

# Slow technology for well-being

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## ABSTRACT

Slow technology is technology that actively influences our well-being and helps people to stay true to their values and needs. It aids in staying in contact with ourselves as human beings, slowing down the speed introduced by our technical world and aids in arbitrating between demands of work and life and our personal needs.

## Author Keywords

Well-being, Meditative Experience, Calm Computing, Zenware.

## ACM Classification Keywords

H.5.m. Information Interfaces and Presentation (e.g. HCI):  
Miscellaneous

## General Terms

Slow Technology

## SLOW TECHNOLOGY IS...

Slow technology is technology that actively influences our well-being in a positive and unobtrusive way. It can aid in staying healthy in our fast, technology filled and output oriented world. This aid can be either *proactive* or *inherent*. Proactive means technology that aids in pursuing our consciously chosen goals. This includes behavioral goals as well as interventions for reflection, mental rest, and solitude. Inherent means that technology is designed in such a way that it helps us focus on the technology supported task when needed; after that, the technology completely disappears, at least from our consciousness, until needed again; thus the technology aids in an unobtrusive way. Supposedly this is something that good interaction design always should do anyway.

This leads to a definition of slow technology by way of several attributes and previous concepts. Slow technology is

1. zen-style: technology that does exactly that what it is supposed to do. Not more not less. Zenware is an example of this.
2. calm: technology designed for mental rest, contemplation, self-sufficiency.
3. low profile: technology that disappears behind purpose and hopefully great design. It is technology that is only used where ultimately necessary and that is there to help people (instead of only focussing on increasing output).
4. ambient: in that it conveys information and guidance in a subtle, inherent way.

Slow technology can have one of these attributes or all. Important is, that in this case technology is designed in such a way that it supports people to slow down, come to rest, and stay healthy and happy. Areas that contribute are ambient interfaces, pervasive computing, calm technologies, calming technologies, contemplative computing, among others.

## WHY BOTHER

After having focussed on industrialization and production efficiency in the last century, we now arguably move on into ages of information and knowledge. This comes at a cost. It appears that more and more people suffer from burnout syndromes and other "modern" diagnoses. Not properly discussing the reasons here, it seems that we run after more and more information but seemingly are not able to process it to knowledge while we are running and running. It also seems there is an agreement that we need to stay in contact with everybody every time, we need to know everything that happens just now, and we need elaborate, multifunctional technical gadgets that help us make our personal, social, and work life more efficient. In this, we aim at generating even higher efficiency, now in collecting information and staying up to date. This, however, is not increasing knowledge in people – acquiring knowledge would require learning by experiencing, doing and reflecting. Instead, it makes people become efficient information receiving and transmitting entities, often not for their own benefit. Information is valued over knowledge. And cognitive processing is valued over real world, full body experiences. By focussing on the information world outside, we easily loose the connection to ourselves and the capabilities to perceive our own needs and our immediate real surrounding.

However, there are other ways to lead a live, being more centered in what really matters to us and in a conscious and thoughtful way [6], and connecting our own experiences with the world outside and its experience. A lot has to do with slowing down and taking time to appreciate what is. This can be entirely achieved without technology. Meditation, contemplation, going for a walk, living a rich real social life, and so on aids in doing so. Still, technology can aid in mediating between the outside demands and our personal needs. And



Figure 1. "Honey, I'm home" signals your internet connected friend by way of olfactory evaporation of this device that you came home. This is a project by Jofish Kaye. Image courtesy of Jofish Kaye.



Figure 2. Afshin Mehin proposes the Slow Down Watch that visualizes the heart beat. Image courtesy of Afshin Mehin.

potentially it can make functions available that otherwise are not available. Slow technology helps me to take time off, escaping the speed and demand that seems to be everywhere. Slow technology aids me in pursuing my personal goals, aids in staying focussed on what matters to us and helps not be distracted. It does exactly what it is supposed to do. Not more not less. It uses only technology where it is absolutely necessary. And its is calm, available in an ambient, non intrusive way, unless I want it being in my focus. And last but not least I personally prefer physical objects enhanced with technology to PC or smartphone apps. Nevertheless, computers have large possibilities to deliver applications tailored to support people in living a healthy life and help them stay true to their values and needs.

## ARTIFACTS

Four artifacts present examples that show attributes of slow technology. The first example is Jofish Kaye's work on ambient olfactory devices [3] for subtle information delivery, shown in Figure 1. It is at least zen-style and delivers the information in an ambient way. The second example is the Slow Down Watch of Afshin Mehin [4] in cooperation with IDEO that visualizes the heart rate and encourages to decrease the stress level, as shown in Figure 2. This aims at calmness and features all four attributes of slow technology. The third example is my favorite long time owned Zen alarm clock, the Zen Timepiece by Now & Zen [5], shown in Figure 3. This clock delivers the sound in a calm way (at first), slowly waking people from sleep, then decreasing the quiet time between gongs and increasing the sound. The last example is from our



Figure 3. Zen Timepiece is a digital alarm clock that slowly wakes people with a real brass bowl-gong. The time intervals between gongs decrease in a harmonious function.



Figure 4. GranulatSynthese is an interactive installation for the intuitive and haptic creation of ambient, meditative audio-visuals. It uses granulate distributed over a surface with projected visuals and sound.

own work, the GranulatSynthese [1], presented in Figure 4 and at [2]. GranulatSynthese is an interactive installation for the intuitive creation of ambient, meditative audio-visuals. It uses granulate distributed over a tabletop surface with projected visuals and generated sound. A haptic, visual, and auditory landscape can be explored and composed intuitively. This installation is calm in that it supports a meditative experience and fosters mental rest and self sufficiency.

All four examples are great examples of slow technology, as they all aim at enhancing the well-being of people by way of technology. They do this in a calm unobtrusive way and feature some or all of the different aspects of the above given definition of slow technology.

## REFERENCES

1. Beckhaus, S., Schröder-Kroll, R., and Berghoff, M. Back to the sandbox: playful interaction with granules landscapes. In *TEI '08: Proceedings of the 2nd international conference on Tangible and embedded interaction*, ACM (New York, NY, USA, 2008), 141–144.
2. GranulatSynthese. im.ve, University of Hamburg. <http://imve.informatik.uni-hamburg.de/projects/GranulatSynthese>.
3. Kaye, J. J. Making Scents: aromatic output for HCI. *interactions* 11, 1 (2004), 48–61.
4. Mehin, A. Slow down watch. <http://www.afshinmehin.com/?p=241>.
5. Now & Zen. Zen timepiece. [http://www.now-zen.com/Zen\\_Time\\_Piece.html](http://www.now-zen.com/Zen_Time_Piece.html).
6. Sengers, P. What I learned on change islands: reflections on it and pace of life. *interactions* 18 (March 2011), 40–48.