PERSONAL ELECTRONIC JOURNALING

Kresten Bjerg
"SiteInvent" 59,Vennemindevej, 2100 Copenhagen, Denmark
kresten.bjerg@psy.ku.dk

Abstract

I advocate a new order of information-democratic citizen science though development of software tools, fitting the needs of the citizen's informed daily accountability and everyday relevance, independent of proprietary platforms & computer programs.

I propose a toolset for individuals to conduct and self-organize own information-handling: an electronic journal, as a practical "bridge" for the citizen's navigation through a personal everyday life and its shifting relevancies.

It is grounded in concepts of personal constructs, the phenomenological and social structures of the individual life world, categories of relevance and the way both social reality and subjective reality are organized though identified typicalities of events and situations. And it integrates notions of the self as a reflexive project and notions of time-geographical description with Tristine Rainer's notions of the new diary

I introduce the concepts of oikosphere, somasphere and iconosphere as basic for a prototype of an electronic diary.

The division of labour between left and right cerebral hemisphere favours that "glyphs" for subjective typicalities of events and situations can serve as effective shorthand for verbatim record.

From this I derive the roots and stem for a more or less global glyph alphabet, based on intrapersonal communication more than on interpersonal communication, - in principle independent of written language.

The electronic diary is explicitly open source and freeware, and as such useable from day one by any citizen, who owns a laptop. Relevance to the educational system, the health system, the correctional system, the energy-saving system, the consumer-protection system and the exporting-democracy systems is noted.

Keywords:

Info-overload, Self-management, Electronic diary, Health-care, Cognitive Stress, Cognitive skills, Documentary power. Accountability, Democracy-export, Biotelemetry, Phenomenology, Pictograms, Glyphs, Creativity

Laptop as extension of personality

The fundamental problem I am addressing in my research is the shift from regarding the computer as an impersonal tool, a machine, to regarding the computer (increasingly: the personal laptop), as an extension of an individual personality, - like a private home or a rucksack of a homeless.

This is a problematic shift, because it introduces an existential vulnerability: a home can burn, and the inhabitants can loose so much of their life. A homeless can loose his/her rucksack. The more we make ourselves dependent on computers, the worse are we fated, when our storage of our own information is lost.

However the technological gift of the memory (USB) stick with gigabytes of storage space now ensures a mini-lifeboat to the laptop, a crystalline form of the phenomenal extensions of the users personality, which can be designed, orchestrated and manifested in the vulnerable process structures of the personal laptop.

Laptop as a problem

To survive socially and economically in the broadband society, and with the price of laptops coming down to 300 dollars or less, we must face the fact that most citizens in many cultures of sheer necessity will be laptop owners and laptop-users, and that their interaction with other persons, their social practice, to an increasing extent will be mediated through the laptop, - along with the parallel cell phone, SMS, videophone and GPS constituted social network.

In the broadband society the person with a computer is willy-nilly a network node – and existentially responsible for an accountable social practice vis-à-vis the surrounding network-stabilities and instabilities.

But the basic problems of the appropriation of "e-literacy" are overwhelming. The citizen (child-pupil-teacher-student-father-mother-employee-employer-retired-aged- handicapped-prisoner-guard-therapist or patient) is from the outset relatively ignorant prey for the informational capitalism (Aigrain, 2005) Industries, which capitalize the ownership of code (Lessig 1999, Weber 2004, and Ghosh, 2005)

The liberalistic competition between offers of helpful proprietary platform specific user interfaces and integrated toolkits to assist users in managing their personal information flows is producing highly sophisticated– ever updated - versions of machineries. Windows, Microsoft office, Adobe, iPhoto/iMovie/iWeb/iLife, all fitting hosts of free services like the Wikipedia, Google, Utube, Facebook families which offer more and more options for reaching out globally

One could say that this is "only" a question of professionally guided apprenticeship, teaching citizens how to handle the proprietary platform-specific software –to attain technical and cognitive mastery,

But this is a very slow and expensive approach to a meaningful integration of the use of the device into the user's everyday practices.

It is necessary to distinguish between mere use of a technical device and a users enrolment of it in social practice. (Proulx, 2008)

Targeting intra-personal communication as a prerequisite for adequately targeting inter-personal communication

There is an alternative approach to apprenticeship, which can start from quite a different angle: namely the angle of the user's everyday routines, -which tend to be repeated so often, i.e. day to day, that they become invisible.

Maren Hartmann (2008) argues well for seeing the everyday as the site for agency, for innovation.

Personal agency is rooted in a particular body and, (for most people and across varieties of cultural circumstances) a particular home.

Their myriads of tools are integrated in habits, primarily somatic and domestic.

Like the relative stability of the external networks, we can see the everyday agency in its diurnal and weekly cycles of domestic information dynamics as constituting and sedimenting another relative stability.

Now, my suggestion is, that we take a turn inward, in our thinking about the social appropriation of the computer, participation and innovation

We can take it from Socrates: Know thyself!

A unified analytical construct: The reflexive citizen tool

A unified analytical construct – an ideal type – can be seen in the empowerment of the individual citizen in the information society to establish and maintain a basic contextualized documentation of personally relevant events and phenomena around the clock or in selected periods.

Relations and interplay with relevant freeware or proprietary software-tools and offers of services belong in this realm, but should not define it.

I outlined (Bjerg 2008) a series of assumptions about the future of ICT in the global broadband society. I presented the theoretical reasoning behind a conceptual model, posing the notions of the "OIKOSPHERE" (from Greek Oikos=Home), the "SOMASPHERE" (from Greek: Soma=Body), and the "ICONOSPHERE" " (from Greek: Icon=Image and noos: knowledge.), as basis for the formation of free and adequate reflexive citizen tools.

And I declared such tools as an indispensable basis for any farsighted user-centred developmental agenda.

We are, as we all know, situated in a transitory historic phase, where conventional and habitual everyday life forms are undergoing proliferating and accelerating transformations. In force of global waves of demanding and complicated technological and institutional innovations, citizens all over the globe are finding themselves in new uncharted situations and life conditions, for which no adequate precedence exists.

Citizens increasingly find themselves in situations for which conventional tools and problem-solutions are obsolete, and where relevant tools are difficult to recognize and evaluate, pay for, learn and apply, - not to speak of: difficult to integrate with each other and with the sedimenting ground of familiar solutions to everyday problems:

How can one for example document the waiting-times on public and private services and answering services, e.g. concerning net-bank, the differential billings for mobile-to-mobile, mobile to fastnet, fastnet to mobile and fastnet to fastnet phone calls and video calls, at the different rates around the clock

Modern self administration of 6-8 daily doses of expensive pharmaceuticals, optimally linked to prescribed self-monitoring of blood-sugar, weight, blood pressure and journaling of the coming and goings of symptoms and temperature, in the life of a responsible husband or wife may be another example.
Granted such inevitable exposure it is logical to look for ways to empower citizens in their relationship to technology –and through this hope to increase the quality of their lives.

I advocate a new order of information-democratic Citizen science: the global development and free offer of adequate tools, fitting the needs of the citizen's informed daily accountability and everyday relevance, independent of proprietary platforms & computer programs.

What I propose is a software toolset, for the person to conduct and self-organize own information-handling, an electronic journal, the interface of which first and foremost is a practical "bridge" for the individual citizen's navigation through a personal everyday life, its habits and its surprises.

The vessel is the body, the vessel is the home, and in another sense the vessel is the laptop.
The concept of bridge can be applied to our notion of a personal desk or writing table, with its drawers and cupboards, and perhaps adjoining shelves + it's often numerous tools for handling paper, including also the printer-scanner-copier.
But it is the laptop, which constitutes the kernel of the bridge.
The electronic desktop tool, and what instrumentation it is brought to include, so to speak in it's engine room, shall be pragmatically operated by the citizen on an autonomous platform, which is ABOVE the platform specifics of Windows, Mac or Linux.

Theoretical Foundation

My approach is "a human-centred point of view" (in contrast to a technology-, product- or business-centric). It builds primarily upon theoretical foundations in the psychology of personal constructs by George Kelly (Kelly,1971):

Those conceptual constructs, which are most useful, are those, which increase predictability, control and understanding of the events

The works on the phenomenological and social structures of the individual life-world and the categories of relevance by Alfred Schutz (Schutz, 1974) are most clarifying:

The social reality, and the subjective reality are organized through identified typicalities of events and situations. The emergence of themes is to be seen as figures of core and horizon in the stream of consciousness. Schutz teaches how to conceive of the spatial and temporal dimensions of situations, and teach the distinction between "the world within immediate reach" and "the world within potential reach". And he teaches to distinguish between at least three categories of relevance, which may characterize, when something springs out from the everyday taken-for-grantedness:

Thematic relevance, interpretational relevance and motivational relevance.

A symptom may be noted, it may be interpreted as trivial, but its reoccurrences may change the interpretation and it may be motivational: to stop drinking so much, or to go to the doctor.

The theory of the self as a reflexive project by Anthony Giddens (Giddens, 1991) comes in timely as old ritualized life forms become obsolete and the challenges of the third millennium are approaching.

The theory of reflexive learning by Philip J. Boxer (Boxer, 1980), the notions of "the new diary" by Tristine Rainer (Rainer, 1979,2004) the notions of time-geographical description by Torsten Hägerstrand (Hägerstrand, 1975) and clarifications about the domestic ICT by Ian Miles (Miles, 1988) and Roger Silverstone (Silverstone1992) complete the firm conceptual structures supporting the present endeavour.

The Iconosphere: Another unified analytical construct

Now practical agency in the individual life world implies categories of relevance, which can be considered as atoms, molecules and strings of habits.
The everyday routines – often considered as trivia - are extensively describable in language, there are thousands of typicalities for which the citizen has concept, and most have words in one or more languages.
But referring descriptively to them by words in languages is cumbersome,

Now, as to general use of an electronic bridge-journaling, we have an apparent dilemma: people, who are active, engaged and involved in life and fellow humans, living under information overload, will have all too much to tell their electronic diaries.

Involved with other humans and other tasks, there are only small and sparse time-windows for reporting to the diary. Describing everyday life with words is unproportionally time-consuming and so some kind of shorthand would be convenient.

The everyday stream of thought, of consciousness or of subjective life and agency is to a wide extent language-independent, and not in the form of propositional thought. But there is a division of labour between the two cerebral hemispheres, of which usually the left is handling language in words, whereas the other, so called recessive hemisphere, usually the right, is dealing in images and sensory-motor figures [Sperry, R.W., M.S. Gazzaniga, and J.E. Bogen, 1969)

The development of human civilizations is intrinsically based on development of spoken language. And the invention of writing, with its origin in images (the hieroglyphs) is a crucial turning point. But writing has, for millennia, developed in force of a minimal number of letters in alphabets, and basically tied to the sounds of spoken language.

The original track of the hieroglyphs, writing with images, has been out of bounds to the handwriting-, typewriting- and printing-cultures, simply because general picture-alphabets had to include so many more characters.

The international use of traffic signs was the first forceful penetration to the general public of modern hieroglyphs

And since computers entered the scene and reproduction of such pictures were facilitated, the modern world is replete with icons, pictograms, glyphs, used to identify typicalities of brand, origin, qualities, functions, actions and behaviours of goods, men and machines. We see simple non-verbal symbols heavily used not only in traffic but in vehicles, hospitals, newspapers and in most mechanical and electronic tools, including their manuals, toolbars and controls, - and even on the child's toys, the clothes we wear and the containers of the foods we eat. Their communicative value lies partly in their at-a-glance recognizability, one-letter briefness, colourability & resizeability. But their cross-language understandability is, in force of globalization of the market, a further incentive to extend their use.

Now, in the habits of everyday personal life, typicalities abound.

In dealing with the communication-handicapped, programs have been developed which offer a rich variety of icons for symbol and image-based interpersonal communication about everyday life.

But they are bit-mapped pictures, and mainly bound to licensed software. However pictograms can be considered as a species of characters. Symbol fonts are in fact produced and marketed.

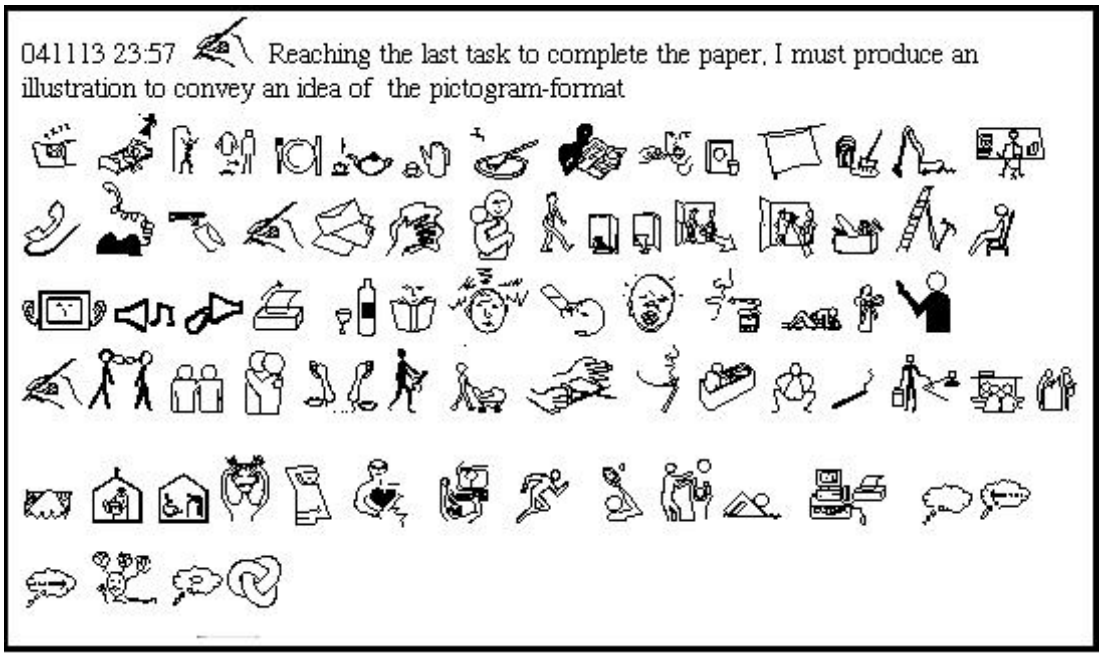
This implies, that a basic diary writing, which can report habitual situations, everyday events and activities with pictograms as single dedicated characters, understandable even to the illiterate and the child, is a logical possibility. But the number of keys on keyboards being limited, the entry of icons must take place otherwise than the entry of words. The solution presented here is to let the user choose and distribute pictograms, (stored as characters in a font suite) as screen buttons. Users can arrange and rearrange them on the principal screen-window, surrounding the central scroll field, where text is entered, and they can then with a single mouse-click, be entered in the (time-indexed) text-lines of the diary.

The user has access to an extended library of pictograms, primarily referring to more or less universal all-human – or culture specific - typicalities of bodily, domestic and neighbourhood endeavours, pursuits and processes. No user will need them all. It is essential that it is the user, who selects and distributes wanted icons, try out chosen samples, and easily remove and replace them with others.

The pictograms refer to sleep & wake, hygiene, household processes, TV, reading, ICT processes, arrivals & departures, encounters, meals, digestion, visits and shopping, pains and pleasures, mistakes & mishaps & failures & accidents, exercise & rest, childcare &-interaction, breakdowns & repairs etc.

They facilitate swift logging of habits and events, intermittently with what may be typed in from the keyboard: reporting in words and sentences, names, numbers, titles of books and films, feelings, thoughts and reflections.

It is essential that the electronic diary thus can serve both cerebral hemispheres in timely ways



Arbitrary sample of pictograms.

The mere use of icons may for some contexts and purposes suffice, under time-pressure and in cases of language barriers, illiteracy or speech and language-impairment. [1]

For adults in literate culture, however, they may sooner function as occasional short hand where qualifying words and sentences (immediately or later) can be added and situated

Everyone can profit from personal electronic journaling, because it enables cognitive skills, personal reflection and self-knowledge, help a deficient memory and provide a kind of documentary power in relation to information processes, people, authorities and machineries in the broadband society.

It can be of pragmatic use for people with special problems:

* Clients and patients in counselling and coaching, psychotherapy and psychiatry,

* People with severe physical or mental handicaps,

*Alzheimer,

* Autism,

* Ludomania,

* Drug abuse,

* Alcoholism,

* Smoking,

* Weight watching

* and for journaling symptoms and treatments in somatic illnesses.

Other kinds of advantage can be drawn by students of psychology and by people in creative endeavours, where it can help to catch, retrieve and organize ideas popping up in the stream of consciousness under all kinds of more or less fortunate circumstances of state-specific cognition

In fact this is a toolset the idea of which grew from questions of qualitative research methods concerning the crucial properties of cannabis (Bjerg 1970).

Prototype specifics: The “Phenomenalog” electronic diary

A prototype software tool for keeping a laptop diary is and has been under development and daily testing by the author for many years. First in the LiveLab Experimental home at University of Copenhagen, and in the teaching of qualitative research methods to graduate students in the department of Psychology, and since been further developed and tested. The various needs encountered have – little by little – led to add and improve numerous features, not least options for user to alter and redesign the interface:

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[1] The maintenance of time-indexed 24-hours display of inserted icons, as separated from the text written by the user, is an important feature possibility. It means, e.g. in the present prototype, that their distribution around the clock can be inspected in a separate window, where browsing through sequences of days make changes in pattern immediately apparent. And it opens for further developments towards columnar or circular displays permitting their juxtaposition with corresponding curves of vital parameters from body sensors. Physiological curves plotted relative to pictograms referring to behavioural or ideational events may be illuminating not only to researchers and doctors, but also to potential patients. To this end we must approach the logging process from a non-symbolic angle: The more or less automatic inputs of measurements, which a laptop diary can be made to record, along the diurnal cycle.[1]

* Automation of time indexing, features of searching and parsing, integration with calendar and address book, options for quoting to and from the diary and options for assembling time-stamped notes in a large number of separate thematic fields are basic, - be it symptoms, promises, books read, films seen, passwords and pin-codes to be remembered,

*A substantial innovative feature is, that it provides user the option to supplement text-entries with entries of pictograms (Glyphs) for recurrent typicality's of situations, actions and events in everyday life, as a kind of shorthand, and that user can personally select which of the (yet only 450) glyphs he finds it worth to use screen space for on his/her internal dialogue –scene.

* Another innovative feature is that it automatically - for each day - accumulates a row in a table of data from

1) daily counts of use of selected glyphs (e.g. medicine, alcohol, cigarette,) from

2) typed physiological data (e.g. blood pressure, weight, temperature) and

3) typed word-described symptoms.

The latest new features are

* The option for user to create links (on single days- or permanently) to any file, folder or program/application in the laptop. Use of such links is automatically indicated in the diary and will there make the personal information-handling more transparent in its time-perspectives.

* Functionalities for email by clicking e-mail address and for visiting homepages by clicking it, on namecards within ones own virtual address book

*Inclusion of browser functionality enabling the user to accumulate and organize Internet bookmarks in 2D and 2 ½ D cognitive maps

But the method is ever yielding new demands to its improvement.

*Installers for all three platforms

*Common typicalities, for which glyphs are missing, and should be included

*Option to view the accumulated data-table as differently coloured curves in weekly, monthly and annual perspectives

*Prototyping a cigarette lighter, for wireless triggering of time indexed input of numbered cigaretglyphs-

*Adaptation of the address-book to report and enable Skype calls directly from telephone numbers in address-book

* Optional time-indexed sound recording of vocal remarks and conversation storage

* Optional time-indexed phone-dialogue storage.

Latest versions of the program can be freely downloaded from www.phenomenalog.dk, where Danish and English demoslideseries can be browsed, and where a userforum is prepared for exchange and mutual help among users.

Goals

It is the hope of the author, that the preliminary prototype – being open source, freeware and in versions for both Windows, Mac and Linux, - will be seen as a resource- or at least an inspiration -, from which collaborative enterprises in these directions can be formed

There are various relevant targets

The educational system

The health-system

The correctional system

The consumer-protection system

The energy system

The exporting-democracy initiatives

Further developments, translation to other languages and continued enrichment and improvements of the glyph-fonts are expected through collective networking in many directions, adapting it to various cultures and target-groups, not least those concerned with self-care and physiological telemonitoring, which I shall thematize in the second paper to this conference: Self-care, telemonitoring and multidimensionality in person-to-person interfacing.

Conclusion

A pragmatic alternative to reaching for IT-literacy through schooling apprenticeship on the premises of informational capitalism and proprietary platform monopolies is to pave a way for techno-activist social interaction, (Proulx, 2008) by empowering the individual citizen - independent of proprietary software and media - to document their own informational flow from the first day, they open their own computer.

Let the sails be set for the design of the cross-platform virtual schoolbench/toolbench fit for citizens to improve on. A citizen workbench on the laptop, to constitute for the citizen his/her very personal virtual observatory, archive, tool and vessel for informational householding.

The interests of such are global, and as much as the routines of the everyday are culture-specific, the cross-cultural conceptual overlaps of oikospheres, of somaspheres and of iconospheres conceptions are notable.

Free and shareable tools for self-documentation (Call it journaling, logging or diary-keeping) must be the ultimate in ascendant innovations, because they proceed upward and onwards from the ground level of users exploration and parsing, seeking to improve what they can do with already-existing technologies and services. (Von Hippel 2005),

Essentially and existentially this approach must be rooted in the midst of the already integrated set of everyday (around the clock, and along the calendar), daily routines and involvements of people in their social contexts and their personal responsibility towards the construction and maintenance of stability in the everyday (Harmann, 2008)

It fits well with the theoretical model for the social appropriation of digital technology (Proulx, 2008), taking individual everyday life experiences as the staring point.

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