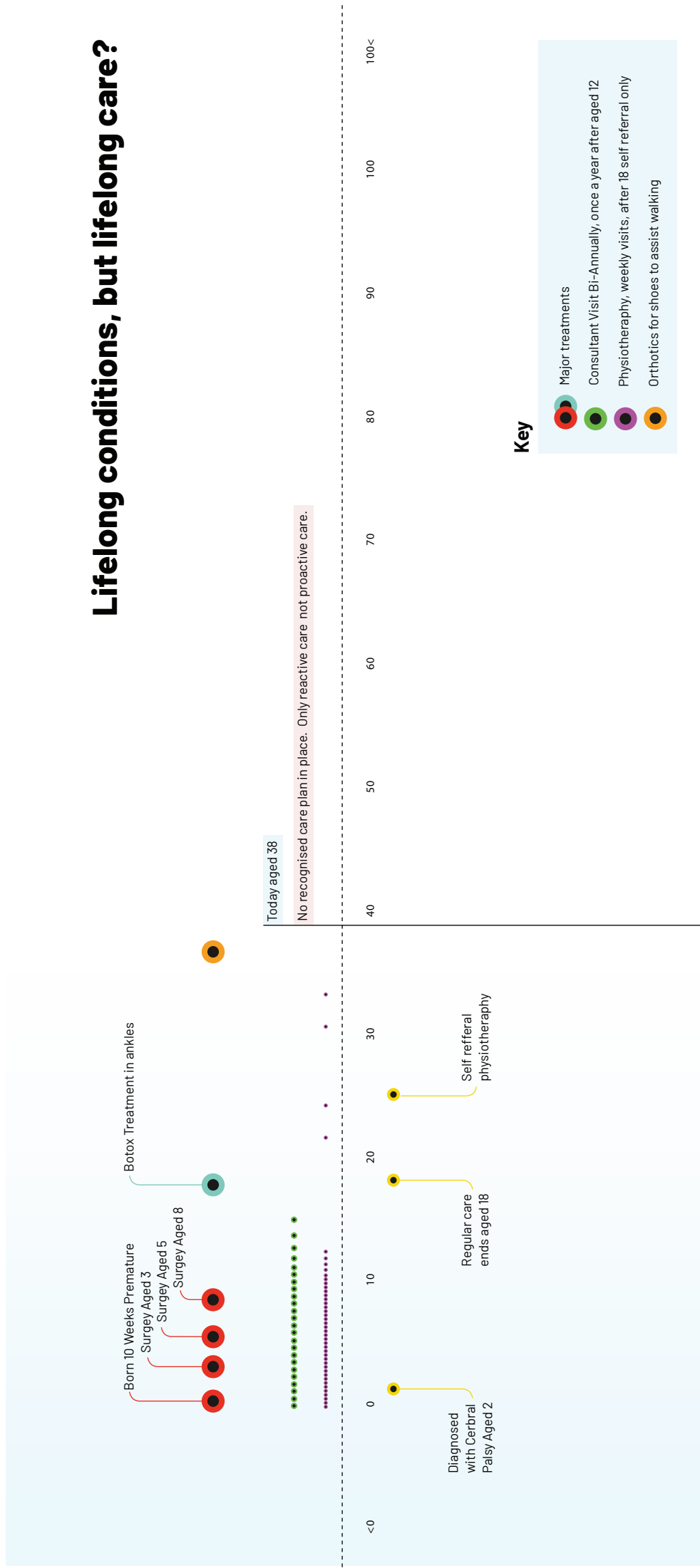
It wasn't immediate but from the age of 15 there was a gradual fading away. I went from being looked after to looking after myself. In my early twenties, my physical condition began to falter, and my ability to walk regressed. Fearing the consequences, I went to see the doctor, this wasn't a specialist but a GP. The verdict was disheartening, I would have to self-refer for Physiotherapy, and even then, the sessions were meted out in a limited supply. Gone were the days of regular, permanent sessions I had known as a child.

My physiotherapist cautioned that the absence of regular sessions could have dire consequences for my ability to walk. The very therapy that had once been my lifeline was no longer a viable permanent option for an adult.

This pattern of limited attention and intervention remained a constant theme in my adult life, extending to any medical care I required. Yet, I have come to understand that even seemingly small interventions can yield profound effects, both mentally and physically. They serve as the guardians of our well-being, preventing minor issues from snowballing into insurmountable problems. In doing so, they save not only precious time but invaluable resources for the National Health Service.

I've witnessed the extraordinary dedication of healthcare professionals who nurtured me through the trials of childhood. While the transition to adulthood has brought its share of challenges, it has also illuminated the importance of continued support for those living with lifelong conditions. The story is far from over; it evolves with each passing day. I carry with me a fervent hope that society will recognize the lasting value of sustaining such care, ensuring that every individual's unique narrative can continue to unfold for a flourishing future.

Lifelong conditions, but lifelong care?



Louise O'Boyle, Ulster University

100 YEARS OF LIVING THROUGH DYING

The one certainty of living is that it is limited. At a point living ceases and a new state of 'being' begins. We can witness the evolutions of such states in the life cycles of all that surrounds us in the physical world; past and present. Coming into being/birth, growth, fruition, decay, death, decomposition, renewal are all states that can occur sequentially but not always so. In tandem those cycles such states exist within, may evolve to combat, avoid and/or survive external agents that impact upon them. Such changes can be temporary, permanent or act as a catalyst for the formation of entirely new cycles.

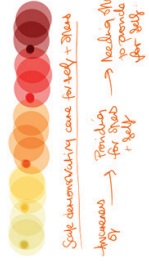
Across human civilisations, belief systems have sought to navigate and predict what lies beyond the end of life for a

person's spirit/consciousness. Ancient Celtic nations believed in the power and symbolism of trees to articulate life, death and rebirth in nature and spirituality. Trees were considered direct connections to ancestors past and therefore doorways to the afterlife. Indeed, the Celtic word for Oak is *daur/duir* which is the origin of the word door.

Our awareness of the life to death cycle may be highlighted at different points in our lives as we care for and are cared for by others. As human beings we have all been born and will all die. As the most certain of experiences, planning for our care needs and discussing our understanding and expectations for living and dying well is fundamental.

This map narrates my personal life cycle to date and plots my initial advance care planning needs and wishes.

How to read this:



From top to bottom
the more absorbency
the more care



One leaf
Stem and
and another of
life



Stem and
all the flowers
are placed
around the stem
(center stem)

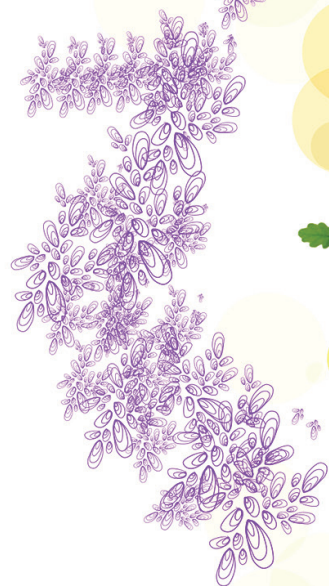


Stem and
all the flowers
are placed
around the stem
(center stem)

Leaf and
all the flowers
are placed
around the stem
(center stem)



Stem and
all the flowers
are placed
around the stem
(center stem)



Dr. Pamela Whitaker, Ulster University

CHOREOGRAPHY OF CARE

The care map displays a community of moshers—an improvised and uninhibited formation of people whose dancing style responds to punk and hardcore music through bodily contact at speed. The intensity of these genres of music brings people together in ways that are both unpredictable and uncertain. There is a release of energy that surges to compose a swarm of collectivity. The capacity to respond within the immediacy of changeable situations, can be linked to adaptivity and resilience. It is a display of both expression and community making represented in the formation of in-the-moment decision making within a context of volatile situations. The resiliency is the capacity for action within adversity. Within a dance at risk of unforeseeable circumstances, moshing is characteristic of animals moving in formation and cohesion. This flow and unification of movement, is a holding environment for community relations that operate on the basis of improvised uncertainty. The care is expressed in terms of flow, immersion and protecting through volumes of mobile support.

The ritual of moshing is fast paced and not for the faint hearted. It seeks to restore participants from routines of predictability.

As a form of social cooperation, supporting the playing out of risk, it challenges conventional behaviours and attitudes towards physical boundaries. Contact is encouraged, and there is an ethos of trust and consent to be touched through exertion.

The community shaping of moshing is represented as a human vortex that spirals from a centre point. It conjures a sense of care in motion throughout a lifetime, with the centre of the vortex being placed at the time period of middle age. This illustrates how preceding developmental periods accompany us to the middle of a vortex, which then extends outward into older age. The choreography of care displayed within moshing reflects the supports that surround us as we move through life. This is a dance that is vigorous, portraying a life in motion hitting up against restrictions, and then bouncing back again. And yet we are with others who circle around the same challenges and desires to liberate through a shared endeavour of solidarity. Releasing our potential through a dedicated sense of purpose and a demonstration of trust out of bounds.



Ommah Alsenani, Hajar Taissier Marji
University of Strathclyde

FLOURISH PATH

This map, spanning 100 years, illustrates the period from 25 to 45 years in a person's life, which we have termed the "Flourish Path". Philosopher Ken Wilbur examines the concept of spiritual awakening as part of the spectrum of human consciousness evolution. This awakening occurs multiple times and at different stages, varying from one individual to another. This path depicts the typical trajectory, with awakenings occurring in the late twenties and mid-forties.

During the late twenties, individuals often experience a profound spiritual awakening, catalysing a significant reshuffling of priorities. An intense focus on career development predominantly characterises this phase. It is a time for accumulating experience, capturing diverse opportunities, striving for promotions, and seeking career advancement. This pursuit often leads to a peak in professional accomplishment and financial stability. However, this intense focus on a career can sometimes overshadow other vital aspects of life, such as personal connections, family ties, relationships and friendships. Neglecting these aspects can, in some cases, lead to a state of burnout, where individuals realise the disproportionate amount of time and energy devoted solely to professional endeavours.

This realisation often marks the commencement of what we describe as the 'awakening stage', during which individuals become acutely aware of their long-standing neglect of personal needs outside of work. This stage is not just a period of reflection

but also one of tangible consequences, such as physical and emotional signs of stress, including self-doubt in some cases. It is a poignant reminder of the cost of a life lived in imbalance.

Subsequently, other spiritual awakenings unfold, particularly in the mid-forties. These later awakenings prompt a reassessment of life's priorities, bringing to the fore the importance of connections, relationships, and emotional well-being. It is a stage where the value of human connections and the nurturing of personal relationships ascend in priority, often eclipsing the earlier sole focus on career and financial success.

This process of awakening and re-evaluation is not linear but somewhat cyclical and iterative. As individuals navigate these various stages, they gradually learn to balance the different facets of their lives. The ultimate aim is to achieve a harmonious blend of professional success, personal fulfilment, and emotional well-being. This balance is crucial for flourishing in all aspects of life without disproportionately sacrificing any one area.

The Flourish Path is a journey of self-discovery and personal growth. It emphasises the dynamic nature of human consciousness and the evolving priorities across different life stages. By mapping out this journey, we gain a deeper understanding of the complexities of human life and the need for a balanced approach to living. The map serves as a tool for individual introspection and a guide for societal reflection on the values and priorities that shape our lives.

Dr. Carolina Ramirez-Figueroa, Royal College
of Art; Michal Pauzner, Shenkar College

ENTANGLEMENTS OF CARE: DISSOLVING BOUNDARIES OF TIME, GEOGRAPHY AND SCALE

The care constellation explores care as a relational and interconnected act that transcend time, scale, and geography on a planetary scale. The map presents the interconnectedness across humans, nonhumans and all forms of life, challenging conventional boundaries and hierarchies that separate humans from other species.

The entities represented in the constellation are a sample of entities that are in close contact with humans or have some connection during their lifetime: human, domestic cat, soil bacteria (*Bacillus subtilis*), fungi (*Pleurotus djamor*) and tree (Oak). The constellations' outer layer, represented as a thick line, symbolises soil viewed through the lens of feminist politics of care in human-soil relationships.

The concentric circles in the constellation represent location, geography. We wanted to visualise care as situated within socio-cultural contexts. In addition to the UK, we purposely identified Mexico and Israel, our respective countries, to emphasize the importance in recognising non english speaking countries as part of the conversation in care. Time is represented in 100-year units through radial lines with the purpose of visualizing how connections span and transform over generations, mutations and eras. Human generational care was represented through displaced circles, each circle representing a new generation born. Community care on the other is represented as an array of circles arranged from a concentric point, all position on the same geography. Finally we use connector lines that spread across the

constellation to emphasize the interconnectedness across the different entities.

To explore how care is present at the individual and collective level, we created life cartographies for each of the individual entities, working with four attributes of care:

Self: the individualised attention and support that an entity provides to themselves, typically driven by a sense of responsibility for one's own well-being.

Contextual: the individual's close environment, recognizing that the way care is given and received is shaped by the specific life circumstances.


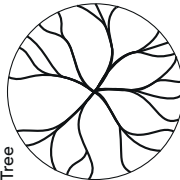




Institutional: the care provided within formal, structured organizations, such as health care facilities or social service agencies, where care is often governed by established rules and procedures.

Planetary: the larger lens of care in which care is recognized to preserve the health of the entire planet, with a focus on sustainability and environmental well-being.


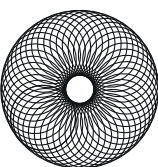

The care constellation is not meant as a scientific artifact, it is made to direct attention and enrich our understanding of the entanglements of care—an invitation to think with and through. Acknowledging the unresolved interplay and links in the maps, helps us maintain a deep and humble connection to the nuanced aspects of care. These speculative maps act as a powerful tool that help us rethink the act of care from a wider perspective, transcending anthropocentric thought, and instead focus on the relationships and responsibilities that define our interactions with the world, other living beings, and the environment.

CARE CONSTELLATION

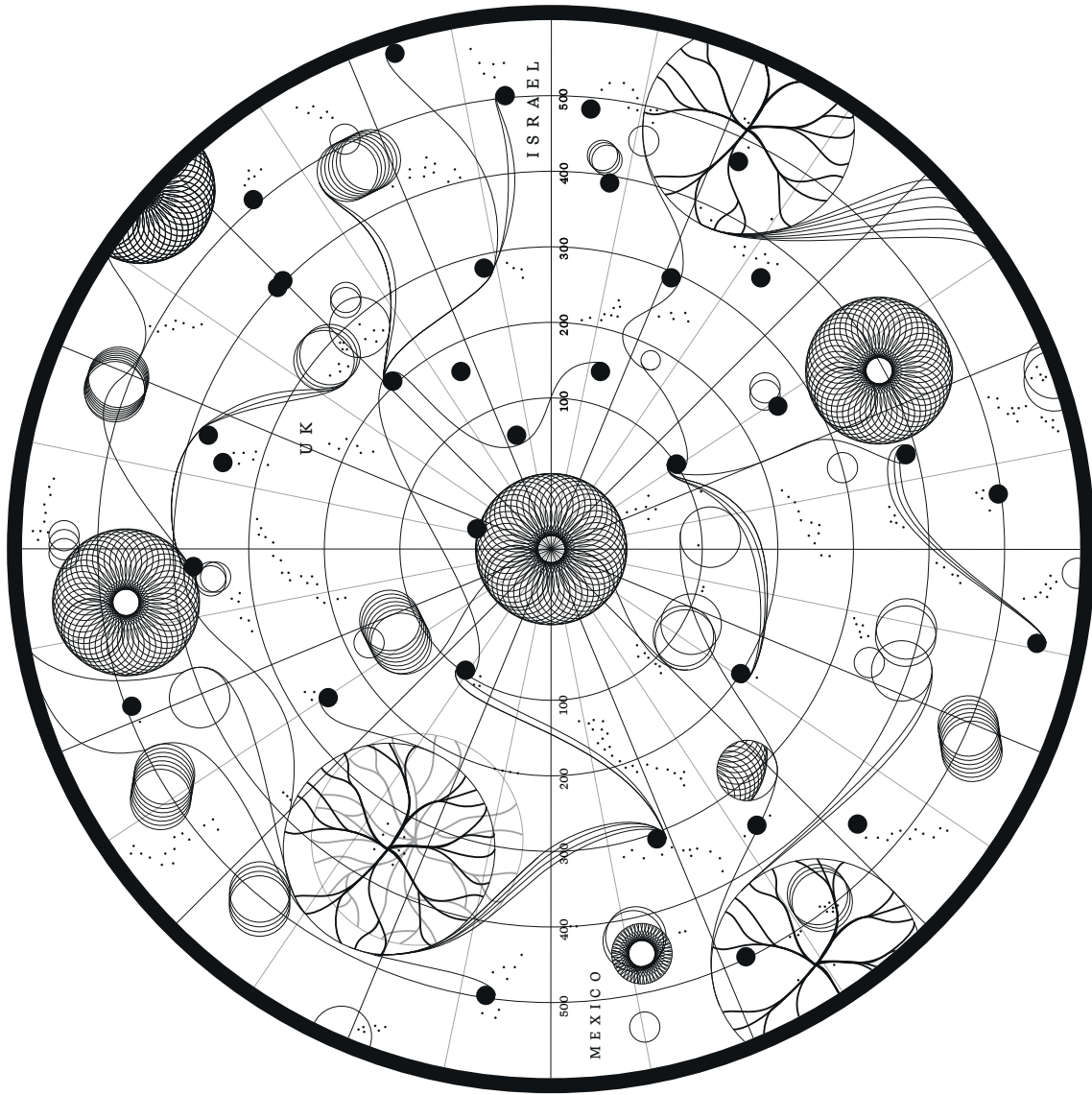
ENTITIES

Soil		Tree		Bacteria	
Human		Fungi		Cat	

RELATIONSHIPS

Generational care	
Community care	
Collective care	

In this exploration, we use speculative maps to explore the entanglements of care. We wanted to visualise a type of constellation that serves as a symbolic representation of the interconnectedness of different ecosystems. In this configuration, organisms are akin to stars, forming intricate patterns of ecological relationships. The constellation serves as a reminder of the vital role each organism plays in maintaining ecological balance.



Sharon Neill and George Kernohan,
School of Nursing and Paramedic Science,
Ulster University, Belfast

OUR CHANGING CARE NEEDS AND ABILITIES OVER 100 YEARS

The earliest evidence of human care dates back 15,000 years- through archaeological records, the first healing of a large fracture was identified- before that time, such major breaks would have led to an early demise and the victim would not live long enough for the tissues to heal. The healing tissue is evidence of someone recognising the need, designing and delivering basic care, likely including food and shelter with protection from predators. Since earliest civilisation, care has been valued for its life enriching and life prolonging outcomes.

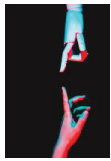
This illustration acknowledges three key stages of life and their associated care needs: childhood, working years and retirement. These span an idealised 100-year lifespan, from pre-conception (<0 on the x axis) through to death (and even beyond ???). Through this time, we are both care receivers and care givers, occasionally simultaneously. A few have the role of care designers. According to Freud (1856-1939), during childhood we transition through phases of complete dependence to counter dependence and then through independence and co-dependence later in our adulthood and old age. Although the term 'dependence' and 'a need for care' can be viewed as very separate concepts, the underpinning notion that care is the provision of what is necessary to maintain a state of wellness and independence must be acknowledged. Hence, it is important to recognise the link between care needs and stages of dependence.

The lines show high needs in early life and again at the end of life. Hence support and care requirements are greatest at either end of the timeline. As the diagram shows, throughout the life course, human abilities and needs evolve in a cyclical fashion in response to biological, psychological, and social factors.

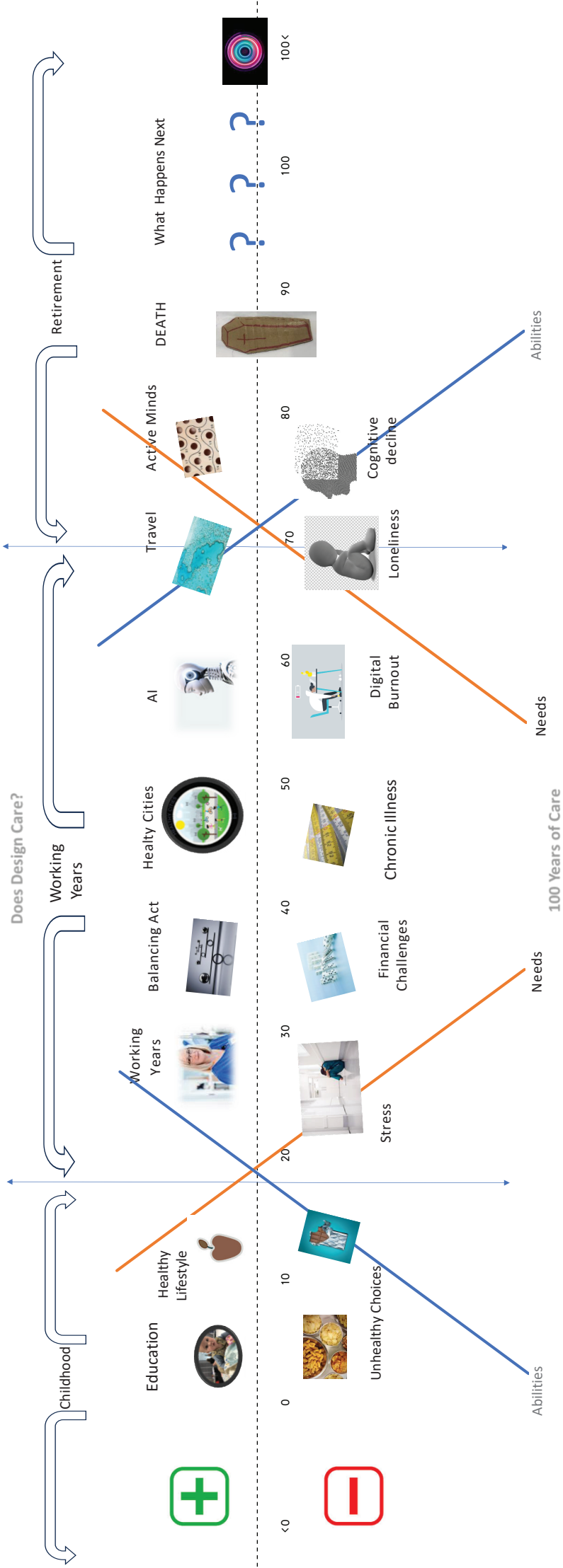
The perceived good influences and positive milestones on this sample life course are highlighted “+” above the timeline, and those that may pose a more negative impact on our health and well-being are positioned below “-”. During our early years there is a significant care given to preparing us for adulthood, where influences like education and other health promoting activities are designed to inspire and guide us towards reaching our optimum potential in the adult years.

Adulthood often centres around career, developing relationships, and the need for economic security. Here we reach the minimum level of need for care. Here is also when we have the maximum potential contribution to support others as care workers, care givers and care designers. The evolving interplay of abilities and needs underscores the dynamic nature of human development. In later years, physical abilities may decline, necessitating healthcare and support, while wisdom and life reflection become more dominant. There are generally fewer opportunities to make a positive contribution, leading to fewer social contacts. Add age-related decline and possible chronic illness, to result in significant levels of unmet need that have design requirements. The design of care is a fundamental discipline throughout the life course, adapting care to changing needs, integrating innovations, and ensuring the provision of quality, person-centred support from infancy to old age.

Does design care? YES! Designing care involves thinking about environments, systems, and services that prioritise empathy, human dignity, and clinical effectiveness. There is an ongoing need for design expertise as part of quality improvement across the life course. Designing high quality care integrates user-centred approaches to enhance the well-being of those receiving care. Tailoring solutions to individual needs, fostering inclusivity, and promoting holistic, patient-centric care are essential aspects of the design process.



Does Design Care?



Dr. Daniel Carey

KEEPING SCORE

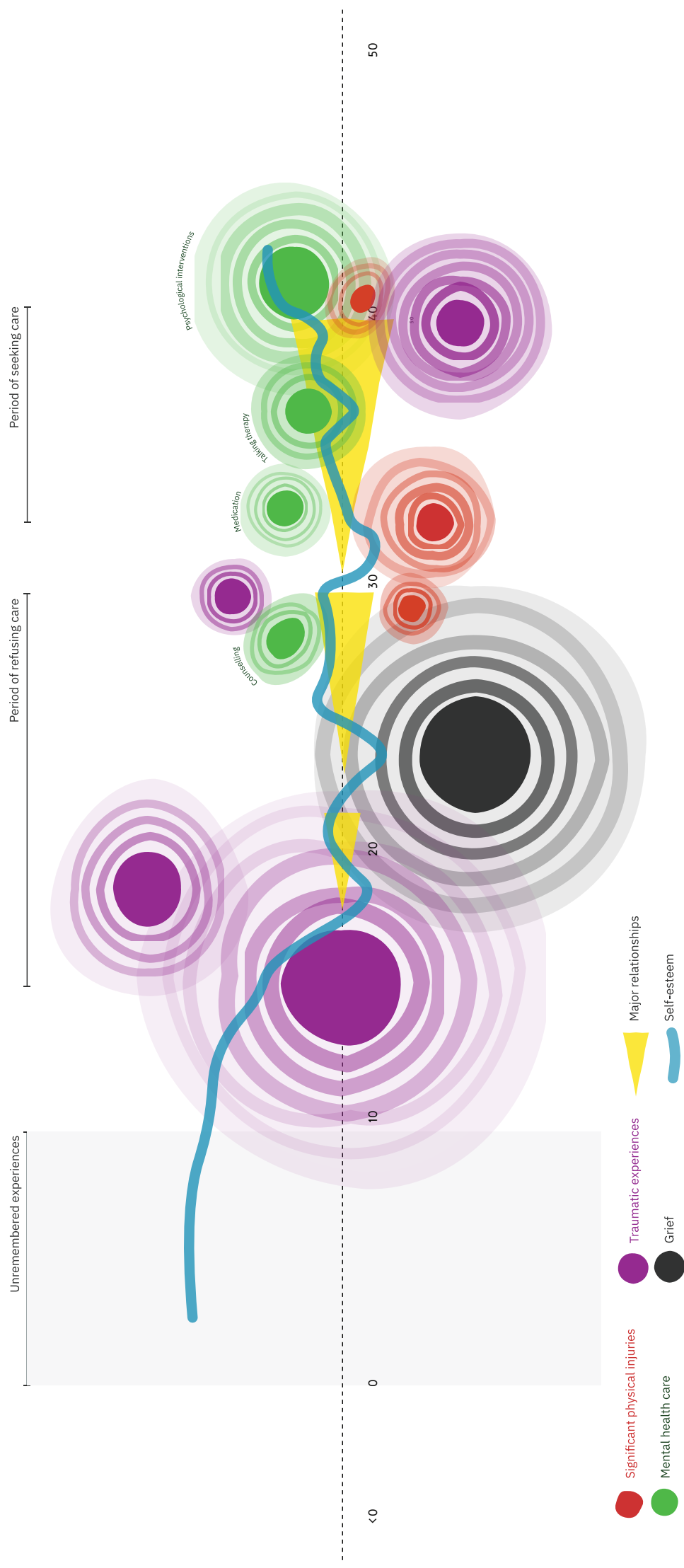
This map was developed by the designer and used as part of psychological therapy to explore Complex Post-Traumatic Stress Disorder. C-PTSD can arise through recurring or long-term traumatic events, such as childhood abuse. People with C-PTSD can struggle to separate themselves from the trauma they experienced, leading to ingrained feelings of worthlessness, shame, and hypervigilance.

After struggling to relate their experiences to the psychologist through an oral narrative, this approach helped the person to tell a deeply personal story on a less stressful and more equitable level. Mapping the territory helped the person feel more able to explore particular experiences and recognise their accumulated weight.

Through this approach, the person began to appreciate how physical and mental traumas impact their relationships and sense of self. These traumas not only informed subsequent actions, but also recontextualised past ones.

In particular, they became aware of two distinct periods in their lives. Between their mid-teens and late 20s, they typically refused to accept any form of care from others. Physical health issues, including two operations, seemed to herald a change in the person, who then became more accepting of care to the point that they sought out pharmaceutical and psychological support. The psychologist was particularly interested in the acknowledgment of 'unremembered experiences' in early childhood. This helped open up space for them to explore the relationship between childhood trauma, disassociation, and CPTSD.

The map is unfinished, awaiting new layers of data as the therapy progresses.



Dr. Fernando Galdon, Royal College of Art

MORE-THAN-HUMAN CARE

The evolution of care within a more-than-human realm is a fascinating journey, intricately woven with diverse providers and elements that cater to the needs of ecological liveability. This timeline explores the dynamic interplay of care through four main providers—human, flora, fauna, and digital—and the essential elements they contribute to the well-being of their recipients.

HUMAN PROVIDERS

Parents (Family): During all stages of human life, parents play a pivotal role in providing care. This includes the fundamental elements of food, nurturing relationships, educational foundations, and health monitoring.

Friends (Social Bonds): As humans grow, their social circles expand, and friends become crucial providers of emotional support, companionship, and elements such as friendship and shared knowledge.

School (Education): Formal education becomes a significant provider, offering elements like structured knowledge, social

skills, and personal development that shape individuals and contribute to their overall well-being.

NHS (Healthcare): In the realm of health, the National Health Service (NHS) emerges as a vital human provider, offering medical care, preventive measures, and health-related knowledge to ensure the well-being of individuals.

FLORA PROVIDERS

Plants (Oxygen and Aesthetics): Plants contribute elements like oxygen production, aesthetics, and environmental balance, enhancing the quality of life for both humans and other living organisms.

Herbs (Medicinal and Culinary): Herbs offer not only flavorful additions to cuisine but also medicinal elements, showcasing the symbiotic relationship between humans and plant life.

Bacteria (Bioremediation): Microorganisms, including bacteria, play a crucial role in bioremediation, purifying the environment and contributing to the overall health of ecosystems.

Fungi (Nutrient Recycling): Fungi contribute to nutrient cycling, breaking down organic matter and recycling nutrients in ecosystems, providing essential elements for various organisms.

FAUNA PROVIDERS

Pets (Companionship): Pets become valued providers of companionship, emotional support, and elements like love and loyalty that significantly impact human well-being.

Animals (Proteins and Ecosystem Balance): Wild animals contribute to the balance of ecosystems, and domesticated

animals provide essential elements like proteins through meat and dairy products.

Parasites (Ecosystem Regulation): While often associated with harm, some parasites play a role in ecosystem regulation, showcasing the intricate web of interactions within the more-than-human world.

Insects (Biodiversity): Insects contribute to biodiversity, playing crucial roles in pollination, nutrient cycling, and ecosystem dynamics.

DIGITAL PROVIDERS

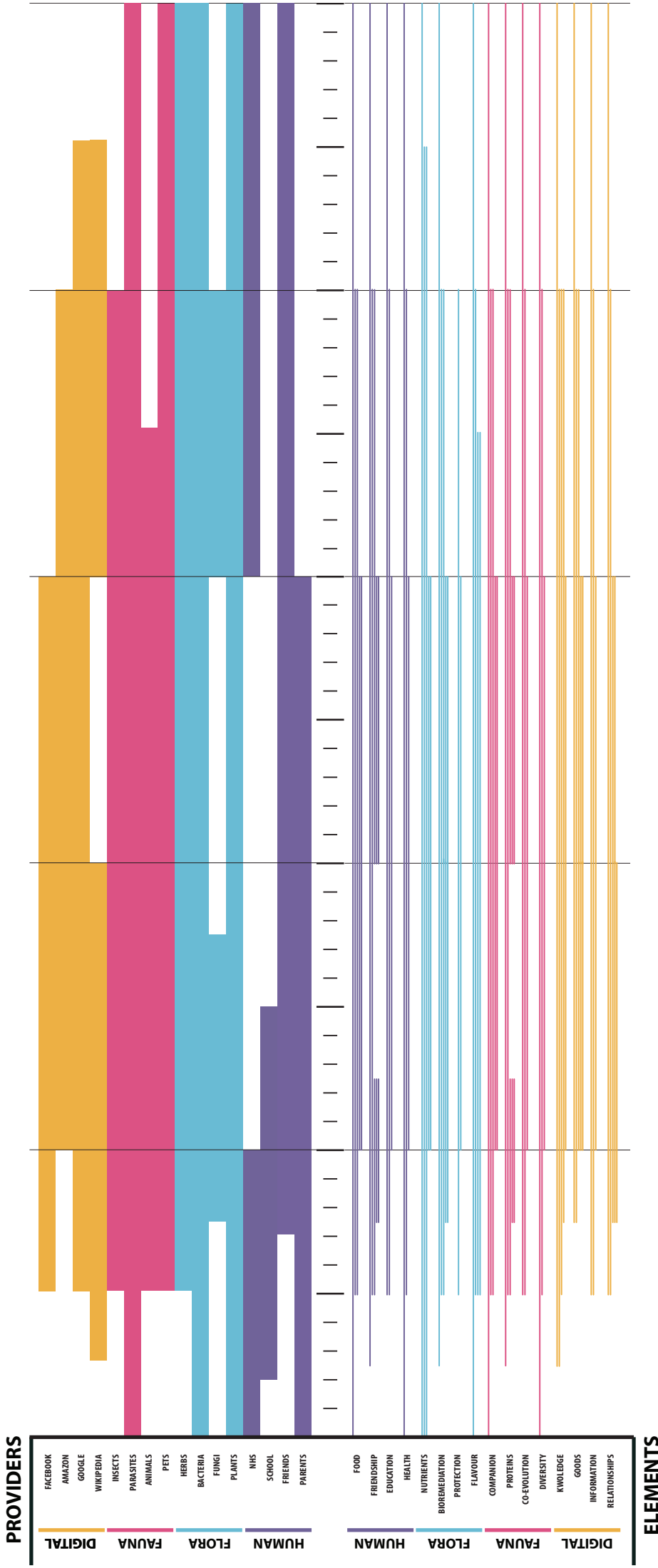
Wikipedia (Knowledge): Wikipedia emerges as a significant digital provider, offering a vast repository of knowledge and information accessible to individuals worldwide.

Amazon (Goods): Amazon becomes a major provider of goods, offering a platform for the exchange of products that cater to diverse human needs.

Google (Information): Google stands out as a primary provider of information, shaping human understanding and facilitating access to a wealth of data.

Facebook (Relationships): Social media platforms like Facebook become providers of digital relationships, connecting individuals across the globe and contributing to social bonds.

As this timeline unfolds, it becomes evident that more-than-human care is a complex and interconnected web involving diverse providers and elements. The collaboration and coexistence of human, flora, fauna, and digital entities underscore the intricate balance and dependencies necessary for the well-being of the entire ecosystem.



Alison Gault, Ulster University
Katherine Mansfield, AHRC

100 YEARS OF CARE— WOMEN'S CARE

Our map represents a care lifecycle focused on women's health. It maps the beginning of life from fertilisation and the impact of pregnancy on women to early year development, puberty, the menopause (which we argue should be reclaimed as 'femopause') and finally later life.

Given that women traditionally adopt the role of caregivers, we've mapped the impact this has against the limited support available for women to negotiate their changing role. This becomes particularly evident from 50-60 when women are not only facing the menopause and its symptoms of anxiety and vasomotor to name a few impacts of comorbidities at a time when they are often jointly responsible for providing childcare and parental care. This is increasingly becoming an issue many women must negotiate as they choose to have children later in life so they can concentrate on education and their careers during their 20s and 30s.

While care is traditionally provided by family during the first 65 to 70 years of a person's life, afterwards the burden on the healthcare system often increases as people become unwell or need more medically supervised care interventions. This comes at an increased cost to the NHS. It can also come at an increased cost for families and include decisions that may remove the liberty of the family member in the process towards a 'Deprivation of Liberty' (DOL). It can also involve negotiating a range of care provision, including discussing external agencies which may include social workers, organising a care package, palliative care, and carers.

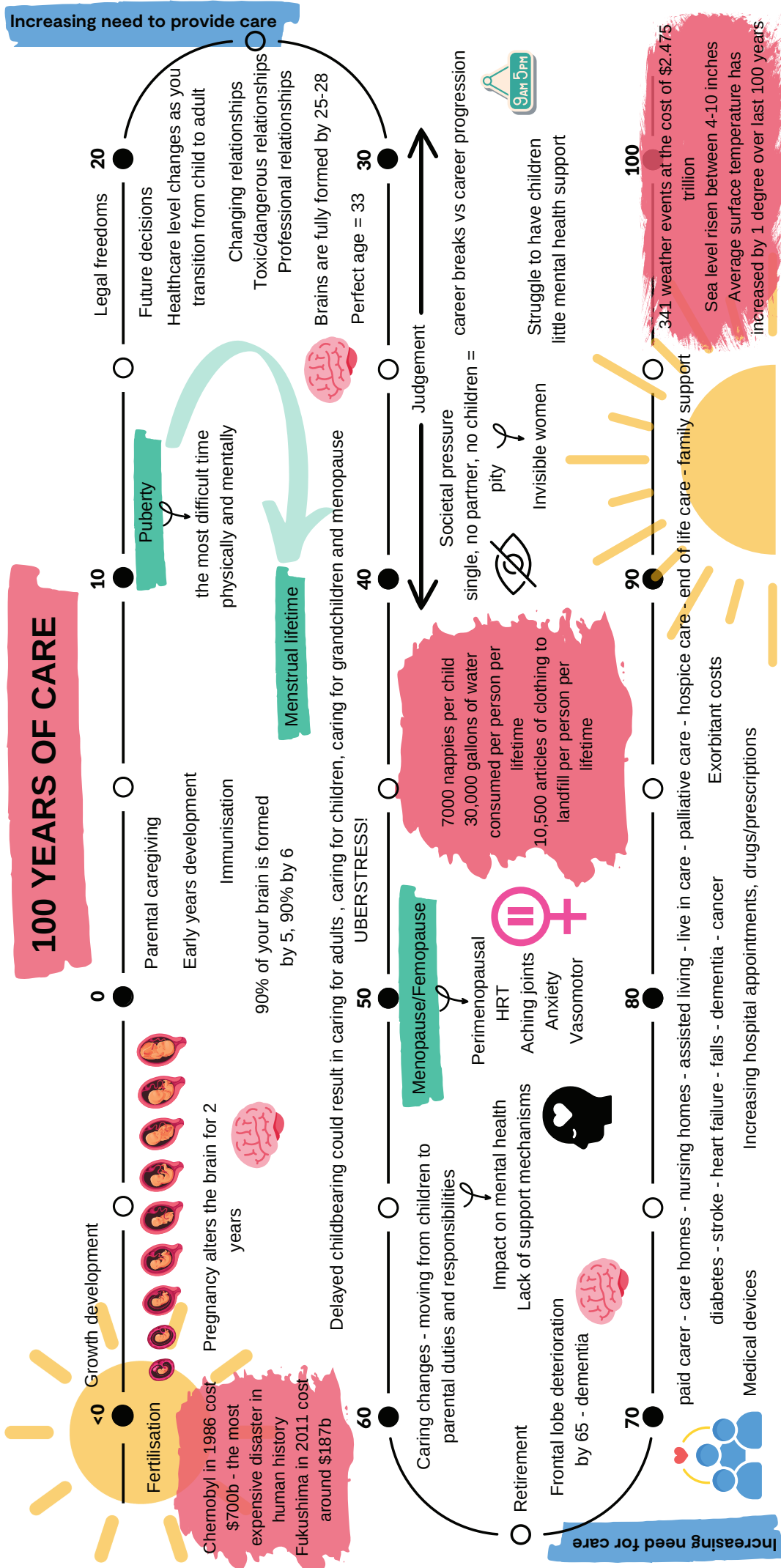
The brain's development and deterioration is also mapped across the 100 year lifespan.

As well as mapping women's care lifecycle, we have mapped human's impact on the environment. Each person contributes an average of 10,5000 articles of clothing to landfill and consumes 30,000 gallons of water over their lifetime. It takes 1500 gallons of water to make a pair of jeans and 2700 litres for one t-shirt, which is enough for one person to drink for 900 days.

A woman has around 450 periods in her lifetime. This adds up to 10 years or 3,500 days of an average woman's life that is spent menstruating, with a 45 million period products being produced yearly will have its own environmental impact.

During an average person's lifespan, they will witness 341 weather events costing a total of \$2.475 trillion. Over the last 100 years average surface temperature has increased by 1 degree and 11 of the warmest years have occurred since 1980. Sea levels have risen between 4-10 inches and greening in Spring begins 8 days earlier and is lasting longer. Moreover, during the past 100 years we have witnessed Chernobyl, the most expensive disaster in human history at a cost of \$700 billion, and Fukushima at a cost of \$187 billion.

We argue that both the impact of care on an individual and the environmental impact of people should be considered simultaneously if we are to find solutions to both problems.



Mah Rana, Royal College of Art

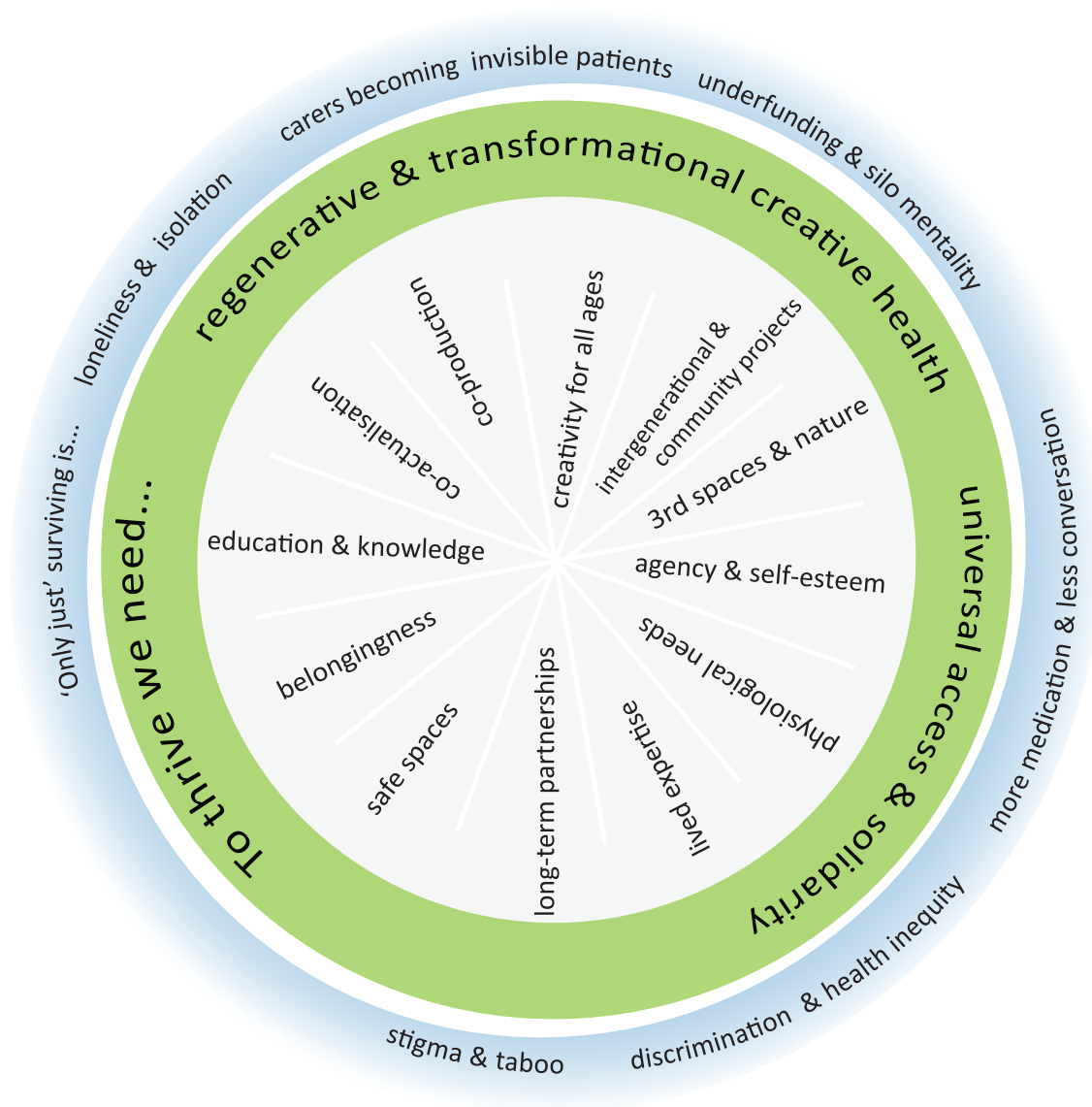
WELCOME TO CAREHAM
WHERE WE CAN BE MORE DOUGHNUT

Be more doughnut Whilst the pyramid illustration of Maslow's hierarchy of needs is still very influential, its depiction as a pyramid has meant that Maslow's theory has attracted critical questioning. For example, recent empirical studies investigating the current validity of Maslow's hierarchy of needs report that self-actualisation, the highest pyramid tier, is not a universal goal for everyone (see e.g. Montag, Sindermann, Lester & Davis, 2020; Yurdakul & Arar, 2023).

Is something missing? Earlier this century, Motschnig-Pitrik and Barrett-Lennard (2010) introduced co-actualisation as

a construct having psychological "potential realized in some relationships and not in others" (p. 383).

Creativity and care The reciprocal character and mutual influence of co-creativity emphasises the need of trust in existing and new relationships. The reciprocal quality of 'relational care' respects interdependence while at the same time fostering mutually beneficial interpersonal connections that supports the wellbeing and health of individuals and communities. By drawing on the principles and illustrative visuals of doughnut economics perhaps we can start to map out a hierarchy wheel of needs interactions with the environment and others for self co-actualisation. And we can be more doughnut (less pyramid).



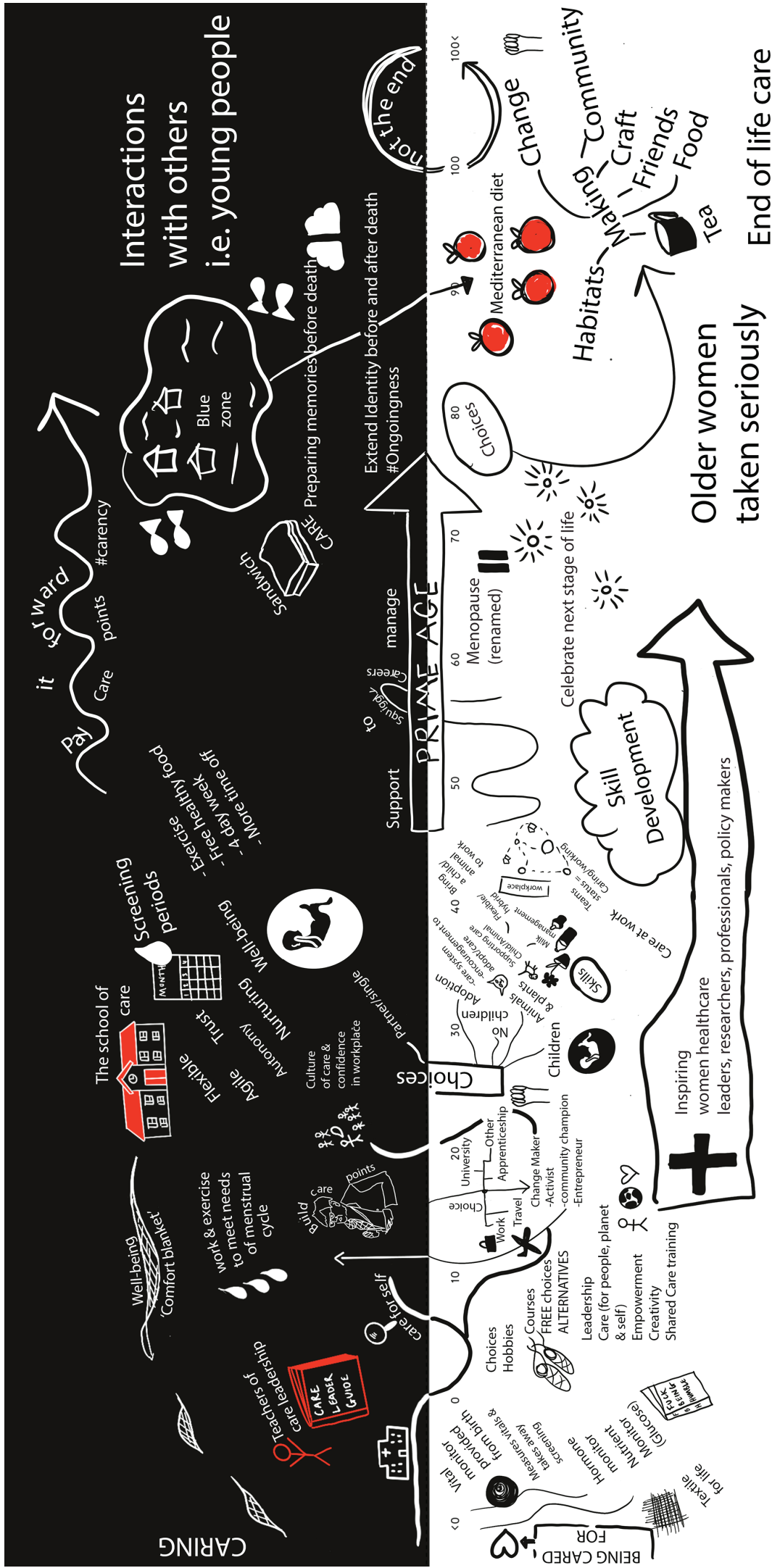
Laura Wareing, Lancaster University
 Lucy Robertson, Heriot-Watt University
 Jen Ballie, V&A Dundee

100 YEARS OF SPECULATIVE WOMEN'S HEALTHCARE

Women comprise more than half the world's population (United Nations, 2023), yet historically, the world has been designed for and by men (Perez, 2019), frequently neglecting women's needs and perspectives. Women experience disproportionate health inequalities, there is less funding to tackle illnesses that are more prevalent in women and a lack of research focusing on improving women's health (Galea and Parekh, 2023; White and Clayton, 2022). There is an urgent need for a greater understanding of women's health throughout their lives (Bill and Melinda Gates Foundation, 2023), moving beyond a focus on just reproductive and maternal health.

This timeline aims to consider the potential lifespan of a woman born in 2024, for their 100 years of care and beyond, forming a speculative tool for designers, researchers and policymakers. Two sections of the timeline 'caring' and 'being cared for' intersect at points showing the close relationship between them. This timeline advocates and speculates for a broader understanding of feminism in design, going beyond the consideration of who is involved to focus on the how and why of design. This aligns with feminist activism expanding upon Place (2023), transforming existing structures to promote equality and inclusivity and centring feminist ways of knowing and doing within the design process. The term women in the context of 'women's health' is inclusive of both sex as a biological variable and gender as a social variable across the life course and people assigned female at birth, transgender women, transgender men, and non-binary people', as defined by experts for the Women's Health Innovation Map (2023). The timeline prompts thoughts on:

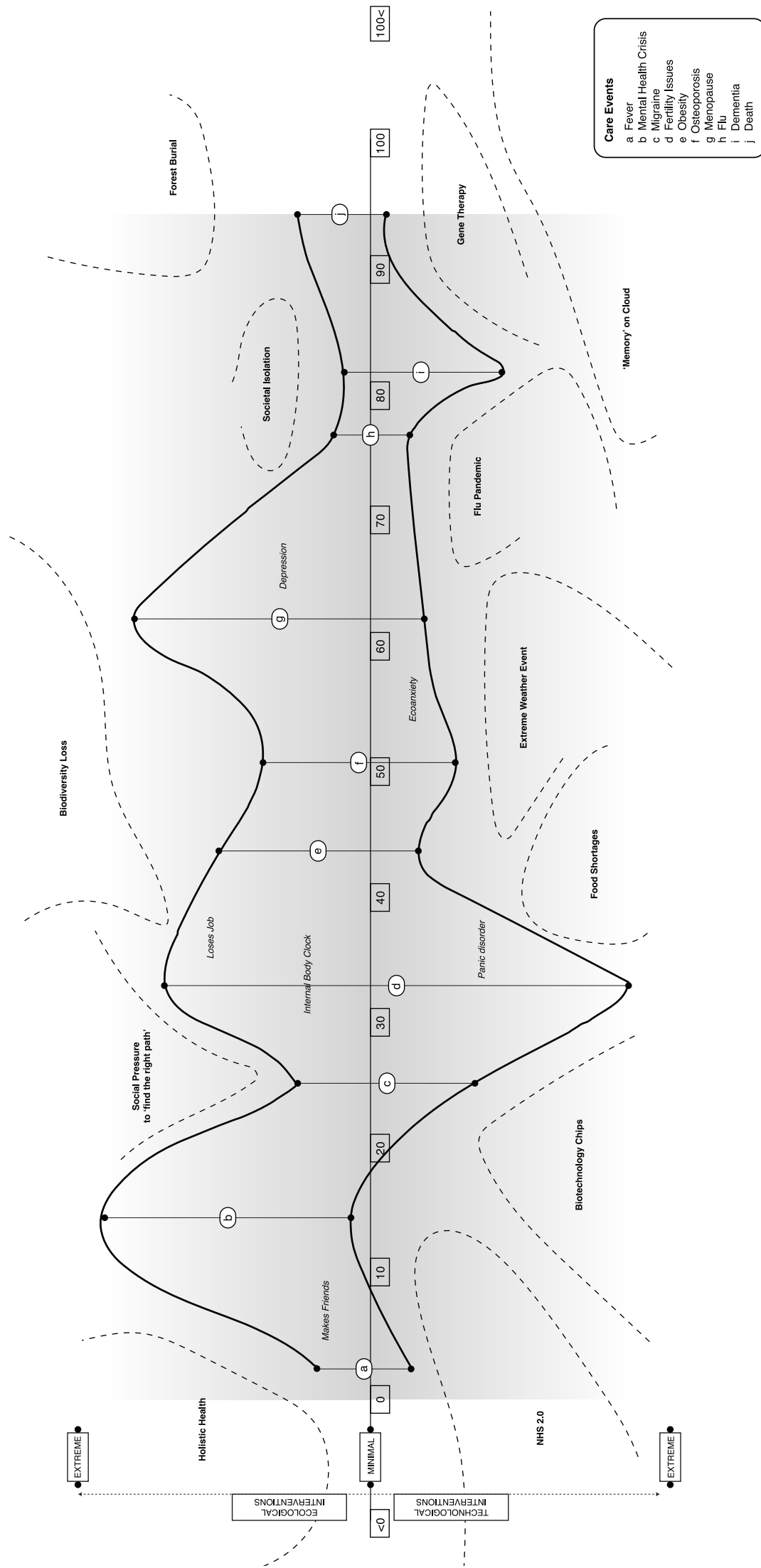
- The School of Care—inspiring women in/through healthcare to create leaders and researchers in women's care, whilst fostering care in society.
- A culture of care at work, supporting 'Squiggly careers' (Tupper, H. and Ellis, S, 2020) to work and fit around life events, skill development to encourage flexibility, trust, autonomy, nurturing women's wellbeing and respond to needs including menstrual cycles, pregnancy, menopause and mental health.
- A culture of care for women in society—no judgements on life/relationship choices, equalising the care system to alleviate and share emotional and hidden labour and inclusive access to care activities for all, not just the privileged.
- Addressing 'sandwich care' challenges (caring for children and parents), including the care idea of paying care forward through #carency and support to adopt children as an equal choice.
- Vital monitor from birth to check vitals (e.g. glucose levels, hormones, stages of life and allergies), reducing screening.
- Caring choices in society—Alternative hobby choices from an early age to introduce young women to leadership, care, creativity and equality. Expanded education/work/life choices for a supportive society that creates change makers for the next iteration of our planet, healthy living environments, including 'blue zones'.
- Celebrating through all life stages—renaming menopause, celebrating older women and increasing their visibility. Pay it forward #carency pairs the older generation with younger carers taking on this role to build #carency for themselves in later life.
- (Not) the end of life care—How can we prepare memories and extend our identity before and after death echoing 'Ongoingness' (Wallace and Josh, 2022).



Dr Emma Campbell, Queen's University, Belfast
 Dr Seán Cullen, Queen's University, Belfast
 Professor Fiona Hackney, Manchester School of Art
 Gail Mahon, Ulster University

TECHNO VS ECO-CENTRIC IDEOLOGIES OF CARE

This timeline is inspired by Tim O'Riordan's text, *Environmental Ethics*, which distinguishes two environmental ideologies, techno-centric and eco-centric modes. It follows the lifespan of one person born in 2023, Alexa, noting key health events throughout their life. It charts how they navigate eco and techno-centric forms of care interventions, balancing internal pressures and external forces, from doing nothing to going all out. While the next 100 years of care sees radical changes in technologies and our relationship with the environment, the types of pressures, collective and personal, inform an individual's reactions. These pressures—political, economic, environmental, social, and cultural—often define and dictate a mutable, middle-ground in which a majority sits.



Fiona Jack

100 YEARS OF CARE— A PERSONAL JOURNEY OF 50 YEARS

This map illustrates the key groups of people and touch points with them over my lifetime. It is a personal journey of the care I have received, with several significant and lesser interactions with these groups highlighted.

My starting point was the lines of the musical staff and the notes dancing up and down the lines representing a line of melody. I wanted to capture the visual and dynamic of how interactive our lives are, and how much we connect with other people during the care we receive. When the lines settled as representing groups of people, then it became clear how to represent my life and interaction with those people.

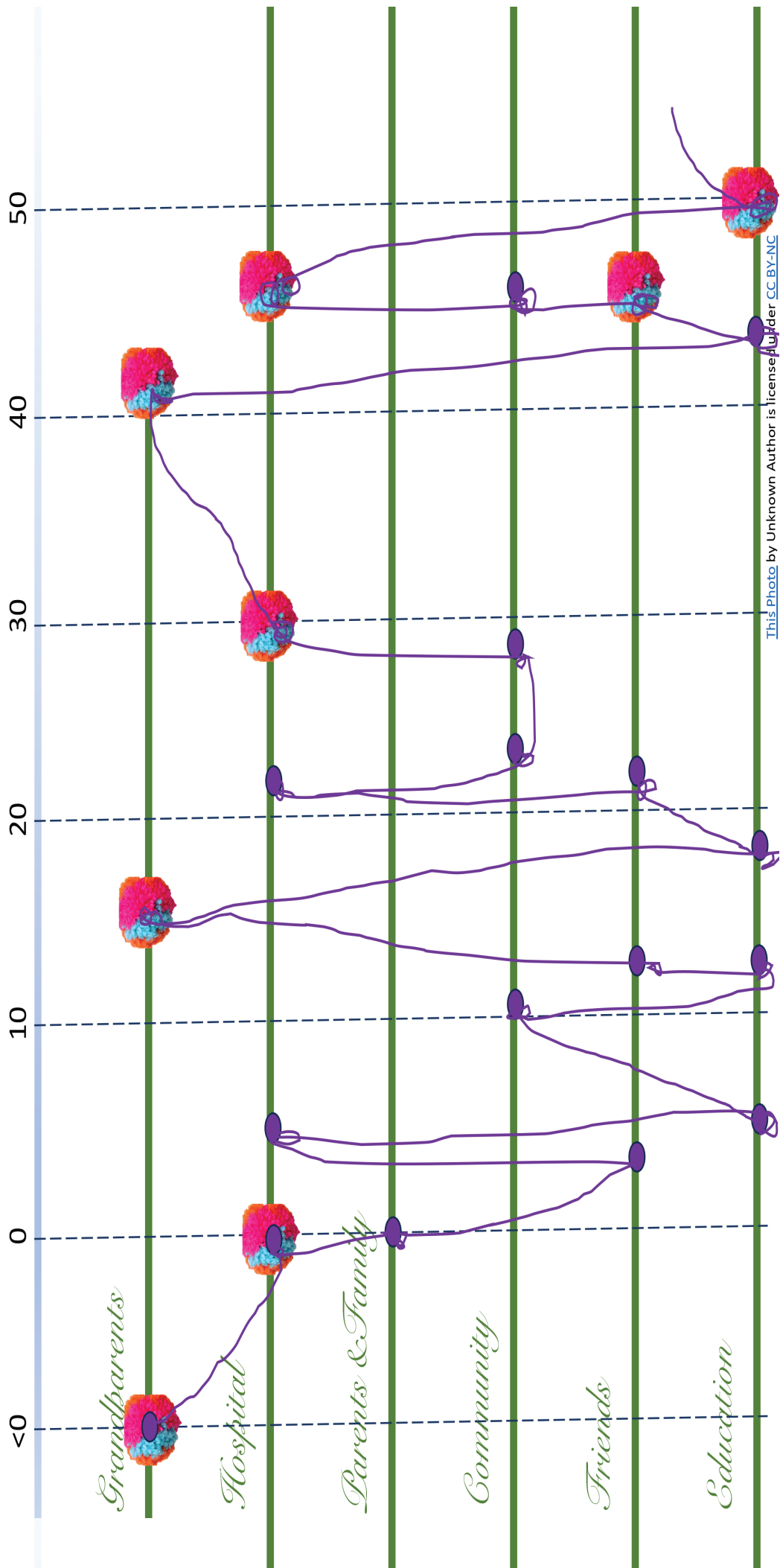
While creating a physical map, I was drawn to something interactive and tactile, gravitating to some yarn left on a table at the workshop. I used green yarn to represent the horizontal lines of the people providing the care, and purple to represent my journey. I decided to make the groups of people who have cared for me at various points as the static lines, with my journey between them being the thread that connects them. This map was initially made from yarn, which was used to indicate interactions (knots between the two yarns) and togetherness. Significant, or life-changing events were indicated by a purple and pink pop-pom: the time spent making each pom-pom was time spent thinking of the period/event and the people who

supported me, so it became a reflective journey as well as a creative one. Transferring the map to the digital format loses much of its personality, however it is something that could be created again, at not too much expense.

The stories of the pom-pom events vary, so the first pom-pom on the Hospital line was surgery at birth which allowed me a chance to walk reasonably normally. On the Grandparents line, the two right-most pom-poms are the deaths of my maternal grandparents, who looked after me a lot when I was growing up. The Hospital, Friends and Community event around age 46 was treatment for cancer. The combination of these three groups got me through a difficult time which I might not survived, had I been born in a different age.

It was an interesting exercise to complete, as it helped me realise that I did not come through these life-changing events on my own, even if it perhaps felt like it at the time. Our memories can be quite selective, and need to be challenged at times, as we build a narrative of what our story means. Many care events could be seen in different ways, and what we choose to remember about them shapes who we are now, and how we will deal with similar situations in the future.

I recommend you take some time to create your own care journey—whether it's related to the people you care(d) for, or who care(d) for you. See how you want to represent it, and what you find out while you review it.



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Sally Sutherland, University of Brighton

CARE IN MOTION: RELATIONAL WAVES AND THE IMPORTANCE OF UNCERTAINTY

Read the image as 100 of anything - years, lives, seasons, milliseconds, galaxies, cycles, or any diverse measurement or understanding of time. Instead of offering a beginning and end, the image can loop around on itself, with undulating currents and climaxes.

The metaphor of waves rejects a linear understanding of time and instead offers a cyclical, interconnected, and relational representation. For me, care is unpredictable and interconnected. It is also an obligation, meaning I reject the notion that it is solely determined by individual choices - I am in the waves whether I want to be or not. The undulating patterns of the waves reflect the rhythmic, varying intensities, and turbulent nature inherent in the practices of care. The impossibility of taming the waves and the sea parallels the futility of attempting to control or fix care. Rather than seeking dominance, I prefer 'going with uncertainty', understanding the rhythms and patterns within care, and acknowledging the delicate balance between stability and unpredictability.

Drawing on and inspired by the work of Maria Puig de la Bellacasa (2017), I understand care as an entanglement of dynamic and diverse entities. There is, therefore, a value in embracing these complexities of entangled relationships through design modes and methodologies rather than dominating or 'fixing' them. I hope this visual narrative will challenge perceptions of care as a commodity, separatable into economised and calculable units. I do not believe care is measurable in current conventional terms. The image tries to include elements such as calmness, turbulence, repetition, circularity, and beauty in care. These characteristics mirror some of the multifaceted aspects of care often overshadowed by conventional design modes and approaches. Instead, I am positioning care as an active practice intricately woven into the fabric of complexity and uncertainty. It is through embracing complexity and uncertainty and not tidying it away that opportunities may emerge.

Acknowledgement:

This image was created in collaboration with Dr. Tom Ainsworth.



- Welcome to Careham where we can be more doughnut**
Bridgman, T., Cummings, S., & Ballard, J. (2019). *Who built Maslow's pyramid? A history of the creation of management studies' most famous symbol and its implications for management education*. Academy of management learning & education, 18(1), 81-98.
- Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. OUP Oxford.
- Montag, C., Sindermann, C., Lester, D., & Davis, K. L. (2020). *Linking individual differences in satisfaction with each of Maslow's needs to the Big Five personality traits and Panksepp's primary emotional systems*. Heliyon, 6(7).
- Motschnig-Pitrik, R., & Barrett-Lennard, G. (2010). *Co-actualization: A new construct in understanding well-functioning relationships*. Journal of Humanistic Psychology, 50(3), 374-398.
- Raworth, K. (2017). *Doughnut economics: seven ways to think like a 21st-century economist*. Chelsea Green Publishing.
- Yurdakul, G., & Arar, T. (2023). "Revisiting Maslow's hierarchy of needs: Is it still universal content?": *Journal of human behavior in the social environment*, 1-28.
- 100 Years of Speculative Women's Healthcare**
Galea, L.A. and Parekh, R.S., 2023. Ending the neglect of women's health in research. *bmj*, 381. <https://www.bmj.com/content/381/bmj.p1303.full>
- Place, A. ed., 2023. *Feminist Designer: On the Personal and the Political in Design*. MIT Press.
- Tupper, H. and Ellis, S. (2020) *The squiggly career: ditch the ladder, discover opportunity, design your career*. Penguin.
- Wallace, Jayne & South, Josh. (2022). *Enabling Ongoingness (Book)*.
- White, J. and Clayton, J., 2022. The gender health innovation gap: a perspective from the NIH Office of Research on Women's Health. *Med*, 3(S), pp. 298-301.
- Women's Health Innovation Opportunity Map 2023: 50 High-Return Opportunities to Advance Global Women's Health R&D. October 2023. Bill & Melinda Gates Foundation and National Institutes of Health.
- Choreography of Care**
Palmer, C.T. (2005). Mommers and moshers: Rituals of trust in changing social environments *Ethnology*, 44(2), 147-166.
- Care in Motion: Relational Waves and the Importance of Uncertainty**
Puig de la Bellacasa, Maria. *Matters of Care: Speculative Ethics in More than Human Worlds*. Vol. 41. Minneapolis: University of Minnesota Press, 2017.

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