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Technical artefacts, modes of

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It may be useful to give a distinction between the two modes in which technical artefacts can be seen (in-hand and put-down). The difference between in hand and put-down is not simply between attached/not attached to the body [Heidegger, 1996].

There are two relatively independent levels of dividing:

- Between put-down and in-hand.

Put-down corresponds to the mode in which the artefact is the object of the explicit attention as an assembly of the matter with certain proprieties (the specifically scientific mode of relation to the object). One can think on the difference between designing and riding the bicycle. The in-hand mode is the mode in which the user is engaged in the activity, and in which, under normal conditions, the artefact is transparent, one feels it like the extension of the body, not like the object of the physics [Merleau-Ponty, 1945].

- Between a normally functioning and a broken artefact.

Now comes the situation in which the artefact is broken. In this situation, the artefact switches from in-hand to put-down: instead of riding the bicycle and being engaged in the sensory-motor activity, one examines the broken chain as something having being made of the material with bad resistance, etc.

It is the same case with the computers, even in virtual reality. As a user, one does not care about what is going on in the computer, which becomes a transparent equipment. When the artefact is broken or in case of a malfunction, the user will check cables, electricity, etc. He/she will then consider the computer as an object of science and tech-

nology, and the artefact is no more a transparent mean of action.

So one can as he/she wish be in different attitudes to artefact: consider it as in-hand or put-down (when maintaining the technical device, one puts it in the put-down mode). But the situation when the artefact breaks is particular, because it forces the user to consider it as put-down.

The difficulty comes when we consider the fact that in the put-down mode, the designer is also engaged in the activity. But in a different way: the artefact is not a mean of action. In fact, when one is maintaining/designing or doing scientific research, he/she is using other artefacts (pencils/computer aided design/hammer or measurement instruments), which are in-hand as means of action, and which are transparent to the user. So one can see the put-down mode of the artefact as a derivative from the most fundamental one, which is in-hand.

Now the in-hand mode was provisionally defined as an attachment to the body, in order to underline the fact that it is transparent and fits into action. But in fact the artefact can be not attached to the body, but still in-hand. The road for example is not attached to the body, but is still in-hand as a transparent mean of action. Being on the road, one does not consider the road as the physical proprieties of tarmac in the way the science/technology do, but rather as a possibility to get there he/she wants to; the lighting pole on the road is not attached to the body, but it is still in-hand because it is also a mean of action of going there, and it (a) structures one's actions and (b) is transparent in the sense mentioned above.

If one agrees that the perception is not something independent from the action, then every artefact is the artefact that "help us do": the means of lighting probably change the sensory-motor loops (the light coming a certain way, one takes it into account without explicitly thinking on the proprieties of the light, and adapt his/her sensory-motor posture when riding a bicycle; when there is no

sufficiently light, one can be more focused on the auditory modality). So, as for the bicycle, the lighting pole is in-hand because it fits into one's action and changes the sensory-motor activity.

It stands to reason that there is still a difference between the artefact that are actually attached to the body, and which are not, but the first level of distinction seems to be between in-hand (in a broad sense) and put-down. In this broad sense, the artefacts are in in-hand mode when they (a) fit into action, (b) change sensory-motor loops, (c) are transparent, i.e. not explicitly noticed, disappear from consciousness in aid of the world they bring forth.

References

- [Merleau-Ponty, 1945] Merleau-Ponty. *Phénoménologie de la perception*. Gallimard, Paris, 1945.
- [Heidegger, 1996] Heidegger, M., *Being and Time*, State University of New York Press, 1996.

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