

“Bodies without soules... sweete substances without sense”:

Automatic Birds in the Early Modern Pleasure Garden

The decades from 1570 onward witnessed a flowering of interest in automatic theaters. Recent scholarship has attended to the roles these machines played in the scientific revolution, with particular attention to the mechanical orientation of natural philosophy. The craftsmen who created them, however, aspired primarily to inspire marvel through simulacra of nature, an impulse seen especially in their bird automata. My study works back and forth from these machines—both real and imagined—and the sounds they created to locate contacts between the music they produced and the musical ideas they inspired.

The “music” that the machines made had an unusual ontological status—if birdsong could not be music because it was made by irrational creatures, then could the highly rationalized birdsong (re)created by engineers and their machines be considered music? Athanasius Kircher’s *Musurgia Universalis* (1650) shows the processes of the transformation implied by this question. His notation of birdsong, one of the earliest to be found independent of a musical piece, forces the birds into a level of rationality. When he shows the birds in their natural habitat, the vague notation loops around the page. However, when the birdsong is prepared for an automatic theater, clefs and time signatures rectify their songs into proper music. The act of framing causes natural “substance” to acquire “sense.”

This “framing” also occurs in music about birds. Throughout most of the 16th century, birdsong was framed by a human interpreter. A marked shift, however, is seen during the age of automata. Michael Praetorius defines the ritornello, the key musical framing device of the 17th century, through recourse to machine-like animal behavior (1619). Some of the early ritornellos refer specifically to birds, and the mechanical regularity of the ritornello “body” highlights the range of emotions throughout the rest of the work. The influence of mechanicity, as figured in the bird fountains, resonates throughout the 17th century.