From healthcare to the care of health:

a learning path in complexity and futures literacy

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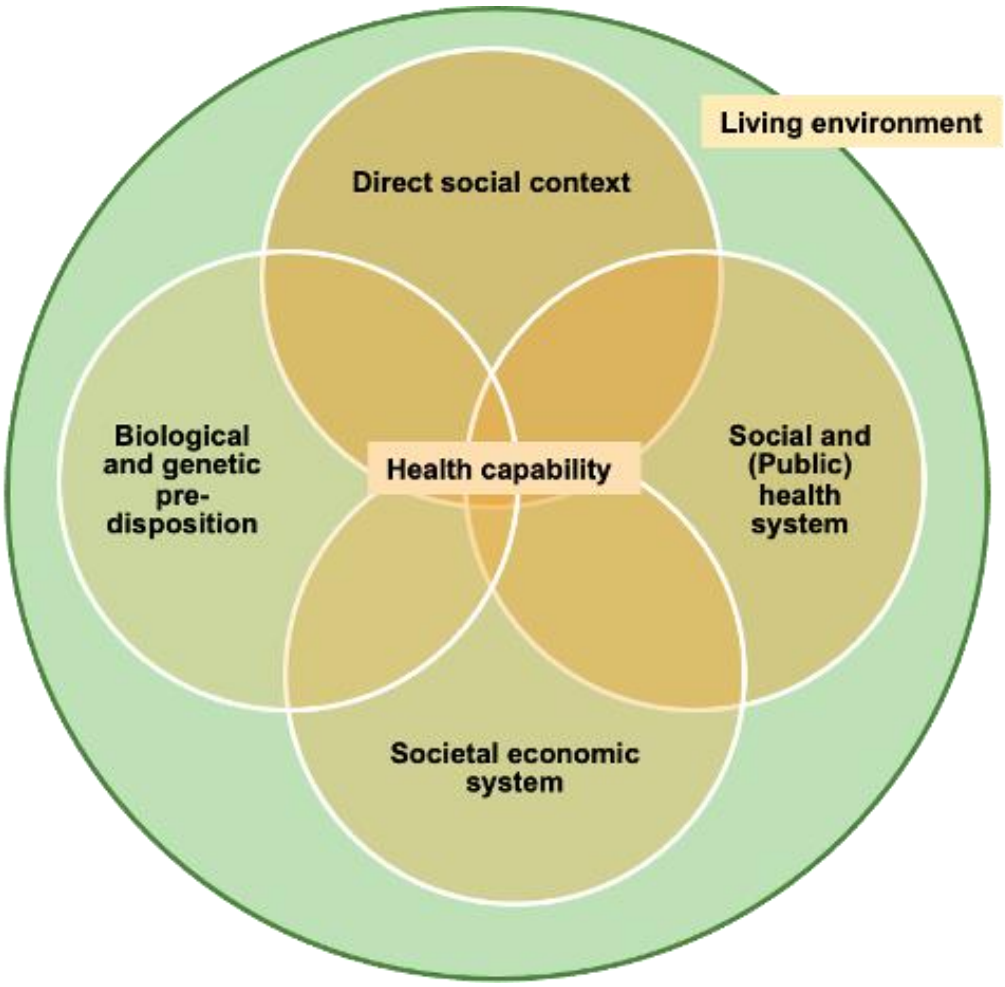
This blog is the summary of two key notes during the final conference of the HIPPA project in digital innovations at the Metropolia University in Helsinki, October 2022: We felt both key notes were complementary and an example of the necessity to fundamentally rethink our world view, our perception of knowledge and agency facing the great challenges around health and social care today. We will argue for this rethinking and for the capability of futures literacy as an essential asset in this process of learning.

As such, this blog also illustrates the underpinning of our project ECOLAH, that stands for Embracing a Complexity Orientated Learning Approach in Health. A European project that explores the consequences for learning when we take the underlying logics of complexity seriously. For more information, follow us on: www.ecolah.eu.

The care for health is crumbling fast

Health and social care are in general based on a diagnose-intervention thinking. Once a problem arises, we determine the problem (diagnose) and then find a remedy (intervention). This has shown to be an extremely successful mode of thinking resulting in increased longevity and the ability to "manage" a diversity of health problems. Although successful, the last decades have proven this is not enough. Healthy life years turn out to be the result of a web of factors constantly interacting with each other (figure 1; based upon Prah Ruger, 2010; Bellancasa, 2017).



All these factors such as the influence of socioeconomic status, a societal tendency towards unhealthy stress induced lifestyles and the continuous neglect of the health of our planet, impact the health of people massively. Most individual health problems are chronic and are increasingly impacting our lives, often impairing us along the way. We are basically waiting till we are sick enough to be diagnosed before the system allows us to do something about it. We define *urgency in health* only when the damage is done:when a health problem occurs, it is often too late for the majority of societal health issues. While dealing with one health issue, people are often deconditioned and become highly vulnerable for other chronic lifestyle induced problems. Being lonely for example, fosters an inactive lifestyle which in return can increase health risks.

To put it bluntly; health and social care systems are designed to take care of health problems but do not invoke the capacity to be and stay healthy. The way modern societies have developed in the last century and the associated health problems have received little attention. We often start to hear the call for urgency when a problem has developed over decades into a storm we can't ignore any longer. These systems are financially unsustainable and unable to answer the demands of society. Moreover, challenges like the increasing demand of health workers under a high demographic pressure, the pandemic of Non-Communicable Diseases and a deteriorating planetary health have been known for decades, without any actionable result to speak of.

It is therefore not surprising that health systems are under tremendous pressure of being unable to deliver the necessary services while dealing with increasing costs. Optimising the current health systems will not suffice and won't reach SDG 3; E**nsure healthy lives and promote well-being for all at all ages**. Policies to incrementally change this undesired and unsustainable situation doesn't expedite these reforms (Christensen et al, 2017). An alternative is the fundamental change from solely problem oriented 'health care' towards the care for health.

Taking complexity of health seriously

Taking the care of health seriously necessitates the acknowledgement of the interweaving and dynamics of all factors as a complex system. Questions of circumstances, events, timing, history, personal and cultural preferences matter enormously in addressing the question 'what needs to be done? (Tsoukis, 2017). However, as Greenhalgh points out; *"It is fashionable to talk of complex interventions, complex systems, complex patients, wicked problems, and the like. However, with few exceptions, we embrace the theme of complexity in name only and fail to engage with its underlying logic"* (Greenhalgh, 2018).

To understand better why we have so much difficulty navigating complex systems, we need to distinguish between complicated complex and complex issues. A problem that is complicated means outcomes and effects are predictable and effective actions can be planned and translated through guidelines into actions (e.g. a cookbook). The great attraction and success of this view is that we can predefine the outcomes, and thus control and audit processes and results. An example of a complicated issue is an open heart operation, a tough challenge but with the right manual, knowledge, and material you can exactly get what was envisioned (and thankfully so). Our diagnose -intervention based health care systems are fully built on this complicated world view.

In complex phenomena, like raising a child, the outcomes can often not fully be (pre) defined from the beginning and the steps to follow are always situative, negotiated and follow non-linear patterns. Simply said 'context matters'. This complexity could be defined as: "A dynamic and constantly emerging set of processes and objects that not only interact with each other, but come to be defined by those interactions" (Cohn, 2013).

Don't make from a complex issue a complicated one

The practical consequence of dealing with complex issues is that we, (managers and controllers included), need to accept that we do not know everything, which leaves us with the need to

constantly anticipate these 'emerging sets of processes and objects' with a certain amount of uncertainty. What is left is a humble learning process navigating complexity. This thinking feels counter-intuitive to a reductionist diagnose-intervention mindset: the first reflex is often to reduce this complexity to a complicated problem by focusing on one or more 'determinants'. This explains why health professionals tend to reduce a whole, complex human being, into a patient as if it were a single identity (and then follow the guideline). This is why the global health community responded to the COVID pandemic with a sole focus on finding a vaccine, while largely neglecting the rest of the societal system.

Learning in complexity

Accepting the underlying logic of complexity offers an opportunity to think beyond linear causal problem solving. Complex systems have the property to self-organise and adapt to new situations. A hopeful example was the caring resilience of local communities during COVID and lockdown. Care emerged from local communities, neighbours were shopping for each other and alternative ways of social contact and physical activities popped up. Tapping into this adaptability is an explorative, creative 'trial and error' way of learning. It's less controlled, sometimes downright messy, and highly dependent on the local situation. Do we still have the space and degrees of freedom to engage in such a journey, to experiment, to allow for mistakes? How do we integrate systems thinking in our approach towards the care of health, from patients to the whole health system?

A major support in (re-)learning to think *with* this complexity is to accept that our knowledge is not all static (objective) and can not be planned and controlled. In complexity, knowledge is often short lived and depending on the dynamics in the system. This is uncomfortable as it demands a constant monitoring and evaluative attitude towards what we consider knowledge of the situation. Learning in complexity is then wayfaring; negotiating or improvising a passage as we go along. Knowledge is then grown along the myriad paths we take as we make our ways through the world in the course of everyday activities, rather than assembled from information obtained from numerous fixed locations (Ingold, 2010). This is uncomfortable as it demands a constant monitoring and evaluative attitude towards our knowledge of the situation. It is even more uncomfortable because we can't put our objective truths upon people and systems. Not without accommodating towards the woven web of what we call 'context' with all it's historicity, dependencies and dynamics. Yet, this more humble position offers also a way to understand and respect much better the qualities of our interconnected world and to cherish its agency. The hardest nut to crack is to say farewell to our illusion we can plan and control, if not colonise, our future. For this it is important to invest in futures literacy.

Futures literacy

Futures Literacy is the capability to imagine multiple futures to see the present anew. Fundamental to this capability is acknowledging that the future does not exist. It is the *undefined later-than-now* (Miller, 2018)and the only way the future takes shape in the present, is through imagination. The future is fiction, and yet it has a profound impact on what we do, how we think and act in the present. It is therefore time *to think about how we think about the future*.

Anticipatory systems

Although the future does not exist, we use her every day: to plan our week ahead, to schedule appointments, to dream about that trip or to worry about our health or age. These are common ways to use the future, or in other words to *anticipate*: we might plan for something we see as preferable, or we prepare for something we deem necessary or plausible. We call these ways of using futures *anticipatory systems (Miller, 2018*). What they have in common is a certain idea of what the future might hold; a scenario, a dot on the horizon, a strategy or a dream. These ideas, scenarios or stories we tell ourselves are based on a variety of factors: upbringing, culture, films, books or education. Think of our assumptions of what a healthy person looks

like, or what healthcare should entail in a modern society. These narratives are rooted in systems, worldviews, myths or metaphors, and can often be static or deterministic (Inayatullah, 2015). Many (digital) innovations in healthcare for example, albeit useful and life-changing, do not change the system or worldview that lies underneath. A new technical tool can solve problems in the short run, but does not change the way we see health in society. To put it bluntly: ***everybody wants change, but nobody wants TO change.***

Challenging dominant narratives

To fundamentally change how we see care for health, or what it means to be healthy or to be able, we need to start with our shared narrative of the future. What is it that we fundamentally believe in? These visions of the future shape our decision making in the present: they offer guidance, or can stimulate our sense of agency. They can, however, be extremely limiting in our capacity to innovate, to be creative and open to uncertainty and novelty in the present. Without understanding what assumptions or static narratives we base our futures on, we fail to detect our blind spots, or to see different ways of doing. It's when 'how we respond to a problem, might become part of the problem" (Akomolafe, 2016). Think about the topic of the HIPPA conference *Digital innovations for the future of housing seniors*: based on what assumptions do we intend to foster these innovations? That the word 'senior' has the same meaning in the future as it has now? That we still live in houses ? That technology continues to develop the way it has? Controllable by mankind?

To identify these anticipatory assumptions we need to engage in a different anticipatory system besides planning and preparation. We can use the future for exploration by thinking about the unthinkable, imagine the unimaginable, by exploring alternative scenarios that may seem whimsical or farfetched, but can help us stretch our imagination beyond the obvious and help us identify the gaps in our thinking. Reflective practices are key here, as is the collective intelligence when engaging in these sort of exercises. Listening to the different futures of others and their interpretations can push our imaginary boundaries even more. The future does not exist, but thinking about her does and by widening the pathways in front of us, we are able to see more in the present. It can help us to overcome the poverty of imagination.

Walking in two legs

The practice of exploring alternative futures to see the present differently is called *anticipation for emergence* (Miller, 2018). When able to navigate between the three anticipatory systems (planning, preparation and exploration) in different contexts and for different purposes while identifying anticipatory assumptions, one can be called futures literate. Miller calls this 'walking on two legs', as we need both, anticipation for the future *and* for emergence. This capability, as any capability, takes time to develop and while practising, one should resist the modern call for urgency or for acting on an impulse. Understanding the differences in these anticipatory systems can force us to challenge the status quo of the current health care and social systems, and can make space for a different kind of (shared) decision making. Less controlled, less focus on complicated problems but more personalised and appropriate for any given situation; an approach that demands learning in complexity.

Futures Literacy accepts the premise that the future cannot be foreseen, and that knowledge creation is dynamic and fluid. It allows for complexity to be appreciated, not to be solved, and for uncertainty to be embraced, not to be eliminated. It enhances our perception of the present: we sense more, but novelty also makes more sense. Lastly, it changes our sense of agency (Kazemier et al, 2021), as we make better informed decisions and become comfortable with different ways of being, thinking and doing.

Wrap up

We state in this article that we should take the care of health more seriously as a grand societal challenge. For this we need a worldview that embraces more the underlying logic of its

complexity (ontology) and be consistent in how we get and value knowledge of this world (epistemology). *Learning in complexity* offers a nascent guideline on how to do. Its goal is to install a humble yet performative attitude of 'wayfairing', developing capabilities and supportive learning methods. *Futures Literacy,* named by UNESCO as the essential capability of the 21st century, can help us change the narrative from health care to care for health.

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