The Politics of Tuning and Temperament: Transnational Exchange and the Production of Music Theory in 19th-Century Europe, Asia, and North America

Abstract

This dissertation examines how late nineteenth-century discourse on tuning and temperament was co-produced with the global politics of nationalism, transnationalism, colonialism, and imperialism. I concentrate on the history of "just intonation"—a tuning system whose intervallic proportions are predicated on the logic of simple whole-integer ratios—as it was theorized by a network of musical scholars spanning Asia, Europe, and North America. My focus on this history reveals how, on the one hand, political forces shaped the development of comparative musicology and methods of score-based analysis. I also demonstrate, on the other, how the increasing entanglements between "Western" and "non-Western" scholarship produced new expressions of cultural hybridity that fundamentally reconfigured national politics, through the reciprocal exchange of musical ideas and instruments. Based on my findings, I challenge persistent myths of theoretical autonomy and cultural exceptionalism, and assess both the merits and pitfalls of attempting to write a global history of music theory.

In four chapters, I examine three branches of just-intonation discourse and evaluate their connections to the political relations between indigenous—settler populations (Native American communities/United States), colonizer—colonized groups (England/India), and nation-states pursuing diplomatic relations (Germany/Japan). Drawing on the methods of Science, Technology, and Society Studies (STS), I lay out how the epistemological frameworks of scholarship within these contexts drew upon statistical techniques, myths of cultural origins, and

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theories of nature that were integral to the formation of nineteenth-century nation-states and imperial regimes. I argue that the construction of just-intonation keyboards with as many as fifty-three tones per octave played a particularly important role within this context, as tools for scientific investigation as well as for normalizing and standardizing national musical practices. I then build on the insights of transnational historiography and post-colonial theory in examining the subaltern response to these approaches, identifying two destabilizing strategies: the provincialization of "Western" musical discourse, and the defamiliarization of "Western music." I conclude with reflections on my own experiences playing just-intonation instruments, suggesting how the global history of theory might incorporate insights from music cognition, critical organology, and performance studies so as to expand its purview from the history of ideas.