Time between Emergence and Design

By Caroline Nevejan

Where before experience of time locally emerged from nature as given - offering weather, seasons and rhythm of humans, plants and animals along - today 24/7activity is designed to facilitate human interaction and systems transactions around the globe. In personal lives and organizations people integrate nature-time, body-time, inner-time, clock-time, and now global 24/7 systems-time. Time is a dimension of experience, which is fundamental in processes of design as it is in processes of emergence in any next nature to come. To be able to recognize spatiotemporal trajectories of other beings is a prerequisite for sharing concepts and language to communicate. Human beings, in past, current and next natures, have to deal with emergence and design of time, all the time, in order to survive.

Witnessing spatiotemporal trajectories

To think about the future new worlds are visualized, assuming that these images reveal how life in decades to come will be shaped. These visualizations offer insight today's imagination of next natures and next cultures to come. However, in these visualizations 'time' as a process of emergence and design, is often forgotten. This contribution argues that time design is distinct in any next nature that will emerge.

At the end of his life Thomas Kuhn concludes that in communities of practice human beings need to recognize other beings spatiotemporal trajectories to be able to share concepts and develop language as a result. In this statement he suggests that without understanding other beings movements through time and space no communication will be possible. This statement challenges today's experience of global systems-time of millions of people who manage to communicate with people they do not know nor see in the online world. Nevertheless in today's experience the feeling of having 'no time' has become common good. Reaching out to anyone anywhere seems to generate 'no time' as a result. Will human beings be able to overcome the loss of sharing spatiotemporal trajectories and share concepts in next natures to come? What time design requirements would be needed to facilitate a time design that will foster the emergence of communication and possible new language as well?

Since only 15 year systems-time invaded and restructured many professional practices all over the world and people have developed a variety of time designs to make the 24/7economy work for them. Without formulating it as such a widespread knowledge and experience with time design has emerged in businesses, organizations and personal practices as well. In the interdisciplinary project "Witnessed Presence and Systems Engineering" (TU Delft), four features have surfaced as being crucial in time design for human beings involved: integrating rhythm, synchronizing performance, moments to signify and duration of engagement. Hereunder these 4 dimensions are sketched in the awareness that more research in any of these will benefit future time design.

Integrating rhythms

When working in distributed teams, organizing a shared rhythm is crucial for keeping communication and business processes in flow (Wilson 2008). Simple things, like one well structured meeting online a week, generates trust and well being for all involved. When working in different time zones adaptation to others, at the expense of personal time, has to be taken into account. In small businesses people benefit from the fact that distributed work on a day-to-day basis facilitates personal life styles for those involved. Finding the ultimate rhythm between people's personal time given the work that has to be done, is crucial for success.

Global 24/7 systems-time has expanded human experience of time fundamentally. It offers immediate connections to other places anywhere facilitating interaction and transaction anytime and affects social structures of finance, law, business and family life profoundly. Human beings, through a methodology of trial and error, find solutions to integrate different rhythms they are confronted with. Different kinds of time merge necessarily in personal, social and collective experience of time: nature-time, body-time, inner-time, clock-time and systems-time.

Nature-time, has a huge diversity of scale in time designs. Long era's and short time spans, stretched rhythms and instant events, are deeply interwoven. This is the environment in which human presence exists. Human bodies can only exist in one place and therefore human beings have partial perspective on nature-time as a whole. Human beings biological existence, beholder of body-time, is dependent on rhythms like day and night, heartbeat and breath. Human existence also contains a sense of psychological inner-time, which is hardly investigated and yet it underlies processes of growth and transformation and defines how social situations and events are perceived (Oliver 2004).

Many centuries ago clock-time was introduced to mechanically structure social time people share. In the variety of clock-times, nature-time was integrated. Whether the clock was made by use of the sun, by smaller and smaller radars or by digits as are used today, clocks made it possible to socially anticipate on what will happen next. Clock-time always offers a local perspective on time because it is fundamentally connected to a specific region or place. Places are defined by nature-time offering seasons, climates and specific ecological systems that characterize a place. Clock-time and nature-time are integrated in local agenda's taking into account the context in which the human body survives.

Today's systems-time, based on algorithms operating on a global scale, is changing the planetary landscape profoundly. Where before systems were built on principles of mandate and delegation, systems have become participants in communities of people in their own right (Brazier 2009). Systems need clock-time to synchronize, but they are detached from nature-time. Like climate and weather also systems-time can only be known through partial perspective, but unlike climate and weather, human beings can

communicate in systems-time and many millions do so everyday. The use and impact of systems-time is its immediacy above all. Human beings can travel to expand their experience and mental map of the place they live. Systems-time offers an expansion of connection in an instant with anyplace anytime. It fosters the experience of being in one place while bodies involved reside in different places. Just as nature-time profoundly challenges human existence, so does systems-time as well.

Nature-, body- , inner- and clock- time offer rhythms that are shared and structure social life. Rhythms cannot, not integrate (Kumar 2001). During several centuries human kind developed a conscious integration of rhythms, inventing work hours, school hours, lunch breaks, agendas, holidays and more. Systems-time is challenging the integration of rhythms, since it does not seem to have a rhythm of it self. In day-to-day experience individuals integrate systems-time to their benefit, but for organizations this is more problematic. Research into beneficial systems-time design has not been taken up yet.

Integrating rhythm is part of any next nature that will emerge, even though it is not clear which rhythm will dominate human life in the end. Human beings need to recognize and integrate rhythms to survive: nature-time, body-time, clock-time, inner-time. Especially systems-time, which gains importance day by day, is hard to recognize for human beings even though systems participate in human society more and more.

Synchronizing performance

Seeking well-being and survival human presence judges and anticipates what will come next. In meeting a new person there is a moment when encounter starts. Bodies reach out through perception and from the first instance a careful tuning of presence emerges. Lots of tacit knowledge is exchanged in such moments of exploring doubt and hesitation. Granular perception offers instant negotiation resulting in synchronizing the performance of presence to establish common ground upon which interaction may proceed.

The tuning of body rhythms in this process is profound; already a piece of glass between two people sitting at the same table breaks synaesthesia between them (Gill 2010). Sensory perceptions, simple emotions and more complex feelings influence processes of synchronization fundamentally. To facilitate synchronization social structures have invented gestures of encounter. The handshake is such an example. Body language is distinct in these moments; the possible recognizing of each other’s spatiotemporal trajectories is at stake.

Mediating granular perception is complex. Collaborating distributed teams cannot communicate a simple phenomenon like colour for example (Gill 2010). Nevertheless, human beings do synchronize in mediated communication in the variety of media they use. In a phone call, where bodies are not present but the voice is, this negotiation happens through a switching between talking at the same time and silences that are just too long before conversation enrols smoothly. SMS-es need to arrive just in time and so on.

On the Internet digital handshakes have the character of ‘pitching one’s presence’ after a period of investigating an online environment (Abraham 2008). And even during participation, the process of synchronization is continuously ongoing in social networks and mailing lists because community members correct each other all the time to protect the ‘tone of voice’ they have agreed upon. When not sharing physical interaction people synchronize through engagement in time, through pitching and judging performance, through social control.

Synchronization of performance of presence will remain a feature as long as human beings want to interact in any next nature that may emerge. Synchronization between human beings and animals, ecosystems and larger technology systems is indispensible for interaction to take place.

Moments to signify

Part of human existence is that meaning and signification are continuously generated in personal lives and in social structures that emerge through time. Emphasizing specific moments of transformation, of passage of time, highlights the process of time. It helps people to deal with time. Human societies have invented rituals and celebrations for specific moments in time through which meaning emerges for those involved.

In personal lives signifying moments play an important role. Be it a private experience of becoming aware, or a collective celebration in which one partakes, these signifying moments produce identity and are fundamental for cultures to survive. Through orchestrating moments to signify, shared experience emerges and offers participants a perspective on their individual position in context of the biological, ecological, technological or social whole. In offering a perspective, it also produces this perspective, which is how cultures emerge and design at the same time. Creating ‘moments to signify’ is needed to create commitment for those involved (Solomon 2009). People need to share experience for ideas to become sustainable and materialize in the real world.

Special moments to signify are moments of unanticipated impact. In situations of trauma and tragedy the human mind accelerates. When bearing witness to moments of trauma, human beings dramatize to communicate impact (Ophuis 2009). In these traumatic ‘imaginative’ moments inner-time dominates perception. Stories of trauma may even include perceptions of experiences that never took place. However, they reveal an inner experience of impact that needs to be signified to be able to communicate.

Moments to signify are necessary for meaning to emerge. Offering a shared experience and/or offering an intense personal experience, they are fundamental for cultures to sustain. Any next nature that includes human life, will be faced with the human need to signify. Moments to share the process of signification can be designed or will emerge. In these moments human’s inner time interacts deeply with rhythms around and culture is shaped.

Duration of engagement

One can be as authentic on Facebook as on a piece of land for 80 years (Hazra 2008). Where authenticity used to be a property of being in one place for long stretches of time, in today's world this notion is replaced by being engaged in an activity for specific durations of time. Duration of engagement qualifies participation, validates contributions and therefore deeply influences human lives. Consequentially, it is not enough to be just present any more. Individuals need to proof existence by doing transactions all the time (Abraham 2008).

The formulation of 'duration of engagement' stresses the fact that there is a beginning and an end to activity. From simple time designs to more complex situations in which time emerges, people have to adapt to beginnings and endings continuously. Just as being born and dying are fundamental to human existence.

For human beings the transformation between start and end of engagement is crucial to their well-being because it generates 'empty time' in between. In empty time, whether one is bored or not, feelings, emotions and a different thinking surface and human presence emerges. When such empty time is not granted, as in the Global Service Delivery model in the outsourcing industry in India in which people are monitored 24/7 hours a day, human beings well-being is seriously jeopardized (Ilavarasan 2008).

To generate empty time, robust structures of time design are needed (Feigl 2009). Only in moments of empty time people can experience the situation they are in and act to be well.

Duration of engagement is needed for authentic human participation to emerge. However, longer durations of engagement need to include 'empty time' for human experience to surface and to offer people the opportunity to sustain the duration of engagement they are in. When duration of engagement is not properly designed, including a start and end with empty time within as well, human beings loose well-being in significant ways. Next natures will have to accommodate human beings need for duration of engagement and empty time within as well.

Communities of Practice

When accepting the proposition that recognizing spatiotemporal trajectories of other beings is fundamental to the ability to share concepts and develop language as well, any next nature that includes human presence will have to facilitate this recognition. In current nature especially systems-time is challenging the human mind. Its scale and speed can only partially perceived and it does not seem to have a rhythm of its own. Human beings find solutions to integrate it anyway, but it is not a given that people will be endlessly capable to do so. If next nature includes human presence it has to take into account that human beings integrate their own rhythm with the

environment, synchronise performance of presence to be able to communicate, create moments to signify so meaning emerges and need specific durations of engagement, with start and end with empty time within, to sustain their well-being and survival in the end.

In the tension between emergence and design human presence in past, current and next natures is shaped. The experience of time influences the experience of place, how we relate to each other and the sense of possible actions we can do. Any next nature will also be defined by its time design in which integrating rhythm, synchronizing performance, moments to signify and duration of engagement will define how human beings will be able to create communities of practice in which concepts, language, social structures and cultures will emerge.

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