

## **Getting to Postgrowth: The Transformative Power of Mind and Paradigm Shifts**

- Draft presented at the 2014 Degrowth Conference -

*A transition to sustainability demands profound changes in understanding, interpretative frameworks and broader cultural values, just as it requires transformations in the practices, institutions and social structures that regulate and coordinate individual behaviour. In this context, it is essential to get to the position where people, industry and governments can easily distinguish between objective facts and opinions that are presented as facts to advance particular interests, and rely on the former to make informed decisions. (UNEP Global Environmental Outlook 5 Report, 2012, p. 447)*

In order to make sense of the world humans create ideas and stories about why they are here, what the purpose of their life-journey is and how to relate to their human and natural environment. The results are individual mindsets that lie at the heart of identities and social paradigms that structure socio-political development processes. Among the latter are the widely accepted common sense, the canonized knowledge and the cultural narratives enveloping human role definitions and cooperation agreements. Through these forms of materialization ideas and stories become part of the observed “reality” in which future thinking, observing and being takes place. They are intricately linked with the “objective” world and can therefore be a source of vision, innovative creativity and flourishing progress – as much as a source of mental barriers, strategic power or even forceful domination.

Understanding this structural-material impact of ideas, the “patterned freedom” of human development, lies at the core of “reflexive” social sciences. Reflexivity is a uniquely human capacity that allows for strategic engagement in changing societal structures and institutions that have been set up and form “reality” today. It enables to become aware of the biasing forces and effects of socialization and to identify where institutional path dependencies and guiding stories drive societies along development routes that are not in line with overarching goals and aspirations (any longer). Thus, assessing the underlying assumptions and unstated ideas upon which social processes and institutions have been built, justified, maintained, and adapted empowers to break free from them if necessary. Re-socializing the ideas and stories created by neoclassical economics and reflecting on their impact on how we see, experience and organize the world therefore is, as I argue below, a transformative leverage point to making sustainability visions and commitments reality.

The structure of the paper is the following: a brief introduction to the original definition of sustainable development in 1992 precedes a rough outline why the neoclassical economic paradigm cannot provide any meaningful insight into how this agreed goal can be achieved. Tying this analysis back with complex system transition research it then combines the multi-level-perspective (MLP) on societal change with Gramscian hegemony theory on leading with least resistance to argue that replacing the neoclassical mindset or paradigm is a high leverage point for system transformations towards sustainability. The outlook briefly summarizes some approaches from alternative sustainability economy movements that tackle the blind spots in neoclassical thought identified at the outset head-on. In a first assessment these pioneering practitioners show a surprisingly high degree of commonality in their ideas, stories and governance solutions. Further research should investigate how and if it is forming into a new

economic paradigm and mindset suitable to progressively unite decentralized and diversified initiatives into a political force or Gramscian “common will” for structural change.

## **1. Sustainable Development: Which Vision and Goals?**

In 1987 the United Nations appointed the World Commission on Environment and Development (WCED) published its path breaking report on sustainable development. It highlighted many of the heavily degrading effects that the 20<sup>th</sup> Century economic development path had brought to nature while still keeping a majority of people in poverty. The call was to replace this path with “sustainable development,” development which “meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>1</sup> To specify this new vision, the report highlighted two key points for attention and intervention. These were “the concept of ‘needs’ in particular the essential needs of the world’s poor,” to whom, it argued, “overriding priority should be given,” and “the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.”

In 1992 the Rio Declaration of the United Nations made sustainable development the overarching policy principle of international cooperation. Today’s statistics provide ample evidence that sustainable development was not achieved. I will argue here that this is at least partly due to the fact that the overarching development storyline or narrative and its underlying economic explanations as to what humans are like, what the drivers of their lives are and how they relate to each other and nature was not seriously challenged. This storyline finds its most powerful source in neoclassical economics and its models that managed to incorporate challenges like natural limits to growth or unfair distribution effects of market liberalization policies instead of being weakened. Historically, such cooptation was of course helped by the collapse of the Soviet Union around the same time, leading to declarations of “The End of History” (Francis Fukuyama). Also, powerful promoters of this storyline and paradigm are usually spared from suffering the consequences of its implementation: it provides a terrific rationale to feel comfortable with being much better off than others.

## **2. Neoclassical Economic Paradigm: Which Insights for Sustainable Development?**

A paradigm or societal narrative rests on some core ideas or concepts. These are more than simple flashes of thought, a mere slogan or a buzzword. According to institutionalism political economists Morten Boas and Desmond McNeill such an idea “has some reputable intellectual basis, but it may nevertheless be found vulnerable on analytical and empirical grounds. What is special about such an idea is that it is able to operate in both academia and policy domains.”<sup>2</sup> Providing the language and sense-making that people apply in order to govern their own existence in the world, ideas also become part of the common sense according to which collaboration is set out and institutions are designed.

---

<sup>1</sup> WCED, 1987, Our Common Future, Chapter 2, Paragraph 1, online at: <http://www.un-documents.net/our-common-future.pdf>

<sup>2</sup> Desmond McNeill and Morten Boas, 2004, Global Institutions and Development. Framing the World?, Routledge, p.1

Looking at what the storyline of neoclassical economics has offered to make the sustainable development vision become reality one should not be too surprised that it has not come around: in its analytical concepts or core ideas this paradigm has lumped all human needs – the one key point in the sustainable development definition - into one undifferentiated concept of “utility maximization.” It is regarded to be the primary universal law or human condition that actors selfishly, insatiably and rationally pursue the never-ending maximization of pleasure. All other concepts and explanations stem from this core idea and the prime source of pleasure is considered to be consumption.

Unsurprisingly, according to neoclassical economics, the natural best development path for these “representative actors” is one of eternal growth in consumption and therefore production: utility and need satisfaction or happiness will then keep on rising forever as well. The most efficient and just institution to bring selfish actors into the cooperation necessary for production and exchange processes are markets in which supply and demand are matched through prices: “freely” negotiating actors end up signing “voluntary” contracts in which everyone perceives to get out the best cost-benefit deal for him- or herself. Each price therefore indicates the “willingness to pay” and therefore provides a useful indicator for the utility created by a particular good or service: Selfish people only pay as much as they really value something. Taken to the level of explaining entire economies and their development we find the origin of the third universal law, that of equilibrating competitive markets: every product finds a buyer once the price is right and human needs will therefore steer production in the right direction.

Since this paradigm does primarily look at the point of decision-making but excludes the context in which it takes place (e.g. the distribution of what people can offer in the “free agreements” or what the content of these are or which ends they serve) the concept of power does not exist in this paradigm. Translated into the socio-cultural domain of sense-making we see how it easily translates into a discourse that particularly benefits comparatively wealthy groups or individuals: market competition drives people to highest performance and thus the revenue a particular skill generates in the market is a just expression of how valuable this person’s contribution is to society. If people do not manage to get a return for their offerings it is their own deficiency rather than anything else: they did not try hard enough to offer something desirable, did not provide solutions to the needs of people.

With reference to respecting the laws of nature and their ability to sustain need satisfaction – the second key point of the sustainable development definition, the equilibrating market will also do the trick: once increasing scarcity in natural resources drives up their prices, smart creative entrepreneurs will come up with alternatives to generate the same consumption options from cheaper sources or with different technologies. The way the environment was “integrated” with economics (a central demand from the Brundtland report) was to internalize nature into the abstracted cost-benefit equations. The solution was found by anticipating prices of single resource chunks to appear on the input factor bill of production and therefore steer usage into a sustainable direction – or rather, in the direction that human consumption is not dried out by natural destruction.

In these equations it is possible to completely eradicate other forms of life as long as overall economic output keeps on rising: which real products and goods hide behind the price-based utility measurement is secondary. The concept of “capital substitutability” explains that the overall sum is what counts, as this monetary wealth can be transformed into anything else, including environmental restoration should humans really not succeed in finding substitutes for certain resources. Only money flows or “exchange values” register in the calculations.

This also implies that waste from production and consumption only becomes visible if someone is paid a price for storing or burning it.

What this paradigm therefore leaves unanswered is the core of the sustainable development vision:

- How can we prioritize the needs of the poorest in a meaningful way if we do not differentiate between use value of goods and services for healthy existences for all from exchange value expressions in prices mechanisms that are mute on what they stand for? Housing bubbles, sky-rocketing expenditures on abstract pieces of art and fun rides to Mars as increased wealth with the same “utility gain” as providing food, shelter and healthcare to the poorest.
- How do we know if we are bumping into overexploiting even renewable resources to the degree that nature cannot reproduce them if we only look at the flows that register by being bought and not at the remaining stocks and their complex dynamic reproduction circuits? Every alternative solution needs some kind of resources and transmission structures as long as humans are not directly converting solar energy into all they need for survival.

The bottom line then is the question how we are supposed to understand and meet human needs or devise strategies to aligning their satisfaction strategies with the laws of a finite planet on a long-term basis with such a theoretical framework? One in which individuals cannot stop wanting ever more even if they are plump, filthy rich and burnt out and where natural life cycles outside of production functions do not exist?

### **3. The Role of Mindsets and Paradigm Shifts in Social Transformations**

According to reflexivity-based theories the human process of making decisions is guided by the individual’s worldview, mindset or consciousness and in making choices he or she influences the sense-making of counterparts and observers. Thereby, social groups continually co-create the environment in which they live. Humans are both the subjects and the objects of making history, as political economist Robin Hahnel points out: “every person has natural attributes similar to those of other animals, and species characteristics shared only with other humans - both of which can be thought of as genetically ‘wired-in.’ Based on these genetic potentials people develop more specific derived needs and capacities as a result of their particular life experiences. While our natural and species needs and power are the results of past human evolution and are not subject to modification by individual or social activity, our derived needs and powers are subject to modification by individual activity and are very dependent on our social environment.”<sup>3</sup>

This dependence involves significant limitations on the free wills of single people to change social roles defined by society’s major institutions within which most of our activity takes place. This is one of the main reasons of inertia with regard to change in bigger organizations and societies. Social scientists, transition researcher and political economists have developed the concepts “paradigm shifts,” “path dependencies” and “hegemony” so that these processes can be assessed in more detail.

The term “paradigm shift” originates from the philosophy of science and usually references Thomas Kuhn as the original thinker in this context. In his 1962 book on *The Structure of Scientific Revolutions* he wanted to describe a change in the thought patterns and basic assumptions with which scientific analyses are addressed. In scientific terms, paradigms comprise assumptions that are epistemological (what can we know,) ontological (what can be

---

<sup>3</sup> Robin Hahnel, 2002, *The ABCs of Political Economy. A Modern Approach*, Pluto Press, p.4-5

said to exist and how do we group it,) and methodological (which guideline framework for solving a problem is suitable.) In the context of worldviews many add axiological aspects (which values are adopted). Depending on how these are defined, one and the same event will be interpreted very differently. Kuhn examined how the standard definitions on these assumptions determine *which* questions will be raised when assessing a certain issue, *how* they will be raised, *what* will be observed and *how* these results will be interpreted. Usually, competing paradigms hold different assumptions and therefore one and the same event will be analyzed differently and proposed solutions to the same problem will vary significantly, depending on assumptions about actor behavior, processes of development and system characteristics.<sup>4</sup>

Generally, the existence of competing paradigms already prohibits the declaration of full “objectivity” or the existence of unshakable truth. This is particularly true for social sciences like economics where the ideas about the world inform the institutions we build to govern the world and therefore how the future world or “reality” looks like. Thus, as Kuhn claimed, what is considered to be “true” in science has the quality of a consensus of the scientific community. Since the people forming this consensus have undergone processes of socialization themselves, science is never completely free of the mindsets that those involved bring to the table or laboratory. During strong dominance of one particular paradigm like that of neoclassical economics, however, research results not conforming to the paradigm’s prediction are usually interpreted as a mistake by the researcher instead of a falsification of the paradigm’s assumptions. When paradigms shift, however, new ways of interpretation and understanding that formerly would not have been considered valid are opened up and new truth claims can emerge.

Neoclassical economics has a long tradition of defending its foundational “natural laws” on human behavior with vague amendments like “less-than-perfect” information or “bounded rationality” in decision-making, but never went through a real ontological shift. The socio-economic concept of path dependency sheds some light into why this is understandable. It explains why social institutions carry a self-stabilizing momentum fostering the continuation of the status quo. If the status quo is challenged, it translates into a deviation from the “normal” way of doing things. Informal rules and routines in organizations tend to render such deviations as less easily acceptable or adaptable. They challenge beliefs, create fear of loss through role changes and include higher transaction costs since established processes are changed. On top institutionalization and the creation of manufactured infrastructures lead to material-technological lock-ins that are truly difficult to change even if people decide that an alternative way of providing e.g. public transport or energy would now be better.

Meanwhile, being socio-political actors, individuals or groups who are struggling for change will defend them rationally, here meaning to give reasons not only to themselves but also towards others to gain support. The more they manage to appeal to widely established convictions and canonized knowledge, cultural narratives, belief-systems and the “derived needs” in a particular group, the more likely their particular solution is to find supporters. Thus, proponents of status quo solutions and their path dependencies and therein embedded social roles, vested interests and structural procedures, always have the edge over those with new proposals: The prevailing ethics, norms, rules and laws in the given context and the distribution of skills and power to navigate these, effectively provide a framework for action that is a biasing yet rather “invisible” source of justification and legitimization in political struggles.

---

<sup>4</sup> Thomas Kuhn, 1962, *The Structure of Scientific Revolutions*. University of Chicago Press



In order to capture the effects of this framework for action and the role that the “mental glue” of paradigms and mindsets play in defense of the status quo political economist Antonio Gramsci developed the concept of hegemony in the 1930s. He coined this term because he wanted to find explanations for situations in which we observe a few enjoying much more wealth and freedom than the majority despite it being democracies with presumably similar citizenship rights. The concept draws attention to the role of culture and social norms in securing leadership and resilience of particular governance solutions and also highlights how strategic use of science or cultural framing can dress up particular political positions. Gramsci’s work draws heavily on that of Machiavelli, namely “The Prince.” For successful leadership towards the founding of a new state, this work proposes the use of a “dual perspective” of consensus and coercion. A central role in it is to offer a story or narrative on what this society and living in it is about and which policies and programs are therefore in the common interest.<sup>5</sup>

This story has the quality of a “social myth,” “a political ideology expressed neither in the form of a cold utopia nor as learned theorizing, but rather by a creation of concrete fantasy which acts on a dispersed and shattered people to arouse and organize its collective will”.<sup>6</sup> The “collective will” with Gramsci is a group of people strategically promoting the ideas and stories supporting the social myth so that over time heterogeneous interests are welded together with a single aim, on the basis of an equal and common conception of the world. The social myth at the center of this common conception therefore plays a very important role in legitimizing or justifying the adequacy of the specific norms, practices, institutions and regulations put forward or in place. Having become the dominating common sense in this society it overarches individual sense-making and influences the development of mind sets as to why we should behave in a certain way or anticipate others to behave in a certain way.

Such institutionalized ideas function as much as path dependencies as technological and material infrastructures or economic cost-benefit calculations do. They are part of the structural power of the status quo against alternative ideas and proposals. In reflexive science this is widely acknowledged even though the degree to which scholars and practitioners understand narratives or ideologies as a strategic mechanism of the elite to lead with least resistance will already depend on the paradigm. Some are closer to calling changes in perception of the world “learning” and “evolution” whilst others will enunciate the power aspects and expose elements of “domination” in standardization and collective rule setting.

Regardless of the individual positioning on this spectrum, most will agree that without a good story, narrative or practical examples of why changing the status quo is actually more in the interest of powerful players or the general good, it is very difficult to meaningfully change existing institutions and development pathways without full-blown crises shattering their perpetuation. Preemptive adaptation or transformation strategies therefore rest on ideas and visions or mind and paradigm shifts that redefine the understanding of what are possible solutions in a given situation or even the imaginary of potential future lives, socio-economic set-ups and human-nature relations. After all, it is human sense-making and engagement that drives socio-economic and political developments and finds materialization in the institutions that constitute the “reality” of today.

Social scientist system scholars like famous Donella Meadows therefore analyze paradigms as the “source of systems,” informing the purpose that these are set out to deliver on. In system

---

<sup>5</sup> Antonio Gramsci, 1971, Selections from the Prison Notebooks, International Publishers, p.126

<sup>6</sup> *ibid.*

transformation strategies paradigms therefore rank as the second highest leverage point, above rule changes and any other standards or metrics: “The shared idea in the minds of society, the great big unstated assumptions - unstated because unnecessary to state; everyone already knows them - constitute that society’s paradigm, or deepest set of ideas about how the world works.”<sup>7</sup> Once these reference frameworks start changing we observe a widespread questioning of the institutions in place, the goals they are after and the processes they rest upon. People begin to ask: What is the purpose here? From a Gramscian point of view one would say that the hegemony of particular ideas or narratives and therefore their legitimizing power are challenged. Coupled with frictions in the economic-technological reproduction circuits the conditions of a “structural crisis” emerge that hold the potential for more radical or deeper transformative system change.

#### 4. Embedding Mindset and Paradigm Shifts in Transition Theory

One rather recent research discipline seeking to understand and conceptualize wider and deeper system change is transition theory.<sup>8</sup> One of the central concepts among this research community has been developed by Frank Geels and is referred to as the Multi-Level Perspective (MLP).<sup>9</sup> It draws on structuration theory in sociology and distinguishes qualitatively different ordering levels in societies according to their degrees of changeability and resistance to change. This does not imply a hierarchical structure (change can emerge on any of the levels) but does express how alterations on higher levels typically impact the path dependencies that lower levels are confronted with. Of such levels it distinguishes three:

- a *niche level* where experiments or pioneering innovations are undertaken by small units or “situated groups” that can change fastest and deviate most from the established framework for action because they show few interdependencies with overarching or neighboring systems,
- a *regime level* whose structures include well-established practices, rules, science and technologies that govern social interaction on the societal level and through institutional settings and feedback loops tend to stabilize the status quo,
- an overarching *landscape level* of slowly changing, rather exogenous development trajectories like nature’s laws, big infrastructure but also deeply anchored economic institutions like the market system and worldviews or social values. These form the backdrop of lower level developments.<sup>10</sup>

The landscape level is impossible to purposefully change in the short run but can bring about shocks that lead to rapid change on the regime or niche levels, like natural disasters. Yet, the evolution of all of these structurations is the result of parallel processes in diverse subsystems influencing each other and reacting to changes or shocks in their environments. The changing constellations create different impulses and spaces for change, many changes on the lower levels also triggering reactions or even transformations on the higher ones (see graph below).

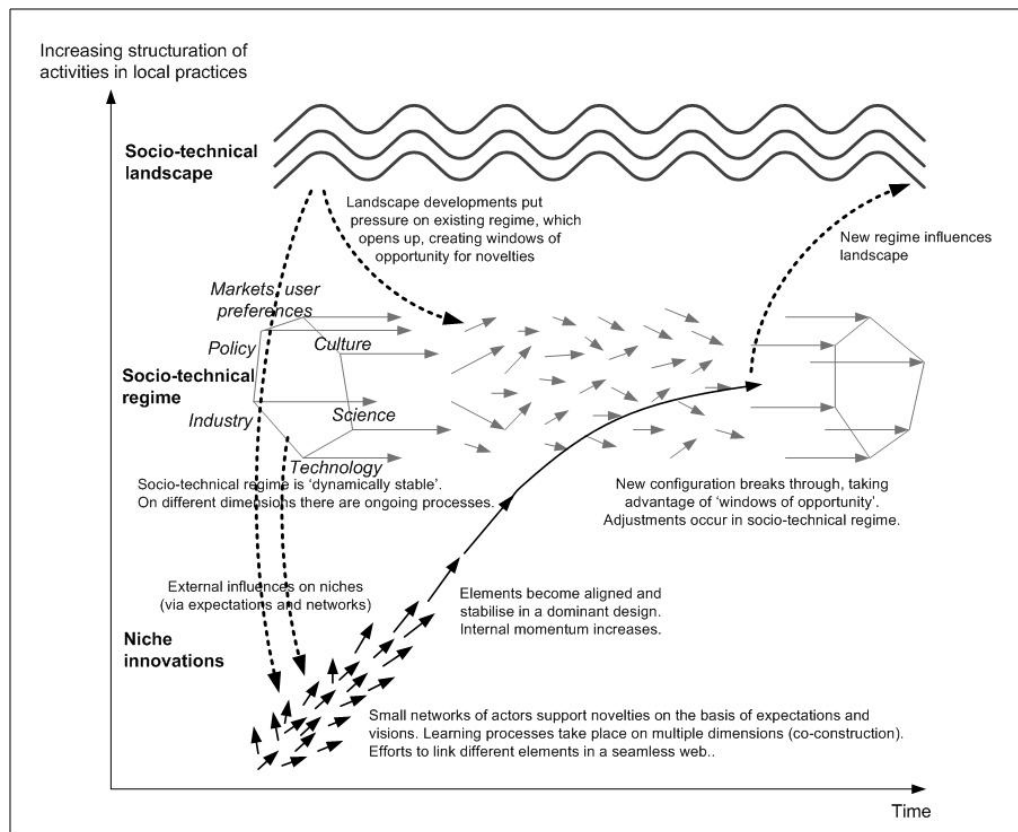
---

7 Donella Meadows, 2009, Thinking in Systems. A Primer, Earthscan, p. 162

8 For a website with a manifesto on this research approach, links to articles and the annual conference see [www.transitionsnetwork.org](http://www.transitionsnetwork.org)

9 For an overview of joint concepts and differences between sub-schools see the book by Jan Shot et. al., 2010, Transitions to Sustainable Development. New Directions in the Study of Long Term Transformative Change, Routledge

<sup>10</sup> Depending on the author you find slightly diverging descriptions on where elements like market patterns or policy orientation rests, regime or landscape level. Each case may allocate these slightly differently, depending on the actual system looked at and the contextually perceived resistance to change.



**Figure 1: The Multi-Level Perspective developed by Frank Geels and Rene Kemp<sup>11</sup>**

From this point of view, transitions to sustainable development are conceptualized as long-term multi-actor processes with interactions between citizens and consumers, businesses and markets, policy and infrastructures, technology and cultural meaning. Resistance results from direct action on the side of other actors or groups with other interests or views but also from the various types of path-dependencies outlined above.

In their analyses, however, most transition studies on socio-technical regime changes focus on the more visible and tangible types of path dependencies and the relationship between new technologies and social practices. The role of mind sets, narratives or cultural aspects and their structural power potentials in pushing or blocking transformative change is usually not assessed. Some reference is made in a list of five “main ingredients” for successful transformation that system innovation researcher Charlie Leadbeater has put together. Taken together, these ingredients amount to what Gramsci would have called a structural crisis of a framework for action as described above:

1. Failures and frustrations with the current system multiply as negative consequences become increasingly visible.
2. The landscape on which the regime operates shifts as new long-term trends emerge or sudden events drastically impact general availability or persuasiveness of particular solutions.
3. Niche alternatives start to develop and gain momentum, coalitions start forming that coalesce around the principles of a new approach.
4. New technologies are energising the alternative solutions either in form of alternative products or communication and connection possibilities.

<sup>11</sup>Franke Geels und Jan Schot, 2007, *Typology of sociotechnical transition pathways*, in: *Research Policy*, 36(3), pp. 399-417



5. For far reaching regime change rather than small adaptations and cooptation into the old regime, dissents and therefore fissures inside the regime itself are key. Possibly called niches within the regime, in joining coalitions for change they will help bring the system down or at least change its current setup and development dynamic significantly.<sup>12</sup>

A core functional ingredient in this sequence is of course the “new approach” mentioned in point 3 that multiple actors and groups coalesce around. The new principles mentioned are the results of having ideas and seeing that and how this system could be set up differently and which purpose it could then fulfill. In the following I illustrate that hegemony theory can shed some more detailed light on this point in the list of “ingredients” and provides an interesting research perspective delivering a lot of insight into system transformation.

Contemporary political economists like Stephan Gill have developed analytical Gramscian hegemony concepts that fit nicely with the MLP divisions. They highlight how the neoclassical development ideas and story finds different forms of expressions on each level and help sharpen an understanding of the degree to which this paradigm has been encoded into societies and culture.

On the landscape level, *market civilization* describes the overarching market system structure and the hegemonic competitive growth narrative according to which all relationships should be commodity shaped and organized along price signals. This deeply anchored grammar nurtures, according to Gill, an ahistorical, economic and materialistic, me-oriented, short-term and ecologically myopic perspective on how the world works.<sup>13</sup>

The regime level is marked by what Gill calls *new constitutionalism*, describing how the establishment of laws, regulations, social practices and artifacts are necessary to create commodity forms and market patterns out of human skills, ecosystem services or credit relations. Their amendments and expansion transform the organizational logic of formerly non-marketized areas of life, like governance of nature in the form of Emission Trading Systems. The most impressive of those examples may be the addition of “third markets” of derivatives to the finance system that have no existence beyond digital numbers on a screen and legal frameworks promising their owners claims to real resources.

Thus, from a hegemony point of view, such regime structures “armor” the market civilization outlook on human development with tangible manifestations in norms, rules, role definitions and infrastructures that become the experienced reality of humans. In effect, living embedded into such social and institutional systems and path dependencies pushes individuals closer to behaving and organizing their own life like the market society utopia foresees. The term “armoring” also indicates that those interests and groups benefiting from these particular regime solutions can count on being defended with the force of the law: as the generalized rules for society they manifest the “common interest” or “normality” that can legitimately be coerced, even with force. Here we find the Machiavellian duality of consensus and coercion in successful ruling strategies.

Lastly, *disciplinary neoliberalism* refers to the definition of discipline as used by sociologist Max Weber. It holds that classes, status groups, political parties etc. are social phenomena expressing the distribution of power in a society. They discipline those who wish to be part of these communities or networks: “What is decisive for discipline is that obedience of a plurality of men is rationally uniform”.<sup>14</sup> In effect this means that everyone seeking to fit in with a market society develops self-governing rationales, habits and social practices that

---

<sup>12</sup> Charlie Leadbeater, 2013, The Need For Regime Change, in: Systemic Innovation: A Discussion Series, Nesta Foundation, pp.31-32, for download at <http://www.nesta.org.uk/publications/systemic-innovation-discussion-series>

<sup>13</sup> Stephen Gill 2002, Power and Resistance in the New World Order, Palgrave, pp.116-138

<sup>14</sup> Max Weber 1963, quoted by Gill 2002, p.130

allow for him or her to lead a successful live under the hegemonic paradigm or narrative and the organizational logics or new constitutionalism patterns that have been set up.

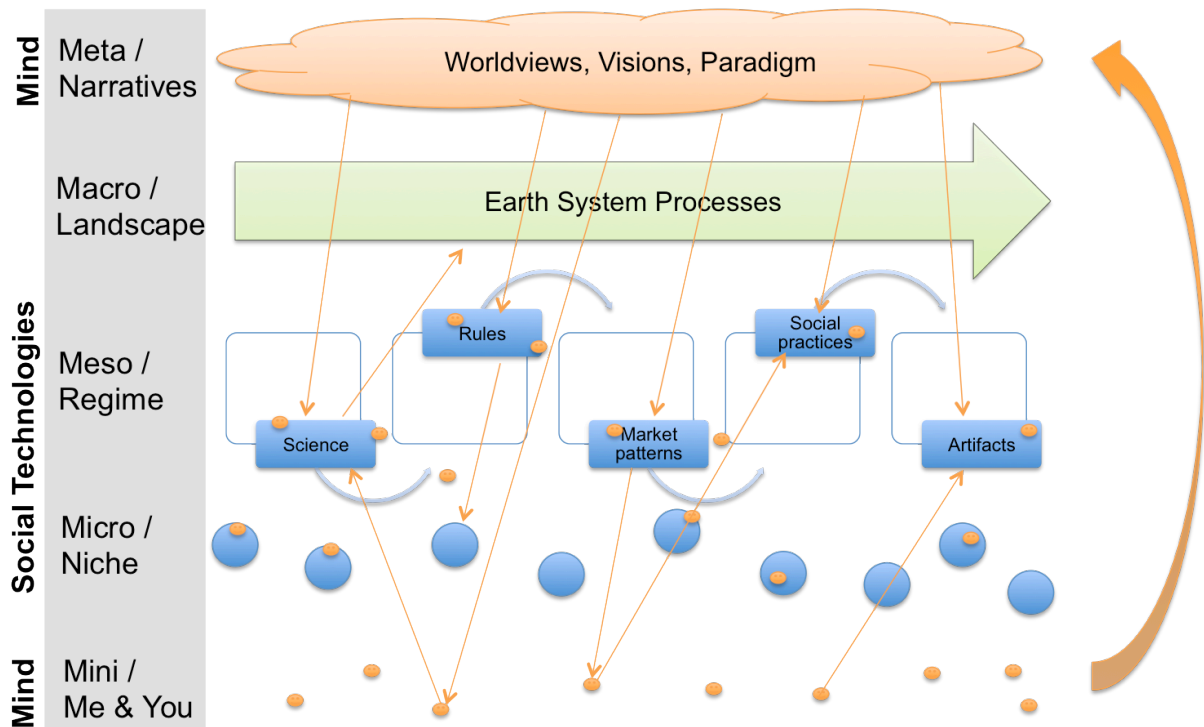
Gramsci himself had therefore urged to not restrict the idea of coercive rule to official laws but to understand how the “private” context equally defines codes of conduct and shapes the limits of possible deviance as long as “fitting in” is still the motivation: “Question of the ‘Law’: this concept will have to be extended to include those activities which are at present classified as ‘legally neutral’, and which belong to the domain of civil society; the latter operates without ‘sanctions’ or compulsory ‘obligations’, but nevertheless exerts a collective pressure and obtains objective results in the form of an evolution of customs, ways of thinking and acting, morality, etc.”<sup>15</sup>

Thus, Gill’s neo-Gramscian concepts substantiate the general MLP view on societies with a political economist interpretation of current path dependencies from legal to mental regime structures. They summarize manifestations of the neoclassical paradigm and mindset on each of the three levels as distinguished by Geels and Kemp. This shows how the hegemonic story of sense-making on why things are the way they are translates into the socio-cultural glue behind strategies cutting across them and therefore into structural power potentials in change or resistance strategies.

To capture this mediating role of mindsets or paradigms in societal transformations I expanded the MLP graph. The landscape level got divided into two qualitatively very different ones. On the macro level I put more physical-structural parameters on which humans have only very indirect and certainly not quick influence, like earth system processes. On a *meta level* I distinguished the role of worldviews or mindsets that are still very resistant to change but directly constructed by humans and therefore also directly changeable, even in the short term. They are permeating the socially built regime and niche activities that I grouped under the term “social technologies,” which could also be institutions. In addition, I added the micro level to highlight the role of individual sense-making and deviance from the common sense. In the end, each group or niche is the result of individuals making the choice of coming together and it will be single people formulating the new principles for pioneering activities mentioned by Leadbeater. By connecting with complex system innovation approaches like that of Donella Meadows I will argue how changes on the rather intangible meta level translate has the potential to become very objective future reality: in the end all human-created structures are a materialization of ideas.

---

<sup>15</sup> Gramsci 1971, p.242



14

**Figure 2: The role of mind sets in the Multi-Level-Perspective on system change**

### 5. Mind shifts as high leverage points in sustainability transitions

Systems like the ones grouped onto the different levels of the MLP or what the MLP as a whole describes can be a society, a family, a corporation, a university, a forest, or an economy. They can be defined as “a set of things – people, cells, molecules, or whatever – interconnected in such a way that they produce their own pattern of behavior over time”.<sup>16</sup> Each system is composed of 3 different types of elements: accumulated parts (stocks), dynamic interconnections changing their quality and composition (flows) and purpose (function). When seeking to understand system *behavior*, it is very important to look at the interconnections and feedback loops between different stocks and their changing, which in turn are programmed by the purpose that the system pursues.

To imagine this programming effect it is helpful to turn back to the list of leverage points to foster system change by Donella Meadows. It ranks the possible intervention places according to their transformative effectiveness, coupled with the possibility to actually influence them.

**Places to intervene in a System** (in increasing order of effectiveness)

12. Constants, parameters, numbers (such as subsidies, taxes, standards)
11. The sizes of buffers and other stabilizing stocks, relative to their flows
10. The structure of material stocks and flows (such as transport networks, population age structures)
9. The lengths of delays, relative to the rate of system change
8. The strength of negative feedback loops, relative to the impacts they are trying to correct against
7. The gain around driving positive feedback loops

<sup>16</sup> Donella Meadows, 2009, p.2

6. The structure of information flows (who does and does not have access to what kinds of information)
5. The rules of the system (such as incentives, punishments, constraints)
4. The power to add, change, evolve, or self-organize system structure
3. The goals of the system
2. The mindset or paradigm out of which the system – its goals, structure/rules, delays, parameters – arises
1. The power to transcend paradigms

This list is designed for social system change and adjustments on the lower levels can alleviate immediate pressures but will usually not break path dependencies perpetuating the system behavior and development dynamic. Only if changing these lower parameters will kick off higher sitting leverage points will impact on the system purpose and behavior emerge. These points are embedded into many path dependencies or feedback loops from material infrastructure to social processes and institutions to individual sense-making of what is at stake in the given context. This makes them more difficult to change but at the same time, doing it successfully will bring more lasting change to the entire system dynamic.<sup>17</sup>

For example, if a government increases the minimum wage by 10 percent, does this mean the former rate was not enough to pay for existence – or is it the measure expressing a new goal that income differences between people working in the same organization should be reduced? Is it simply a measure to avoid lower strata of society to enter poverty statistics and welfare programs, or is it a move to alleviate the span of inequality in a society? The latter would be a new rule, which indicates a goal-shift as to how much inequality we accept in sustainable societies - rather than fighting the symptom that people cannot pay for a living if they work fulltime.

Changing the third highest leverage point, the system goal therefore means that many of the lower leverage points will be put in motion to get there. Finally, the top two encapsulate the transformative potential of mind or paradigm shifts: “the mindset or paradigm out of which the system – its goals, structure, rules, delays, parameters, arises; and the power to transcend paradigms.”<sup>18</sup> They provide the reference framework for what seems adequate, rational, desirable and possible.

Today, the most important goal of our societies is economic growth. It prevails even though the type of growth structure we have today produces a lot of social and environmental costs. Yet, in order to tackle those problems, societies keep on pushing for more of this growth as fast as possible in order to be able to pay for the environmental and social damages. Given the ongoing neoclassical paradigm and its blind spots this path is promoted to be continued in ignorance to the fact that most of the damage is happening because of *the type of growth* that this development idea is aspiring for.

Meadows points out that this phenomenon is typical: people have a feel to where leverage points sit but often tend to push them into the wrong direction. To address negative outcomes and emerging structural frictions the collective will suggests pushing for yet more growth of this kind instead of thinking about the prevented damage that less of it could bring.<sup>19</sup> To give a prominent example of this mindset trap, one can look at the Brundtland report from which

---

<sup>17</sup> Donella Meadows, 1999, Leverage Points. Places to Intervene in a System, paper published by the Sustainability Institute, p.3, for download at: [www.http://www.sustainer.org/pubs/Leverage\\_Points.pdf](http://www.sustainer.org/pubs/Leverage_Points.pdf)

<sup>18</sup> *ibid.*, p.3

<sup>19</sup> *ibid.*, p.1

the definition of sustainable development emerged in the first place: it suggests to foster 3 percent GDP growth worldwide because otherwise rich countries will not invest in poor countries and rich people will not accept redistributive measures if they are not taken from yet more gains. The imagination of possible future developments is straightjacketed by the image and logics of a capitalist market society connecting up to 10 billion selfish utility maximizers.

Changing the deeply embedded neoclassical paradigm, its political and economic institutions, distribution patterns, life styles and identity-shaping discipline therefore amounts to no less than *repurposing* human development. This is a huge task, will involve lots of conflict, and take time. But ultimately, even very deep social structures depend on humans reproducing them. So just like paradigms and hegemonic mindsets have a hampering effect on alternative proposals, challenging and changing them also holds tremendous emancipating power. Gramsci called this the “progressive self-consciousness:” “The awareness of self is re-constituted through an appreciation of prevailing thought-patterns and the nature and distribution of life-chances. Hence the moment of self-awareness leads to a more complex and coherent understanding of the social world and is a form of historical change”.<sup>20</sup>

So, while changing paradigms is not an easy task, engaging in this goal – as expressed with the direct arrow from mini to meta level in Figure 2 - is immediately open to everyone. Donella Meadows refers to Thomas Kuhn when outlining this path of engagement: “In a nutshell, you keep pointing to the anomalies and failures of the old paradigm, you keep speaking louder and with assurance from the new paradigm, you insert people with the new paradigm in places of public visibility and power. You don’t waste time with reactionaries; rather you work with active change agents and with the vast middle ground of people who are open-minded”.<sup>21</sup> A lot of this is happening today, as the following practice examples show.

## 6. Living a New Economic Paradigm in Practice

Across the world many different initiatives and movements for alternative ways of organizing human relationships and human interaction with nature are in place and emerging. We see a wave of small-scale *repurposing* experiments with alternative production and consumption systems and solutions. They are of different size and shape and carry different names, but their commonalities in paradigm are striking. None of them sticks with the story that actors are selfish and insatiable independent units or that market prices and efficient competition are the one polestar for successful development processes. All of them track connections between social processes and those of the natural ecosystems around them. They seek to understand how the wider system context influences actor decision-making and institutional development trajectories. The following section reviews four exemplary movements that are rapidly growing. It is a very Eurocentric snap-shot of initiatives that have made it into mainstream attention and a next research project could seek to map many more initiatives around the world regarding paradigmatic similarities or differences.

### 6.1 *The Economy for the Common Good*

The mindset of this movement does not extrapolate from the description of „how humans are“ but starts from a societal or system view. The challenge for successful sustainability solutions for thinking and aspiring individuals is viewed to lie in striking the balance between

---

<sup>20</sup> Here quoted by Stephen Gill, 2002, p.31

<sup>21</sup> Donella Meadows, 1999, p.18



community responsibility and individual freedom. Neither is functioning without the other: individuals need cooperation to flourish and build wealth and the community needs creative deviators in order to keep on diversifying and adapting.

The core Christian Felber, a lead author in this movement, therefore emphasizes the need to reconnect private entrepreneurship with the overall binding goal of the common good. The latter can only be defined in democratic political processes and the former shows how a particular way of running a business can deliver on it. According to Felber, the current economic rules not only incentivize egoism, greed and striving for power but also reward those showing such behavior most effectively. Unlike the “com” in “competition rules” would suggest (Latin for “together” or “we”) they ensure that winners basically take all and render even hostile take-overs of entirely healthy businesses as a legitimate outcome as long as purchasing power can push it through. This incentivizes relationships of “contrapetition” in which asocial behavior pays off, attacking units are better off for the next battle and power and wealth are increasingly concentration.<sup>22</sup>

The movement’s website [www.gemeinwohloekonomie.org](http://www.gemeinwohloekonomie.org) proposes 20 principles or ideas as to how an alternative type of economy could be put into practice. None of these are foreseen to be fixed rules but inspirations for reflection and dialogue on the values, norms and practices that status quo institutions and regime solutions nurture or even prescribe. Principle 1 expresses the overall purpose mission: “The same collectively shared values that contribute to fulfilling interpersonal relationships are the basis for the Economy for the Common Good: confidence building, cooperation, appreciation, democracy, solidarity. Scientific research proves that fulfilling interpersonal relationships constitute a key factor to happiness and motivation.”<sup>23</sup>

Following from this the foreseen “more intelligent rules of the game” should lead away from contrapetition towards cooperation, from profit to common good results, and from market control to democratic decision making. In an Economy for the Common Good, business performance measurements therefore go beyond the internalization of environmental harm into market prices: “Economic success will no longer be measured with (monetary) exchange value indicators, but with (non-monetary) use value indicators.“ As a consequence, similar indicators for business and economic performance on a societal level can align bottom-up and top-down initiatives towards the new societal purpose: “On the macroeconomic level (national economy) the Gross Domestic Product (GDP) will be replaced – as an indicator of success – by the Common Good Product. On the microeconomic level (company) the financial balance sheet will be replaced by the Common Good Balance Sheet (CGBS). The CGBS becomes the main balance sheet of all companies. The more companies act and organize themselves along social, ecological and democratic lines, the more solidarity they display, the better will be the results of their Common Good Balance Sheet. The better the CGBS results of the companies within a national economy, the higher its Common Good Product.”<sup>24</sup>

Thus, the Common Good Economy rules and incentive structures are not to be confused with a socialist planning state that Felber himself diagnoses to have suffocated individual freedom. The entire idea is to make selfish and ruthless behavior the more difficult solution rather than the easy and profitable one, e.g. externalization of social and environmental costs is not longer a competitive advantage but disadvantage. A research strand full of such ideas on how

---

<sup>22</sup> Christian Felber, Gemeinwohloekonomie. Das Wirtschaftsmodell der Zukunft, Deuticke, 2010.

<sup>23</sup> See the website <http://www.gemeinwohl-oekonomie.org/en/content/20-principles-guiding-economy-common-good>

<sup>24</sup> *ibid*

to create new default settings is behavioral economics. Here the term “nudging” is used for non-controlling adaptations of the architecture of choice so that sustainable behavior becomes easier rather than being the more cumbersome choice in any given situation.

## 6.2 Transition Towns

The movement of Transition Towns finds its common denominator for engaging people in collective change processes in neighborly vicinity. Originally emerging from the UK it has spread all across Europe and makes “reflexive relocalization” its core stance. The term reflexive is important because it highlights that the change processes are driven by the communities and not imposed from above. The general paradigm pictures communities as systems embedded in wider environmental systems and the goal is to improve the resilience of the towns future development in light of building megatrends like climate change, rising energy prices and economic crises.<sup>25</sup>

For Rob Hopkins, a leading author in this movement, resilient sustainable communities are those that are structured along three principles: *diversity* of life-supporting solutions or livelihoods, *modular structuration* with buffers to the outer systems that increase self-reliance possibilities, and *tight feedback loops* that bring the results of actions closer to those responsible for them.<sup>26</sup> This of course is easiest done at the local level where physical vicinity allows for such design principles to be fulfilled.

Once again, it is the overarching system dynamics that determine which production processes are promising and the assumption is that learning actors rationally adapt their solutions accordingly. Rational in this context, however, means with reason and a lot of discussion rather than an automated response of representative actors to cost-benefit stimuli. Part of this reasoning involves assessing the foundational ideas around what humans need and want and questioning whether efficiency gains are always good. An explicit part of increasing self-reliance and resilience, for example, means turning away from massive economies of scale that are only possible under systems with very high divisions of labor and a concentration of production. Less mass production and a focus on non-consumption wellbeing strategies are also central elements and pursued by linking “satisfaction and happiness to other less tangible things like community, meaningful work, skills and friendship.”<sup>27</sup>

The vision behind Transition Towns is one of a resilient world built on the promotion of trust, well developed social networks, and adaptability of groups working well together. The main mission is summarized as follows: “to inspire, encourage, connect, support and train communities as they adopt and adapt the transition model on their journey to urgently rebuild resilience and drastically reduce CO2 emissions.”<sup>28</sup>

We clearly see how many of these principles fly against the notions of neoclassical models: actors are explicitly requested to change their way of thinking and being in the world and to share instead of compete. Production and cooperation processes are intentionally set out to be less efficient and centralized so that resilience and co-creation are increased. The economic

---

<sup>25</sup> Rob Hopkins, *The Transition Handbook. From oil dependency to local resilience*, 2008, p.10

<sup>26</sup> *ibid*, pp. 55-56

<sup>27</sup> Rob Hopkins, 2012, *Resilience Thinking*, in: Bollier and Helfrich, *The Wealth of the Commons*, The Commons Strategy Group, p.20-21

<sup>28</sup> Rob Hopkins and Peter Lipman, *Who we are and what we do*, document on the Transition Network website, for download at

<http://www.transitionnetwork.org/sites/www.transitionnetwork.org/files/WhoWeAreAndWhatWeDo-lowres.pdf>

system is viewed as a subset of socio-ecological systems that can and should fundamentally change if it hurts those. Research strands providing ample evidence on the importance of social connections and intrinsic rather than extrinsic motivation for human wellbeing and happiness are positive psychology and neurosciences.

### 6.3 Commoning

In economic thinking and governance the term commons is usually connected with the idea of a “tragedy of the commons.” Openly available natural resources like land, forests, oceans or the atmosphere would be used unsustainably if everyone could pursue their own interests of using as much as possible of them or dumping ones emissions and waste into them. The selfish-competitive actor view in neoclassical economics therefore concluded that only private property rights and strict state control would be suitable to deter such activities.

The Commoning movement, on the other hand, puts the idea of commonly held property at the center of a principled approach and governance ideal that treats most of what is there today as the common heritage of humankind to which each person has the same entitlement.

This also implies that each generation should not use more than future generations will need to enjoy similar wealth levels. Jointly produced value is conceptualized as a common good outcome rather than divided into individual shares of the market price returns in line with the particular “value” that each one brought to process. Thus, next to being co-stewards of what earth and ancestors have provided, everyone is conceived to be a co-proprietarian of the wealth created. Commoning solutions therefore seek to define new systems for socio-economic reproduction that go beyond the typical market and state patterns in political economy. They envision and enact non-commodified relationships in which joint responsibility for the maintenance of the system is an integral part.

The book *The Wealth of the Commons: A World Beyond Market and State* comprises 73 essays from thinkers and practitioners in the field. The commonalities binding this rapidly growing community are described to be “an overarching worldview” with a set of social attitudes and commitments and a political philosophy or even spiritual disposition that guides an experimental way of strategic change.<sup>29</sup> The introduction of the book highlights plenty of statistics that show how much “overwealth” (Überfluss) there is in the world and that it is not a matter of scarcity but of unsound patterns of production, distribution and consumption that create the unsustainable outcomes of today. Thus, it is also not simply a question of better technologies but of better institutions with their psychological, socio-cultural and institutional path dependencies.

While there does not exist one unitary definition of the commons or commoning, one website central to the movement (<http://onthecommons.org>) summarizes the gist of this paradigm. The core principles characterizing all commons initiative are

- *equity* - everyone has a fair share of our commons to expand opportunities for all;
- *sustainability* - the common wealth must be cared for so that it can sustain all living beings, including future generations;
- *interdependence* - cooperation and connection in communities, around the world and with the living planet is essential for the future.

The characteristics of community life in line with the commoning vision are described as

- *shared governance* in the most participatory form;

---

<sup>29</sup> David Bollier and Silke Helfrich, 2012, *The Wealth of the Commons*, The Commons Strategy Group, pp.xii-xiii

- *deepened responsibility* for the restoration and care for the common inheritance;
- *belonging* as a general outlook on ownership and organization;
- *co-creating* as a form of engagement and sharing that highlights the abundance of skills and solutions rather than scarcity.

Commoning approaches therefore distinctly break with the organizational logic of markets and declare the profit motive and the individualistic competition processes to be core drivers of unsustainable solutions.

## 7. Conclusion

Before an individual decides to act, he or she requires a story or mindset to make sense of what life is all about and what is at stake in the given situation. Acting rational from a reflexive science view therefore means first and foremost to act in congruence with ones worldview, with the individual interpretation of what the social logics or “rules of the game” are and if those can or should be changed. Research designs applying mindsets or paradigms as core variables therefore seek to show how the same situation or possible future developments are viewed very differently depending on the chosen lens. The goal of this paper was to connect a critical political economy approach in reflexive science, namely Gramscian hegemony theory, with currently widely discussed concepts in transition theory.

By discussing exemplary manifestations of the neoclassical paradigm with reference to the Multi-Level-Perspective on societal change it showed how ideas and their materialization in concrete norms, practices, rules, laws, material infrastructures and physical technologies create a framework of action that influences how human needs develop as much as what seem adequate or possible solutions for commonly defined goals. It therefore engages with the research challenge put forward in the 2013 World Social Science Report that grouped mindsets among the core concepts to be understood for greater transformation towards sustainability: “Critical to a social-ecological systems perspective is the role of humans as reflexive and creative agents of deliberate change. Understanding how values, attitudes, worldviews, beliefs and visions of the future influence system structures and processes is crucial”.<sup>30</sup> The report calls for increased “future literacy” in order to be able to envision and therefore engage in change processes so that the outcomes are institutions, processes, technologies and business models sustainable by design and do not need ex-post cleaning up any more. For this, it is important to see where blind spots of the common sense or the uncontested ideas about how the world works are blocking structural change.

The paper showed that neoclassical worldviews and models are full of blind spots regarding the origin and quality of human needs as well as natural processes providing the resources needed to satisfy them. It also provided some first ideas as to where their nevertheless ongoing reification is located, from overarching infrastructures to individual identity formation. As philosopher Richard David Precht points out: “Strict and tough calculation of utility, ruthlessness and greed are not man’s main driving forces, but the result of targeted breeding. One could call this process ‘the origin of egoism by capitalist selection,’ following Charles Darwin’s famous principal work”.<sup>31</sup>

---

<sup>30</sup> World Social Science Report 2013. Changing Environments, UNESCO and ICCS, Summary, p.7, online readable at [http://www.oecd-ilibrary.org/social-issues-migration-health/world-social-science-report-2013\\_9789264203419-en](http://www.oecd-ilibrary.org/social-issues-migration-health/world-social-science-report-2013_9789264203419-en)

<sup>31</sup> Richard Precht, here cited by Habermann 2012, We Are Not Born as Egoists, in Bollier/Helfrich 2012, p.15

The final conclusion therefore holds that the ultimate drivers of societal change are located within each one of us. In comparison to the magnitude of the challenges that earth scientists and poverty statistics describe this may sound disproportionate. But each doing things differently, each questioning of purpose or reasons leaves a dent in the former framework of action and its reifying impacts. Psychology, sociology, neurosciences show that shifting mindsets implies not only a change in thinking but a change in being, feeling, engaging, relating and acting in the world. They are at the root of what we can imagine to be possible sustainable futures and adequate social as well as physical technologies and governing systems to host them. The briefly reviewed and quickly growing pioneer movements for new sustainability solutions are an expression of this. They all carry clear principles and imaginations of system designs whose purpose is a different one than economic growth and market forces.

The fascinating work of the next years and decades in research and practice will be to keep on mulling out the new paradigm or story-lines emerging from this movement and see how they may shape into a new collective will with a compelling social myth. The latter needs more conscious storytelling and strategic coalition building between pioneering initiatives or change makers highlighting these niche practices to argue for regime change. After the first superficial comparison of paradigms behind common good economy, transitions towns and commoning I am less pessimistic than sociologist Harald Welzer that this is possible: “For the time being, the transformation necessary today lacks guiding principles of the kind that early industrialized societies had in terms of progress, freedom, prosperity and growth. It will not be possible to establish new mental infrastructures without guiding ideas, yet if they do not dovetail almost naturally into day-to-day lives and lifestyles, visions of the self and frames of reference for the future, they will remain just that – ideas.”<sup>32</sup>

Instead, I argue that we do not need to reinvent principles but much rather reclaim the meaning of what deeply anchored human values are connected with. Among the pioneers we find overlapping ideas for this: a holistic understanding of *prosperity* beyond consumption needs that guides equitable and balanced *progress* of the whole socio-ecological system to improve human security - *freedom from fear* to fall behind or to be enmeshed in conflicts over resources and *freedom from want* that marketing and advertising constantly create. The examples already show that this leads to an unprecedented *growth* in the *creativity* of non-materialistic need satisfaction strategies and *conviviality* in the processes to enact them. As a result we can add another benefit for future human development: improved individual, communal and societal *resilience* in a world whose transformation - towards sustainable development or into any other direction - will present us with a rocky ride.

---

<sup>32</sup> Harald Welzer, 2012, Mental Infrastructures, essay published by the Boell Foundation, Germany, p. 32