

Invisibly Visible, Visibly Invisible

Computers have fostered both a decline in and frenzy of visual knowledge. Opaque yet transparent, incomprehensible yet logical, they reveal that the less we know the more we show (or are shown). Two phenomena encapsulate this nicely: the proliferation of digital images (new media as “visual culture”) and “total information” systems (new media as “transparent”).

When digital cameras were introduced to the mass market in the 1990s, many scholars and legal experts predicted the end of photography and film. The reasons they offered were both material and functional: the related losses of celluloid and of indexicality, the evidentiary link between artifact and event. If, as Roland Barthes argues, the photograph certifies that something has been — it is not a “copy” of a past reality, but an “emanation of a past reality”³ — and if, as Mary Ann Doane contends, film as a historical artifact and the filmic moment as historical event are inextricably intertwined,⁴ digital images by contrast break the temporal link between record and event. Because a memory card can be constantly rewritten, there is, theoretically, no fixed relationship between captured event and image. Thus, it is not just that digital images are easily manipulated, but also that the moments they refer to cannot be chemically verified. Digital images, in other words, challenge photorealism’s conflation of truth and reality: the notion that what is true is what is real and what is real is what is true.⁵ The output phase. Let’s work on the second part of the program first. It’s not as interesting as the problem of computing prime numbers; but the job of printing must be done sooner or later, and we might as well do it sooner, since it will be good to have it done. [And it is easier to learn WEB when reading a program that has comparatively few distracting complications.] Since p is simply an array of integers, there is little difficulty in printing the output, except that we need to decide upon a suitable output format. Let us print the table on separate pages, with rr rows and cc columns per page, where every column is ww character positions wide. In this case we shall choose $rr = 50$, $cc = 4$, and $ww = 10$, so that the first 1000 primes will appear on five pages. The program will not assume that m is an exact multiple of $rr \cdot cc$. Online: <http://pad.constantvzw.org/p/observatory.participants> <http://pad.constantvzw.org/p/observatory.reader> On etherbox: <http://etherbox.local:9001/p/participants> <http://etherbox.local:9001/p/reader>

I. WHAT IS SOFTWARE The first two days of The Techno-Galactic Software Observatory will be developed in collaboration with the NAM-IP in Namur and will take place in the surrounding of their collection of historical ‘numerical artefacts’. Viewing software in this long-term context offers the occasion to reflect on the conditions of its appearance, and allows us to take on current-day questions from a genealogical perspective. What is software? How did it appear as a concept, in what industrial and governmental circumstances? What happens to the material conditions of its production (minerals, factory labor, hardware) when it evaporates into a cloud?

WHEN AND WHERE IS SOFTWARE The second two days will focus on the space-time dimension of IT development. The way computer programs and operating systems are manufactured changed tremendously through time, so its production times and places changed too. From military labs via the mega-corporation cubicles to the open-space freelancer utopia, what ruptures and continuities can be traced? From time-sharing to user-space partitions and

containerization, what separations were and are at work? Where and when is software made today?

Friday 9 June: WTC25 Koning Albert II-laan 28-30, 25th floor
10:00 Introduction WHEN AND WHERE IS SOFTWARE, reader (Martino + Anita) + guide/etherbox (Anita + Seda)
11:00 Contribution: Entreprenariat (Silvio Lorusso) 13:00 Push and Pop lunch / see https://users.ece.cmu.edu/~koopman/stack_computers/sec1_2.html + <https://cdn.ckitchen.com/p/midimages/piper-products-pt-1520mo2-mobile-tray-dispenser.png> + <http://english.hupfer.de/images/large/0162777.jpg>
14:00 [...] 18:00 End

Saturday 10: WTC25 Koning Albert II-laan 28-30, 25th floor
10:00 [...] 13:00 Lunch Louise Mestrallet + Chris Valens
14:00 [...] 18:00 End

OBSERVATION AND ITS CONSEQUENCES The last two days at the Techno-galactic software observatory will be dedicated to observation and its consequences. The development of software encompasses a series of practices whose evocative names are increasingly familiar: feedback, report, probe, audit, inspect, scan, diagnose, explore ... What are the systems of knowledge and power within which these activities take place, and what other types of observation are possible? As a practical set for our investigations, we will together set up a walk-in clinic in the basement of the World Trade Center, where users and developers can arrive on Monday with software-questions of all kinds
Sunday 11: WTC25 10:00 Introduction OBSERVATION AND ITS CONSEQUENCES, reader (Carlin + Seda) + guide/etherbox (Peggy + Martino) 11:00 Exercise: Fingerprinting 13:00 Lunch Louise Mestrallet + Chris Valens 14:00 Preparations walk-in clinic: Tool/Method swap 18:00 End

Monday 12: WTC25 10:00 Preparations walk-in clinic 13:00 Lunch Louise Mestrallet + Chris Valens 14:00 Walk-in Clinic Opens 17:00 Closing the clinic, drinks 19:00 End
<http://www.constantvzw.org/site/Open-Call-for-The-Techno-Galactic-Software-Observatory.html>