Meanings for the degrowth society: From the Great Acceleration to the semiosis of the living

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Abstract. The global ecological crisis has often been related to the so-called Great Acceleration, i.e. the rapid growth of many social metrics (population size, gross domestic product, energy usage, etc.) from the mid-20th century onwards. The degrowth movement has opposed the great economic expansion by advocating for a simplified society and decreased human use of energy and natural resources. In this paper, I will analyse the semiotic aspects of this process as a *semiotic acceleration*, and argue that transformation into the degrowth society can be supported by the restructuration of human semiotic systems towards more coherence and better connectivity with ecological processes. The semiotic acceleration manifests as a massive multiplication and spread of abstract signs and information content that is detached from ecological and material processes, and lacks value-based organization. To support the degrowth transformation, I propose the semiosis of the living as an understanding that significance arises first and foremost from semiotic participation in specific lived ecologies (cultural, ecological, and material), placement and rootedness of the given act of semiosis in the particular semiotic fabric and the unfolding of the world. The semiosis of the living re-grounds the human semiotic processes in the patterns of iconic and indexical relations shared by humans and non-human species alike.

Keywords: ecosemiotics; degrowth movement; the Great Acceleration; sign object; the semiosis of the living; semiotic ground; ecosemiosphere

There is a broad consensus amongst researchers in earth systems science, climatology, and ecology concerning the severity of human-induced global ecological crisis (Powell 2019). Depending on the chosen development strategy, the global average ground temperature is expected to rise from 1.4 to 4.4°C by the end of the century (IPCC 2021; IPCC 2022). The effects of climate change and the replacement of natural ecosystems with agricultural and urban landscapes are the

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main factors pushing a large number of species to extinction (Di Marco *et al.* 2018; Spooner, Pearson, Freeman 2018). It is predicted that the current extinction rate of vertebrate species is up to 100 times higher than the historical background rate, and the number of endangered endemic vertebrate species will double by 2040 (Ceballos *et al.* 2015; Gonçalves-Souza, Verburg, Dobrovolski 2020). Ecological damage as such is often connected with the so-called Great Acceleration or the rapid growth of many social and economic measurements (population growth, gross domestic product [GDP], energy usage, etc.) from the mid-20th century onwards (Steffen *et al.* 2015). The global impact of humans is deeply rooted in profit-driven and growth-oriented economies. It can be described as the over-exploitation of nature's resources for the sake of short-term human advantages, coming at the expense of other biological species. At the same time, humans' role and responsibility for the ecological crises is not even, but varies depending on the geographical region and country, gender and socioeconomic class.

The Great Acceleration and human expansion are not only material and social processes. In fact, they are also processes of altered cultural dynamics, communication, and sign relations. The emic aspect of the growth lies in spedup communication and information exchange, overworking and exhaustion, and higher and higher effort to gain social benefits or preserve social and economic status. The hastening of social life is systematic – the life that seemed satisfactory yesterday is not pleasing according to today's measures, and the exertion required today will not be sufficient tomorrow. German sociologist Hartmut Rosa (2020) describes modern society as being in the state of dynamic stability – that is, contemporary society needs constant quickening in order to retain its stability. The Great Acceleration appears to be related to changes in semiotic processes, that is, to how cultural meanings and values are constructed and used and how they become disconnected from referential objects in the world.

In the recent decades, the social and political movement of *degrowth* has countered the growth-oriented economies and social systems by challenging the power relations in the existing economical systems, advocating a more simplified society and decreased human use of energy and natural resources (Burkhart, Schmeltzer, Treu 2020; Stuart, Gunderson, Petersen 2021; Cosme, Santosi, O'Neill 2017; Kallis *et al.* 2018). Critiques of Western progress narratives and profit-seeking capitalist economies, imbalances holding between resource usage and the environmental impacts holding between social groups as well as global regions, questionable relations posited between GDP and human wellbeing and good life, and the possibility of a basic income, are some topics that the degrowth movement has addressed.

There is a broad understanding that current energy usage rates and production/ consumption are not sustainable in a longer perspective. Fulfilling the United Nations' targets of a global temperature rise of less than 1.5 degrees for 2100 is not likely without a remarkable decrease in global energy usage (Gruber, Wilson, Bento 2018; Keyßer, Lenzen 2021). At the same time, there is a strong positive correlation between growth of a national economy and environmental degradation: on average, 1% of economic growth brings along 0.6-0.8% increase in carbon emissions and 0.8% growth in resource use (Kallis et al. 2018: 297). Similarly, the environmental problems of massive species extinction and the replacement of natural ecosystems with agricultural and urban landscapes cannot be solved within the current growth-oriented economies (Otero et al. 2021). For a sustainable future, living standards and energy consumption should return at least to a global level comparable with the 1960s (Millward-Hopkins et al. 2020). Consequently, human civilization can only endure if societies are restructured to become simpler and less producing/consuming. Such transformation need to be systemic and cover many facets of culture and society as envisioned by Giorgos Kallis and colleagues:

the economic is no longer at the center of everything; democracy is direct; surplus is expended for reproduction or fun; income and wealth are distributed according to egalitarian principles; vital resources, infrastructures, and spaces are shared and held in common; technology is convivial and serves social purposes; resource throughput is minimized; and working hours are reduced by cutting consumption, production, and wasteful expenditures. (Kallis *et al.* 2018: 308)

In addition to economic, political, and social change, degrowth-transformation also depends on the decolonization of the imaginary and reorientation of individuals towards a simpler lifestyle, the emergence of new forms of social connectivity, collective action, and the availability of cultural resources that support this change (Brossmann, 2020; Varvarousis 2019; Lestar, Böhm 2020). This "transition from a materialistic to a convivial and participatory society" has been seen as one of the three main goals of the degrowth framework (Cosme, Santos, O'Neill 2017). Some social movements supporting the transformation of individuals include the voluntary waiving of products and goods, minimalism as a lifestyle, the sharing economy, and the consumption of experiences instead of commodities (Meissner 2019; Wallman 2015). From a semiotic perspective, the core issues that need to be targeted for the degrowth transition are: how to bring significance back to a world that we co-habit with other species and how to embed informational and communicational processes in the ecologies wherein we live.

Individual choices are made within existing signs systems, so people are influenced by the cultural context and the available communication-content which can either support or hinder the transformation. The challenge for semiotics – as a discipline studying regularities in signs, interpretation, and communication – is to figure out what strategies of meaning-making and corresponding values individuals can rely upon in the process of degrowth-transformation. The central argument of this paper is that the simplification of social systems and human life needs to be accompanied by the restructuration of human semiotic systems towards more coherence and better connectivity with ecological processes. My goal is to demonstrate how an individual can find support from the meaning-making in the degrowth transformation so that the outcome would be a simpler, but more significant and enjoyable life. In order to show some possibilities in this direction, I will first discuss the deficiencies of the dominant semiotic practices of the Anthropocene, and after that provide an alternative that grounds meaning and value in the broader cultural-ecological realm.

Semiotic acceleration: A criticism of the Anthropocene semiotics

A simple and broadly recognized definition of the sign is that the sign is something that stands for or represents something else than it is (CP 7.355-6). This quality of "standing for" creates, on the one hand, the distinction between the sign and its referent or object, but on the other hand, it also sets limits to the same division. There can be a sign function only if the referential connection persists. Deterioration of the referential dimension and domination of more abstract and self-sufficient signs appears to be a flaw of contemporary societies that corresponds to the growing detachment of humans from the rest of life on Earth. The crisis of representation is often seen as a characteristic feature of modernity (Nöth 2003: 10). Jean Baudrillard anticipated this condition in his concept of the simulacrum, where the "liquidation of all referentials" takes place. In a simulacrum, no representation or reference remains as there is no "truth, reference, objective cause" and "the whole system becomes weightless" (Baudrillard 1995: 5). The expansion of symbol systems in modernity has many roots and causes. We can shortly characterize this change by two processes: (1) the separation of abstract structures of language, discourses, literature, and art from the particular historical, ecological and material processes and conditions where they initially thrived; (2) the aversion, criticism, and cancelling of value relations of the structures that were established in the first stage. These stages of cultural development lead to the expansion of

abstract semiotic systems that are: (a) detached from the background conditions and developmental processes of the world; and (b) deficient of value-based organization and orientation. Together, these processes resulted in the emergence of semiotic entities in enormous quantities that formed detached slices of the world and generated abstract and self-sufficient semiotic bubbles.

The process of semiotic systems becoming separate from the fabric of the world produces exceptionality and uniqueness in bulk. Today, there is an enormous number of products that are advertized as excellent, tens of thousands of Instagram stars who are all unique, greater and greater productivity results represented in Excel sheets, etc. There are countless stories of success, all equally magnificent, but without any stated measures or criteria to assess the processes behind the signs. Household products are presented in ways that render invisible their production and ecological footprint. People present themselves in a way that hides their real lives and separates them from actual events, mistakes, imperfections, and realizations. The thin layer of symbolic representations appears to cover everything else. The common feature of all these instances is that signs have become separate from the conditions of their appearance, symbolic reference has gained full control, while iconic and indexical aspects of the sign have diminished.

In semiotics, the deterioration of the referential dimension is often related to the properties of one specific sign type: symbols. In his classification of signs, Charles S. Peirce introduced the second triad of signs based on representamenobject relation; the first two signs in this are icon and index, which are types of signs related to their object domain by similarity and correlation, respectively (CP 4.531). The third type of sign is the symbol, which has a much looser connection to the objects it mediates, as in symbol mediation depends on social agreements, conventions or habits. Icons and indexes are the sign types predominantly used by non-human species in recognition and making associations (Kull 2009). In the biological world, icons have a central role in all semiotic processes that are based on meaning relations between token (single instance) and type (class of signs) such as recognition of species mates, food, habitat, and other natural resources. Indexes coincide with "natural signs" in the tradition of St. Augustine, and cover all instances where sign processes follow some underlying physical or causal relations: for instance, animal tracks are indexes insofar as they indicate the physical presence of an animal as a cause of the footprints. Anthropologist Eduardo Kohn notes that icons and indexes create modalities shared by different animal species. He argues that symbols are in danger of becoming separate from the world wherein living bodies endeavour (Kohn 2013: 39, 55).

Peirce also offered an alternative interpretation of the sign concept, where iconicity, indexicality and symbolicity are considered as different aspects of a

sign (MS[R] 484:5–7).² In this interpretation, signs can have a simultaneously iconic, indexical and symbolic character. There are hidden symbolic qualities in images and paintings as they make use of artistic language and styles specific to the given era. Likewise, there are hidden indexical qualities in the most abstract mathematical symbols inasmuch as they are used as signs in communication to refer to something. In such an interpretation, the critical question becomes the dominance of the symbolic quality of the sign over the iconic and indexical qualities. Correspondingly, the criticism proposed in this article does not target the symbols as a sign type, but argues against the extreme forms of symbolic representation that have lost their referential grounding and become detached from the simpler iconic and indexical semiotic relations. In a similar vein, ecosemiotics can address the expansion of symbols by analysing ways in which cultural texts and practices can be grounded through onomatopoeia, tacit signs, zoosemiotic modelling, deixis and pointing, and other forms of iconic and indexical reference (Maran 2020a: 25–35).

The capacity to use symbols is often considered to be a characteristic feature of the human species as a whole (Sebeok 2001), whereas the extensive proliferation of symbols appears to be related to the developments of modern culture. There are new information and communication technologies that sustain the massive spreading of signs in their contained form, detached from their object-domain. As Tyler Bennett (2015: 458) has shown, the overgeneralized symbolic signs lose their object-dimension and degrade from triadic signs to degenerate dyadic forms that can be called memes. Anthropologist Alf Hornborg (2001) has demonstrated the devastating effect of abstracted symbolic signs – economic signs – on traditional local cultures. By being detached from the human life practices of the local ecosystem, abstract economic signs function as a means of exchange, and as markers of status and wealth. At the same time, they conceal and dissemble the more immediate sign relations of sensory and linguistic signs, thereby dismantling the local cultures.

The massive presence of unrooted symbols surrounds human subjects and forces them into a peculiar position. For an interpreter, the mass of semiotic processes results in positive self-affirming and re-assuring feedback, or in cyclic amplification without correspondence to or correction from the world. Humans have a seemingly total momentary control over their semiosis; in each moment, there are plenty of signs (representamens) to choose from, and the paths of

² Peirce, Charles S. 1898. On existential graphs. MS[R] 484. *Robin Catalogue*: A. MS., n.p., 1898, pp. 1–28; 11–15, 20. (Cited after: Commens Dictionary. Peirce's Terms in His Own Words, accessed at http://www.commens.org/dictionary/term/symbol on 23 January 2023.)

interpretation seem unconstrained and unlimited. Yet paradoxically, the more control humans have over the semiotic process, the more the semiosis turns into a self-repeating and self-affirming autocommunication cycle. Everything appears to be novel, and yet, all is mimicry. This cyclicity of modern semiotic processes is recognized and used in the merchandizing business. Environmental philosopher and semiotician Yogi Hendlin (2019: 132) raises criticism against the advertizing industry, which "creates 'fake loops' of mimicry that excites our instincts but then fulfills them through commodities that fail to satisfy — setting up a lifetime of addiction to various consumer products".

Cyclically interchanging signs that we seemingly control generate little new information and are deficient in value. Our ability to choose and connect with any representamen results in shallow and passing interpretations. We are left chronically unsatisfied and in need of repetition. More and more input is needed to retain the same level of stimulation, the need develops for faster and faster sign processes to happen in order for people to keep up with themselves. This process can be explained by another cycle - Jakob von Uexküll's (1982) functional circle (Funktionskreis) that describes perception and action spaces (Merkwelt, Wirkwelt) between an animal organism as a subject and environmental objects. If some part of the functional cycle becomes corrupt, an animal's actions in the environment may become seriously disturbed. A marten, having entered a chicken coop, cannot stop killing, as there is no natural stop switch (action sign, Wirkmal) in his umwelt that could stop the functional cycle in the case of abundant prey. The condition of modern humans resembles an animal's position in a functional circle where the object is degraded or removed. On the object side of the model, action directly converts into perception, the functional circle degrades into an autocommunicative loop, and the subject is left in a repetitive state wherein little new has been generated.

Therefore, aside of the Great Acceleration of social processes, there is a reason to distinguish *semiotic acceleration*, understood as ever quickening communication, massive accumulation of signs and media content in combination with the degeneration of the referential or object dimension and fragmentation of the interpretation process. The semiotic acceleration has a direct connection with the negative ecological effects of humans. Symbolic signs are connected with the physical world due to the matter and energy required to produce and maintain various media and artefacts that embody signs. Internet communication needs servers, cables and computers, symbols of social status are embodied in clothes, accessories, vehicles and buildings. The need for new impressions and exotic experiences requires a complex infrastructure of air traffic, hotels, restaurants, beaches and resorts. Signs are embodied in our communication technologies,

consumer goods, infrastructure and cultural artefacts that all require matter and energy and will later become obsolete and disregarded as waste.

To develop a proper critique of Anthropocene semiotics, we could perhaps turn to authors whose work precedes the modern era. One of such writers is the 19thcentury British polymath Lady Victoria Welby. Aside from immediate perception of the sign ('sense') and its communicative value ('meaning'), Welby's original theory of Significs circled around - what she identifies as the third component of the sign process – its ideal value or 'significance'. To understand the significance of semiotic processes, they need to be opened up to the broader cultural, social, and environmental context by considering "far-reaching consequence, implication, ultimate result or outcome of some event or experience" (Welby 1911a: 79). Significs was initially established by Welby as a didactic discipline, with an aim to educate the general public as regards their interpretative skills, and to develop their abilities to recognize the deep value inherent to cultural processes. In describing the significance of language, Welby specifies that "the significance of a word depends ultimately not merely on the context, not merely even upon the whole treatise of which the context is a part, but finally on the whole of the rest of the language - and probably, in the last subtle analysis, it ends not even there" (Welby 1911b: 102). It may be claimed that due to the weakness of the referential or object dimension, the abstract symbolic structures of contemporary culture have lost their significance. The valuation of signs necessitates interpretation in relation to the full entanglements and complexities of the world (or semiosphere) – a feature systematically deficient in contemporary culture.

Finding meanings in the degrowth society – towards the semiosis of the living

The semiotic potential of the degrowth movement appears to be related to time and temporality. In a slower society, there would be fewer communicative events, less media content, less stimulation, and more time to concentrate and have more thoroughgoing interpretations. By slowing society down, the degrowth movement opens up space for critically reviewing our existing semiotic and communicative habits. The lowered pace of degrowth society may guide us towards the understanding that signs entail histories and that interpretation takes time as it requires taking into account different codes and contexts. I argue that this transformation is related to the conscious re-valuation of the ways in which informational and communicational processes are embedded in the ecologies wherein we live. In short, the idea around which the degrowth-transformation can

be organized is the understanding that significance arises first and foremost from semiotic participation in specific lived ecologies (cultural, social, and natural). This idea will be denoted in the following as *the semiosis of the living* – an understanding that semiosis is a flow-like process of our participation in the living world that unfolds at its own pace, event by event and connection by connection.

Describing such an approach as 'the semiosis of the living' corresponds to the existing semiotic vocabulary. Thomas A. Sebeok (2001) has famously established a formal connection between life and semiosis claiming that all living organisms use signs. Here I suggest taking a more processual approach according to which the process of life and semiosis are intertwined in their temporal unfolding. Eduardo Kohn uses 'semiosis of life' as a concept for the semiotic fabric of the world, shared between different species: "The semiosis of life is iconic and indexical. Symbolic reference, that which makes humans unique, is an emergent dynamic that is nested within this broader semiosis of life from which it stems and on which it depends" (Kohn 2013: 55). In studying the potential of performative practices in relation to degrowth, Johannes Brossmann and Mina Islar use the concept of 'living degrowth' to refer to an "endeavour to transform current problems into imagined futures through individual, performative, collective and structural dimensions" (Brossmann, Islar 2020: 919). Other influences are Tim Ingold's (2011: 28) emphasis on the 'living' as a process by which beings constitute each other's conditions of existence and co-create the fabric of the world, and Andrew Stables's (2005) education semiotics that treats "living as a semiotic engagement". The semiosis of the living stresses events and experiences as part of a broader web of relations which form the basis for semiotic processes.

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Criticizing the closed and fragmented forms of Anthropocene semiotics, I can hardly explain the semiosis of the living only at the level of textual representations: I need to go beyond textuality. A suitable example of the *semiosis of the living* as I understand this is an experience that I and a friend of mine had on an evening of October 2021. We were dining in my flat in the historical centre of the city of Tartu. The sun was about to set, and the living room's large windows did not provide much light. However, it was still possible to see outside. At the time my flat was on the ground floor, with the windows facing a tiny garden space, and at a distance of three metres there was a high wooden fence. We were sitting on chairs and were about to begin dining when there was a sudden movement outside. On the top of the fence walked slowly and skillfully a marten – a slender dark-furred animal with a beautiful long tail and a pale breast. We noticed her at the exact moment she saw

us. Our gazes interlocked, and she observed us with her round vigilant black eyes. The eye contact lasted only seconds, some very long seconds. She did not seem to be particularly afraid. She may have walked there earlier, looked into windows, and seen people in the midst of their everyday doings. Then, without much haste, she jumped elegantly off the fence and disappeared into the darkness.

This encounter, although very brief, kept us alert for the whole evening and inspired a discussion on urban animals. We joked about each other's reactions to the encounter. I remember this evening very vividly today, although many months have passed. So what is so special about it? I can go to the Zoological Gardens and observe the behaviour of various species of Mustelids for a much longer time. I can easily download an enormous number of photographs and videos of martens from the Internet, most of them boasting a better quality and more favourable light conditions than our short observation. Yet I think the value of the encounter becomes evident if we interpret it as an example of the semiosis of the living. Namely, this encounter is remarkable because it was an unexpected and genuine event that we did not trigger and whose cause we were unable to direct. At the same time, the event entailed many meanings. It had symptomatic qualities concerning the local environment with its large maples, gardens overgrown with vegetation, and unused sheds that constitute a suitable habitat for the marten. It also told the story of the relatively peaceful co-existence of humans and wild animals in the central neighbourhoods of Tartu that has reduced fear on both sides. This must be a long story, as it takes time – perhaps generations – to form the experience, traces, hideouts, and feeding places for a wild carnivore to inhabit the urban environment and be able to read the signs of danger and resources effectively. It is also a complicated story, as it must include themes of rodents and small songbirds, and perhaps those of jackdaws, crows, and urban foxes with whom the marten occasionally crosses paths. It may also be a critical story related to changes in the landscape, real estate development, and renovations in central Tartu. And somehow, this story is related to us with our personal background narratives, dining there at that very moment, without too much noise, sudden movements or other disturbances, so that it became possible for the event to unfold.

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The meeting with the marten had meaning and significance, but it is based on the semiosis of the living, or the placement and rootedness of the given act of semiosis in the particular semiotic fabric and the unfolding of the world. Such a meeting is significant only in the reality where an encounter with a marten is an infrequent and unexpected event. This infrequency has to do with the ways in which we together create the common fabric of the world through interpreting, acting, and interacting. The semiosis of the living, as the theoretical category in question, would take the meaning and value of the sign as derived from the cultural, ecological and material realms, on account of the sign's symptomatic positioning in it as regards its histories, affinities, and potentials.

The meaning and the significance of the marten derived from the fact that she and we were part of the same semiotic ground, understood as the pattern of iconic and indexical relations shared by humans and non-human species alike and also connected with the regularities and semiotic potentials of the material realm. The concept of the semiotic ground was formed by anthropologists Eduardo Kohn (2013) and Andrew Whitehouse (2015) to denote the semiosic basis of the traditional cultures living in ecosystems. In the book How Forests Think, Eduardo Kohn (2013: 58) describes this basis as "semiosis shared by the living—a semiosis that emerges from and ultimately grounds us humans in the world of life"; he also claims that "symbolic thought run wild can create minds radically separate from the indexical grounding their bodies might otherwise provide. Our bodies, like all of life, are the products of semiosis" (Kohn 2013: 49), and "thanks to this living semiotic dynamic, mean-ing (i.e., means-ends relations, significance, 'aboutness,' telos) is a constitutive feature of the world and not just something we humans impose on it" (Kohn 2013:16). Whitehouse (2015) has developed Kohn's ideas further and applied Tim Ingold's (2011: 168) concept of the 'meshwork' to emphasize the semiotic nature of the ground: "This 'broader framework' [of communication] might be better thought of as a meshwork – a way of thinking about the world as emergent, fluid and entangled that chimes with both Kohn's and Peirce's ontological claims. The lines, knots and texture of the meshwork are themselves semiotic. Iconic forms are continually emerging in the continuous rebirth of the world; materialised indexical associations are what 'things' are made of. The meshwork is semiosis made flesh" (Whitehouse 2015: 60).

Both Kohn and Whitehouse connect the semiotic ground with the lived experience and the process of living, that is, the semiotic ground expresses itself here and now, by the impressions, events, encounters and experiences. We may imagine the semiotic ground as a fabric of similarities and associations by which different species connect to one another and to potentials and affordances of the land. Let us visualize for a second what the semiotic ground could include in an unharmed natural ecosystem. It is about the geographical relief and routes of movement, open and closed views, hideouts and shelters, obstacles, bodies of water for drinking, flows of wind and directions of flyways, landmarks and other navigation aids, recognition of species mates, enemies, partners and offspring, cycles of weather and circadian rhythms, the morning choir of birds with its

rhythms and pauses, the rain that erases smells and odours, different pitches of sounds interpreted differently due to physical obstacles, light, a lot of light in different variations and hues, patterns of colours and shapes, fragmentation of landscapes, rapid alarm calls of various bird species that indicate danger, and so on. Upon this semiotic basis more complex and species-specific communication systems are built.

Human culture can be rooted in the semiotic ground if its semiotic practices relate, through references and interpretations, to the object realm and to broader environmental contexts (cultural, ecological and material ones). Just as the soil beneath our feet is essentially a living organic matter that has been growing and decaying countless times, so are the objects in our world already many times recognized and re-modelled by having been parts of earlier semiotic associations. Objects for semiotics are not the same as objects for classic physics. Instead, it can be said that objects branch into the world like roots of trees receding into causal and semiotic connections and processes. From this perspective, signs and semiosis are seen as being bound to specific histories and the conditions from which they derive. Semiosis has significance, not just meaning, due to the particular way it is located in relation to other semiotic and material entities in the given place and time of the world. Semiosis, seen like this, is an event – a combination of occasional happenings and unfolding patterns and structures of the semiosphere. On the one hand, the semiosis of the living is a full-scale semiotic process as signs in this process can stand for different entities, be used in communication, and be based on the codes shared between participants. On the other hand, the semiosis of the living stands in a symptomatic relationship with broader processes and structures in the cultural, ecological and material realm. The richness of such semiotic events can be taken as an indicator of the quality of the environment, but also as a marker of the human relationship with that broader semiotic sphere (Maran 2020b). The semiosis of the living can be seen as a process in which human subjects participate and become (i.e. find their belonging or fitting) in the ecosemiosphere (Maran 2021).

Transitioning towards the semiosis of the living would bring along a recalibration of our cultural codes and interpretation practices. It would lead to better correspondence between signs and the processes/conditions from which these signs derive. If one prefers a more technical semiotic description, then in the terms of Peircean semiotics, the semiotics of the living entails a better correspondence between a dynamical object and the final interpretant of the sign. Peirce explains the final interpretant to be the conclusive relation of the sign to its (dynamical) object (CP 4.536; 8.314; 8.184). He also relates his concept of the final interpretant to Victoria Welby's 'significance'. To rephrase, signification is the way in which an

interpretant (in its entirety) relates back to the object sphere (in its entirety). For the human subject as an interpreter, the semiosis of the living approach would lead to a more straightforward and less noisy world, but at the same time also to a more coherent, better-integrated, and probably more enjoyable life. A lesser bulk of signs/representations would be needed to realize value and signification. In the context of degrowth transformation, the semiosis of the living can answer the question where to find mental support for living at the times of economic and social transition and developing ecological crises. As the semiosis of the living uses less media content and artefacts that embody signs, it also directly fosters degrowth transformation.

How to use semiotics for degrowth transformation – returning to the future

Are there any practical instructions that semiotics could give to support transformation into degrowth society? In the following, I will draft three preliminary topics that could help alter semiotic activities, either individually or socially. These suggestions combine semiotic modelling and semiosis as a process – they use the analytical potential of semiotics in order to create the conditions for the semiosis of the living to unfold and develop (see Maran 2020a).

1. Developing a critical attention towards semiotic systems. Moving towards more integrated and rooted semiotic practices necessitates an awareness of how semiotic processes in general function and influence human subjects. Therefore, having basic knowledge of the discipline of semiotics and practical skills of analysing signs in everyday situations would be very useful. In the 1990s the bioregionalist movement encouraged people to learn the ecology of their local communities by getting to know the cycles of resources, food, water, and waste. Similarly, semiotics could be used to understand the movement of information and cultural influences in the local ecosemiosphere. From where do the signifying practices originate? What hidden codes or contextual meanings does media content bring along? What do signs conceal, substitute, or dislodge? Is the interpretation shallow or thoroughgoing? Basic fluency in semiotics would help understand the workings of abstract symbol systems, interpret signs in a broader cultural-ecological context, and recognize how significance arises from the interpretation process. Semiotics also provides an individual with a toolbox to understand his/her involvement in information processes and cultural practices and give more agency for transforming this involvement.

- 2. Opening up and integrating across semiotic layers. A characteristic feature of Anthropocene semiotics is the dominance of symbol systems, the formation of closed semiotic bubbles, and the disconnection between semiotic layers of different complexities. In addition to symbol-based semiosis, there are, however, many other types of semiotic processes: simpler sign types of icons and indexes, non-verbal semiosis, environmental signs, tacit knowledge, etc. Correspondingly, activities that open up semiotic spaces, foster integration between semiotic layers, and reground symbols are beneficial and support transition. For instance, media content can be juxtaposed with lived everyday experience; abstract semiosis can be connected with human embodiment in the world. Enriching artefacts and products with background narratives would give them more value and make them less easy to replace. Communicating with other species would utilize our abilities of preverbal zoosemiotic modelling, tactile and phatic communication, gestures, and facial expressions. Tuning in to affordances and the semiotic potentials of landscapes and wildlife would add to the connectivity between human symbolic representations and environmental signs. Relating symbolic semiosis with landscapes may enrich our semiotic practices as landscapes provide additional rhythms, structures, and contexts for interpretation. These different connections would increase vertical integration between different semiotic layers within ecosemiosphere (the cultural, ecological and material realm).
- 3. Relinquishing control and relying on dialogic interpretation. The formation of closed semiotic bubbles goes hand in hand with the human ambition to control sign processes and interpretation. In contrast, habitual semiotic routines can be changed by lessening this control and making interpretation open by including other subjects. There are two practical ways to nurture dialogic relations: firstly, by learning codes, signs, and languages used by other subjects, both human and non-human, and secondly, by providing meanings and significance for other subjects through activities and behaviours that are potentially meaningful for them. Events like the encounter with the marten described above are inherently dialogic and based on shared interpretation between different participants. Such dialogism overcomes the limits of any single code or sign system and can lead to new ways of noticing and thinking, as well as more inclusive and coherent relations. Relinquishing control over the semiotic process may also open us up to see the abundant patterns, structures, and connections that are present in the ecosemiosphere, which derive from its past or adjacent semiotic processes. Rich aesthetic impressions and feelings of significance may arise just by us perceiving and interpreting existing patterns without becoming directly involved in them. Perhaps there is a reason for us to identify something like collateral semiosis - the interpretation of signs, stories, and events that do not result from our intentionality, but happen almost as a supplement, being occasional

and extra (Maran 2022). This is significance "for free", deriving from the adjacent structures and histories of the ecosemiosphere.

In this paper, I have proposed the idea of the semiosis of the living for the degrowth movement as a way towards better integration of culture and the ecosystem. At first sight, this ideal may stand close to the Romantic understanding of the harmony between nature and culture. While recalling insights of historical authors and learning from the past, it is clear that society cannot be forced back to early cultural models and ecological conditions. There are no stable environmental conditions within the current ecological crisis; there is no stable ground to which to return. This was the observation behind Whitehouse's (2015) concept of 'anxious semiosis' - bird sounds and images of nature are not as splendid as they used to be, but reveal the story of fragmented and collapsing ecosystems. In such conditions, the best we can do is to navigate back forth and back between immediate perception of the semiotic ground and more general knowledge systems. The latter however, can be positively remodelled, reconfigured and practically applied to establish conditions for more integrative semiosic processes to emerge. Thus, my proposal of the semiosis of the living is not a reminiscence of the harmonic past. Instead, it is a future-oriented attempt to support degrowth transformation by suggesting strategies for replacing defective semiosic practices with simpler but more significant alternatives.

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去增长社会的意义: 从大加速时代到生活的符号过程

当下的生态危机通常与所谓的大加速时代(the great acceleration)相关,即自二十世纪中期起社会各个层面的快速增长(如人口,国内生产总值,能源消耗等)。而与大规模的经济增长相对,去增长运动强调简化社会,减少人类对于能源和自然资源的使用。在本文中,我将分析大加速时代的符号学方面,将其作为一种符号加速(semiotic acceleration)的过程,并论证重组人类符号系统,使之与生态过程联系更加紧密将帮助我们转型为去增长社会。这一符号加速过程体现为抽象符号和信息内容的大量增殖和传播,这些信息内容脱离了生态和物质过程,并缺少基于价值的组织形式。为支持去增长社会的转型,我提出生活的符号过程(semiosis of the living),以理解意义首先来自对特定生态的符号学参与(文化,自然,和物质),在特定符号环境中符号过程的特定行为的根源性和世界的展开。生活的符号过程重新将人类的符号过程定位在人类与非人类共享的象似和指示关系中。

Tähendused tasaarengu ühiskonnale. Suurest kiirendusest elusemioosini

Globaalset ökoloogilist kriisi on sageli seostatud nn suure kiirenemisega, s.t paljude sotsiaalsete näitajate (rahvastiku suurus, sisemajanduse kogutoodang, energiakulu jne) kiire kasvuga alates XX sajandi keskpaigast. Tasaarengu liikumine on astunud vastu majanduse laienemisele, propageerides lihtsamat ühiskonda ning vähemat energia ja loodusvarade kasutamist. Käesolevas artiklis analüüsin selle protsessi semiootilisi aspekte kui semiootilist kiirenemist ja väidan, et üleminekut tasaarengu ühiskonda saab toetada inimsemiootiliste süsteemide ümberstruktureerimisega suurema sidususe ja parema seotuse suunas ökoloogiliste protsessidega. Semiootiline kiirenemine avaldub abstraktsete märkide ja infosisu massilise paljunemise ja levikuna, mis on ökoloogilistest ja materiaalsetest protsessidest lahutatud ning millel puudub väärtuspõhine korraldus. Tasaarengu transformatsiooni toetamiseks pakun välja elava semioosi mõiste kui arusaama, et tähendus tuleneb eelkõige semiootilisest osalusest konkreetses elatud (kultuurilises, ökoloogilises ja materiaalses) ökoloogias, antud semioosiakti paigutusest ja juurdumisest konkreetses semiootilises koes. Elava semioosi läbi seostatakse inimese semiootilised protsessid uuesti ikooniliste ja indeksiaalsete suhete mustriga, mida jagavad nii inimesed kui ka teised liigid.