Technik Sozio. & Psycho.

railway

cars

ICTs

+ telephone

+ vacuum-cleaner

in-class group-work &
discussions

readings

portfolio + double exam

min. 1 per item!

miss ≤ 2 full sessions max

def psyche

experience

actions
vs behaviour ← incl unintended
↳ intent, agency

"only humans"
≠ speciesm

"behaviour is gene-bound"

social actions make sense
↳ meaningful to actor

make sense to
the actor (contextual/
subjective

@ "the beginning": even
before birth

Spitz
orphanages after WWII
no time for social
interactions (eyes, touch)
↳ under-development
and death

micro-sociology: groups close to n=2

meso — orgs

macro — society

psychology can't just focus individuals as they're social

DEF: TECHNOLOGY

def Technology

∈

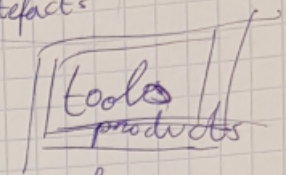
∉

+ examples

fine art ≠ tech

artefacts? not just?
& productionsmittel

vs other artefacts



virtual tech → art

↓ tech

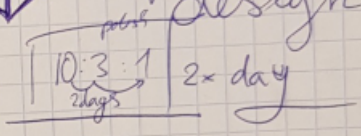
pertain

laws of nature

what prob wash'it seen as such b4?

every solution
+ process of making it

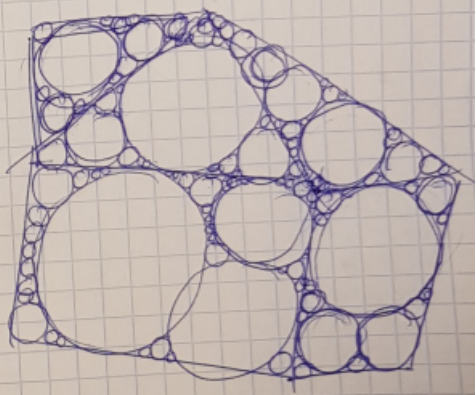
explorative design



techique vs technology

systematic approach

fabbaro



min complexity? wheel

hi-tech

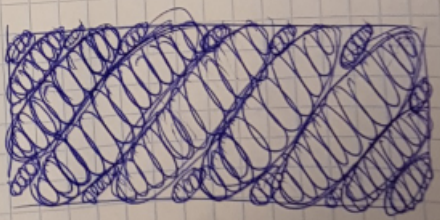
Duchamp found objects

tool with a purpose

if you don't know how to

tech: ~~not~~ made by humans

~~by~~ (vs given by nature)



ad def in slides:

not included:

- educational technology
- yoga-technik
- self-defense techniques

⇒ methodology
systematic way of doing sthg

First approach:

Psychology:

The subject of analysis is

- the **experience** and
- the **actions of humans**,

however - in contrast to a widely spread self-misunderstanding of psychology - humans cannot be considered as isolated individuals, but must be considered from the beginning on as **social beings**

Sociology:

The subject of the analysis:
human life within societies, groups
i.e. the actions of humans as social beings (Giddens).

Society:
The complete context of social action and behavior when humans exchange and act together (Tjaden).

Technology:

- technological artefacts (objects of daily use, tools, machines, gadgets),
- their interaction, their interconnection in aggregates, ensembles and networks as well as
- their underlying procedures

including actions and procedures / techniques as related to those objects as well as the corresponding knowledge (Hörning)

Habermas/Weber

"technization/rationalisation of life":

formalized control media that help coordinate daily life (e.g. traffic lights at crossings, money, etc)

turning point @ use of tech:

ancient times: miracles. warfare

industrial revo: in workplace

later part of non-working life

story: emperor Vespasian got design & faster column construction: "good, but won't use - poor need to work/eat"

industrialisation
tech enabled exploitation
(much) later: gradual
inclusion in benefits

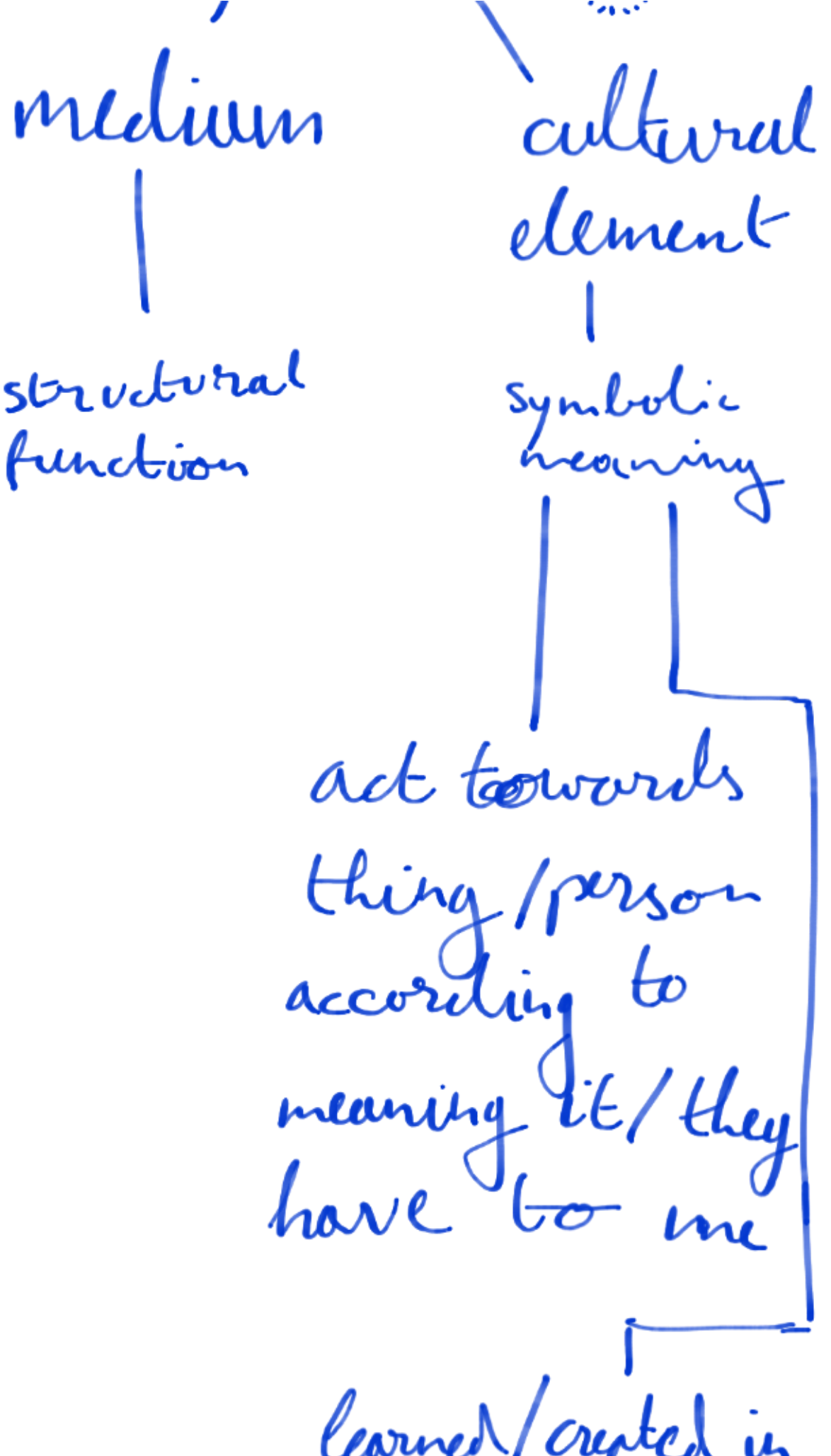
even today benefit for
few at cost of others

(today: "far away")

risks have become more collective (meltdowns, global warming, ...)

industrial society thought tech merely arises from natural laws

dual nature


medium
cultural element
structural function
symbolic meaning
act towards thing/person according to meaning it/they have to me
learned/created in

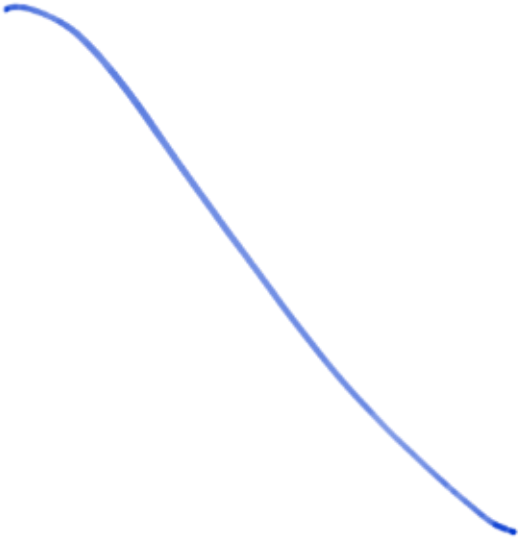
it's not essential to the thing — social interactions.

it's culture bound.

children haven't yet learned "this is (chair is an airplane")

only meanings that can be realized (chair can't fly, but can be used as table when sitting on floor)

100 $ laptop flopped for lack of WiFi; GSM was there → smartphones succeeded.



Culture

"... a historically transmitted pattern of meanings embodied in

symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and their attitudes toward life" (Geertz 1973)

1. Perception (of Tech)
2. Interpretation → meaning for us
3. action

example: adolescents & scooters

"cooking has to be hard work"

example: microwave & Germany vs

France

/

women were used to work (made life easier)

smartphone has different meaning here than in e.g. India

vacuum cleaner spread faster in USA than Europe (between WWs)

Europe: expensive

/

burgoise households

house maid

↓

"why make her job easier?"

USA: "all are equal"

↳ no large scale servitude

↓

cleaning by oneself

→ more power 4 women

external (political) & internal (household) power

Wien

Gründerzeithäuser:

Vorderhaus / Hinterhaus

all luxuries + small servant rooms

often no bathrooms, water

behind kitchen

in Paris servants lived beneath the roof with own staircase

loss of servants after WWII was sign of death of Empire for UK citizens.

@ Vacuum:

With the same forthrightness, Catherine E. Beecher faced the servant problem. She saw here a social issue almost beyond solution in America. She was sensitive to the basic paradox of 'domestic service' within a democratic state.

'There is no point where the women of this country need more wisdom than in relation to those whom they employ in their services,' she wrote in 1841 in her chapter 'On the Care of Domestics.' 'The subject is attended with many difficulties. The peculiar trials which American women suffer from this source are the necessary evils connected with our most valuable civil blessings.' [4]

With her sister, Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, she completely rewrote her textbook on domestic economy. The new version, dedicated to the 'American woman' and entitled *The American Woman's Home*, appeared in 1869. Here the earlier fragmentary hints were elaborated: 'Every human being stands (according to the Declaration of Independence) on the same level. . . . There are no hereditary titles, no monopolies, no privileged classes. . . . All are to be free to rise and to fall as the waves of the sea. . . . The condition of domestic service, however, still retains about it something of the influence from feudal times.' [5]

The pseudo-feudalistic conditions then prevalent in Europe are brought out by comparison of America with England: 'In England the class who go to service *are* a class and service is a profession. . . . In America domestic service is a spring-stone to something higher.' [6]

The authors did not avoid the issue: 'Now, what is the matter with domestic service? . . . We cannot in this country maintain to any great extent large retinues of servants. . . . Every mistress of a family knows that her cares increase, with every additional servant.' Their verdict is unequivocal: 'A moderate style of housekeeping, small, compact and simple domestic establishments must necessarily be the general order of life in America.' [7] And finally they point to the solution: 'This being the case, it should be an object in America to exclude from the labors of the family all that can be . . . excluded out of it by combined labor.' [8]

Even today, one could hardly state the problem more trenchantly. By force of circumstance, reality is gradually moving toward this state. Sampling at random the views expressed around 1910, we learn that the servant problem is to be solved' 'on the same plane as in other employments,' and as a direct result, 'we are gradually coming to the abolishment of a permanent serving class in our homes.' [9] Meanwhile the problem increasingly shifted into the psychological sphere. 'There is a very strong case against the presence of the permanent worker in the home. . . .' She forces 'psychological adjustment . . . on the homemaker and on the entire family. . . . In many cases the standard of the home is consciously or unconsciously made less simple or adapted to the expectation and demands of the worker.' [10] All this points back to Miss Beecher's proposal of 1869, that housework should be divided up so far as possible among the members of the family. In 1915 more pressing reasons are given: 'The servantless household (by servantless is meant without resident workers) offers the only opportunity for a family to follow *the exact standards* . . . and enables a family cooperation and a chance for training the children.' [11] The prerequisites for such a solution were supplied only when mechanization made it possible to reduce manual drudgery to a minimum.

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[4] *A Treatise on Domestic Economy*, p.204.

[5] Catherine E. Beecher and Harriet Beecher Stowe, *The American Woman's Home*, New York, 1869, p.318.

[6] Ibid. p.321.

The work does not start with cooking recipes. It opens with a chapter on 'The Peculiar Responsibilities of the American Woman.'

She raises her questions in the very preface: 'In what respects are women subordinate? Wherein are they superior and equal in influence?' This woman, who at the age of twenty-one already taught domestic economy in an institution of her own founding, blamed her sex's many disappointments on the fact that 'women are not trained for their profession.'

Her *Domestic Economy* carefully weighs the problems facing the women of 1840. Before coming to her subject, she could not help discussing human physiology. Without such an understanding, it seemed to her, practical rules were bound to be mere patchwork.

She treated in detail practical household tasks — how to cook, wash, clean, how to furnish the home, or choose vegetables and trees for the garden. As for kitchen recipes, there were none. They were published later, separately. Her every word shows that efficient housekeeping was not an end in itself. It was but an instrument to be properly mastered; and above all it was the medium through which she hoped to guide American women to their responsibilities.

In a speech to American women in the 1840's, Catherine Beecher pointed to the 'evils suffered by American women and American children.'[3] She dealt with the female lot among all classes of society. She told of '10,000 women in New York living by needle work, who by working twelve to fourteen hours can earn only twelve-and-half cents.' She has seen a 'New York office opened to aid domestics in finding places' where in 'a large room so crowded that she could think of nothing but a slave market,' servants were selected like chickens on a counter. She investigated living conditions among the workers at the Lowell textile mills (regarded as a model factory settlement in her time) and differed in her conclusions from Charles Dickens, who had visited them some years earlier. The fourteen-hour day, she found, was toil beyond the girls' endurance: 'At five the bells called for labor. . . . Work prosecuted without remission till twelve . . . then half an hour allowed for dinner and work till seven o'clock.' And finally she came to 'another class of evils endured by a large class of well-educated, unmarried women of the more wealthy classes. . . . It is the suffering which results from inactivity.'

Catherine Beecher's aim was not the achievement of outward power. She was thoroughly opposed to feminism in the political field. Her goal was to give women self-assurance and confidence in their profession. That is why all her life she demanded that 'domestic economy' be taught in the schools as a science no less than physics and mathematics. Only properly trained women could rise to the status for which they were destined.

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[3] *The Education of the Rising Generation*, Address to the Women of Cincinnati, 1846.

vacuum cleaner

↕

hairdryer

same tech, different meaning

(had reverse switch)

study; asked for perfect vacuum-cleaner

women: bonding with mom; sitting on vacuum

mess: shit along room that sucks in all dust in room at press of a switch

are example for:

shelved inventions
(Vorratserfindungen)

waiting for right time and place

Structur-
ing Fact.

(Tech as Medium)

human ⇄ Tech ⇄ reality

different perceptions/
actions given a technology

example: b4 mandatory child examinations many children didn't know they were short-sighted. they perceived the world diff-erently due to that

when they get glasses their perception changes massively

telephone was invented to demonstrate an acoustic effect. Bell saw it as a toy.

@adoption USA vs Europe: see GKM-ex.

structuring function:

equalizing / dehierarchising

McLuhan: tech as extension of body

Guns in US vs / Switzerland, Finland

both have ~30 / 40 / 50 % households with guns.

USA has stand-your-ground mentality.

Finland: hunting

Switzerland: country defense

→ symbolic meaning

2 examples of school shooting from DE/AT:

- learned that shooting is an activity
- (learned skills)
- power — control (vs unhappy life)
  — proving masculinity

technology follows (developments in)

⇓ society

structural function

=

reinforcing retroaction

arise in subgroups
enshrines and projects their
values

THE MEDIUM IS THE MESSAGE

In a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium—that is, of any extension of ourselves—result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. Thus, with automation, for example, the new patterns of human association tend to eliminate jobs, it is true. That is the negative result. Positively, automation creates roles for people, which is to say depth of involvement in their work and human association that our preceding mechanical technology had destroyed. Many people would be disposed to say that it was not the machine, but what one did with the machine, that was its meaning or message. In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out cornflakes or Cadillacs. The restructuring of human work and association was shaped by the technique of fragmentation that is the essence of machine technology. The essence of automation technology is the opposite. It is integral and decentralist in depth, just as the machine was fragmentary, centralist, and superficial in its patterning of human relationships.

The instance of the electric light may prove illuminating in this connection. The electric light is pure information. It is a medium without a message, as it were, unless it is used to spell out some verbal ad or name. This fact, characteristic of all media, means that the "content" of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked, "What is the content of speech?," it is necessary to say, "It is an actual process of thought, which is in itself nonverbal." An abstract painting represents direct manifestation of creative thought processes as they might appear in computer designs. What we are considering here, however, are the psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes. For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs. The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure. This happened whether the railway functioned in a tropical or a northern environment, and is quite independent of the freight or content of the railway medium. The airplane, on the other hand, by accelerating the rate of transportation, tends to dissolve the railway form of city, politics, and association, quite independently of what the airplane is used for.

Let us return to the electric light. Whether the light is being used for brain surgery or night baseball is a matter of indifference. It could be argued that these activities are in some way the "content" of the electric light, since they could not exist without the electric light. This fact merely underlines the point that "the medium is the message" because it is the medium that shapes and controls the scale and form of human association and action. The content or uses of such media are as diverse as they are

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the electric light is like
totally radical, pervasi
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itself on to what we

McLuhan's arg @ structuring principle

ineffectual in shaping the form of human association. Indeed, it is only too typical that the "content" of any medium blinds us to the character of the medium. It is only today that industries have become aware of the various kinds of business in which they are engaged. When IBM discovered that it was not in the business of making office equipment or business machines, but that it was in the business of processing information, then it began to navigate with clear vision. The General Electric Company makes a considerable portion of its profits from electric light bulbs and lighting systems. It has not yet discovered that, quite as much as A.T.& T., it is in the business of moving information.

The electric light escapes attention as a communication medium just because it has no "content." And this makes it an invaluable instance of how people fail to study media at all. For it is not till the electric light is used to spell out some brand name that it is noticed as a medium. Then it is not the light but the "content" (or what is really another medium) that is noticed. The message of the electric light is like the message of electric power in industry, totally radical, pervasive, and decentralized. For electric light and power are separate from their uses, yet they eliminate time and space factors in human association exactly as do radio, telegraph, telephone, and TV, creating involvement in depth.

As Selye deals with the total environmental situation in his "stress" theory of disease, so the latest approach to media study considers not only the "content" but the medium and the cultural matrix within which the particular medium operates. The older unawareness of the psychic and social effects of media can be illustrated from almost any of the conventional pronouncements.

In accepting an honorary degree from the University of Notre Dame a few years ago, General David Sarnoff made this statement: "We are too prone to make technological instruments the scapegoats for the sins of those who wield them. The products of modern science are not in themselves good or bad; it is the way they are used that determines their value." That is the voice of the current somnambulism. Suppose we were to say, "Apple pie is in itself neither good nor bad; it is the way it is used that determines its value." Or, "The smallpox virus is in itself neither good nor bad; it is the way it is used that determines its value." Again, "Firearms are in themselves neither good nor bad; it is the way they are used that determines their value." That is, if the slugs reach the right people firearms are good. If the TV tube fires the right ammunition at the right people it is good. I am not being perverse. There is simply nothing in the Sarnoff statement that will bear scrutiny, for it ignores the nature of the medium, of any and all media, in the true Narcissus style of one hypnotized by the amputation and extension of his own being in a new technical form. General Sarnoff went on to explain his attitude to the technology of print, saying that it was true that print caused much trash to circulate, but it had also disseminated the Bible and the thoughts of seers and philosophers. It has never occurred to General Sarnoff that any technology could do anything but add itself on to what we already are.

McLuhan

structuring fct of public lighting: make things visible that we couldn't before (= medium)

independent on concrete things made visible (= content)

medium is a message

medium is a massage ^ ^ -

TV meaning centralist broadcasting could also be inter-

participation-oriented

↓

would have had different structuring function

@ vacuum:

The Vacuum Cleaner

First approaches: Beginning of the 19th century's second half

First attempts at mechanizitation: Revolving-Brush Carpet Sweeper (1858)
Existed even earlier → street-cleaning (1840s)

Pre-stages of the vacuum cleaner:
Compressed air cleaner:
- Type 1: Device based on pure suction (1859)
- Type 2: Revolving brushes were added (1860)

After 1900:
Type 1:
- In stationary installations (USA)
- In mobile plants on wheels (England, France)
- For portable types still in use today

Type 2:
Constant improvements as portable device
Replaces the stationary plants after the electrification since the 1920s

Type 1 and Type 2:
„shelved inventions“

3 phases before the introduction of the portable vacuum cleaner in houses/flats:
- Carpet-beating machines in laundries (1860-1900)
- Stationary plants for big corporations (in the basement - pipelines in the house; especially in the USA)
- Mobile plants (in front of the house - hose into the house; especially in England, France)

1901/1902 first satisfying vacuum plants
(Initially inscecurity: vacuum-suction or compression-blowing)

How to generate vacuum?
- Water motors (no bags to change)
- electric motors

Breakthrough:
→ Fraction horsepower electric motor (Hoover 1909)

Today 2 types of portable vacuum cleaners:
- Tank type (Sliding chassis; hand-held suction nozzle - like earlier stationary plants)
- Handle type (Nozzle and body combined in a light trolley-unit; handle as the body's extension - combination of brush and suction like in 1860)

Source: Siegfried Giedion: Mechanization Takes Command. Oxford University Press / W. W. Norton & Company, 1948/1969/1975.

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Excerpt taken from:
Gerald Steinhardt: Computer-Mythen. Kulturtheoretische
Einbau einer neuen Technologie in alltägliche Lebenszusa
Psychologie und Gesellschaftskritik 17 (1993) 4/4, p. 43 –

Technische Geräte müssen – gerade unter der Perspektive ihrer Veralltäglichung – immer auch begriffen werden als Kulturelemente, deren Bedeutungen für die Gesellschaft und die Subjekte es zu untersuchen gilt. Kultur soll in diesem Zusammenhang in Anlehnung an Geertz verstanden werden als „ineinandergreifende Systeme auslegbarer Zeichen", als „Bedeutungsgewebe" (Geertz, 1987, S. 9, 21). Ein solcher semiotischer Kulturbegriff zielt ab auf Symbole, in denen Bedeutungen und Vorstellungen zutage treten. Denn: „Durch Kulturmuster, geordnete Mengen sinnhafter Symbole, verleiht der Mensch den Ereignissen, die er durchlebt, einen Sinn" (Geertz, 1987, S. 136). Durch sie wird für die handelnden Individuen Orientierung in einer komplexen Lebensrealität möglich. In seiner Bestimmung von Kultur als Symbolsystem charakterisiert Lorenzer, der sich in seiner Entfaltung des Symbolbegriffs stark auf Cassirer und Langer bezieht[2], Symbole als „*alle* Produkte menschlicher Praxis, insoweit sie ‚Bedeutungen' vermitteln" (Lorenzer, 1984, S. 30; Hervorhebung von A. Lorenzer); dazu gehören neben den sprachlichen Zeichen Kunstwerke als repräsentative Symbole ebenso wie Gegenstände des Alltags, insofern sie als Bedeutungsträger fungieren. Symbole stellen „lebenspraktische Entwürfe" dar, die immer kollektive Praxis zum Ausdruck bringen (Lorenzer, 1984, S. 45). Dabei ist von einem Wechselspiel zwischen dem materiellen, sinnlich-greifbaren Substrat der Kulturobjektivationen, also den Gegenständen selbst, und den inneren Entwürfen auszugehen, wobei – wie Langer betont – Symbole nicht bloß für den Gegenstand stehen (im Sinne einer Stellvertretung), sondern „Vehikel für die Vorstellung von Gegenständen" sind (Langer, 1965, S. 69). Den Hervorbringungen menschlicher Praxis als Bedeutungsträger kommt dabei ein Doppelcharakter zu: Einerseits sind sie Ausdruck von kollektiver Praxis und kulturellen Bedeutungssystemen, andererseits wirken sie auf die Subjekte und ihr soziales Handeln ein. Untersuchungen aus kulturtheoretischer Perspektive, die Technik in ihrem sozialen Gebrauch als symbolische Form[3] auffassen und die symbolische Funktion technischer Artefakte als gegenständlichen Bedeutungsträgern zu einem zentralen Untersuchungsgegenstand machen, eröffnen sohin nicht nur den Blick auf die gesellschaftlich-kulturelle Semantik der jeweiligen Technik, sondern auch auf die Bedeutungswelt der Subjekte. Technik wird in unterschiedlichen Diskursformen verknüpft mit den Dimensionen des sozialen Lebens[4]. Aus einer Analyse dieser Diskurse lassen sich Aussagen gewinnen über den Einbau technischer Produkte und Technologien in das Koordinatensystem der zentralen Symbolik unserer Gesellschaft und damit auch über die Auswirkungen dieser Technologien auf die Gesellschaft. Sie geben Aufschluß über Prozesse der Veralltäglichung neuer technischer Errungenschaften und ihre Integration in die alltäglichen Lebenszusammenhänge der Menschen. In diese Diskurse fließen immer auch die „Gebrauchsanweisungen" und -vorstellungen der Hersteller samt den den Geräten eingeschriebenen Verwendungsweisen ein wie auch die oft eigensinnigen (subkulturellen) Vorstellungen und Nutzungsmodi der Anwender; gleichwohl erschöpfen sie sich nicht darin.

Verbreitung und Gebrauch technischer Produkte im Alltag können nicht ausschließlich auf ihre technische Funktionalität und vorstrukturierte Verwendungsmöglichkeiten zurückgeführt werden: Beim Eintreten technischer Gegenstände in soziale Prozesse erfolgt eine Anbindung an zentrale Wunschpotentiale der Menschen sowie an lebensweltlich verankerte Motivationen und Sehnsüchte, die zu einer semantischen Anreicherung führt. In den unterschiedlichen Diskursen lassen sich die symbolischen Entsprechungen dieser Wunschpotentiale und Attraktivitäten auffinden:

– in den öffentlichen Darstellungen, Bildern und Aussagen über die jeweilige

Technologie und ihre Relation zu den Menschen;

- in der Bedeutung, die ihr im gesellschaftlichen Diskurs eingeschrieben wird;
- in den zentralen Bildern und Vorstellungen, unter denen sie in die alltägliche Lebenspraxis eingebracht wird.

Ihre Analyse bietet sich an, um Aussagen darüber zu treffen, in welcher Weise Computertechnologie – wie der Soziologe Norbert Elias es für eine ganz andere Technik formuliert – „[...] der Art [... ihres] gesellschaftlichen Gebrauchs nach, Inkarnat der ‚Seelen', ihrer veränderten Triebe und Wünsche, Verkörperung geschichtlicher Situationen und gesellschaftlicher Aufbaugesetze" (Elias, 1976, S. 164) ist.

Streetlights (ctd.)

structuring function:
visible what wasn't before

Symbolic meaning
France: movement to destroy them were symbol of power of & surveillance by king and his police. Thought it would help their privacy.

"questioning king's

authority' → tried as crime against the king

why invented
vs
why used (widely)

RAILWAYS

steam engines used to pump water out of deep coal mine shafts

producers run into market-saturation

1780 watt steam → rotation

~1800 high-pressure
→ smaller, more powerful, more efficient

engine that moved itself (auto mobile) instead of other things

used in coal mines. already had rails there. powered by horses; replaced by steam in 19th century: coal was cheaper than horse-food around mines compounded by high taxes on imported grain.

backfired for
the landowners

teleological question:

why need for new means
of transportation?

Industrialization

↓

mass production required
logistics for massive

amounts of raw materials, energy (coal), and goods

not enough mats. & ppl close to factory

horse carts + roads didn't have volume and were unreliable

↖ weather, robbery, fluctuating speed

could have been sthg else than railway.

w/o anything the societal development would have stiffeled.

◁○▷

Prob: TimeShifts (every town had their own local time) @ timtables

traincompanies usually used their HQs localtime as "railtime".

in stations: one clock per

provider

UK: GMT as standard (~1850) railway time

⇓

local time became ever less important

~1730 GMT est.

used by navy for position determination (via star pos + reference time).

Greenwich was harbor for ships (is downriver of London)

Greenwich has observatory for required star maps

⇒ GMT preexisted when needed for railway

1883 US: timezones

(bc: 200 time changes west to east.)

1893 Germany, 1910 Austria

time was "delocalised"

↑ less grounded (sun pos)
more abstract

one of the structuring function of the use of railways

Δt_{sunset} makes difference for cultural life; e.g.

Vie – Paris – Madrid

↑

Dinner@>22h

China only has 1 timezone for "4h" △

"where you're in $small_village along_railway_line"

phys: yes, consc.: no

perceptible: no

disconnection between

inside & outside of train
(through country not
in it)

only see distant things in
detail (due to velocity +
framing by window)
+
cutouts / deichs / walls / tunnels

railway : delocalization of
time

railway (30–40 km/h)

coaches. everything seems closer (compression of space). 3× farther reachable (expansion of space)

compr + expansion

dialectics of space

this change of structure of perception is a structuring function of railway

b4: LON-EDI 10 days

w/railway: —"— 5h.5h

reopening of train network to other networks when EU insisted (@freedom of trade)

(same @ electricity networks)

railway privatization in UK under Thatcher

travel across country became

difficult again

most profit: not investing in owned tracks → lot of accidents

early railway:

no avoiding

no overtaking

page 1 vs 2 ?

1

immediacy of experience

Goethe 1797

Left Frankfurt shortly after 7:00 A.M. On the Sachsenhausen mountain, many well-kept vineyards; foggy, cloudy, pleasant weather. The highway pavement has been improved with limestone. Woods in back of the watch-tower. A man climbing up the great tall beech trees with a rope and iron cleats on his shoes. What a village! A deadfall by the road, from the hills by Langen. *Sprendlingen*. Basalt in the pavement and on the highway up to Langen; the surface must break very often on this plateau, as near Frankfurt. Sandy, fertile, flat land; a lot of agriculture, but meagre . . .[1]

surroundings
state of road
village life
} small details

try to apply "travelling by foot" to "travelling by train"

increasing emphasis on vision in modernity ← all senses → only vision for train

"felt landscape (hills, road structure) vs. disconnectedness of railway

no way for lingering gaze/extended study of close things

Jacob Burckhardt wrote in 1840: 'It is no longer possible to really distinguish the objects closest to one — trees, shacks, and such: as soon as one turns to take a look at them, they already are long gone'.[12] In a text from 1838 we find the statement that it is impossible to 'recognize a person standing by the road while driving past him' at the 'greatest speed',[13] which prompted the following advice: 'He who has good eyesight . . . does well to acquire the habit of observing from a certain distance everything that attracts his attention while traveling: given some power of observation, he will not miss anything at all, not even during the stage of utmost velocity'.[14]

distance to things + only if good eye-sight

Ruskin

I say, first, to be content with as little change as possible. If the attention is awake, and the feelings in proper train, a turn of a country road, with a cottage beside it, which we have not seen before, is as much as we need for refreshment; if we hurry past it, and take two cottages at a time, it is already too much; hence to any person who has all his senses about him, a quiet walk along not more than ten or twelve miles of road a day, is the most amusing of all travelling; and all travelling becomes dull in exact proportion to its rapidity'.[18]

Reizüberflutung

overstimulation @ high speed

tried to focus and ponder small, nearby details

amusing travel

no focus for regular concrete

more (inter) active travelling

Eichendorff

'These travels by steam keep on shaking the world — in which there really is nothing left but railway stations — like a kaleidoscope, incessantly, the landscapes speeding by in ever-changing grimaces even before one has been able to perceive any genuine traits of physiognomy; the flying salon presents one with ever new coteries, even before one has been able to really deal with the old ones'.[17]

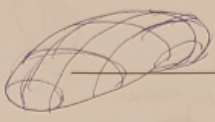
only pause in stations

Claudin 1858

'There are people, hurried by their business, who . . . in the course of one day have to cast their eyes upon the panoramas of several hundreds of places. They arrive at their destination overwhelmed by a previously unknown fatigue. Just ask these victims of velocity to tell you about the locations they have traveled through, to describe the perspectives whose rapid images have imprinted themselves, one after another, on the mirror of their brain. They will not be able to answer you. The agitated mind has called sleep to its rescue, to put an end to its overexcitation'. (Gustave Claudin, *Paris* [Paris, 1867], pp. 71–2.)

travel fatigue overstimulation

no memories retained of vistas

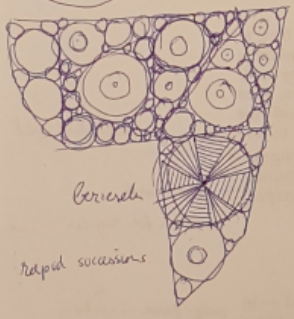


Liebar 1834

exciting of all traveling, it seems to me, is decidedly locomotion by steam on a rail-road. The traveler, whose train of ideas is always influenced by the manner in which he proceeds, thinks in a steam car of nothing else but the place of his destination, for the very reason that he is moving so quickly. Pent up in a narrow space, rolling along on an even plain which seldom offers any objects of curiosity, and which, when it does, you pass by with such rapidity, that your attention is never fixed; together with a number of people who have all the same object in view, and think like you of nothing else, but when they shall arrive at the journey's end — thus situated, *you find nothing to entertain or divert you*, except now and then a spark flying into the window of the car. . . . There is no common conversation, no rondolaugh, nothing but a dead calm, interrupted from time to time, only by some passenger pulling out his watch and uttering a sound of impatience. . . .[21] (Italics in original.)

1830

The passenger by this new line of route having to traverse the deepest recesses where the natural surface of the ground is the *highest*, and being mounted on the loftiest ridges and highest embankments, riding above the tops of the trees, and overlooking the surrounding country, where the natural surface of the ground is the *lowest* — this peculiarity and this variety being occasioned by that essential requisite in a well-constructed Railway — a level line — imposing the necessity of cutting through the high lands and embanking across the low; thus in effect, presenting to the traveller all the variety of mountain and ravine in pleasing succession, whilst in reality he is moving almost on a level plane and while the natural face of the country scarcely exhibits even those slight undulations which are necessary to relieve it from tameness and insipidity.[22]



1853

'The beauties of England', an American traveler wrote in 1853, 'being those of a dream, should be as fleeting': They never appear so charming as when dashing on after a locomotive at forty miles an hour. Nothing by the way requires study, or demands meditation, and though objects immediately at hand seem tearing wildly by, yet the distant fields and scattered trees, are not so bent on eluding observation, but dwell long enough in the eye to leave their undying impression. Every thing is so quiet, so fresh, so full of home, and destitute of prominent objects to detain the eye, or distract the attention from the charming whole, that I love to dream through these placid beauties whilst sailing in the air, quick, as if astride a tornado.[23]

Cjastineau 1861

Devouring distance at the rate of fifteen leagues an hour, the steam engine, that powerful stage manager, throws the switches, changes the decor, and shifts the point of view every moment; in quick succession it presents the astonished traveler with happy scenes, sad scenes, burlesque interludes, brilliant fireworks, all visions that disappear as soon as they are seen; it sets in motion nature clad in all its light and dark costumes, showing us skeletons and lovers, clouds and rays of light, happy vistas and sombre views, nuptials, baptisms, and cemeteries.[24]

Cloviefie

'In a few hours, it [the railway] shows you all of France, and before your eyes it unrolls its infinite panorama, a vast succession of charming tableaux, of novel surprises. Of a landscape it shows you only the great outlines, being an artist versed in the ways of the masters. Don't ask it for details, but for the living whole. Then, after having charmed you thus with its painterly skills, it suddenly stops and quite simply lets you get off where you wanted to go'.[25]

Traditional vs

PANORAMIC

travelling

ppl on 2nd page got used to panoramic travelling.

focus on reaching destination

structuring fn is of tech used in a

specific way:

Pan - o - rama
All to be seen;
to see everything
end of 18th cent
mass media
baroch church ceiling
exaggerate height via painted
perspective
beginning of 19th cent.:
Panorama building, e.g.
Prater Panoramastraße

hood + fake foreground to give impression of being there and observing from distance (not even able to look at nearby objs)

mass media: images exchanged after everybody has seen them.

Panorama as overview from atop a mountain: ppl couldn't climb just 4 experience b4. Großglockner only climbed

in 18th/19th cent.

sightseeing platforms (e.g. Wienerwald) only set up in 19th cent.

railway to Kahlenberg: 19th cent.

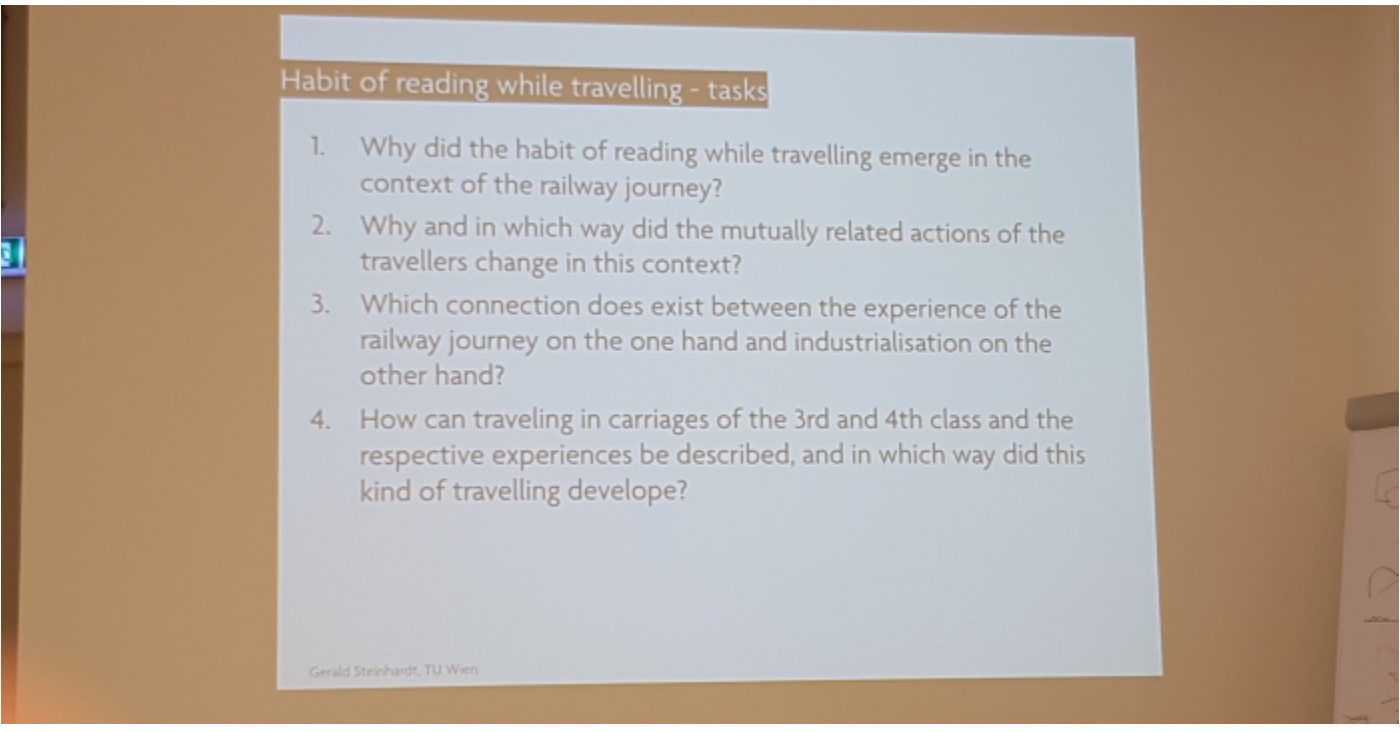
↓

perceptual change linked with Railway Journey

panoramic & structural

of railway

Homework:



Perception

"all" + "see" "to see all"

continous threat of being watched all the time.

+

don't know when they're being observed

one guard is enough

G4: chained on wall

starved

phys. violence

⇓

goal: to restrict/affect the body

panoptiсon:

+= psychological violence

"controlled visually"

~ panoramic principle:

- distance
- overview

- observing subject & observed objects

there's one in Dublin, one in Iran, some in US,

also realized in a Russian factory (beginning of 19th c.)

skilled work: ppl worked on own time (when result was needed, {aufmachen} on Monday, etc)

industrial: paced work
(at rythm of machines)

→ owners established
control via observation
and harsh punishment

Taylorism & conveyor-belts
came later

early industrialism: produce
as much as possible

also ∃ some panoptic schools

modernity: > late 18th c.
"tech → progress"
leading tech: railway

late modernity: > 1960s/80s
part of modernity
applies it's principles to itself ⇒ reflexive mod.

"t. → progr., but it's more complicated (e.g. pollution)"

leading tech: ICTs

panoptic in late modernity:

- radarboxes for cars
- CCTV (+ demonstrative TV @ entrance)
- tracking while browsing
- IMSI catchers
- ~ Sesame Credit @ by neighbours: Blockwart-system under Nazis

pre-modernity:
traditional modes of
perception & experience
tech: coach

Brighton (south of London)
small fishing village

highest class went
there by coach (e.g.
to royal summer-palace)

+ train: journey became cheap
→ lot of tourists
- → fishing families switched to tourism
- → beach extension
- → boardwalk
- → royals moved elsewhere (e.g. highlands) for exclusivity / distinctivity

Delocalisation and Disembedding

(characteristic to modernity)

(b4: person from Ötztal would at max travel to Pittstal + almost always come back)

b4: strawberries where harvested and eaten in same place. (transportation too slow, no refrigeration). They belonged there.

modernity: could be transported, lost their location.

ppl don't know about details/ context

of growth.

they belong to the shops.

ad reconstructable ctxt

handout @ trains :

via Floridsdorf to Brünn

no connections between compartments
→ tickets couldn't be sold and checked on train
↳ in station

The interaction between travelers as well as what they did while traveling changed too: people started reading while traveling. However – and this is important - only middle class passengers started doing this. The reason for this was the design of upper class wagons, which had cabins, as shown in the following illustrations of Austrian wagons (Kaiser-Ferdinands-Nordbahn) from 1839:

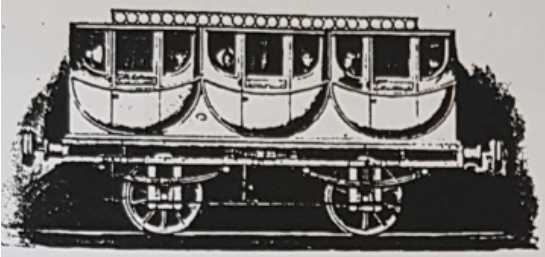
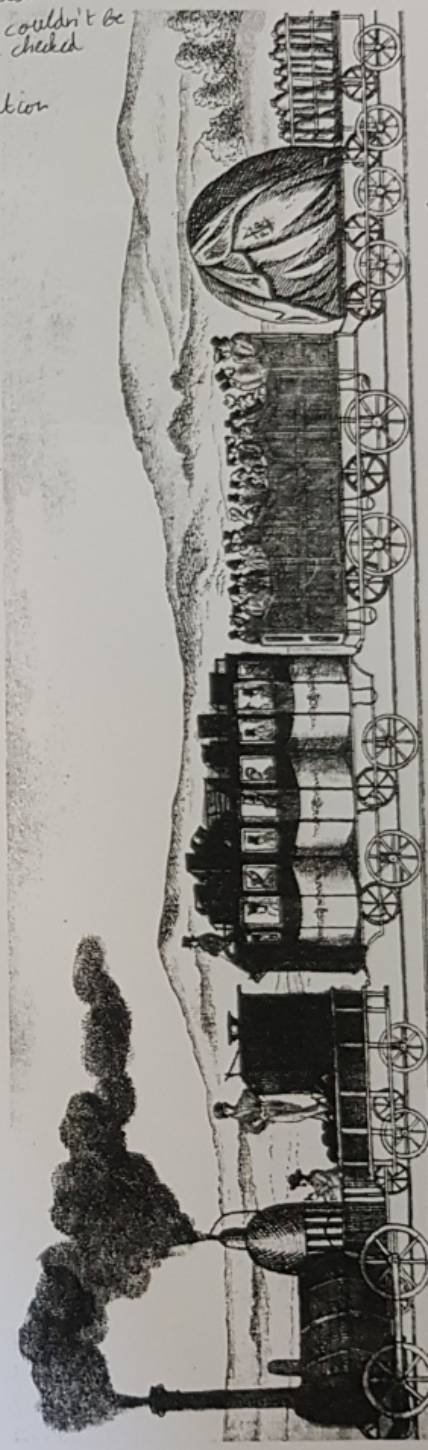


Abb. 324 a. I. Classe.

Abb. 324 b. II. Classe.

Abb. 324 c. III. Classe.

Abb. 324 d. IV. Classe.



META@PORTFOLIO:

avoid quotes in favor of ocon words. if quote is unavoidable: do it properly

in Master Thesis: only primary sources/references, i.e. one has read themselves.

secondary sources (i.e. via another text) only if all possible measures to get primary source.

templ: "$sec cited after $primary"

Sec. quoting Key for portfolio

one reason for quoting:
quote first + analysis of
quote (not just quote
because wording is better)

◁○▷

Ex. ad Aura of Artworks:

*mechanical technical

1) What is the difference between the picture of Mona Lisa in the Louvre and a *reproduction of it in your living room!

) Does the fact that the Mona Lisa can be technically reproduced *the original picture and the perception of the original picture?
*influence

Anne-Victoria Meyer
11741631

Renée Singer
1028092

Patrick Hochhorster
1008935

Benjamin Offenbach
1576922

2 1) There is only one original but theoretically an arbitrary number of reproductions.

Regarding the picture itself: a mechanical reproduction, i.e. a print doesn't have the same texture, lighting, resolution, aging marks, etc. of the original. ~~Symbolll~~ Symbollically, the context and effort of it's creation, it's long history and the symbolic connection with it via the act of viewing it as well as the prestigous setting ~~at the~~ of being displayed in the Louvre give it an culturally constructed/assigned gravitas that the reproductions don't have. With this also comes ~~an~~ a substantaly increased price. The original is irreplaceable, whereas reproductions can be modified and discarded easily ~~On the~~ But as a drawback the fame of the original also means that the ~~disp~~ space in front of it is immensly crowded, which makes it hard to enjoy according to PBS Art Assignement.

ad 2)

The original picture is not directly changed by it (but the context of viewing is due to it's increased fame that has lead to immense crowding)

Should the original get damaged, recordings, ie. reproductions can help with restoring the original, as is about to happen with the Notre Dame.

As said before, the perception of the original most certainly changed. Due to the reproductions the artwork became immensly famous/popular, even among people who have (and would never have) seen the original.

Also due to the reproductions, we might not be as impressed by the original as expected to be.

- orig becomes less impressive due to inflated expectations (e.g. zoom, cropping)
- democratization
- that it got famous
  modified situation in Louvre (i.e. crowding, glass box)

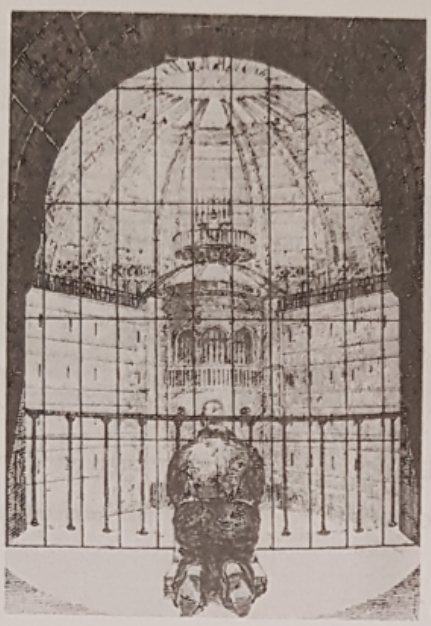
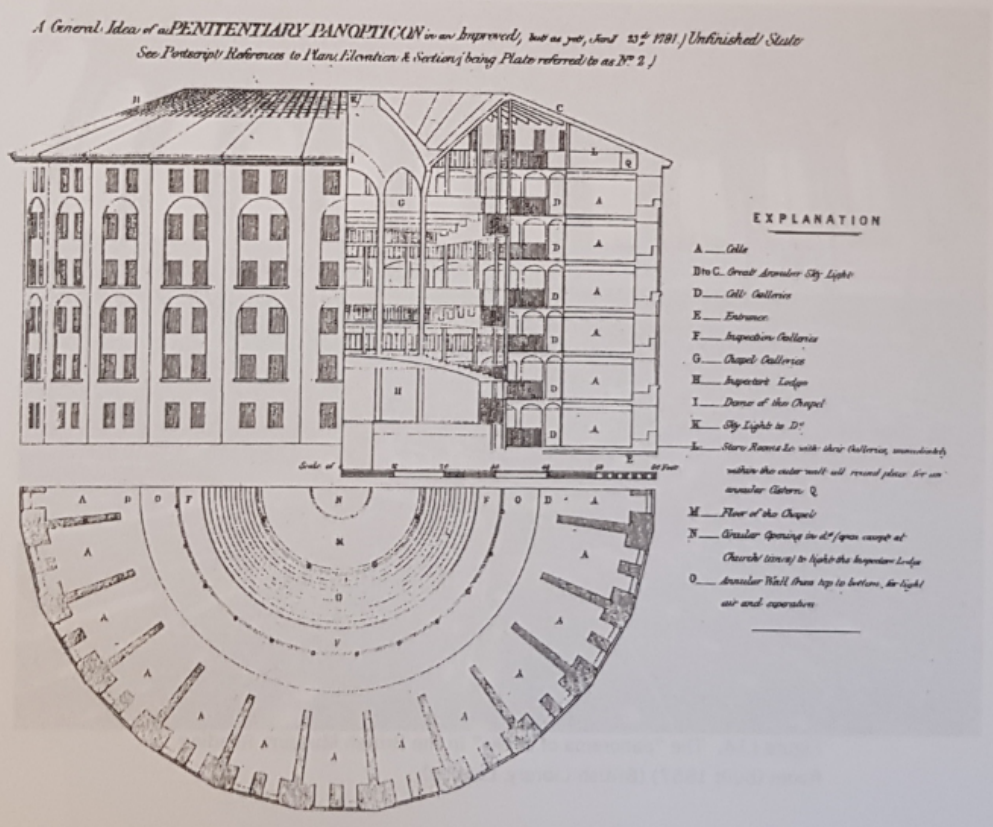
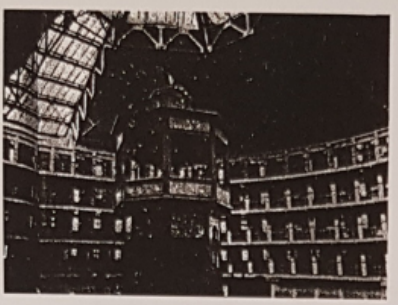


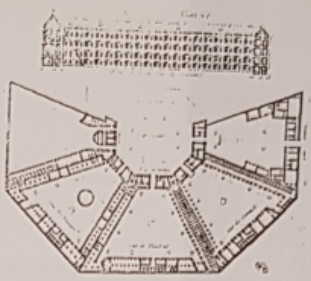
Figure I.12. N. Harou-Romain, *Plan for a Penitentiary*, 1840. A prisoner, i his cell, kneeling at prayer before the central inspection tower (Michel Foucault, *Discipline and Punish* [New York: Pantheon, 1978]).

Figure I.13. Sketch of ground plan and cross section of Bentham's Panopticon, 1791.

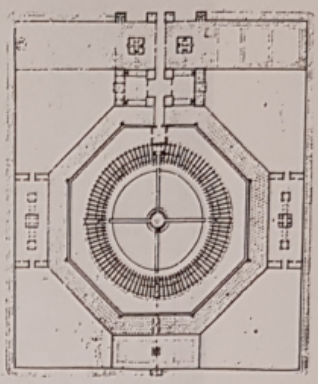




state prison of Stateville (USA)



plan for jail of Gent, 1773



plan for prison, 1840

Figure I.14. The "panorama of books" in the British Museum Reading Room (built 1857) (British Library, London).

Sociology of Technology

9. Mai 2013

- Railway compartments were modeled after stagecoaches
  - you couldn't move from one to the other between stops
  - there were murders in trains
  - people were scared and felt trapped in their compartments
  - ideas for solutions:
    1. a rope which ran through the entire train which you could pull to make a bell ring in the locomotive
    2. a speaking system
    3. small windows between compartments
    problem: ~~small~~: makes people feel watched, but they wanted to remain undisturbed while travelling
    → was discarded
  - then 4: create walkway outside of carriage
    → very dangerous → a lot of deaths
  - then 5: walkway was moved to interior part as aisle to the side of the compartments

- Picture task: all 4 pictures are from the US
  → different cultural context
  → development was completely different from Europe

- Railway in Europe: railway as successor to stagecoaches

- Railway in America: opens up vast new spaces
  - Europeans first settled at coast and up rivers of America
  → rest was mostly unknown

- England: - Industrial Revolution in transportation followed industrial revolution in production
  - first train line between Liverpool & Manchester
  → connect harbour to cotton factory (?)
  ~~→ fulfill necessity of~~

- America: - Starting point of industrial revolution was agriculture & transportation (not manufacturing!)

- Europe: mechanization destroyed existing structures
  → people had to leave home & move to city for work
  → worker exploitation

- America: there was a lack of workforce, no one had to fear losing their jobs bc of mechanization

- Figure 1: wouldn't be possible, train would derail
  Figure 2 works
  Problem: wagons had to be very short → small
  → proportions become uneconomical

- In American trains: open cars → a lot of communication

SoT 9.5.19

Delocalisation
↳ strawberries
↳ Mona Lisa
↳ Brighton (England)

Aura ... „sense of seamners", 13/ was locationbound
not connected to an item

„compartment problem"
↳ fear of isolation } ideas for solution:
↳ fear of murder } speaking tube & long rope to ring abell
↳ no heating / toilets also: peep windows doors

Solution: walkway outside for the train staff
improvement: ~~internet~~ walkway inside

transportation means developed different in different cultures / locations. e.g EU / USA relocation → handwork

also mechanisation was perceived as destruction in Europe, but as positive in the USA.
↳ lack of workforce
unity of country, birth of country

Transportation in America:

- along the coast
- along the rivers
- miserable roads & not enough means
  ↳ river steamers

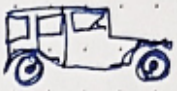
off the rivers: railway
but the rails did not follow the idea of a straight line, they followed the landscape
↳ sharp curves
↳ shorter carriages
↳ uneconomic!

Sociology of Technology

16.5.19

- Paris: Boulevards allowed army / police (?) to get an overview of neighborhood and quick access to neighborhoods.
  - for the army it's difficult to control neighborhoods with small winding streets and corners

- Railway stations were usually built outside the cities
  - boulevards were built from station into city
    e.g. Mariahilferstr. to Westbahnhof (was outside the city then), also Nordbahnhof & Praterstraße, Südbahnhof & Favoritenstraße



- Symbolic meaning of cars
  - until 20s & 30s no one bought a car for practical reasons
  - there were no roads suitable for cars yet, it was slow
  - there were no gas stations
  - people bought car bc. of symbolic meaning
    - meaning of ruling time & space
    - car allowed rich to regain sovereignity of time & space which they used to have in horse-drawn carriages
  - the car was a means of the battle of the classes
    → rich restored their power of time & space (which they lost when common railways became faster & cheaper than their horse-drawn carriages)
  - cars were bought to cultivate indulgence

- Cars in Nazi-Germany:
  - symbol of integration of everyone into fascist regime
  - highways are seen as arteries of „German body", traffic is seen as unity of german people
  - there was no practical use of all these highways then
    - too weak for tanks etc.
    - not much civilian (!) traffic
  - Nazis then started advertising usage of highways instead of regular ~~roo~~ streets

Sociology of Technology 16.5.19

boulevards (Paris) to have an overview of the space & neighbourhoods, for military parades, and as controlling tool. panoramic view.

railway stations outside of the cities
↳ connected to the city by a boulevard
eg. Westbahnhof connected by Mariahilferstraße

first the car was seen as tool for independency of
- when you travel
- where you travel
- with whom you travel

and a symbol of ruling time and space; claim the control of the new social order.

1938-45: the car was a symbol of integration of the people to "the blood circulation of the german body". the highways were symbolized as the blood venels.

23. May

highways conceived as
"blood vessels of German Body"
by politicians and people

2nd Republic build the
planned highways

130k workers (mostly office workers)
(5% of unemployed)
10-12 h workdays
idolization of bodily work

'33 keynote by Hitler
- road construction

- sep. of road traffic from Ministry of Transport
- tax abatements of cars

⇒

- integration of ppl via mobilisation
- signalling 'modernity' (via tech not democracy)

VW

couldn't meet price of 1000 R17

handed over to DAF

union of workers

- Volksfürsorge — and employers ~ austria > '34
- Kraft durch Freude (Tourism operator) — all (other) Unions forbidden

Robert Ley

GEsellschaft **ZU**r **VO**rbereitung des deutschen Volkswagens

Piechs and Porsche still own VW - Empire

Piech bought Porsche

side-note: TUV hands out a Porsche Award

Factory ended up in
BDR instead of DDR

crowd-funded
5RM per week, 240RM at End
300k ppl
money lost
16y later: 15% discount
when buying a beetle

after '39: adapted design
→ Lübelwagen
(monopoly > '42)

vs Russia: air-cooled
(no water that can freeze)

+ parts for warplanes

air-cooling: bad when going
uphill (no airflow)

VW-Factory: no core
workforce yet
→ prisoners (POWs and from
concentration camps)

in return discounted
Kübelwägen for SS

50s/60s "we did it"
comeback from war
car as prosperity-
symbol.
(ignored: a lot of ppl
didn't have the wealth

allowed to go on holiday-
trips; to countries prev.
invaded with tanks;
especially camping

"freedom" going west
myth

↳ indep. war

US: guns

EU: cars

French Revolution 1789 ✓

March — " — 1848 ×

Franz Josef I aged 18

neo-absolutism

ppl suppressed in everyday life

to release revol. tendencies:

car as symbolic freedom

until 1970s

a lot of old men fear not being

to drive most. "loss of freedom".

also: no speed limits - drive as fast

as you want and where you want

~

Jeep / SUV: symbol for possibility to go anywhere
'reality': forbidden to just drive across meadow, through forests, etc.
(other reasons: being large / intimidating, holiday-feeling in everyday life)

↑ study w. Jeep-owners in Vienna

did not work that way (e.g. due to traffic jams) → erosion of

symbolic meaning ~ railway

|

"passively transported"

autonomous car

↯

autonomous driving

"freedom", "control of own life"

⇒ ppl driving atm will not like auton. cars

young urbanites are unincumbered in this regard

⇒ will take generation turn-over

send car home to park

due to lack of space
a rebound effect

Data Linked to the "Auto Mobilization"

(Germany; Source: Sachs 1990 and 1987)

1923	Around 130000 cars
1923	First gas pump (in Hamburg)
1928	First traffic lights (in Berlin)
1929	First park house (in Berlin)
1932	Around 490000 cars (1% of citizens motorized)
1933-1945	6500km highway planned, 3500km built
1952	27.3% households have a car
1960-1973	Quadrupling of the number of cars
	Tripling of the kilometers driven
	Doubling of the length of highways
Around 1970	More than half of the working class households with cars

Praterstern in 50s: a square
(a round-about today)

overseeing auton. cars:
studies from auton. pro-
duction lines with human
Q&A: ppl can't concentrate
e.g. studies by Voest

challenges:
mixed traffic, non-std.
streets, changing weather
conditions

to do it soon: separation and prioritization of traffic space. shaping surroundings. non-users get disadvantaged.

|

≈ cars atm

bridgerton. cars reinforces that

Course "Sociology of Technology" - Steinhardt

The Phases of Automobiles Entering the Social and Every Day Lives of Mankind

As a contribution to

- The design and usage history of the automobile and
- The change in the symbolic meaning that the car had in its "social existence"

(Germany, Austria; Source: Sachs 1990 and 1987)

1) The beginning: the car as a symbol of ruling time and space

   (Restoring the lost sovereignty of the coach; using the car the financially able middle class not only claimed their right for control of time and space but also for control of the new social order.
   The care is therefore not a mere transport vehicle but a medium/instrument/path to securing social power at the beginning of democratic times and a contest between the classes during the beginnings of industrial capitalism)

2) 20ties to the beginning of the 30ties: The car as a symbol for the "elegant world" and cultivating the "indulgent life style"

   ("Nearly no citizen bought a car because it was useful or even needed. Just the opposite: the car was bought to cultivate the indulgent live style beyond every day life" [Sachs 1990, P. 51].)

3) During the Nazis: The car as a symbol of the integration of everyone into the (fascistic) society by being part of the (traffic) mobilization and so by attaching everyone to the "blood circulation" * of nationalistic life; highways as a symbol for "arteries" of the metaphorically imagined German body *; the pulsating traffic as a symbol for the unity of the "German People" *.

   * (as described by the NS-paper "Die Strasse" – see last unit's hand out)
   (People's car and automobile were consequences of this – both were used for political esthetics, which propagated the fantasy of universal mobility.)

4) Post war: The car as a symbol of the economic wonder, prosperity for all and "we did it!"

   (without really having prosperity for all! The continuity to the Nazi times is clear as the "Volkswagen" – a promise made by the Nazis – is now produced)

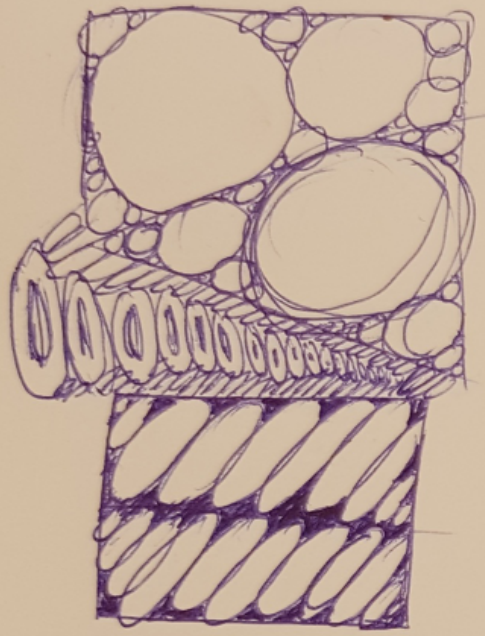
5) Throughout the beginnings until the 70ies (and until today): The car as a symbol for freedom and independence.

6) Since the mid 70ies: a parallel opposite tendency – the overloaded roads and the daily traffic jam experiences are slowly eroding the promises linked to cars.

7) Autonomous Driving - Great promise: risk-free & comfortable mobility.

Cars' struct. func.

seperation of space



mobility = activity

ppl ∈ car ∃ external reality

seperation of mob. space prioritization: car #1

perception: "normal that space is seperated and prioritised" roadification

if used differently → diff struct for

&pedagogication ← incl fahrschule but also pedestrian

after cars: enforced regulation @ mobility behaviour

→ limited actions in & perception of space ~~to~~

prioritication: @permpassage (cars on surface)

traffic in towns → bypasses → business to edge of town

~~village~~ w ppl moving away from towns to cities

closed railways, reinforcement of car traffic

The automobile contributed significantly, of course, to the ruination of the structural and social "ecosystem" in which pedestrians and bicyclists feel at home. The pedestrian needs a thick, intertwined, even entangled locale. It is not without reason that places built by their inhabitants to their own measure often resemble labyrinths—one thinks here of a Moslem medina or a medieval city. The labyrinth is the ideal structure for a people who rely only on the power of their own legs: it encompasses in the narrowest possible space a multifaceted world and creates security for those who spend their daily lives there (if confusion for strangers).

The opposite of the labyrinth is a space planned for the automobile; with a priority on rapid through transit, no environment hospitable to the pedestrian is possible. The most decisive consequence of motorization is the destruction of the vital basis for nonmotorized movement—and this goes for the all-around "clean" car as well. As a saying current in Los Angeles goes, "Pedestrians are people on their way to or from their cars." The automobile has arranged for itself a radical monopoly, one that causes not other firms, but entire ways of life to disappear. "This profound control of the transportation industry over natural mobility," Ivan Illich wrote in 1974,

> constitutes a monopoly much more pervasive than either the commercial monopoly Ford might win over the automobile market, or the political monopoly car manufacturers might wield against the development of trains and buses. Because of its hidden, entrenched and structuring nature, I call this a *radical monopoly*.[1]

Those in the Shadows . . .

The right of unfettered movement has, in the wake of motorization, been transformed into an obligation toward transportation. Indeed, transit-intensive distances and the uninviting here have created an environment in which the nonmotorized can scarcely survive. But what happens to those people?

To be sure, individuals without a car are not well off: they have the choice of either taking the time and trouble to use mass transit or not going anywhere at all. Many a grandpa in the countryside will just shrug his shoulders in resignation when he wants to buy shoes or visit the doctor. Lacking a car, he has only the unpleasant alternatives of rocking along in a bus for half a day or just staying home. Not much is available within the range of his own legs, and important destinations have been pushed too far from home. Those without an automobile find their power over the space for which no car is needed devalued, while their access to the space outside this narrow range is withheld. Motorization has created a new form of inequality.

In a pedestrian city in earlier years, say Tübingen in the nineteenth century, just about everyone but the lame had the same power over space, because all—with the exception of coach owners, and even there the discrepancy was not so great—were subject to the standard set by their legs. With motorization, the dominant classes acquired another means of exercising power over space, and accessibility—formerly generally available—became a scarce good that could be had only through the purchase of transit kilometers. Thus was laid the foundation for transport-based technological inequality: the better off grabbed the newest means of transportation more quickly than the less prosperous could keep up. The gap between the privileged and the unprivileged widened—to the increasing disadvantage of the nonmotorized because, in the struggle between the two groups, autonomous mobility was the inevitable victim.

1. Ivan Illich, *Energy and Equity* (New York: Harper & Row, 1974), 45.

source: W. Sachs: For Love of the Automobile. Looking back into the History of our Desires. (1992)

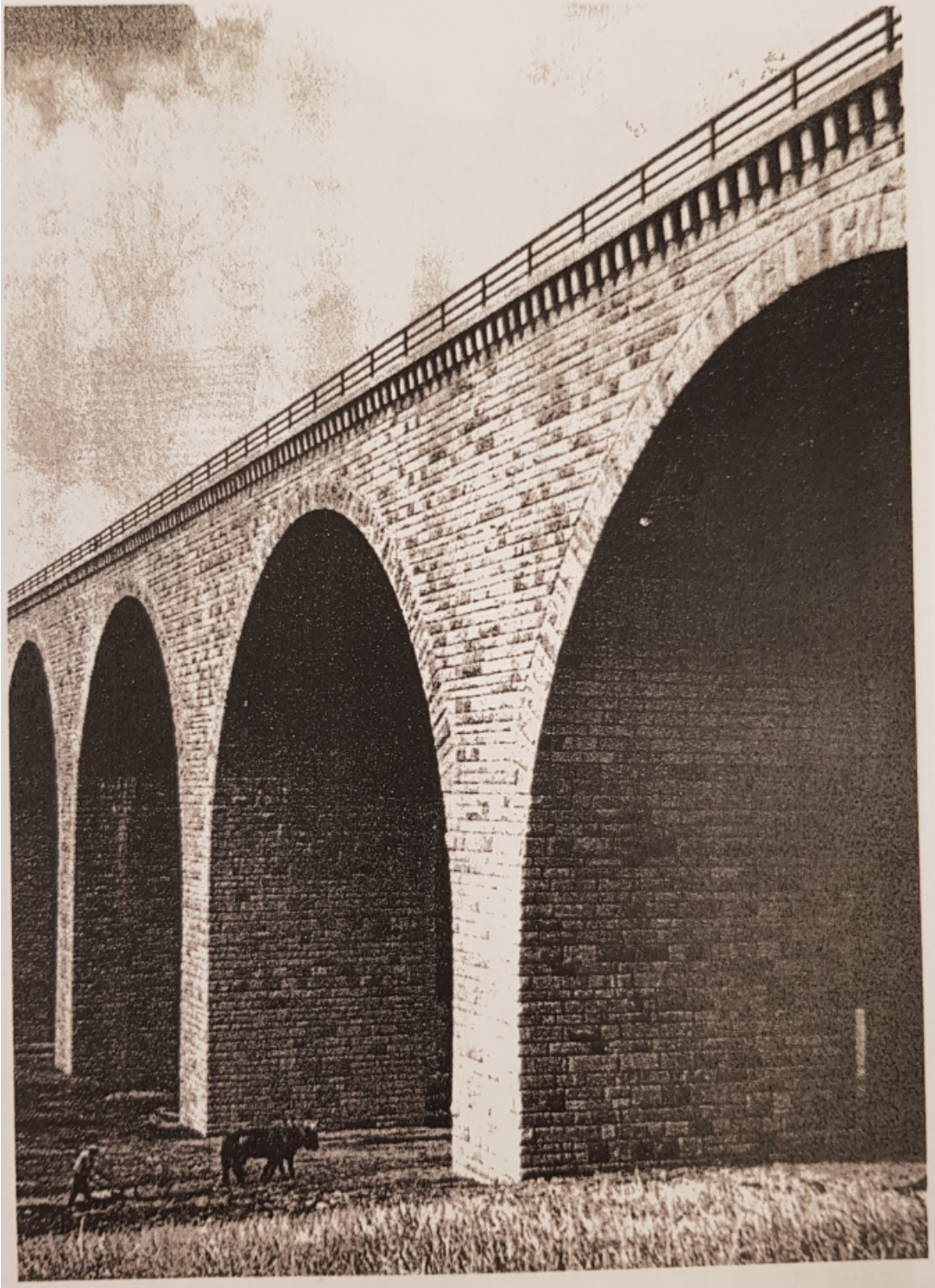


Fig. 6: Bridge of the Reichsautobahn, made out of natural stone. (Saalebrücke at Hirschberg at the franconian-thuringian border). Photograph from: Lendvai Dirksen, Reichsautobahn, 1937.

Fig. 7: Saalebrücke at Hirschberg at the franconian-thuringian border (incl. Reichsadler emblem). Photograph from: Lendvai Dirksen, Reichsautobahn, 1937.

Fig. 1: The advertisement "Reichsautobahnen in Deutschland" by Robert Zinner from 1937 with the Saalebrücke at Hirschberg at the franconian-thuringian border shows two typical features of the Reichsautobahn: The curved road layout, which preserves the countryside, and a monumental stone arch bridge. (Photograph poster collection Burkhard Sülzen, Berlin),


COMPUTERS

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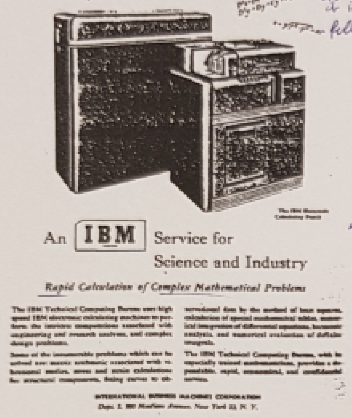
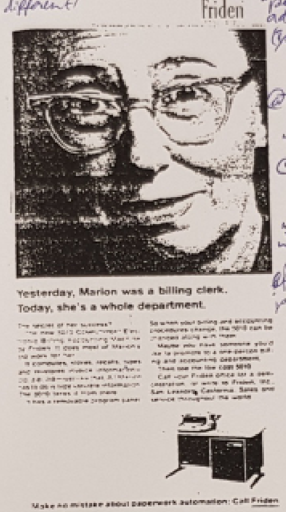
1950



"better calculator"
better version of existing tech
(ppl wouldn't have understood it if described as different)
full potential
"speed"

1965

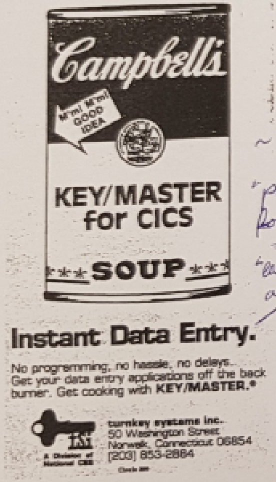


@clerks: "personal advancement" (you = whole dep.)
@CEOs
@CEOs "profit++"
"less ppl needed"
"efficiency power"

1965

"calculator"
modern (latest tech, radio dish)
stylish
attractive
cultured / "not dirty work"
"even by a woman"
eye candy

1970



1970

~ cooking
"pop", for everybody
"easy-to-use" as instant soup
20y earlier: expert machine

1980

too complex / ∄ understanding
"replacement"
computers as monsters
"eyes"
around time of space odyssee 2001
HAL ← IBM

(HAL
IBM

human-like
companion
as important as marriage
expensive
"objectivity"
"perfect" "optimality"

meaning
promises & fears

Stages of computerisation

'45 - 80s mainframes

80s+ PCs ("microcomputer")

~95+ interconnectedness++ of consumer PCs

computers for self-assembly (bf µComp./PC)

required soldering + programming

↑ via switches

µComp/PC (> '77)

not many extra features,
just assembled.
Keyboard

discrepancy power
$\mathcal{E}$ # bought
⇓
for symb. meaning!

bf µC: "being controlled"
fantasies (comp. advert above)
billed, taxed, large taking
over small. → claim computers
for people
(terminal-based)

'69 moonlanding (requ. computers)
vids from moon & Houston

'70 computer projection of
election results by statistics
prof.

Commodore PET

"domesticated"

"reliable", 'convenient', 'time-saver'

- the power of mainframes
in your home, "efficient"

"men's friend / male friend / companion"

meta ad republished →
must have resonated

@ "this one never let's me down" :/
"inserting floppy disk"

ads made for men

Apple Ad: "understands you"
"meets your demands"

'doesn't demand anything return'

women started living independently in 90s

also scenario for II "Her"

IBM "I wanna be loved by you"
subordinate

Apple: "uncomplicated (+women)"

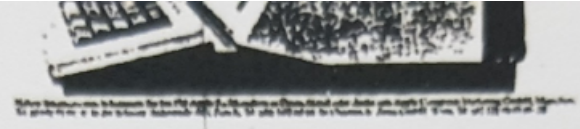
"Freedom" (work at home,

work whenever)

- "from anywhere present in NY/USA"
- "pulling all strings from HQ"
  - ↳ "Delocalization"

IBM: µC → PC

PHILIPS



TU Wien

Gerald Steinhardt

TU Wien


Ich verstehe!

PHILIPS

Robert König: „Was passiert, lieber Apple, wenn ich 1983 1 Million DM investiere?"

Apple: „Dann wirst Du im nächsten Jahr 93.000 DM mehr Gewinn machen, Robert."

Robert: „Und wenn die Kredit-Zinsen ... sagen wir mal ... um 2% steigen?"

Apple: „Dann, lieber Robert, wirst Du 16.000 DM weniger Gewinn machen."

Robert: „Und wenn sich die Lohnkosten um 8% erhöhen?"

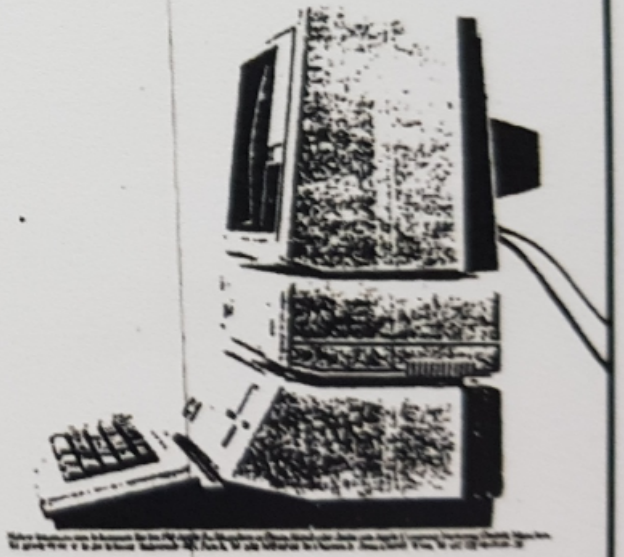
Apple: „Dann sind es noch einmal 36.000 DM weniger, Robert."

Robert: „Und wenn die Rohstoffe auch noch um 20% teurer werden?"

Apple: „Dann können wir dichtmachen, Robert."

Jeder sollte einen Freund wie Apple haben.

apple



Delocalization, loss of

- locatability of info
  ↓ @ ① + ⓪
- social historical anchorage of info
  (ability to reconstruct creation context)
- experienceable adjacency / local proximity
  (know soc media better than neighbours)

completion of this process of (late) modernity

risk for consumers in a

"risk" for consumers in connectedness of data (e.g. red flags w/o context)

mobility++ → (frenetic) standstill

(comp / J-met as ultimate mobi.)

Kaleidoscopic Perception and Experience

"new immediacy"

overload for ppl
who haven't learned to read the
patterns yet.

many open apps on a typical
desktop.


~~far/close, foreign/familiar~~


~~before/after~~

⇓

- simultaneousness } Real Virtuality
- accessability

∃ what is acc. now,
∄ what isn't

(e.g. not using FB
↳ don't get event invite
↳ "don't exist")

Different Subjects

Individual in the Middle Ages	Modern Subject	Late Modern Subject
Individual • born / put to their place / position • their duty / obligation was to bear and accept their fate • their life and the options they had, were determined by their position in society	Subject, • that had a distant, interested, watching, changing, and moving stance towards the outside world • (middle class subject that conceived himself as an actor of his history/circumstances)	Subject • As a node in a flat net of equal „simultanousnesses" • (late modern subject that is confronted with changing requirements of different – not necessarily coherent – facets of reality – which require adequate behavior in quick succession)

M. A.: trying to change that.
↳ "vs "god-given order"

↳ harsh punishment (treason, heresy, ...)

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defs aus 1. Einheit (Tech, Soz, Psychi)

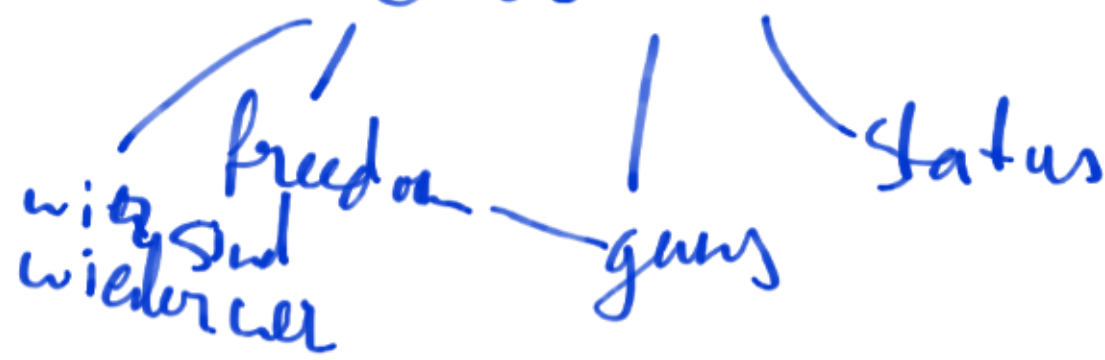
Aura

Waffen

Staubsauger

2 missed sessions

Symb car EU vs USA



Sinne @ tradit vs panoramatisch