with a melody from the *Battalia* and Schmeltzer's *Polnische Sackpfeifen* is a bit strained since the melodic *ductus* in my opinion is quite different.

The identification by Rawson of a previously unknown melody found in the third viola part of Biber's quodlibet (150) is important, though this too is not without interpretative issues. The melody was discovered by Rawson in a number of eighteenth-century sources, perhaps most easily found as 'Air XXII: Cotillon' from Act 2 of *The Beggar's Opera*, and he also discusses a number of earlier French sources. The problem is that in his text Rawson says that the 'earliest printed source of the melody' is from a French publication of 1707, though he does acknowledge 'there must be an earlier source, especially considering that Biber's version is over thirty years earlier than the Feuillet print' (150). In a footnote on the same page, however, he writes that according to Georgy Calmus's 1912 study of *The Beggar's Opera* and Alain-René Lesage's parody *Télémaque* from 1715, 'the melody was printed in Frankfurt in 1664'. Rawson's page citation is only to Calmus's edition of the French parody, but in the more detailed listing of sources for the tune on page 218 of Calmus's study it is proposed that 'Vielleicht stammt das Lied sogar aus Deutschland', since it was published in Georg Heinrich Schreiber's *Neu außgeschlagener Liebes- und Frühlings-Knospen Nachschößlinge* (Frankfurt: Köler, 1664). Calmus notes that it is also found in Christian Clodius's manuscript songbook from 1669 (D-B Germ. Octavo 231). Though I have not yet seen Schreiber's publication, following up Calmus's citation of Wilhelm Niessen's 1891 study of the manuscript songbook ('Das Liederbuch des Leipziger Studenten Clodius', *Vierteljahrsschrift für Musikwissenschaft* 7 (1891), 579–658) reveals that the tune is copied on pages 643–644 with the following text: 'Lustig lieben Domini, lustig omnes Populi, quicquid allhier? Ecce frisch Bier, bibere, lambere, schadets auch schier wenn sich einer exercirt und andern wohl vexirt' (Merrily to love, O lords, merrily, all people, is everyone here? Behold, fresh beer, to drink, to slurp, it's also almost a shame when one of these people drills and annoys others). Clearly this is a closer source to Biber's tune quotation, and the reference to military drills makes it even more appropriate to the imitation of drunken soldiers in the *Battalia*. Rawson's discovery of this melody is an important addition to our knowledge of Biber and his music, but just a little more effort following his sources would have saved the author from a discussion of tunes that postdate Biber's composition and come from very different cultural contexts.

While some of these bibliographic details will circumscribe its research value, Rawson's narrative is especially compelling in contradicting the three myths mentioned above. At many points he acknowledges the difficulty of separating out the influences on the 'Czechness' of these composers in such a multicultural society, and it would have been a very different study had he examined the similar issues in Slovakia, Hungary, Poland and the Balkans. As it stands, *Bohemian Baroque* provides a window onto both the 'long' seventeenth century and the beginning of the 'long' eighteenth century, and demonstrates the foundations for cultural traditions that were later evident to Charles Burney and Wolfgang Amadeus Mozart.

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ADELHEID VOSKUHL
ANDROIDS IN THE ENLIGHTENMENT: MECHANICS, ARTISANS, AND CULTURES OF THE SELF
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In E. T. A. Hoffman's 1812 novella *Die Automate*, a prophetic android automaton referred to as 'the Turk' reveals an uncanny world in which no clear demarcation exists between man and machine, science and fantasy, reason and superstition. Hoffman's frightening tale gives voice to key philosophical and epistemological questions raised by automata, as well as cultural anxieties about the role of man in an increasingly

mechanized world. These questions and anxieties underpin the broader history of automata and related technologies, from their popularization in the mid-eighteenth century to the present day. From the Enlightenment period onward automata have been enlisted in uneasy considerations of man's essence, the values and perils of technology, the existence of God and the distinctions between humans and animals.

This is the traditional historical view of automata that Adelheid Voskuhl takes to task in *Androids in the Enlightenment*. The book argues against positioning eighteenth-century android automata at the starting-point of 'man–machine problems' that framed industrial revolutions and war cultures of the nineteenth and twentieth centuries. Although some of these problems were first articulated in eighteenth-century philosophical writings (such as Julien Offray de La Mettrie's 1748 *L'homme machine*), they did not enter the public consciousness until the Industrial Revolution. The anachronism nevertheless emerged immediately thereupon, when prominent Romantics identified Enlightenment automata as anticipating 'the perils of the industrial age' (227). Voskuhl's sharply critical text relocates eighteenth-century android automata to their own time and place. Rather than oracles of industrial modernity, she sees eighteenth-century android automata in connection to (1) proto-industrial mechanical arts, (2) emerging techniques of bourgeois sociability in traditional court and estate societies, (3) sentimental music-making and (4) novel types of literary production.

Her argument rests on case studies of two music-playing women automata from the 1780s, which stand for about ten similar constructions built between 1730 and 1810. The first, a life-size android automaton representing a fifteen-year-old girl seated at the harpsichord, was built by father and son clockmakers from La Chaux-de-Fonds in western Switzerland, Pierre and Henri-Louis Jaquet-Droz. The second android is a dulcimer player made by the cabinet maker David Roentgen in conjunction with the clock maker Peter Kinzing. Roentgen was a furniture manufacturer in the principality of Neuwied, seventy miles south of Cologne. This automaton comprises a female musician seated at a table on which rests the dulcimer. Both automata play multiple, standard, two-voice dance pieces from clockwork mechanisms hidden in their bodies.

A detailed reception history (chapters 2 and 3) reveals that contemporary reviews of the automata were derived in substance and wording from the brochures published by the makers themselves. On this basis, Voskuhl concludes that none of the texts' authors saw the automata in action; that there was no collective excitement (or fear) about the automata in the eighteenth century comparable to that which emerged in the industrial period; and, finally, that the authors were less concerned with the issues raised by the automata than with emerging literary practices of copying, borrowing, reporting and transmitting newsworthy information. In other words, the fact of reporting on the automata, and the channels of transmission for those reports, took precedence over the reports themselves – with one important exception. Writers about the dulcimer player, in particular, faithfully transmitted, and sometimes embellished, the sentimental corporeality of the android. They marvelled at the player's subtle nod to the audience before beginning, the motion of its head and hands, which moved in harmony with each other and with the music, and the uncanny expressiveness of the player's eyes, which were seen to communicate a full range of affects in coordination with the music. These movements, we learn in chapter 4, were the product of elaborate mechanical contrivances that betray the importance of the subsidiary motions to the makers of the automata. The focus for artisans and audiences alike was on the life-like gestures of the androids, which corresponded so neatly to the music being played. Rather than articulating man–machine problems as they are widely seen to have done, this aspect of their reception suggests that, on the contrary, they instantiated connections between the experience of music and the bodily expression of affect.

For Voskuhl, the unlikely figure of the 'sentimental android' in turn highlights the mechanized, propagandistic aspects of sensibility that underlay the culture's emphasis on feeling and spontaneity. In German-speaking Europe in particular, sensibility coalesced around a 'cultural nation' whose utopian democratic values opposed those of traditional court and estate societies (165). The author views sentimental androids as a form of propaganda that sought to reproduce mechanically the cultural and political signifiers of that utopian state. The sentimental android represents one of multiple ways in which sensibility was mechanized

and reproduced for the purpose of promoting its practices and values. As Voskuhl argues, the contemporary pedagogies of C. P. E. Bach and Johann Quantz mechanize musical sensibility, turning feeling into a mechanically reproducible mode of musical production. Her readings of Quantz's *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752) and Bach's *Versuch über die wahre Art das Clavier zu spielen* (1753) emphasize the rhetoric of control, which seems to promote an on-and-off switch governing sentiments. This, combined with the pedagogical and paternalistic tone of the texts, points towards the mechanical aspects of these treatises, and towards particular facets of the political culture itself. For Voskuhl, automata (like the musical treatises) articulated a slippage between pure sensibility, on the one hand, and its mechanical reproduction for political and civic purposes, on the other. The tension so prominent in later periods between man and machines is thus not a tension at all. It is, for Voskuhl, a tidy and efficient correspondence.

Readers of *Androids in the Enlightenment* will be persuaded that eighteenth-century androids were a product of their own time, and thus demand their own contextualization. They will also discover many meaningful connections between emerging technologies in the eighteenth century and the culture of sensibility. Indeed, Voskuhl moves helpfully towards revising the narrow association of sensibility with pure, unmediated feeling and spontaneity; android automata, as Voskuhl describes them, also speak to the reproduction and commodification of sensibility for civic and political ends. This is really the crux of her argument and its most sophisticated claim, and as such one wishes it were interrogated more fully. The book contains a great deal of historical and biographical information not directly related to the central argument. While historians of android automata and related technologies will find much of this useful and interesting, others may wish to read a more developed discussion of automata and the culture of sensibility in its place. For example, her brief discussion of the treatises of C. P. E. Bach and Quantz emphasizes the 'peculiarly mechanical flavor' of the texts without grappling with some of the paradoxes that her observation raises (162). Bach's treatise certainly doesn't promote mechanical playing. On the contrary, it contains a fully developed anatomy of feeling that privileges the heart and soul over the most agile fingers and nimble hands, whose mechanical movements – however skilfully executed – cannot alone move the listener. Quantz similarly compared the player who makes music from his own heart and soul to the pedant who 'mechanically' follows the rules. (Of course, the most famous such remark is by W. A. Mozart, whose characterization of Clementi as 'mechanicus' elevated feeling and taste over the technical machinations of the virtuoso (16 January 1782, in a letter to his father; see Joseph Eibl, Wilhelm Bauer, Otto Erich Deutsch and Ulrich Konrad, eds, *Mozart: Briefe und Aufzeichnungen*, eight volumes (Kassel: Bärenreiter, 2005), volume 1, 192).) These statements, which oppose sensibility to virtuosity, technique and mechanical skill, do not negate Voskuhl's claims about the artificial aspects of musical sensibility, but they do complicate them, revealing the culture's paradoxes and hypocrisies. Given this, the line between the cultural anxiety about automata in the industrial age and their cosy accommodation in the Enlightenment period may be too starkly drawn.

Despite this criticism, the book is a valuable resource for anyone interested in the history of automata, and it will undoubtedly spark much-needed discussion about the complexities of eighteenth-century musical sensibility.

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