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 The debates over the positive and negative impacts of standardization and industrialization in the manufacture of material goods have a long history in modern society, beginning at virtually the same time as the processes themselves. Clashes between advocates of modernization, efficiency and practicality and those who stressed the importance of skill, quality, and the human element of production led to anxieties about the implications and consequences of this new way of making things. Although the conflict appears to be a thoroughly modern one, the questions it raises can be applied to past contexts as well.

 In his essay “Economy of Machines and Manufactures,” Charles Babbage celebrates the recent accomplishments enabled by British technological ingenuity, and “the vast extent and perfection to which we have carried the contrivance of tools and machines for forming those conveniences.” He hails these innovations as a scientific triumph, and a testament to British superiority, emphasizing their positive benefits not only for the British nation but for the entire world. He highlights the two key component of this success: the invention of machines that can standardize and guarantee the accuracy and regularity of manufactured objects, and the deconstruction of the act of production into its

component parts and the development of assembly-line style of human labor.

These two advances combined lead to, in his opinion, a long-needed elimination of waste in the time, money, and effort that goes into the act of the creation of widely used goods and tools.

 In direct conflict with Babbage’s standardized, efficient glee, Peter Gaskell decries what he sees as the moral downfall caused by industrialization in “Artisans and Machinery.” Gaskell believes that the sudden material success afforded by manufacturing activities has created a destructive social situation, in which men who lacked sophistication and well-developed personal mores now had at their disposal vast amounts of wealth, which served as a corrupting influence on their behavior, and the behavior of those under their control. He also criticized the elements of the process of modern manufacturing itself as detrimental to personal well-being, as it devalues human labor and individual skill, and ultimately leads to the replacement of man by machine.

 This debate (or at least some manifestation of it) is still going strong in modern discourse, almost 300 years after the writings of Babbage and Gaskell. In Norman’s reflection on “The Future of Everyday Things,” he excitedly expounds on the wondrous technological advances that will become a part of (and improve) our everyday lives in the near future. He speculates about the integration and contributions of “intelligent” appliances and robots in human experience, and even their possible incorporation into our physical bodies. Beyond a brief mention of the potential “social impact” of these developments, Norman spends very little time examining the moral or psychological consequences of these “advances” on humanity. He places the most emphasis on a well-informed and comprehensive “science of design” as the essential component for the successful interaction of humans and technology.

Perhaps an inevitable backlash to thinking of the technological yet ironically immaterial type illustrated by Norman is reflected in Risatti’s writings on design, workmanship and craftsmanship. In a sharply contrasting perspective, Risatti bemoans the modern division between “abstract design” and “concrete object,” a dichotomy in which designers and workmen are seen as “opposing, but complementary.” He connects these two fields to the concepts of *theoria* and *praxis*, but states that the ideal configuration of these two is manifested in the concept of *poiesis*: the “*knowledge* involved in the making, producing, or creating of some*thing*,” a concept realized in the role of the craftsman. Risatti believes the craftsman, whose role has been slowly eliminated in modern society, has an equal understanding of both the aesthetic and technical properties of their chosen material, leading to their ability to create “singular, unique” (and thus more valuable) objects.

Though couched in thoroughly modern language, the above referenced debates center around themes that are not restricted to present-day contexts. This is particularly well demonstrated in “Mechanization of Pottery Production: A Case Study from the Cycladic Islands.” In this study the authors seek to move beyond the traditional criticism of Cycladic pottery from the Late Bronze Age as poorly made and lacking evidence of creativity or skill, towards a possible explanation of this technological shift. They hypothesize that expanding trade networks in the region provided increased opportunities for craft specialists to benefit economically from ceramic manufacture. This situation then led to a decrease in overall energy investment in ceramic production and decoration, as well as the incorporation of energy saving technologies such as the potter’s wheel. As a test of this hypothesis, they examined the dimensions of handleless cups from two different periods, concluding that these objects became more standardized in the later period, supporting the proposition that pottery-making was a specialized craft, and that at least some ceramic manufacture during this period was motivated by profit.

Although we cannot know the complexities of the social context in which Late Cycladic pottery was being manufactured, the changes that are traceable in the material record do raise interesting possibilities. Like the debates of Babbage and Gaskell, Norman and Risatti, where there conflicting opinions in Cycladic society about the changes in the methods and structures involved in ceramic production? Did people resist or criticize the introduction of time and cost saving adaptations due to conservative or traditional attitudes toward technology? Or were these cups and the technologies associated with them accepted or embraced with little opposition? Though no definite answers are forthcoming in this situation, an awareness of modern reactions to and experiences of technological shift can help us to think critically about past intersections of technological and

social change and their manifestations and consequences in ancient societies.