

HeiAge

**Assistenzsysteme und digitale Technologien
zur Verbesserung der Mobilität im Alter**

**Assistive robots and digital technology for
an improvement of mobility for an aging population**



**Cross Topics Project
Ethical and political questions,
dilemmas and consequences in terms
of care**

**Sonja Ehret
Second Annual Meeting October 2021**



Results of period 05.2020 – 08.2021



Discussion about the good life necessary for a technology assessment



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Level 0: transdisciplinary
orientation

Level 1: Universalization and
discourse ethics

Level 2: Principals of a technic
ethics

Level 3: Applied technology
ethics / technology
consequences

Sensus Communis and the good life

Technology meaningful be used for one's own goals or reasonably be rejected. Both are prerequisites for my freedom in dealing with technology (SA, f, 83)

But if this robot is used without my knowledge, thinking or ability, then it will be viewed critically in some areas. (JI, f, 89)

Technology already has an enormous potential for addiction and that robs us of our freedom and monitors us (AS, f, 82)

Level 1-3 see Hastedt 1991

Dialectics of lifeworld



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Alternative life forms vs. Colonialisation of life forms



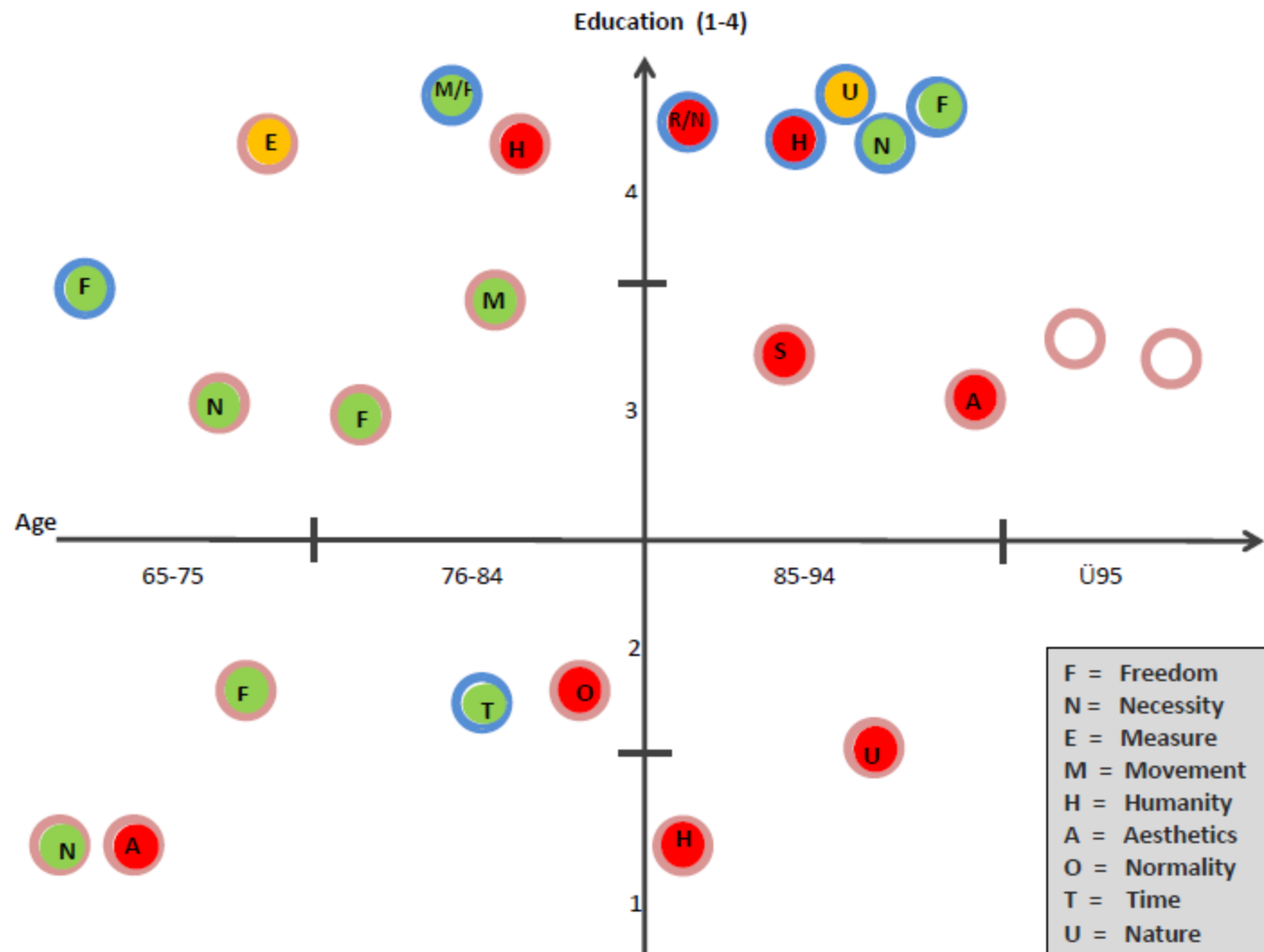
e.g. substitutive and disruptive

complementary

Criteria:

Freedom - Necessity - Movement - Measure -
Well - Nature - Time - Education - Human Labor
Normality - The Good

Ethical guiding principles - A Nomothetic reduction



female male rejected accepted ambivalent



Outcomes

- With women over 95 years there was no dialogical coherence on the topic of robotics, answers are thematically self-reflective,
- Rejection increases with age
- A-priori - participants maintain abstraction and openness in ambivalence of values
- Higher educated persons in third age are more likely to accept

Ethical quotations



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Freedom: unconditional progress, curiosity, trying things out

Necessity: pain, ALS-disease, Insight into necessity, *what do I need and what do I not need*

Aesthetics: Age discrimination, robotics do not wear as an item of clothing

Measure (virtue): not for enhancement, *only if I have a defect, but not with a small deficiency, such as wrinkles on the face.* Humility. *That you don't get oversized.*

Movement: *Movement is extremely important to me. It has increased here in assisted living through the convenience.*

Humanity: *We are human and not machines,* lost of humanity

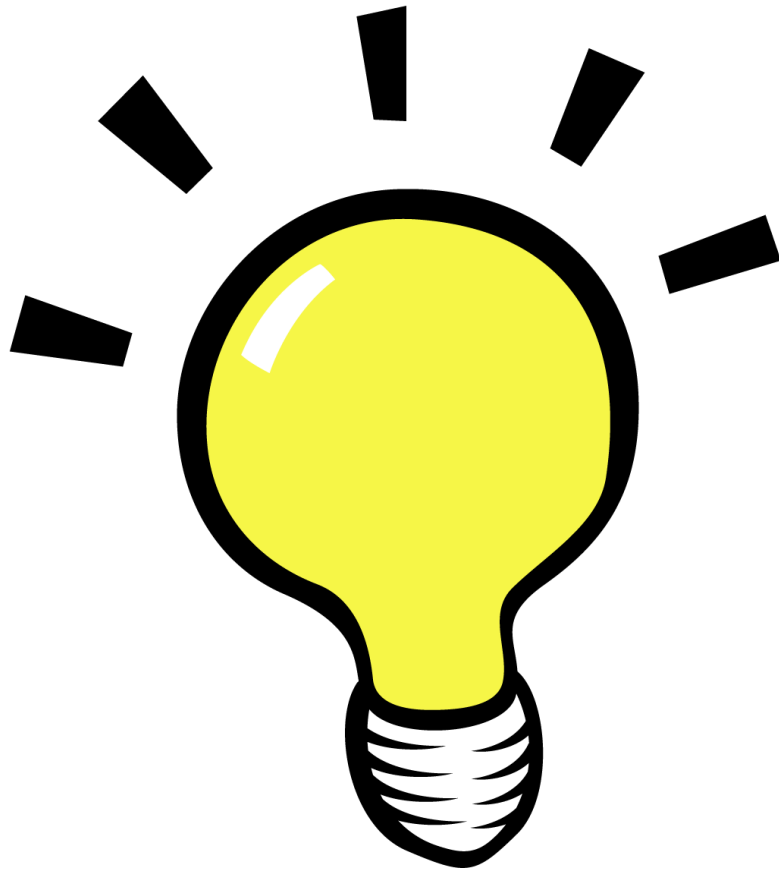
Normality: *This is not a normal thing / that is not enough among people / wish to move normally*

Time: *Because if the physiotherapy suspends - time is lost.*

Nature: development of creation, relationship between god and creation, human nature

Reality: not as a gimmick, *l'art pour l'art* or in service of Big Brother is watching you then we reject

Sense/Reason: *But if this robot is used without my knowledge, thinking or ability, then it will be viewed critically in some areas.*



Highlights



Apriori interviews and recognition

- Apriori Interviews: dialogues with persons so-called “A priori -persons (in advance of empirical experience with robotics but in the status of recognition)
- The Model of value antinomies
- Precedence dialogues

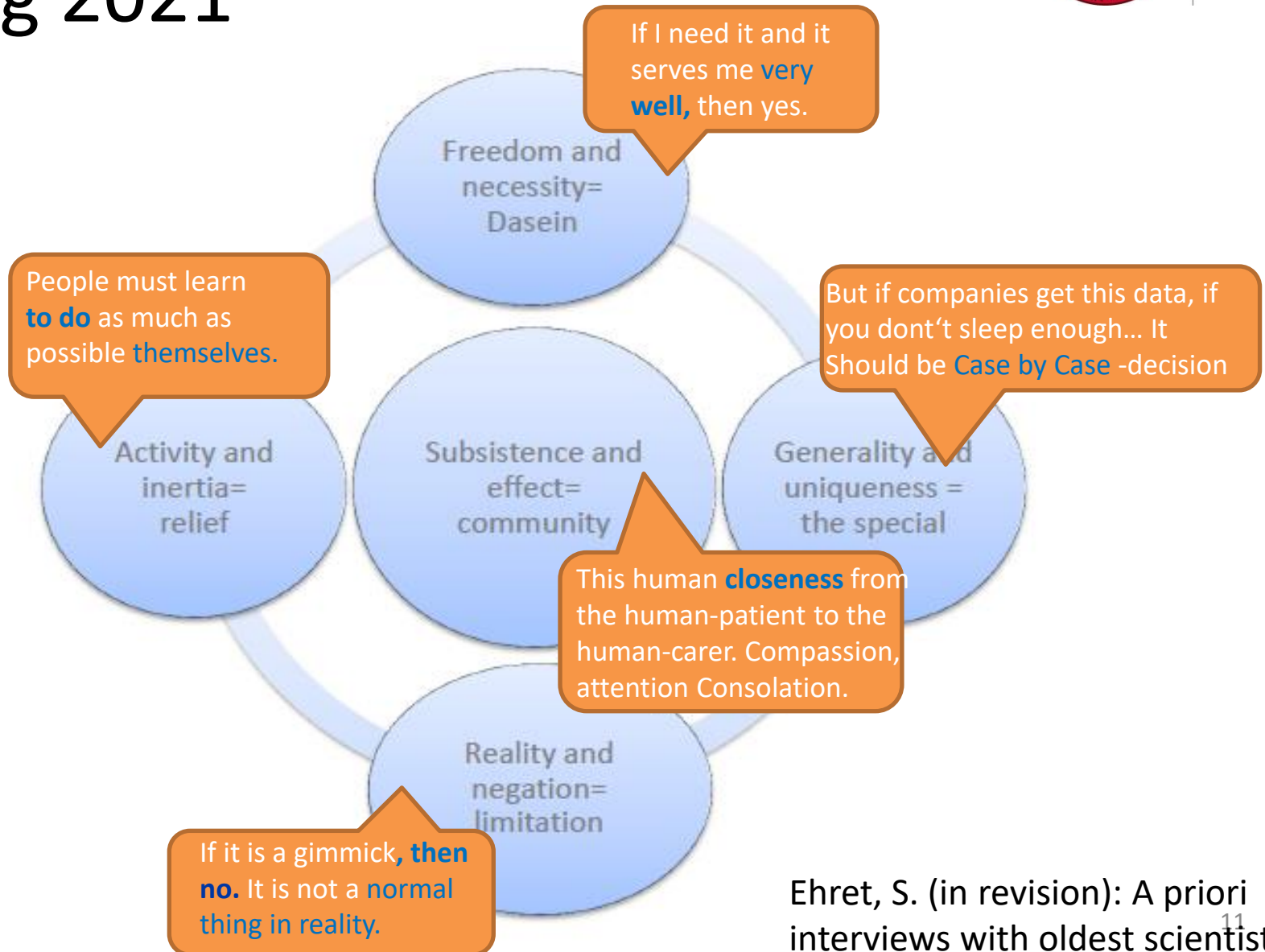
Conversation on themes of being (Ehret 2010)	Example	Ethical Interpretation (reconstructive method, Bohnsack 2000)
Extension of being (5)	Parapsychology Unconscious parts of movement, inertia in old age Da Vinci God and Providence	Understanding Self-actualization Laws of nature Synchronicity
Communicative transcendence (4)	(Exoskeleton) If I need it and it serves very well, then yes. Comparison with hearing aid	Ethical answer (Necessity and well-being) analogy Argumentative mode Understanding
Referring back to your own opinion (3)	"Doesn't electrification have harmful potential?" "In reality it is of course the case that you definitely do not know that in any way."	Asserting one's own point of view recognition level response
Being equal (2)	"You probably know everything." "I do not know everything."	Socratic questions.
Actualization about themes (1)	Life in and with electric fields, electricity and humans.	Interest in the other person. Start of a didactic conversation.

First nomothetic abstraction

Spring 2021



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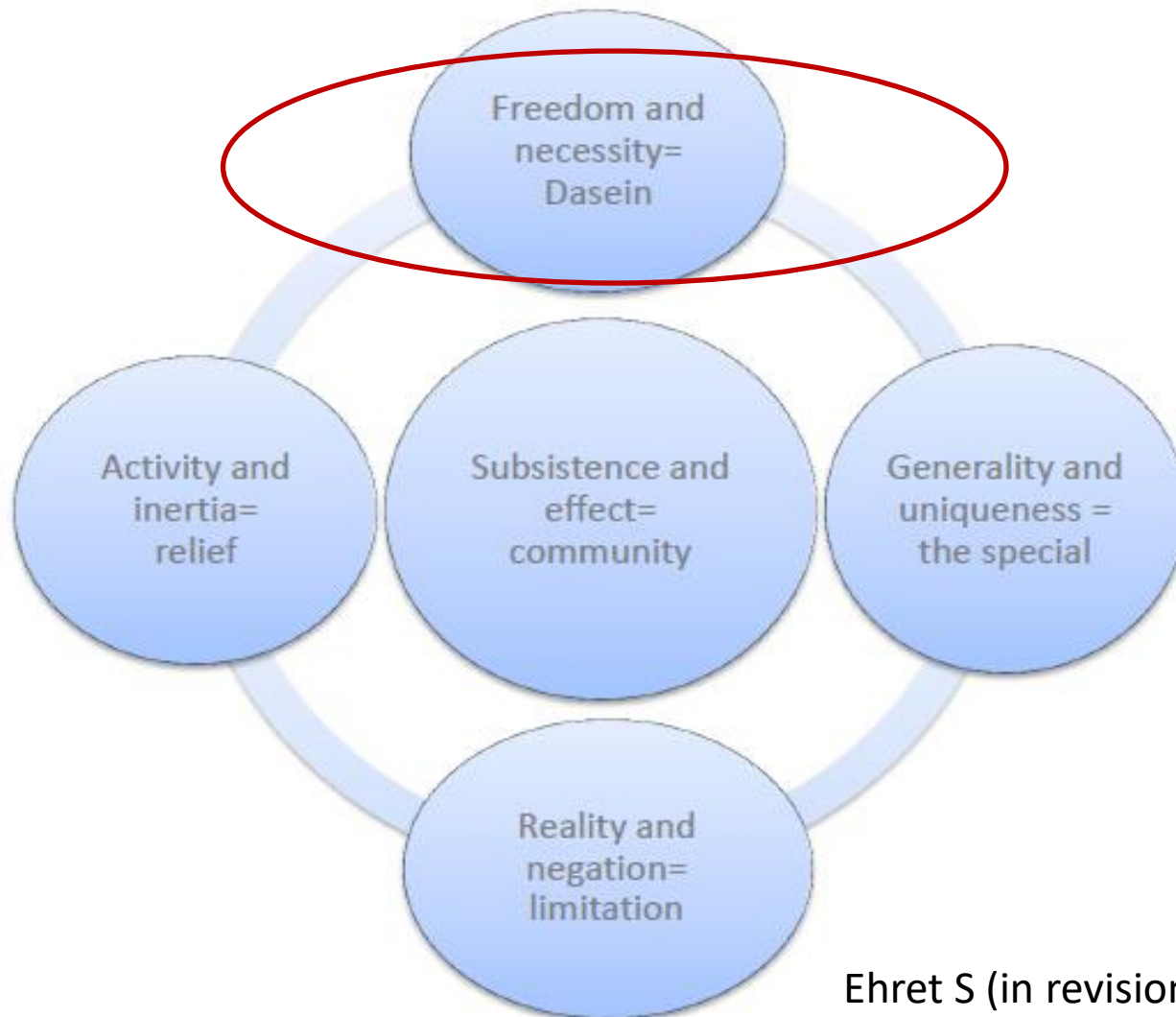
Ehret, S. (in revision): A priori interviews with oldest scientists

First nomothetic abstraction

Spring 2021: Model of value antinomies



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Based on Kant and Hartmann, own complement

Ehret S (in revision): A priori
interviews with oldest scientists¹²

Freedom vs. Necessity

= Dasein (being)



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A modal analysis of the concepts of pure understanding (Kant) shows that there is a **mode of necessity in the world**. Absolute **necessity is a value**, in it the sublimity over the relative, chance or contingency is revealed. Moral feeling looks up to it. **Necessity finds its ethical counterpart in the value of freedom**. It is itself an elementary fundamental value and is only modally limited by necessity. The moral person with all the following value structures is rooted in the balance between them.

Ms. E. : Would you use these robotic aids? (photo)

Mr. B. (85): The question is not an easy one, and I want to answer it in a meaningful way. No. This is my answer now, and not at some point in 500 years, because it is totally alien to me and I'm not running around like an fool yet! But if it was more developed, if it could take on a different form, was harmonious and more adapted to people, my attitude would be different. However, if I needed the help and it really serves me very well, then yes.



Human sense and reason

Jl (89, 3, 3, f): How does science differentiate between the use of a robot and the use of technical assistance? (...) The robot does something for me without having any own influence.

E: This is where the data is collected and the robot learns. A learning system. But what you say is correct because part of human autonomy is also restricted.

Jl: Yes, ethics also play a role here and if the very old people are still mentally fit enough that they say the robot can do that to me and cannot do that to me, it's okay. **But if this robot is used without my knowledge, thinking or ability, then it will be viewed critically in some areas.**

E: What about activation by a physiotherapist or a robot?

Jl: Both. There has to be **someone there who really teaches me that in an understandable way.** Why and for what purpose, then the device can run itself. I think it's like lymphatic drainage (...) **where touch plays an immense role in old age.**



Dialogue MG (98, 3, 4, f) & SE

Rehabilitation in Bethanien after hip fracture, movement with crutch possible again now in own home

MG (98, 3, 4, f): I don't know any of that (tools).

E: Wasn't that used in rehabilitation either?

MG: You have a machine that you ride a bike with and then just go up and down stairs. It is important to have a personal approach. Up and down these stairs is a one-on-one treatment with the young physiotherapist. And then painting. I really enjoyed that at Bethanien.

E: What if a robot did that?

MG: I think that's stupid. **The human relationship is important, for the therapist himself, it is his job that success often brings happiness.**



Dialogue CR (stud.) & RS (94, 3, 4, f))

Rehabilitation in Bethanien after hip fracture, movement with crutch possible now again

CR (stud.) Would you try it out? (Exoskeleton / wearable)

RS (94,3, 4, f) (classical rehabilitation after femoral hip fracture): I don't know. I couldn't answer yes or no. I would have to think about it.

CR: **What are the reasons?**

RS: That depends on the situation. If you see it as a great help, as a straw to cling to, but only now that I don't even see that I need the help, then I would refuse. But I would be reluctant to wear pants like that.

An actual interview based on the above experiences



RF (74, 4, 1, f): I think very highly of robotics for those affected who need it. When you regain skills.

E: Does the movement mean a lot to you?

RF: That I can walk at all. My hobby is mountaineering.

E: Now think about aging. How about the hikes? You are very happy to do that. Would such a wearable be something for mountaineering?

RF: I think then I would no longer mountaineering. But mountaineering is a luxury that is added to daily exercise. Then I would give up mountaineering. You know certain things that stop with old age. **You don't have to rejuvenate yourself artificially.**





The letter from Renate W. (82, 3, 1, f)



Dear Tamana,

(...) Attempts are still being made to strengthen the muscular strength of aging people with gymnastic exercises, but once these digital devices are available, they will also be used and replace people. And then my freedom comes to an end, because a motor determines my sequence of movements. I don't want to experience that anymore.

What about the Conditio Humana?



What is our idea of being human in an AI-permeated world?

RR (90, m): So the human support is priceless in the long run.

WK (88, m): I'm divided on that. The development of robotics is enormous. **But it has nothing to do with being human.** So somehow I would say that I get scared even though I'm familiar with the technology.

GM (89, m): And the more intensely people work on these things, the more dangerous it becomes.

WK (88, m): People have to learn to do as much as possible themselves.

ASD (83, f): My biggest problem is not the technology, but the people who prescribe that the person no longer confronts me as a person. The Dr. no longer speaks to you. **When I turn my back on you as a doctor, that's inhuman.** And that's the danger, the more you invent things like that and the better it is, the more everyone switches off.



Challenges

An essential task of philosophy is to grasp the Zeitgeist in order to criticize it. That is the hope of progress. (M. Gabriel)



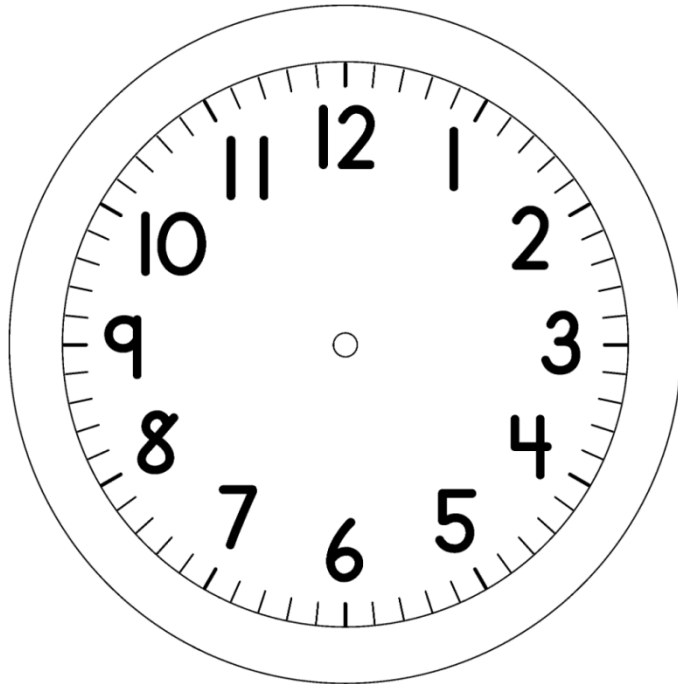
- Devices change the imagines of man (and age)
- We need discourses about humanity and training of human capabilities (empathy, consolation etc.)
- We need explainable and evidence based KI
- We need a clear distinction between reality and fiction

Conservation of forms of life as specific qualities of freedom



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- Aesthetic form of life (FS, 87, 2, 1, m) : Well, it's all related to pleasure. (...) *The proband is also a painter.*
- Oeconomic form of life (found no quotations)
- Political form of life (Recognition, proficiency, merit) (JI 89, 3, 4, f) Mobility is what I suffer most from. All cars out says the politicians (criticism). Politics cannot do without us old people at all.
- Theoretical form of life (Living in sanity, wisdom) In my opinion, people are becoming more and more sensible and sane because everyone strives to lead a good life, to stay healthy, to grow old.
- Religious form of life (I think every technics that makes it easier for disabled people to get around is great, unless there are religious reasons against it, not messing around with God)



Further planning



The good life

What criteria of a good life underlie way of life of the elderly, guide this way of life? And to what extent can mobility-enhancing digital technology contribute to realising these personal criteria? In what ways do they perhaps even conflict with these criteria or have no greater significance?

(A. Kruse, manuscript July 2021)

What techniques and technologies could be useful shaping a good life?



If ethics is declared to be a generally binding teaching (Kant), digitization could cause little or no damage. Otherwise, digitization is another man-made vehicle.

SY (80) new participant in Ethics of Generations

Epilogue:

Ethical development



- Pain reduction (evidence based)
- Healing or treatment of specific diseases
- Robotic care for gaps in time



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