The Designer Fallacy and Technological Imagination

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Abstract Most literary critics have abandoned the notion that the meaning of a text lies in the intention of the author and have called this the "intentional fallacy." I hold that there is a parallel found in many interpretations of technology design and call it the "designer fallacy." This chapter, through examining a wide series of historical technology designs, deconstructs the utility of a simple designer-plastic material-ultimate use model and suggests that one must take into account unintended uses and consequences, the constraints and potentials of materiality, and cultural contexts, which often are complex and multistable. I outline a complex, interactive account of design interpretation.

Earlier in the 20th century, literary theorists developed the notion of an "intentional fallacy." This was the notion that the meaning of a text lay with the author's intentions – if these could be uncovered, then the meaning of the text was established. One can easily see how, if this is the only true way to establish meaning, there could be difficulties. What if the author was long dead? Or, even if living, how could one tell that the author was himself or herself telling the truth? What of unintended meanings, or meanings which fit but were not thought of in advance? Thus, the intentional fallacy recognizes such difficulties and cannot be considered an adequate account of interpretation.

I hold that there is a parallel 'fallacy' which is at least implicit in the history of technology design. In simple form, the "designer fallacy," as I shall call it, is the notion that a designer can design into a technology, its purposes and uses. In turn, this fallacy implies some degree of material neutrality or plasticity in the object, over which the designer has control. In short, the designer fallacy is 'deistic' in its 18th century sense, that the designer-god, working with plastic material, creates a machine or artifact which seems 'intelligent' by design – and performs in its designed way. Instead, I hold, the design process operates in very different ways, ways which imply a much more complex set of inter-relations between any designer, the materials which make the technology possible, and the uses to which

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any technologies may be put. Ultimately I am after a deconstruction of the individualistic notion of design which permeates both the literary and technological versions of the fallacy. First, some examples of simple designer fallacies: Thomas Edison, the great late 19th-early 20th century American inventor, was among the first to design and invent a machine to reproduce sounds – the phonograph. The machine, at first, was a mechanical device which consisted of a speaking tube into which someone would speak; this was attached to a sensitive diaphragm which would reverberate with the sound waves coming into the tube and the diaphragm, in turn, was connected to a crystal needle which would trace the wave patterns onto a rotating roll covered with tinfoil. As the crank was turned, the speaker sounding into the tube, a 'record' was made on the foil. The same machine, played back, would reverse the process and one could hear, well enough to understand and recognize the sounds, originally inscribed on the roller – "Mary had a little lamb…." (Nyre, 2003, 89–90)

Here, the designer intent was to reproduce sounds. But the intent, at this stage, remained ambiguous and the primary possible use of this machine was drawn from the resultant capacities which emerged, more than from any pre-planned single use. It could be a rather primitive dictation machine. Clearly, it would have restricted use since the number of play-backs was very limited due to the softness of the foil – the play-back would remain intelligible for only one or two times. In spite of this, the machine was advertised in the typically glowing rhetoric of technological promise of the late 19th century. It was advertised as "The miracle of the 19th Century," a machine that speaks:

> It will Talk, Sing, Laugh, Crow, Whistle, Repeat cornet solos, imitating the Human Voice, enunciating and pronouncing every word perfectly, IN EVERY KNOWN LANGUAGE." (Nyre, 2003, 89)

If one, with the anachronistic insight of knowing anything about the subsequent history of recordings, read back to Edison's early machines, one might have predicted that one early dominant use of recording devices would quickly evolve into music recording, which in turn, also transformed a number of musical practices. For example, early recording devices could record for only three and a half to four minutes of time – thus the music played must be three and a half to four minutes long, a traditional length for the 'popular song' which persisted well past the time of early recording devices. The new machine calls for new practices, but in this case not 'intended' ones.

The phonograph came later than the telephone, invented at least once by Alexander Graham Bell. Here the designer intent was for an amplifying device capable of transmitting a voice over distance, and intended as a prosthetic technology for the hard-of-hearing (Bell's mother). The early antecedent of "chat" on the internet, the party line on which all the neighbors 'chatted' was not foreseen, let alone the subsequent telephone wiring of early 20th century America.

Even the typewriter was first designed as a prosthetic technology aiding blind or myopic people by allowing them to produce clear script. Instead, as Friedrich Kittler has pointed out, the typewriter become, dominantly, a business machine and one which transformed the secretary of the late 19th century from male to female