

Bonnie Gordon, *Voice Machines: The Castrato, the Cat Piano and Other Strange Sounds* (London: University of Chicago Press, 2023), pp.432

The castrato remains to many a figure of mystery and probably some degree of revulsion. As a male singer whose testes were crushed or severed prior to puberty, the sound produced by the adult castrato was unlike anything else – the hormonal impact of the mutilation was not so straightforward as simply preserving the child's treble sound. Yet we have little idea what such a singer really sounded like. Nevertheless, this is not the key focus of Bonnie Gordon's book. Instead, it is described as 'An exploration of the castrato as a critical provocation to explore the relationships between sound, music, voice instrument, and machine'.

Chapter 1 examines the castrato as one of a range of musical special effects used by composers in the early seventeenth century, while Chapter 2 looks at how both castrati and cicadas 'invite attention to the historically constituted materiality of sound' (p.63). Chapter 3 compares the castrato to the telescope, viewing both as prosthetics intended to extend the human body's capacity. Chapter 4 explores the concept of the organ in all its forms, while Chapter 5 concentrates on the outdoor hydraulic organ. The third section investigates the intersections between the castrato, desire and otherness, with chapters on 'The Castrato as Special Effect'; their nonnormative voice and its place in a globalising Europe; and the approach of musicology, science and medicine to the castrato's sex and gender. The final two chapters address affective responses to the castrato and investigate the ways in which surgery and training 'remade' (p.267) the castrato's body, finishing with a critique of posthumanism as a modern phenomenon. An epilogue seeks to '[embrace] the relationship between inscription and memory' (p.26) with a series of vignettes which act as alternative endings for the book.

There are some interesting insights. For example, Gordon highlights a change in the way the sound of cicadas was described over time: prior to the Industrial Revolution they are compared to musical instruments, but afterwards they are always compared to machines. She demonstrates that because early modern writers did not distinguish between organs with or without sense, they did not see machines as inherently soulless. Nevertheless, this volume is a challenging read. It requires a good technical knowledge of music and familiarity with a range of Renaissance pieces, as well as a grounding in philosophy and the acoustic turn in historiography. Although the topics are often fascinating in their own terms, the eclectic subject matter is at times difficult to tie to an overall argument, and some of the resonances for which Gordon makes claims appear slight. On many levels, this is not a book for the faint-hearted, but what it does do is complicate our understanding of what it meant to be human or machine during the Renaissance.

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