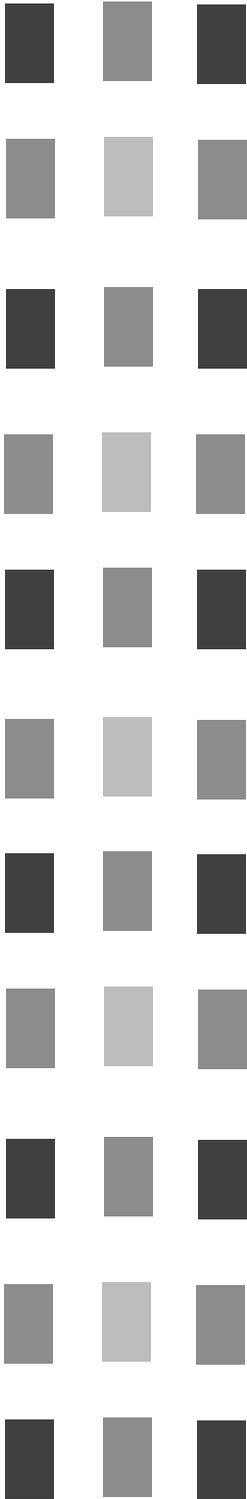# Hannah and Her Sisters

Kari Juhani Jormakka

In the *Human Condition*, Hannah Arendt presents a theory of political action as speech or discussion between equals who are free from the biological necessities of survival and free from being ruled or ruling over others.[1] Action is for her the highest human activity as well as the source of meaning and value. One of the conditions for action is the existence of public space, such as the agora in ancient Athens where the work of architecture functioned as a medium for speech and politics. Today, according to Arendt, public space as a structuring "in-between" is disappearing and with it, the very possibility of political action.

In what follows, I will look at medium, media, mediums and so on in order to make some sense of Arendt, and speculate a bit on whether space could function as a social substance, whether new media might replace architecture as the stage for political action, and whether the rhetoric of many architecture theorists on the disappearance of space merely involves the repetition of a few metaphors.

I begin with a brilliant and obscure statement from the *Human Condition*: "What makes mass society so difficult to bear is not the number of people involved, or at least not primarily, but the fact that the world between them has lost its power to gather them together, to relate and to separate them. The weirdness of this situation resembles a spiritualist séance where a number of people gathered around a table might suddenly, through some magic trick, see the table vanish from their midst, so that two persons sitting opposite each other were no longer separated but also would be entirely unrelated to each other by anything tangible."[2]

Arendt's claim that modernity dissolves traditional structures was no longer new in 1958 when the *Human Condition* was published. Perhaps the most famous expression of this view of modernity was the *Communist Manifesto* of 1848 with its immortal dictum: "All fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air, all that is holy is profaned, and man is at last compelled to face with sober senses, his real conditions of life, and his relations with his kind."[3] The oddly anachronistic spiritist simile used by Arendt, however, is original. Yet, it also harks back to the same revolutionary year: 1848 marked the beginning of both Marxist materialism and modern spiritualism, both of which announced the dissolution of the traditional world.

On March 31 of that year, the house of the Fox family in the hamlet of Hydesville some thirty miles north of Rochester, New York, was disturbed by inexplicable rapping noises. Soon, the young daughters, Catherine and Margaretta Fox came up

with a code to communicate with the presumed spirit responsible for the sounds. The matter was investigated and a committee determined that the house was haunted by the spirit of Charles B. Rosna, a peddler who had been murdered by a previous occupant and buried in the basement. New York State Supreme Court Justice John Worth Edmonds was one of the converts. Initially, he set out to debunk the Fox sisters but since he found no device for making the rapping sounds, he concluded that they indeed came from spirits.[4] Soon, he was even more convinced as the ghost of Sir Francis Bacon, Edmonds' intellectual hero, began communicating with him. The possibility of communication with spirits having been officially confirmed, spiritist table séances became popular in both the United States and Europe, despite warnings by skeptics, such as Michael Faraday who concluded as early as 1853 that the tilting of the table was not caused by spirits but the participants sitting around the table.

Even many scientists were convinced by the mediums. In 1890, for example, the notorious physician and criminologist, Cesare Lombroso called the world's attention to Eusepia Palladino. Initially Lombroso assumed she was just a medical hysteric, but in the very first séance in Naples he heard hard raps and ringing bells, he felt phantasmal fingers stroking his face, and he saw the table rise up in the air even as he held firmly onto the medium's hands. Lombroso conceded: "I am bewildered and regretful that I opposed so persistently the possibility of the facts known as 'spiritist'; I say 'fact' because I am still opposed to the theory."[5] Ultimately in 1908, however, Palladino was exposed as a fraud. She made her custommade table (a table that weighed less than five kilos) "levitate" simply by her hands and feet.[6] Here, the medium was the message.

Tischordnung

No matter which force was moving Palladino's table, Arendt's comparison of a modern city with the séance merits closer examination. This proposition is part of Arendt's argument that human actions and the space in which they occur mutually determine each other. She writes: "Things and men form the environment for each of man's activities, which would be pointless without such a location; yet this environment, the world into which we are born, would not exist without the human activity which produced it, as in the case of fabricated things; which takes care of it, as in the case of cultivated land; or which established it through organization, as in the case of the body politic."[7] The table is a human artefact that not only provides a level surface upon which things can be placed but as a cultural object it also defi-

nes social roles in a communicative situation, such as dinner. Indeed, the height, size, shape and general design of the table depends on the kind of social situation that it is intended to serve. In this sense, one cannot separate the thing or the space from the human activity.[8]

It is even possible to compare the séance table to the fabric of a traditional city. As Aldo Rossi argued, urban monuments represent tradition and continuity, embodying the collective memory of the community. Arendt makes a similar point, stressing the permanence of the world of things that forms the basis of political communication and guarantees supraindividual immortality. Likewise, the séance table mediates not only between the people sitting around it, but rather more importantly, between the people and the spirits of the dead, the previous generations. Even though Arendt seems to think that the levitating table would represent confusion, chaos and failure, precisely the opposite may be the case. The participants of a séance usually come to see the table move and feel a sense of community in witnessing what they believe to be a special moment.

Arendt draws peculiar conclusions from her séance table example because she seems not to distinguish between dinner and séance as social events. And yet, the same physical table would constitute very different social relationships if it were used for a dinner or for a séance. This is a good example of Arendt's claim that activity changes the space as much as space changes activity.

What the séance simile suggests in this reading is that any change in the physical organizing structures of a community, in particular structures of communication, does not so much dissolve the social world as it reorganizes a different community and exposes the artificiality or constructedness of all social relations and the contingent nature of that which is being organized. What Arendt calls an "in-between" is a communicative structure that by definition sets up a situation involving two or more separate and yet linked parties, and excluding many others. In this situation, it is impossible to ask for a more fundamental criterion of truth or validity. Arendt herself quotes Aristotle to the effect that "what appears to all, this we call Being."[9] Should not that which appears to the participants of a séance then also merit the name of reality?

Technology and spiritualism

The dancing table was not the only means by which mediums claimed to communicate with the spirits of the dead. As with the originary "Rochester Rappings", the principal means of communicating with the dead was through sequences of knocks which were interpreted by the medium as an alphabetic code. The parallel to the recently invented digital

telegraph code by Samuel Morse was immediately recognized by contemporaries who felt that if the telegraph was able to establish contact invisibly between two points on earth, it might be able to do the same between two worlds, as well.[10] It is reported that on his deathbed Morse was aroused from stupor by his physicians tapping on his chest, calling him back from the netherworld.[11] Already by mid-1850s, Charles Partridge had established his "Spiritual Telegraph Office." In 1871, a certain Mrs Hollis, a medium from Cincinnati, Ohio, claimed that the spirits had invented telegraphy in advance of its invention by Morse, suggesting that "the time is not very distant when telegraphic communication between the two worlds will be as much established as it is now between Louisville and Cincinatti (sic)". The problem was that if the spirits wanted to communicate through Morse code, they needed to find amongst themselves a deceased telegraph operator, as well as "a band of electricians to sustain the community spirit," and to materialize a battery to power the telegraphic machine.[12]

During the first decades of modern spiritualism, participants to séances were treated to spectacular visual effects, such as dancing table, full-figure materializations, ectoplasm oozing out of the medium's ears or nose. These strange events were often captured on film. Among the most famous spiritualist photographs are those made in 1917 by Elsie Wright (aged 16) and her cousin Frances Griffiths (aged 10) from Yorkshire. Using a simple camera, they claimed to have taken pictures of tiny winged fairies in their garden. Although the fairies bear a remarkable resemblance to illustrations in a 1915 children's book by Claude A. Shepperson, true believers were overjoyed. Arthur Conan Doyle not only accepted these photos as genuine, he even wrote two pamphlets and a book, *The Coming of the Fairies*, in their celebration. Yet, when sophisticated photographic equipment became affordable to a large public, photos were no longer able to sustain the "necessary blindness" which according to Pierre Bourdieu is required of successful ritual practice.

Instead of visuality, the emphasis of the spiritualists turned towards sound and in particular voice effects. In this regard, the séances quicky followed the near-simultaneous development of the telephone and the phonograph in 1876–77. In 1877, The *Times* explained the difference between the telegraph and the telephone as follows: "gushes, sighs, tears, sallies of wit, and traits of fondness do not stand the ordeal of twenty words for a shilling."[13] The telegraph preserves the word, the telephone transports the living, breathing, feeling person. Analogously, the spiritualists took the "direct voice" – the voice of the spirit emanating, as it were, from a special 'trumpet' – as proof that the

identity of a person persisted unchanged through death. The "direct voice" was separated from the medium who no longer actively interpreted the signal (like a telegraph operator) but only passively established or enabled a connection, much like a telephone operator would.

Towards the end of the nineteenth century, both communications technology and spiritualist technique involved a move from somatic to telematic processes of relay: the voice was disconnected from the body and its spatial location. The invention of the phonograph introduced a temporal dislocation as well: the voice can outlive the person and thus guarantee a kind of individual immortality in this world. Because of this, the phonograph was often associated with death. A case in point is Francis Barraud's famous painting *His Master's Voice*. It depicts the dog 'Nipper' listening to the horn with his ears cocked. Originally, the picture that Barrauld offered to The Gramophone Company showed the dog sitting on the polished surface of a coffin and listening not to a gramophone but rather to a phonograph, which allows (unlike an industrially manufactured gramophone record) not only the playback but also the individual recording of voices.[14]

Hannah and her sisters

The theory of the *Human Condition* is grounded on a reality that is more easily verifiable than the claims of the mediums: ancient Greece. With reference to Athens, she draws important distinctions between labor, work and action.[15] Labor relates to the 'oikos' or household and responds to biological necessities; necessity rules over all activities performed in the household and the husband rules over it by violence like a despot. Work relates to the 'agora', and it is not natural; it is the sphere of freedom. Action refers to speech between men without the intermediary of things or matter; it thrives on the plurality of men, the fact that each individual is unique.[16]

Labor reproduces nature by providing nutrition and sustenance for natural organisms while work creates artefacts: a table, a house, or a law, for example. Labor ensures the biological survival of the species but from the individual's point of view, the products of labor are impermanent: they are exhausted as they are consumed. In contrast, the work of the 'homo faber' – e.g. the architect or the legislator – fabricates a semi-permanent artificial world of things which endures across time, provides spaces between individuals, gives people identities by setting up the possibility for meaningful speech and thus forges the people into a community.[17] Arendt insists that the existence of a public realm depends entirely on the permanence of things that transcend the lifespan of mortal men.[18]

In setting up her categories of labor, work and action, Arendt was of course aware of the inequality of the sexes and social classes in ancient Athens.[19] The arena for work, the political agora, was not really accessible to women. Women were largely limited to labor: *giving birth* as well as *providing food, clothing and other necessities of everyday life*.[20] But even the house was divided according to sex to 'andronitis', or the rooms for men, and 'gynaikonitis', or women's spaces. To Antisthenes, crossing the 'gynaikonitis' to the 'andronitis' was like going from Athens to Sparta.[21] The men's side was the place for symposia, to which the wives and daughters had no access but hetairas were often invited to entertain the men. Pseudo-Demosthenes explains: "We have courtesans for pleasure ... and wives in order to have a legitimate posterity and a faithful guardian of the hearth."[22] In classical Greece, love, whether homosexual or heterosexual, happens outside of the home.[23]

Instead of love, the home or the house was the space of identity and the foundation of citizenship. Periclean law, though itself a product of 'homo faber', articulated two conditions for citizenship, both of which relate exclusively to the biological world of 'animal laborans'. One condition was that both of one's parents must be native Athenians, the other one that one had to be male. However, without owning a house, a man could not participate in political discussion. Women did not have a place of their own. Before marriage, a woman belonged to the hearth of her father, later to the hearth of her husband. The requirement for a permanent place set up public space and excluded women, foreigners and slaves from political discussion.

In ancient Greek, there was no word for a female Athenian even though there was a word for a male citizen.[24] Women were not called by their own names but addressed as the "wife of", "daughter of" or "mother of" a man. A husband could also refer to his wife with the term gyne that translates as "bearer of children". Such conventions are significant since according to ancient Greek beliefs immortality was only possible through the survival of the name. Lacking a name even at home, women were almost as deprived of freedom and visibility in the city as slaves.[25] Thus, access to the public realm and the persistence of individual identity were not for women in classical Athens.

Arendt notes that in Athens, "women and slaves belonged to the same category and were hidden away not only because they were somebody else's property but because their life was 'laborious', devoted to bodily functions."[26] This is true of women even today, as Sandra Harding insists: women are assigned the work that men do not want to do for themselves, especially the care of everyone's bodies – the bodies of men, babies,

children, old people, the sick, and their own bo-
dies. And they are assigned responsibility for the
local places where those bodies exist as they clean
and care for their own and others' houses and
work places.[27] Yet it would be wrong to think that
Arendt advocates relegating women to the darkn-
ess of the megaron.[28] As opposed to Mary O'Brien
who accuses Arendt of recapitulating Aristotelian
binary oppositions of men/society/public versus
women/nature/ private, Mary G. Dietz points out
that although 'animal laborans' is associated with
the feminine and 'homo faber' with the masculine,
neither one represents Arendt's ideal condition,
the 'vita activa', which is ungendered.[29]

Space and speech

Similarly to the spiritualists, but referring to Aristo-
tle's definitions of man, Arendt presents the facul-
ty of speech as constitutive of both personhood
and the polis. Thus, she stresses that Aristotle's
definition of man as 'zoon politikon' should not be
translated as 'animal socialis' (a translation already
found in Seneca) but seen in conjunction with the
other Aristotelian definition, 'zoon logon ekhon'
which does not exactly mean 'animal rationale' but
rather "a living being capable of speech."[30] Other
Greek philosophers generally shared Aristotle's
views. The Pre-Socratic philosopher Empedocles,
for example, imagined the ancestors of men and
women as being human in form but lacking the
ability to speak, like infants: only the voice makes
the human being. A similar idea of speech as the
surest index of human identity can be found in Ben
Jonson's *Timber, or Discoveries Made upon Men
and Matter* of 1640 with its famous lines: "Langua-
ge most shews a man: Speak, that I may see thee,
for no glass renders a man's form or likeness so
true as his speech". The dictum is a variation of an
ancient Greek greeting.

Arendt concludes that action as speech is "the
exclusive prerogative of man; neither a beast nor a
god is capable of it, and only action is entirely de-
pendent upon the constant presence of others."[31]
Action of this character requires a public space in
which it can be realized, a context in which indivi-
duals can encounter one another as members of a
community, since action would be meaningless
unless there were others present to see it. The
'agora' is for Arendt the ideal translation of politi-
cal speech into space.[32] But is this model accurate
and is it still relevant today?

The notion that the speech is the essence of
the political and thus the core of the agora as a
political space may not correctly describe the his-
torical development of Athens or any other an-
cient city. The origin of cities has more to do with
writing than with speech. According to Lewis
Mumford, "It is no accident that the emergence of

the city as a self-contained unit ... coincided with
the development of the permanent record: with
glyphs, ideograms, and script, with the first ab-
stractions of number and verbal signs. By the time
this happened, the amount of culture to be trans-
mitted orally was beyond the capacity of a small
group to achieve even in a long lifetime."[33] Not
even in the agora in Athens was face-to-face con-
versation the only form of communication. Texts
and monuments reminded Athenian citizens of sig-
nificant events and occasionally even displayed
municipal laws and regulations.

Yet, in Classical Greece, statues and tombs we-
re equipped with inscriptions which before 550 BC
were autodeictic, i.e. referring to themselves in the
first person.[34] "Here I am, the tomb of Krites" is
what a 'sema' from the plain of Marathon decla-
res.[35] Such inscriptions were written in phonetic
writing in what is known as 'scriptio continua',
without any marks as to where words begin or
end. This is true phonetic writing but it makes
difficult reading, unless one reads it aloud – but
silent reading was in any case unknown in Greece
at this time. If read aloud, the autodeictic inscripti-
on, which belongs properly to the statue, assumes
acoustic reality by the voice of the person reading
it. The statue, announcing its continuing life, takes
over the body of the passer-by uttering the words.
The deceased person lives through others every
time the text is read or, as it were, re-enacted.[36]
However, the autodeictic inscriptions of archaic
Greek funeral statues gradually lost their magical
power of evocation and re-presentation. In the
passage quoted above, Socrates continued to say
that written words were not really alive: "you
might think they spoke as if they had intelligence,
but if you question them, they always say the one
and the same thing."[37] The text is removed from
the world that is alive in time.

Indeed, writing (together with representational
art and architecture) allows for asynchronous acts
of communication: the speaker need not be pre-
sent when the reader deciphers the message. In
the nineteenth century, the invention of the tele-
graph and the telephone made possible a spatial
displacement of the speaker and the hearer, even
though the communication is synchronous. Even
earlier, the modern postal system achieved some-
thing that has been celebrated as the creation of
the Internet and other forms of electronic tele-
communication, namely a combination of both
kinds of displacements: the speaker and the hearer
need not be present in the same space nor at the
same time. Insofar as public space is understood as
a space of communication between various social
agents (that have enough shared values to make
the communication relevant), it is obvious that
public space is much influenced by the available
communicative media. John Stuart Mill made this

point already in 1840. He believed that advances in communications had made it possible to re-create the political experience of Athenian demo-cracy, since "the newspapers and the railroads are solving the problem of bringing the democracy of England to vote, like that of Athens, simultaneous-ly in one agora."[38] In this way, the actual modern agora or the parliament and the symbolic agora or the community of voters are unified.

Further, it could be suggested that not only do the conditions of communication change as tech-nologies change but even the very identities of those engaged in communication may be affected. Notions of personhood, identity, individual free-dom and privacy vary from society to society but they often appear to be linked to social control, as a kind of excess not covered by widely used sys-tems of control: the true self is often experienced as referring to that part of a person or behavior which is conventionally not controlled. If this pos-tulation is even remotely accurate, one may expect that electronic surveillance systems should have an effect on the very concept of a person and of pri-vacy, and thus change the nature of the public sphere as well.

The body politic meets the blob

In contemporary society, according to Arendt, the ideals of 'homo faber' have been sacrificed to those of the 'animal laborans'; while the fabricator of the world strove for permanence, stability and durability, today the primary (if not the only) value is abundance.[39] Even material objects, such as houses, furniture, or cars, that used to guarantee supraindividual continuity are rapidly consumed and replaced by others. Some years ago, Jean Bau-drillard remarked that "we are living the period of the objects: that is, we live by their rhythm, accor-ding to their incessant cycles. Today, it is we who are observing their birth, fulfillment and death; whereas in all previous civilizations, it was the ob-ject, instrument, and perennial monument that survived the generations of men."[40]

Insofar as we agree with Arendt that the possi-bility of communication, identity and politics is contingent upon structures that predate and survi-ve the individual, we can ask whether these struc-tures should be material or not. She makes it clear that to the ancient Greeks, laws were not results of political action but the products of making, like houses.[41] This indicates that for Arendt, work need not result in durable material things but it can also take the form of long-lasting conventions. Recent cybertheorists, such as Vilem Flusser, often insist that everything material is ephemeral while only non-material entities, that which Karl Popper called World 3, can exist forever. From this point of view, the disappearance of the physical agoras should

not complicate the political process too much.[42] The permanence of material structures or social conventions is, however, only one condition for political action to unfold. Another one has to do with Arendt's distinction between the "social" ver-sus the "political". In the *Human Condition*, Arendt warned of the rise of the social as passive confor-mism and the decline of the political as active citi-zenship. Hanna Fenichel Pitkin compares Arendt's concept of the social to the fifties B-movie classic, the *Blob*.[43] In Pitkin's reading, Arendt saw the so-cial as an alien, all-consuming feminine monster appearing as if from outer space to gobble up hu-man freedom and causing public paralysis and de-politicization. In this interpretation, Arendt's "so-cial" means a collectivity of people who conduct themselves in such a way that they cannot control or even intentionally influence the large-scale con-sequences of their activities.

Arendt laments the disappearance of clear bor-derlines between the political and social realms af-ter antiquity, and argues that in the Middle Ages all human relationships were modeled upon the example of the household. A case in point are the Medieval 'compagnons' that organized some pro-fessional relationships: a 'compagnon' or 'compa-nis' is a person with whom one shares bread, 'pa-nis', at dinner.[44] The dinner table has always been recognized as an ideal setting for the forging of social ties and communality. Sigmund Freud, for example, compares the binding power of commu-nal eating to kinship and maintains that kinship signifies having part in a general substance. "It is natural then that it is based not only upon the fact that we are a part of the substance of our mother who has borne us, and whose milk nourished us, but also that the food eaten later through which the body is renewed, can acquire and strengthen kinship."[45] For Arendt, the loaf of bread that one shares with one's companion seems to qualify as an "in-between", for it organizes social relations-hips. However, she explains that bread represents labor and a table represents work and the world because the table can last outlive a person.[46] Ulti-mately, communal eating only gives rise to the social, never to the political.

Pluralism

In talking about the political, Arendt emphasizes plurality, non-conformism and free political debate which raises the question of who is excluded. In her opinion, there exist two common reactions to the discriminatory practices of certain social surro-undings: the parvenu and the pariah model.[47] The first one means that one adapts to the social, assi-milates to the conformist ideal, and gives up one's own identity. The second model implies accepting that one is marginalized and withdrawing to pri-

vacy as a ghetto. Arendt seems to advocate a third alternative: neither to deny one's own identity and assimilate, nor to withdraw from political life but instead to fight back defiantly by asserting one's own discriminated identity.

The recent Renaissance of Arendt's thinking especially among feminist writers has much to do with the third option. However, it is difficult to see how a discriminated identity can be maintained if Arendt's theory is accepted. From which foundation do you fight back? If an individual is denied access to a public sphere, and the public sphere is the source of reality, then no sense of common, shared reality can be acquired and thus the individual's psychological and social stability is undermined.

To move around this problem, Arendt's concepts of the world, language and community may be questioned. Is there one public sphere or are there several? How large is a community and what constitutes it? In the beginning of the *Human Condition*, Arendt urges the reader to distrust the political judgment of scientists because they are forced to use a language of mathematical symbols that is not understandable to everyone. From this we can see that for Arendt political action is premised on a language that everyone can speak. Such a condition would entail, however, that no unified public sphere could ever exist – a condition that could also be seen as liberating. Political action breaks into small communities, each constituted by a shared language, and each recategorizing labor, work and action in a particular way. The assertion of a discriminated identity then happens at the level of political communities, not individuals. An identity that is contested in one sphere may be well-grounded in another. What Arendt calls the human condition of plurality – "we are all the same, that is, human, in such a way that nobody is ever the same as anyone else who ever lived, lives, or will live" – may apply not only to the community but to the individual, as well.[48] While 'animal laborans' and 'homo faber' implies a "what" (animal or man), Arendt's ideal condition of vita activa does not designate an identity, but rather a context for performing – or subverting – an identity, an active "who speaks".[49] If this is correct, then the clear division between public and private space breaks down not only in the modern world, which Arendt criticizes, but in classical Athens, as well.

Still, the proliferation of contingent, performative identities is nowhere more evident than in the recent emergence of cyberspace. In addition to the parvenu, pariah, and rebel models of identity, cyberspace has opened up yet another possibility: that of undisclosed or inauthentic identities. Insofar as a community is constituted through speech, the Internet functions as an "in-between" and sets up a communicative structure involving two or more separate and yet linked parties. However, in Arendt's terms the Internet is a non-political community, rather like a marketplace, where there is no decisive action and no separation between the private and the public.[50]

For Arendt, a person must accept the responsibility entailed by a disclosed identity in order to gain the right to discuss political matters. This demand is not unreasonable: social groupings can give rise to terrifying inhumanity and violence if the perpetrators do not have to accept individual responsibility. Commenting upon the famous experiments by Stanley Milgram and Philip Zimbardo, Zygmunt Bauman has argued that cruelty is social in origin. He concludes that responsibility arises out of the proximity of the other: "the moral attribute of proximity is responsibility; the moral attribute of social distance is lack of moral relationship, or heterophobia."[51] Arendt implies as much in her study of Adolf Eichmann and the banality of evil, and in her unpublished 1965 lectures where she says that "the greatest evil .... is committed by human beings who refuse to persons."[52]

In Arendt's original scheme, identity is the basis of political speech, action and humanity. She insists that "action and speech are so closely related because the primordial and specifically human act must at the same time contain the answer to the question asked of every newcomer: 'Who are you?'"[53] But in the feminist analysis, this question does not admit of an essentialist answer. The medium as an in-between construes contingent identities diacritically; even moral agents might be contingent collectivities.

Telepresence

Although cyberspace's anonymity conflicts with Arendt's requirement of identification, it agrees with her principles on another account: electronic telepresence can be used to disengage communication from labor: the sweaty body of the 'animal laborans' and the dusty bricks of 'homo faber's' works are replaced by the lily-white disembodied subjects of pure intelligence.[54] In 1993, Michael Heim enthused that when on-line, we break free from bodily existence – our "earthly, earthly existence" – and emulate the viseo Dei, the perspective of God, the "'all-at-onceness' of divine knowledge."[55]

For the spiritualists, the cyber-believers and Arendt, one of the consequences of modern technology is the alienation of man from earth and earthliness. For her, the best symbol for this alienation is the airplane, which epitomizes the shrinkage of the earth. Like many other writers from Heinrich Heine through Filippo Marinetti to Paul Virilio, Arendt declares that "men now live in an earth-wide continuous whole where even the noti-

on of distance ... has yielded before the onslaught of speed. Speed has conquered space...“[56] As a result of new communications technologies, traditional architectural boundaries have become obsolete. Insofar as a community is constituted by communication, then it is reasonable to expect a new social formation to emerge.

In line with this reasoning, Vilem Flusser, Alvin Toffler, Paul Virilio, Michael Benedikt and many other futurist writers propose that traditional cities are in the process of dissolution and about to be substituted by electronic cottages.[57] The visions of the future range from Nicholas Negroponte's description of digital technology as "almost genetic in nature“ and as "natural force drawing people into greater world harmony" to John McHale's and William Gibson's dreams of a cyberspace as the sensuous paradise for cyborgs or completely disembodied minds that exist eternally as information in computer networks.[58] In line with the Cartesian dictum – "I am not this assemblage of limbs called the human body. ...I am, precisely speaking, only a thing which thinks ...“[59] – Earl Cox insisted that "technology will soon enable human beings to change into something else altogether“ and thereby "escape the human condition.“[60] The expectation that technology will bring deliverance from the 'soma sema', the prison of the body, is a recurring dream. Indeed, already in 1929 J. D. Bernal prophesized that "scientists would emerge as a new species and leave humanity behind.“ What these "transformed men ... transcending the capacities of untransformed humanity" would leave behind would be their bodies: they would become virtually immortal, experiencing a "continuity of consciousness“ in "a practical eternity of existence.“[61] Many writers, mostly women, have pointed out that the visions of Gibson, Flusser and other cyber-philosophers who talk about the dissolution of space and the disappearance of the physical body resemble the juvenile fantasies of teenage boys who are uncomfortable with puberty or envious of women's ability to give birth.[62]

Be that as it may, a particularly aggressive neo-liberalist version of the dissolution-of-space argument has been presented by Martin Pawley: he calls for "sand-heap urbanism" or disurbanization through telepresence. Echoing Ludwig Mies van der Rohe, Pawley explains: "Its public open space is a vast and scaleless global network that is neither metropolis nor wilderness but infinity: something that is willing itself into existence with a remorselessness untouched by human plan.“[63] He continues: "It represents the ideal physical distribution of humanity into insignificant, undifferentiated, uniformly distributed particles without urban space, without urban identity, without heritage, without history. ... It is the fate of architecture in this invisible global city to ephemerali-

ze.“[64] It may seem that Pawley is merely accepting the desires of large capitalist corporations as a law of nature but in fact he promises a theoretical argument, which he claims is derived from Einstein's theory of relativity, to back up this theory of disappearing space. In an astonishing passage, he writes: "Albert Einstein ... taught the world that the connection between space and time is not remote. Nor is it complicated, for it can be demonstrated by the operation of an ordinary camera. Under given conditions of light, time values are inversely proportional to aperture values in the exposure of film. The faster the shutter of the camera moves, the larger the aperture required to correctly expose the film, and vice versa. Applying the principle of the relativity of time and space in a camera to time and space in a city produces a useful theorem. If urban space is equated with aperture size, and urban time with shutter speed, the less space a city possesses, the more time it has available. Conversely the more space it has, the less time. If urban events were to become instantaneous, as they would if continuous on-line communications encompassed the world day and night, then urban space might dwindle to nearly nothing. There would be no need for urban space as we understand it today.“[65]

Pawley's understanding of physics may be doubted but his millenarian pontification nonetheless appeals to many architects. The same could be said of Virilio's spirited but occasionally more dystopian writings. He predicts that the future electronic city will be characterized by domiciliary inertia and behavioral isolation: people will stay home alone, hooked on their computers, neglecting any political action. Thus, while the modern city with its motorized transportation prompted a general mobilization of populations, the technopolis with its instantaneous transmission prompts a growing inertia and ultimately sepulchral immobility.

With Virilio and Pawley from one direction and with Arendt and the feminists from the other, we seem to arrive at similar readings of the contemporary condition. It looks like information and telecommunication technology is finally able to bring about the revolution that the spiritualists have been expecting since 1848: communication in a non-material world, unbridled by physical and temporal constraints, "without the intermediary of things or matter“, a bodiless immortality in which human beings themselves become their own works. Perhaps Jorge Luis Borges was right in suggesting that universal history is the history of the diverse intonation of a few metaphors.[66]

Author:
Kari Juhani Jormakka
Technische Universität Wien

Notes:

1 Arendt, Hannah: The *Human Condition*, Chicago 1958, p. 32.

2 Ibid., p. 52–53.

3 Marx, Karl and Engels, Friedrich: The *Communist Manifesto*, with an introduction by A. J. P. Taylor, trans. by Samuel Moore, Harmondsworth 1967, p. 83. („Die fortwährende Umwälzung der Produktion, die ununterbrochene Erschütterung aller gesellschaftlichen Zustände, die ewige Unsicherheit und Bewegung zeichnet die bourgeoise Epoche vor allen anderen aus. Alle festen eingerosteten Verhältnisse mit ihrem Gefolge von altehrwürdigen Vorstellungen und Anschauungen werden aufgelöst, alle neugebildeten veralten, ehe sie verknöchern können. Alles Ständische und Stehende verdampft, alles Heilige wird entweiht, und die Menschen sind endlich *gezwungen*, ihre Lebensstellung, ihre gegenseitigen Beziehungen mit nüchternen Augen anzusehen.", Karl Marx/Friedrich Engels: *Das Manifest der Kommunistischen Partei*, MEW Bd. 4, Berlin 1977, p. 466 f.).

4 The trick that the Fox sisters used was too simple to detect. They made the noises by cracking their finger joints; there was nothing to find in the room or on their clothing.

5 Quoted after Sudre, René: *Parapsychology*, trans. by C. E. Green, New York 1962, p. 42. Sudre refers to Lombroso, Cesare: *Ricerche sui fenomeni ipnotici e spiritici*, Torino.

6 Polidoro, Massimo and Rinaldi, Gian Marco: *Eusapia Palladino's Sapient Foot: A New Reconsideration of the Feilding Report*, http://www.cicap.org/en_artic/at101008.htm.

7 Op. cit., note 1, pp. 22.

8 Arendt's idea that artefacts may define social roles was relatively new in the fifties but not unprecedented. The role of artefacts as determinants of social roles and identities was recognized already in the thirties by George Herbert Mead who in the context of his theory of a "mirror-self" suggested that not only other persons but also inanimate objects could serve as elements of the "generalized other," as role models in the development of a self or a personality. A thing may function as a role model because it embodies a set of social rules, goals and expectations. This is not only the case with mementos, souvenirs and other obvious signs, but also of objects of use: using them, one also commits oneself to a certain social behavior. However, there is no reason to think that Arendt would have been much influenced by Mead.

9 Op. cit., note 1, p. 199; Aristotle, Eth. Nic. 1172b36. W. D. Ross translates the passage in question as follows: "that which every one thinks really is so."

10 Morse applied for a patent in 1837, but only finalized his dash-dot code in the following year. In May 1844, with the first inter-city electromagnetic telegraph line (from the Capitol in Washington to Baltimore), he sent a Biblical quotation: "What Hath God Wrought!" The connections may have worked in the opposite direction as well, from spiritualism to modern technology. Steven Connor claims that the idea for a "Printing Telegraph"which used the transmittedcurrent to regulate a rotating wheel with letters, may have been suggested by the workings of the spiritist ouija board; Connor, Steven: *Dumbstruck. A Cultural History of Ventriloquism*, New York 2000, p. 363.

11 Ibid..

12 Ibid., pp. 363–364.

13 Ibid., 380.

14 Ibid., 386–387.

15 Op. cit., note 1, p. 7, 236.

16 Ibid., p. 7; "A regime of freedom, action constitutes meaning and value through 'natality'. Instead of mortality, Arendt presents the condition of natality, the new beginning inherent in birth, as the central category of political thought. Without action to bring into the play of the world the new beginning of which each man is capable by virtue of being born, there is no new thing under the sun; but without speech to materialize and memorialize the new things that appear, there is no remembrance.", Ibid., p. 204.

17 Ibid., p. 195. Arendt refers here to Aristotle's *Politica*, 1141b25 and 29.

18 Ibid., p. 55.

19 Ibid., p. 32. Stressing that the majority of the inhabitants of the polis were not considered citizens, Arendt points out that Xenophon was exaggerating when he claimed that no more than sixty citizens could be counted among the four thousand people in the agora in Sparta.

20 See also op. cit., note 1, p. 30.

21 Antisthenes, Theon: Prog. 215; Keuls, Eva C.: *The Reign of the Phallus. Sexual Politics in Ancient Athens*, p. 212.

22 Pseudo-Demosthenes, Contra Neera, 162, as quoted by Vernant, J. P.: *Introduction*, in: Detienne, Marcel: *The Gardens of Adonis*, trans. by Janet Lloyd, Princeton 1994, xiii.

23 Arendt makes the point that "love, in distinction to friendship, is killed, or rather extinguished, the

moment it is displayed in public. ... love can only become false and perverted when it is used for political purposes such as the change or salvation of the world.", op. cit., note 1, p. 51–52.

24 Loraux, Nicole: *The Children of Athena. Athenian Ideas about Citizenship & the Division between the Sexes*, trans. by Caroline Levine, Princeton 1993, pp. 16–17, pp. 111–117, pp. 247–248.

25 Op. cit., note 1, p. 55.

26 Ibid., p. 72.

27 Harding, Sandra: *Rethinking Standpoint Epistemology*, in: *Feminist Epistemologies*, ed. Linda Alcoff and Elizabeth Potter, New York/London 1993, p. 55.

28 Op. cit., note 1, p. 71. While Adrienne Rich denounces "the power of male ideology to possess such a female mind, to disconnect it as it were from the female body which encloses it and which it encloses," some feminist writers have interpreted Arendt as a gynocentric thinker; Rich, Adrienne: *On Lies, Secret, and Silence: Selected Prose 1966–1978*, New York 1979, p. 212; as quoted in: Dietz, Mary G.: *Turning Operations*, New York/London 2002, p. 126; Thus, Ann Lane suggests that Arendt valorizes "women's hidden tradition ... of doing rather than making." (p. 133); also Arendt's somewhat under-theorized concept of 'natality' has been seen as a feminine category of new beginning, rather than ending. Nancy Hartsock has seen it as promising a feminist theory "grounded at the epistemological level of reproduction.", Hartsock, Nancy: *Money, Sex and Power*, Boston 1985, p. 259; as quoted in: Dietz, Mary G.: *Hannah Arendt and Feminist Politics*, in: *Feminist Interpretation and Political Theory*, ed. Many Lyndon Shanley and Carole Pateman, State Park 1991; however, here Arendt's terminology may be misleading. Instead of the labor of motherhood, she associates natality with action. Natality as a political category stresses spontaneity, unpredictability and irreversibility, which neither the automatic circular processes of 'animal laborans' nor the means-end rationality of 'homo faber' allow. Op. cit., note 1, p. 9.

29 O'Brien, Mary: *The Politics of Reproduction*, London 1981, p. 100, p. 121; as quoted in: Dietz, Mary G.: *Turning Operations*, New York/London 2002, p. 125; also Hanna Fenichel Pitkin's assessment of Dietz's argument. In contrast to Dietz, Pitkin argues firstly that Arendt also, especially in chapter two of the *Human Condition*, applies a dyadic rather than triadic model and secondly that the social is coded as feminine; Pitkin, Hanna Fenichel: *The Attack of the Blob: Hannah Arendt's Concept of the Social*, Chicago 1998, pp. 166–171.

30 Op. cit., note 1, p. 23, p. 27.

31 Ibid., pp. 22–23.

32 According to Richard Sennett, she appreciated Aristotle's remark that an urban space of assembly should be only as large as a shouting human voice can make itself heard in; Sennett, Richard: *The Conscience of the Eye*, New York 1990, p. 135; the remark that Arendt has in mind is probably the one in the seventh book of the *Politica* (1326b2–8): "In like manner a state when composed of too few is not, as a state ought to be, self-sufficing; when of too many, though self-sufficing in all mere necessaries, as a nation may be, it is not a state, being almost incapable of constitutional government. For who can be the general of such a vast multitude, or who the herald, unless he have the voice of a Stentor?" Stentor was one of the Greeks who went to the Trojan war and whose voice equalled that of 50 normal men together.; Homer: *Odyssey*, Il. 5. v 784.

33 Mumford, Lewis: *The City in History*, London 1961, p. 97; as quoted in: Mitchell, William J.: *E-topia. "Urban Life, Jim – But Not as We Know It."*, Cambridge 2000, p. 131.

34 Svenbro, Jesper: *Phrasikleia. An Anthropology of Reading in Ancient Greece*, trans. by Janet Lloyd, Ithaka/New York 1993, p. 40.

35 Ibid., p. 32.

36 In this sense, ancient Greek tomb monuments may be compared with a famous minimalist sculpture, Tony Smith's Die (1962) which is a black six foot cube made out of steel plates. Scale is important here, as most internal relationships in the work have been deliberately suppressed or minimized. Robert Morris remarks that in the perception of size the human body enters into the total continuum of sizes and establishes itself as a constant on that scale. Smith's work is neither a monument nor an object, rather it is a substitute for another person. Like Don Siegel's classic Body-Snatchers, the Die forces man to face mortality by taking his place.; Fried, Michael: *Art and Objecthood*, in: *Aesthetics Today*, ed. Morris Philipson and Paul J. Gudel, revised edition, New York 1980, p. 225.

37 Phaedrus 275d; A little bronze statue found on the Acropolis in Athens and dating from the end of the sixth century bears the following inscription: "To whomever asks me, I reply with the same answer, namely that Andron, the son of Antiphanes, dedicated me as a tithe." Op. cit., note 34, pp. 28–29.

38 Mill, John Stuart: *De Tocqueville on Democracy in America (II)*, in: *Collected Works of John Stuart Mill*, vol. 18, ed. John M. Robson, Toronto/Buffalo 1977, 165.

39 Op. cit., note 1, p. 126.

40 Like most postmodern thinkers, Baudrillard emphasizes the role of electronic communications for the breakdown of traditional community structures. Today, he claims, people are "no longer surrounded by other human beings, as they have in the past, but by objects. Their daily exchange is no longer with their fellows, but ... with the acquisition and manipulation of goods and messages...", in: Baudrillard, Jean: *Consumer Society*, from: *Selected Writings*, ed. Mark Poster, Stanford 1988, p. 29.

41 Op. cit., note 1, pp. 194–195.

42 Of course, non-material structures, while in principle indestructible and incombustible, can in reality often be altered or even cancelled without too much difficulty or cost. Thus, they seldom offer much permanence even though the theoretical possibility would exist. Yet, there was an ancient tradition claiming that a city is ultimately not to be identified with the urbs, the permanent houses and the indestructible stones, but with the civitas, the people who together form a community. After losing a battle to the Syracusians, Nicias told his disheartened Athenian soldiers that „wherever you plant yourselves you are a city already ... For men, and not walls or ships in which are no men, constitute a polis.", in: Thucydides: *History*, trans. by Benjamin Jowett and Ann Arbor, Michigan 1946, VII, 77, pp. 541–542.

43 Pitkin, Hanna Fenichel: *The Attack of the Blob: Hannah Arendt's Concept of the Social*, Chicago 1998, pp. 3–5, pp. 171–185 et passim.

44 Op. cit. note 1, p. 35; Etymologically, also the word 'mate' reflects the same principle. Like the word 'meat', it derives from the root mad-, meaning 'measured piece of food,' or originally also 'moist' or 'wet': with your mate you share your meat.

45 Freud, Sigmund: *Totem und Tabu*, in: Freud, Sigmund: *Essays I, Auswahl 1890 bis 1914*, ed. Dietrich Simon, Berlin 1990, p. 483.

46 Op. cit., note 1, p. 94.

47 Arendt, Hannah: *Antisemitism. Part one of The Origins of Totalitarianism*, New York 1968, pp. 56–68 et passim.

48 Op. cit., note 1, pp. 7–8.

49 Dietz, Mary G.: *Turning Operations*, New York/London 2002, p. 223.

50 Op. cit., note 1, p. 160.

51 Bauman, Zygmunt: *Modernity and the Holocaust*, Ithaca 2000, pp. 150–207; especially p. 166, p. 184.

52 Arendt, Hannah: *Adolf Eichmann in Jerusalem: Report on the Banality of Evil*, New York 1964; Pitkin, Hanna Fenichel: *The Attack of the Blob: Hannah Arendt's Concept of the Social*, Chicago 1998, p. 185.

53 Op. cit., note 1, p. 178; If a true identity is crucial for action, it is ironic that Arendt takes the motto for her chapter on action from Isak Dinesen who is merely a pseudonym for K. Blixen. Arendt is of course aware of Dinesen's true identity. See op. cit., note 1, pp. 175. Born in 1885, Karen Dinesen married Baron Bror von Blixen-Finecke. In 1929, she lost her identity as Baroness Blixen, because her former husband remarried. Destitute, Karen Blixen decided to become a writer and reinvented herself as Isak Dinesen in New York City on April 9, 1934. Perhaps this reinvention is an example of what Arendt calls "natality". Isaac or Yitzhak in Hebrew is a Biblical name that translates as "laughter".

54 Indeed, Arendt states that in modern society (political) action has become the prerogative of scientists. Op. cit., note 1, p. 323.

55 Heim, Michael: *The Metaphysics of Virtual Reality*, New York 1993, p. 95, p. 104; Heim, Michael: *Eoric Ontology of Cyberspace*, in: Benedikt, Michael (ed.): *Cyberspace*, p. 61, p. 73, p. 69; as quoted in: Noble, David F.: *The Religion of Technology. The Divinity of Man and the Spirit of Invention*, New York 1997, p. 161.

56 Op. cit., note 1, p. 251. Upon the opening of the Paris-Rouen-Orléans railroad in 1843, Heinrich Heine called it a providential event that changes the color and shape of life: "What changes must now occur in our way of viewing things and in our imagination! Even the most elementary concepts of time and space have begun to vacillate. Space is killed by the railways, and we are left with time alone...", Heine, Heinrich: *Lutezia*, Part II, lvii, ed. Elster, Vol. 6, p. 360; as quoted in: Schivelbusch, Wolfgang: *The Railway Journey*, Berkeley 1986, p. 37; Sixty-six years later, in 1909, Filippo Marinetti echoed Heine in insisting that "Time and Space died yesterday. We already live in the absolute, because we have created eternal, omnipresent speed." From the Foundation *Manifesto of Futurism*, 1909 in: Marinetti, Filippo Tommaso, *Let's Murder the Moonshine: Selected Writings*. ed. R. W. Flint, trans. by. R. W. Flint and Arthur A. Coppotelli, Los Angeles 1991, p. 49; Seven decades after the first Futurist Manifesto, Paul Virilio quoted the above words of Heine but expanded the gospel of speed to embrace electronic telecommunications as the virtualization of urban space. Perhaps Jorge Luis Borges was right in suggesting that universal history is the history of the diverse intonation of a few metaphors.; Borges, Jorge Luis: *"Pascal's Sphere." Other Inquisitions*, trans. by Ruth L. Simms, Austin 1975, p. 9.

57 In this context, information technologies are also often presented as environmentally friendly in that less travel is required, even though this might not be accurate: physical travel does not seem to substituted by electronic communication, rather urban sprawl promotes more traffic. See Graham, Stephen and Marvin, Simon: *Telecommunications and the City*, London 1996, pp. 240–269.

58 Negroponte, Nicholas: *Being Digital*, London 1995, pp. 230–231; Wertheim, Margaret: *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet*, New York 1999, pp. 253–282.

59 Descartes, René: *Meditations on First Philosophy, I. Philosophical Writings*, sel. and trans. by Norman Kemp Smith, New York 1958, p. 185.

60 Cox, Earl and Paul, Gregory: *Beyond Humanity: CyberRevolution and Future Mind*, Boston 1996, pp. 1–7; as quoted in: Ibid., David F.: *The Religion of Technology. The Divinity of Man and the Spirit of Invention*, New York 1997, p. 167.

61 Bernal, J. D.: *The World, Flesh, and Devil: An Enquiry into the Future of the Three Enemies of the Rational Soul*, Bloomington 1969, p. 14, p. 33, p. 37, p. 61; as quoted in: Ibid., David F.: *The Religion of Technology. The Divinity of Man and the Spirit of Invention*, New York 1997, p. 177.

62 Vilém Flusser declares: "Der größte Skandal in der gegenwärtigen Lage ist die Medizin, und zwar ist sie skandalös, nicht weil sie skandalös funktioniert, sondern weil sie von skandalösen Voraussetzungen ausgeht. Nämlich vor allem von der Voraussetzung, daß der lebende Körper ein Gut ist, und daß es gilt, ihn am Leben zu erhalten. In der heranrückenden Zukunft wird man wahrscheinlich nicht mehr verstehen können, wie wir so einen Skandal haben dulden können (…) Sobald jedoch das Interesse von den Kultgegenständen auf die 'reinen Informationen' (auf die technischen Bilder) hinüberschwingt, erweist sich die gegenwärtige Medizin als ein Verbrechen an der Würde des Menschen. Sobald man nämlich im lebenden Körper ein Anhängsel des Gehirns erkennt, ein nicht völlig roboterisierbares Werkzeug zum Einbilden, wird aus dem Körper ein notwendiges Übel. Der Körper soll so wenig wie möglich beim Spielen (Leben) stören, soll so wenig wie möglich Spielverderber sein können." At another point, he elaborates: "Die telematische Gesellschaft wird sich für schlecht programmierte Körper (Leiber, Laiber) aus Mitleid interessieren: Um sie umzuprogrammieren und schließlich ignorieren zu können." Once the body has been reprogrammed and done away with, eternal life will be guaranteed by artificial memory: "Denn man wird ja nicht vergessen werden: Dafür sorgen die künstlichen Gedächtnisse, in denen das, was einst das 'Ich' genannt wurde, gelagert ist, um dialogisch verändert zu werden."; Flusser, Vilém: *Ins Universum der technischen Bilder*, Göttingen 1990, pp. 124–125; For a critique of Flusser and other similar thinkers, see e. g. Wilhelm, Karin: *Suche nach Unsterblichkeit. Technoutopien des 20. Jahrhunderts*, in Zimmermann, Gerd (Hrsg.): *Als ob/As If*, Weimar 1996, pp. 20–50; David F. Ibid. gives a few examples of thinkers from Scotus Erigena to Francis Bacon who envisaged the restoration with the help of the mechanical arts of Adamic perfection and the recreation of paradise without Eve, "this Noveltie on Earth, this fair defect of Nature", in the words of Milton.; ibid., David F.: *The Religion of Technology. The Divinity of Man and the Spirit of Invention*, New York 1997, pp. 213–232.

63 Mies wrote: "let us accept the changed economic and social conditions as a fact. All these things go their way guided by destiny and blind to values." In the original: "Und wir wollen die veränderten wirtschaftlichen und sozialen Verhältnisse als eine Tatsache hinnehmen. Alle diese Dinge gehen ihre schicksalhaften und wertblinden Gang."; Conrads, Ulrich: *Programme und Manifeste zur Architektur des 20. Jahrhunderts*, in: *Ullstein Bauwelt Fundamente 1*, Berlin/West 1964, p. 114.

64 Pawley, Martin: *Terminal Architecture*, London 1998, p. 171, pp.174–75, p. 177; Pawley declares that the architecture of the future should be modelled on the big industrial sheds outside of the cities at motorway intersections, on gas stations and living rooms with a video projector. He insists that these buildings embody the forgotten essence of architecture "which is not art-historical nor cultural but functional", (p. 205). Pawley promises that architects in the future will "no longer be enslaved by ideas of value... Instead, [they] will be free to exploit the products of research and development... living like a parasite upon the body of all productive industry... relying on electronic brainwork instead of voodoo symbolism and the tribal taboo of the past.", (p. 208). Pawley likes big sheds because they are not what he calls "stealth architecture", i. e. architecture where the exterior of the building is a concern for the designer. He recommends virtual architecture, i. e. the projection of images on the walls because it is modern. Finally, for Pawley, gas stations are exemplary because much of the visible architectural elements are made of plastic which in turn is based on petroleum: "they are the product of their own product." He concludes that "a petrol station is a piece of chemical magic made of space, energy and information, and nothing else.", (p. 198, p.199).

65 Ibid., p. 163.

66 Borges, Jorge Luis: *"Pascal's Sphere". Other Inquisitions*, trans. by Ruth L. Simms, Austin 1975, p. 9.