In the fifteenth century BC, queen Hatshepsut of Egypt had two huge granite obelisks carved in honor of her divine father, which were transported from Aswan to Karnak. Stone reliefs at Hatshepsut’s mortuary temple Deir el-Bahri show the obelisks being conveyed by ships along the Nile. One of the obelisks stands 30 meters high and is estimated to weigh around 320 tons. The reliefs are strikingly similar to modern blueprints. They represent in informative detail the ancient technology of moving obelisks, complete with pulleys, ropes, and great numbers of rowers. The 3,500-year-old images can help us distinguish analytically between engineering and energy sources. It is evident that the technology of monumental architecture three-and-a-half millennia ago required specialized technical knowledge. Although adapted to the practicalities of harnessing slave labor, ancient Egyptian engineering is as analytically distinguishable from slavery as modern engineering knowledge is distinguishable from economic access to fossil fuels. “Technology” in the sense of expert knowledge is as much a necessary condition for transporting ancient obelisks as it is for modern air travel, but in neither case is it a sufficient condition. Without fossil fuels, our technological knowledge would be as powerless as queen Hatshepsut would have been without slaves.

Technologies, in other words, have two aspects. One is the ingenuity underlying technical design and generally celebrated as the primary source of technological progress. The other is the societal arrangement through which that design can be applied so as to harness a particular source of energy. The two aspects constitute and reinforce each other. Just as technical knowledge defines what can be utilized as an energy source, energy sources define what can serve as technical knowledge. But energy sources are not just out there, waiting to be exploited. In order for slaves or fossil fuels to serve as an energy
source for someone, they have to be made available for him or her to exploit. The societal arrangements by which energy sources are made available to different individuals or groups are what we conventionally refer to as the economy. Economies can be defined as modes of distributing resources and risks in human populations. They are universally legitimized by cosmological systems justifying particular patterns of distribution by reference to moral principles. In this abstract sense, the societal function of modern economics is equivalent to the ideology accompanying ancient Egyptian slavery. If a reader should find the comparison objectionable, we might respond by observing that the global inequalities organized by modern economics are considerably more severe than those of ancient Egypt. But the main point to be made here is that “economies” are generally excluded from the definition of “technologies,” even though the former are crucial conditions for the existence of the latter.

If we consider other animal species, we can nowhere find intraspecific inequalities even remotely similar to those generated within human societies. This unique inclination of human populations toward complex structures of inequality is closely connected to another uniquely human feature: the anchoring of social relations to extrasomatic points of reference such as language, symbols, and artifacts. Collaborating with primatologist Shirley Strum in a study of baboon behavior, Bruno Latour noted long ago that this is the fundamental difference between the social life of baboons and that of humans (Strum and Latour 1987). Latour went on to theorize the role of artifacts in organizing human social relations, asserting that the things we engage with tend to shape our relations and our modes of thinking about the world. His so-called Actor-Network Theory recognizes artifacts as “actants” that possess autonomous agency just as humans do. Certainly, language, symbols, and artifacts help to organize and buttress social structures, but they will be treated here as props employed in the service of human intentions and strategies, rather than as autonomous agents. A significant perspective contributed by Latour, however, is the understanding of technologies as systems of artifacts that contribute to the organization of human social relations. As technologies are always embedded in economies, Latour’s perspective should apply no less to systems of exchange. Beyond the organizing power of language, artifacts such as monetary tokens, gifts, commodities, and technologies are the very stuff of human society.

Such artifacts can be perceived in very different terms, however. While premodern valuables and gifts were understood to embody lasting social relations, modern money and commodities tend to be perceived as autonomous objects severed from the exchange relations that they reflect. In economic anthropology, the contrast is often mentioned between Marcel Mauss’s reflections on the fact that premodern Maori experienced gifts as animated by the