artifact is. The trouble is that for any object in the universe known to us we can easily come up with a description of it that employs the intentional vocabulary. 'The object I am thinking of right now' would be a good candidate. This is the mirror image of the earlier observation that everything we know of can figure in the content of a mental state. What is more, these descriptions say something true that is missing in the physical description of the same object or situation. Physical descriptions of Alpha Centauri will adequately describe this star as far as predictions about its position in the sky or its radiation spectrum are concerned, but they will not catch the aspect that I am thinking of Alpha Centauri just now, or that I failed to spot Alpha Centauri when I last looked for it. The claim that a mere physical description of an object does not include what we have in mind for it seems a truism. At the same time, a mere intentional description comes very cheap. Just like artifacts, our descriptions are meant to serve certain purposes. What we are looking for is rather a description that somehow addresses the for-ness of the object qua artifact.

3 Use and Design as Ontologically Differentiating

One candidate for such a description is the following: 'Object *x* can be used to or is currently being used to realize outcome *y*.' In this form it is not obvious that this description makes use of the intentional vocabulary. The one intentional word is 'use'. To bring out the intentionality more clearly, the description can be analyzed as consisting of two parts: one stating that object *x* is part of an arrangement that, given certain circumstances, will result in the realization of outcome *y*, and another part stating that it was or is some person's or persons' intentional action to organize and control the arrangement and/or the circumstances. Someone selected this object rather than another one, or no object at all, because of a desire for a particular result and expectations concerning the coming about of this result. For simplicity's sake I will assume that the situation was or is intended just like that, meaning that the result that obtains was or is the intended result and that it obtained or obtains in the way foreseen. In this account, the intentional part of the description is not a necessary part of the description of the artifact and can be cut loose without difficulty. What would be left would be a purely physical description of a behavior or a disposition to behave by a physical object. The for-ness of this object would not be addressed.

A problem with this description is, therefore, that it is, again, too loose. It fails to apply to artifacts in particular. It may apply to anything that enters the sphere of human action, or at least potential human action. If artifacts are in this sense 'for something', then so is any ordinary object, artificial or natural or human, that we use for a purpose. This stone is for cracking a nut with; the pebbles that Little Tom Thumb dropped on the ground were for finding his way back home; the magician's assistant is for diverting the attention of the audience.[5] Is the for-ness in these cases

[5] I owe the last example to Jesse Hughes.

not just as necessary an aspect of the object – something that a full description should include – as the for-ness of an electric drill?

This is what the 'Dual Nature' thesis seems to deny. It holds that the electric drill *is* for something in a way that Little Tom Thumb's pebbles are not. A description that leaves the for-ness of the drill out and that merely lists the drill's physical characteristics misses something that is essential to it. What sets technical artifacts like an electric drill apart from other objects that are used for a purpose, or are part of an arrangement that serves a purpose, is that they are designed to serve a purpose. This additional aspect gives us another candidate for the intentional description of an artifact that addresses properly its for-ness: 'Object *x* has been designed and made in order to be used to realize outcome *y*.' This description makes *x* straightforwardly the object of an intentional action: some person or persons did the designing or the making. Someone chose the composition of the whole object out of components, and the materials and the forms of the components, such that it would show certain behavior in certain conditions. Again for simplicity's sake I assume that the designer intended a precise form of use or, more formally, a use plan,[6] up until the final – intended – result. It is the realization of this outcome that the artifact was designed and made *for*. Note that this description only applies to *technical* artifacts. There are many artifacts that are designed and/or made for a purpose, but not a purpose that includes their being *used* for something. Examples are works of art but also test pieces. The for-ness of artifacts in general has therefore a wider scope than the for-ness of technical artifacts.

This candidate, however, also faces the problem that the description is true of much more objects than the likes of an electric drill in full working order. For a start, technical artifacts break down, wear, deteriorate, they can even change beyond recognition, although the continuity with the original artifact is such that we must speak of the same object. Few would deny that a drill with a burned-out fuse is still for drilling holes, but for many artifacts that were once made for a particular use it seems far-fetched to claim that, whatever the state they are in, they are still 'for that purpose'. Secondly, artifacts may have been designed and made for a particular purpose whereas they are actually used for a totally different purpose. Examples are a tire made into a garden swing, or pipe cleaners used as toys for tinkering.

To recapitulate, the thesis at issue holds that a description in the intentional vocabulary, making explicit its for-ness, catches an essential aspect of technical artifacts, something that is missed in any merely physical description. Moreover, this necessity exists only for a subclass of all things that are used for a purpose, since otherwise everything would potentially be a technical artifact, and the term would be in danger of losing its meaning. We can quite literally use just about everything to achieve some goal. NASA used the planet Jupiter to launch the space vehicle Galileo on a course that will bring it beyond the solar system. For the famous determination of the path of light in a gravitational field in 1919, both the sun and the moon were used, and readers of Tintin will know that a solar eclipse

[6] Houkes et al. (2002).