

problematic consequence of this position that what sort of artifact an object is need not have a definite answer, and I argue that this form of indeterminacy is an inescapable feature of the intentional conceptualization. In the final section, I use this feature of the intentional conceptualization to give some arguments against the view that the priority in deciding what an artifact is for rests with the designer.

2 Physical and Intentional Descriptions

A first problem regarding these issues is whether the notions of ‘physical’ and ‘intentional’ in relation to the description of objects are sufficiently clear. The distinctions sketched above have been taken up in the ‘Dual Nature of Technical Artifacts’ research programme developed at Delft University of Technology. In a recent overview, the programme’s basic starting point is phrased as the claim that “technical artifacts [are] ‘hybrid’ objects that can only be described adequately in a way that somehow combines the physical and intentional conceptualisations of the world”.¹ This way of putting things appears to be based on the idea that there are two, alternative or complementary, conceptualizations of the world, the physical and the intentional conceptualization, a view that considerably sharpens the mere distinction between physical and intentional aspects of technical artifacts. If a contrast is introduced between the physical and intentional conceptualizations of the world rather than between physical and intentional aspects or between the physical and intentional vocabularies or idioms, the physical conceptualization must be seen as being contained in the intentional conceptualization, or the intentional description as being hooked onto the physical description. In the intentional ‘conceptualization of the world’, if we are to retain for a moment this terminology, the physical description of the world is presupposed. The world remains populated with physical objects that have properties like spatio-temporal location, velocity, and weight; but something is added to this: mental states, which consist of beliefs and desires, and actions. The beliefs and desires are partly about these physical objects, and the actions partly involve the intentional manipulation of physical objects. (This is probably not as an idealist metaphysicist would have it, but since such metaphysics have lost much of their popularity nowadays, I will ignore this point.) This is not unlike the extension of the physical conceptualization of the world going from a microlevel description to a macrolevel description. For example, when describing water at the macrolevel, the vocabulary is extended with the notion of boiling and freezing, but the notions of mass, velocity, and so forth, used at the microlevel are retained.² Nothing is lost that has no meaning at the macrolevel, although not all concepts may retain their

¹ Kroes and Meijers (2006, 2).

² The historical development is of course in the opposite direction, from macrolevel to microlevel description. During this development, the vocabulary used is contracted to retain only the ‘primary’ properties that are necessary for a complete description of the world.

usefulness at the macrolevel. If one holds to a reductionist view, macrolevel phenomena can even be described using the microlevel vocabulary exclusively.³

Similarly, as regards the physical and the intentional vocabularies, for certain happenings in the world we have a ‘macrolevel’ intentional description, whereas the same happenings would in principle allow a ‘microlevel’ description using only the physical vocabulary. On the face of it, there is just as little reason to expect a conflict between the two descriptions as there is a conflict between physical macrolevel and microlevel descriptions of one and the same phenomenon. Nevertheless, the availability of the physical and intentional vocabularies alongside each other has raised various philosophical problems, of which the most relevant here are, first, how descriptions in one vocabulary are related to descriptions in the other where they obviously meet, i.e., in the human body, more particularly in the brain, and second, how determinate or exact are intentional descriptions. Philosophical questions concerning the nature of artifacts are tied up with both these issues. In this chapter, I will only address the second of how determinate or exact intentional descriptions are.

The intentional idiom is part of our vocabulary because we have a use for it. There is nothing mysterious in the fact that this use applies to artifacts. What is less obvious is in what precise way the intentional vocabulary applies to artifacts. How exactly is the for-ness of artifacts accounted for in the intentional vocabulary?

Basic words in the intentional vocabulary are belief, desire, action, purpose, goal, expectation, want. They are the terms of folk psychology and apply to human beings, or to persons. Person itself is, of course, also a prime term in the basic intentional vocabulary. Now any physical object can be an object of a belief, or a desire, or an expectation, and so forth. Would this count as the object being described, partially perhaps, within the intentional vocabulary? This seems gratuitous. Human beings have beliefs and expectations about everything that we know to exist, that is, after all, what our knowledge comes to, and about much that does not exist besides. So this would not be a very interesting result. Another possibility is that objects can be described intentionally rather than physically, just as human beings can be described intentionally in parallel to being described physically.⁴ It seems that, when it is claimed that an artifact can be presented as a mere physical object but can additionally or alternatively be described as being for a particular purpose, such a double description, analogous to the double description of specimens of *Homo sapiens*, is what is meant.

The ‘Dual Nature’ claim about artifacts can then be rephrased as the claim that neither any physical description nor an intentional description in the above sense, however much extended, adequately or fully describes the kind of object that an

³I ignore the case of quantum mechanics here. It can be argued that classical physics and quantum physics do indeed represent two competing conceptualizations of the world. This is generally seen to pose a problem of considerable philosophical depth, which 75 years of discussion have not been able to solve.

⁴‘Physically’ must here be understood in the broad sense that includes biochemical and physiological descriptions of humans as biological organisms.