

## Erratum to: Culture of sedimentation in the human–technology interaction

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In the original publication, reference to Rosenberger (2009a) was incorrectly cited in Sects. 6 and 7. The text with corrected citations is provided below.

Hermeneutics of technologies culturally interpreted can be called material hermeneutics. In other words, material hermeneutics is dealing with the art of embodied interpretation of material culture and technologies. In other words, material hermeneutics comprises of sensorimotor experience (Tripathi and Nath 2011). A hermeneutic relation is the one in which the user interfaces with the technology by reading off it and interpreting that readout (Ihde 1990, p. 80). Entering into a hermeneutic relation requires that a user possess the skills necessary to decipher the encoded meaning displayed by the technology. In many instances, if one possesses these interpretive skills, the meaning appears all at once in a perceptual gestalt. For example, when one knows how to “tell time,” one need not consciously deduce the meaning of the placement of the hands of an analogue clock; the time of day is conveyed immediately (Rosenberger 2009a).

The first kind of relation that Ihde identifies is called an embodiment relation. When one shares an embodiment relation to a technology, one experiences the world through that technology (Ihde 1990, p. 72). Though using a

technology may significantly alter a person’s perceptions or abilities, the user may become accustomed to the technology’s presence. The device itself withdraws into the background of the user’s awareness, and attention is focused on what is being done with the device. For example, one can become accustomed to looking through a magnifying glass. In Ihde’s language, this person embodies the technology (Rosenberger 2009a). In many cases, as Rosenberger elaborates “embodying a technology with any proficiency requires a degree of familiarity; only after becoming accustomed to its use can one think more about what one is doing with a device than about how the device is used. For example, after one has practiced riding a bike, one becomes less aware of the feeling of steering and pedalling” (Rosenberger 2009a).

The third kind of relation to technology is called an alterity relation. The term “alterity,” borrowed from the philosophy of Emmanuel Levinas, refers to the special experience of the presence of another person (Rosenberger 2009a). According to Ihde, some of our relations to technology partially resemble the experience of interacting with a person. He says we relate to these devices as “quasi-other” (Ihde 1990, p. 97). The standard example is the experience of using an automatic teller machine (ATM) to perform banking transactions. (In this form of relations, we have to trust the machine and follow the machine instructions.) A user is posed questions by the ATM’s screen and is asked for responses, and the range of interactions with the machine is typically limited to these questions and answers, says Rosenberger.

It is important here to also review two variables that apply to each of these three kinds of relations to technology. Not everyone’s relationships with a technology are the same. These variables help articulate certain differences. The first is what Ihde calls transparency. This refers

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to the degree to which a technology (or aspects of that technology) withdraws from a user's awareness (Ihde 1990, p. 76). A person unaccustomed to using a particular technology may remain explicitly consciously aware of the relation to that technology as it is used (Rosenberger 2009a). But after gaining some familiarity, this person may experience the technology as less conspicuous.

Material hermeneutics is a hermeneutics which “gives things voices where there had been silence, and brings to sight that which was invisible.” Such a hermeneutics in natural science, as Ihde (1998) claims, can best be illustrated by its imaging practices. The objects of this visual hermeneutics were not texts nor linguistic phenomena, but things, which came into vision through instrumental magnifications, allowing perception to go where it had not gone before. One could also say that a visual hermeneutics is a perceptual hermeneutics with a perception, which while including texts goes beyond texts. Such material hermeneutics (Ihde 1998) are doubly material; first, in the sense that the objects being investigated are material

entities—paramecia, extra-geocentric satellites, and eventually even the chemical makeup of the stars—but also it is material in the sense that the instruments being used to ‘bring close’ such phenomena are also material entities, technologies, through which the natural sciences are embodied (Tripathi and Nath 2011).

## References

- Ihde D (1990) *Technology and the lifeworld: from garden to earth*. Indiana University Press, Bloomington
- Ihde D (1998) *Expanding hermeneutics: visualism in science*. Northwestern University Press, Evanston
- Rosenberger R (2009a) The habits of computer use. *Int J Comput Inf Technol* 1(1):1–9
- Tripathi AK, Nath P (2011) Culture of embodied skill and its acquisition in human computer interaction: how embodied users deal with embedded computers. *Int J Appl Res Inf Technol Comput (IJARITAC)* 2(2):87–96