

Gardening – A Metaphor for a future with value-based engineering

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“Imaginary evil is romantic and varied; real evil is gloomy, monotonous, barren, boring. Imaginary good is boring; real good is always new, marvelous, intoxicating.” Simone Weil (1909–1943)

Technology innovation and engineering is embedded in the socio-cultural metaphors of a time. In the first two decades of the 21st century we could witness that these metaphors are springing largely from 20th century science-fiction narratives that portray our future as technically determined. These science fiction narratives have several traits: Besides the fact that they impress by being dark and conflict-laden, they keep us captive in the idea that technology’s role is to constantly increase humanity’s reach (Rosa, 2019). They let us travel to the stars, enhance our cognitive abilities, increase our bodily strength, etc. Our future narratives fetishize a ‘higher, further, different, better’ destiny for humanity that modernity has been pursuing throughout. Scientific and artistic creativity is bound to critically reflect this unquestioned imaginary. Hardly anyone seems to realize that this narrative – while economically favored by the IT industry and pushed endlessly through all forms of art and media- is not a fixed one, nor is it necessarily a desirable one. The future must not be technical. It can be largely analog or a healthy digital-analog mix. Most importantly it can and should be progressive in a classical human-centric way by fostering resonance instead of reach.

Resonance as described in Hartmut Rosa’s book of the same title (Rosa, 2019) is philosophically capturable with Max Scheler’s value ethics (Scheler, 1921 (1973)). Value ethics understands the world around us as imbued with values. Everything we encounter, people, objects, relationships, symbols are value bearers. And as humans we have the possibility to resonate with the value qualities born by these, which again allows us to flourish. This is also a way we can conceive of technical objects. Technical objects then don’t have the purpose to catapult humanity into a narrative of ‘higher, further, different, better’. Instead, the design of technology aims to foster a ‘cyclical, local, stable and fitting’ environment in which humans can nourish their potentials in social groups. The best metaphor to capture this kind of future is a garden. And the imaginary going in line with this vision is that of gardening.

The gardening metaphor is the one that is secretly underlying the IEEE 7000TM standard, the world’s first model process for ethical system design (IEEE, 2021) or what I call ‘value-based engineering’ (technical gardening for humanity). The philosophical backbone of IEEE 7000TM, published in 2021, is Max Scheler’s value ethics. So engineers are invited to regard their technical objects as value bearers (similar to plants). The goal is to foster value qualities through technology (similar to nature’s qualities) that resonate with human value preferences. The first phase is to prepare the soil (the digital ecosystem) and to understand the waters (the data flows) as well as the stakeholders (the digital neighbors and users). The 2nd step is to understand what value qualities are fitting for a stable evolution of man and machine. The 3rd step is to ensure a cyclical and locally manageable embedding of technical value dispositions.

After having presented the first ideas on IEEE 7000TM at is2si in Göteborg in 2017, this is a visionary update for discussion with the community.

References

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