Technology, Innovation and the Future

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Technology shapes both the limits and possibilities of water in landscape design. It enables us to translate the ordinary into the fantastic, the necessary into the luxurious, and the imagined into the real. Although most visibly defined in the landscape by the tools, mechanisms, and material components that undergird water's collection and movement, technology is equally the applied knowledge and expertise that creates this physical manifestation and the networks of administration and regimes of representation that mobilize it. The technological enhancement of water has perennially been motivated by a desire for the predictability and reliability of its flow, the purity of its quality, and its potential for aesthetic pleasure. At crucial junctures in history, innovations in the technologies of energy and materials have enabled designers to envision new possibilities for water in the landscape, and in some cases to realize old design ideas that had been impossible to achieve because of technical limitations. Focusing on two cases in the early modern world marked by profound technological change—the territorial scaled water systems at Versailles in the 17th century, and the "aesthetic industrialization" of the German landscape in the 19th century—this presentation explores how cascading effects of technological development can lead to novel design experiments with water in the landscape. By tracing how innovations can migrate across seemingly disparate areas of technological culture to coalesce in unforseen configurations, these historical situations indicate how we might prepare for, and attempt to shape, a future that may prove highly divergent from anything we have yet known. And, equally, these cases invite us to ask critically to what degree the future of water in the landscape may uncannily resemble the past. For as unprecedented as the new regimes of remote sensing, artificial intelligence, and robotic maintenance in our landscapes may be, the issues they are being asked to address are not entirely new. Our current dilemmas are directly descended from the environmental and technical challenges that first arose during the advent of industrialization, perhaps best encapsulated in the divorce of aesthetics from increasingly dominant forms of instrumentality. If we are to envision a future in which the technical mastery of water in the landscape and its aesthetic experience are not only balanced but fully integrated, we must first

understand the historical grounding of our current situation. What better way to look forward than to revisit the insights of landscape designers who responded creatively when these conditions first arose.