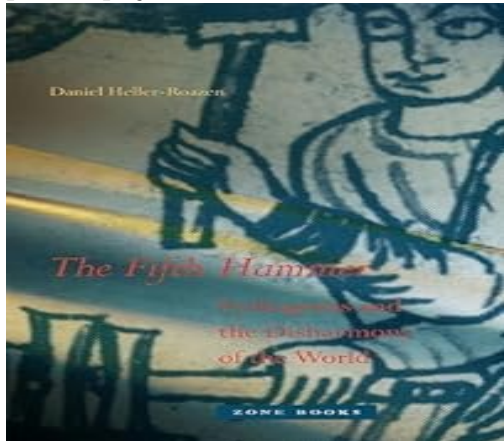


The Fifth Hammer: Pythagoras and the Disharmony of the World By Daniel Heller-Roazen He is the author of *The Enemy of All: Piracy and the Law of Nations*; *The Inner Touch: Archaeology of a Sensation* (2007) which was awarded the Modern Language Association's 2008 Aldo and Jeanne Scaglione Prize for Comparative Literature Studies; *Echolalias: On the Forgetting of Language* (2005); and *Fortunes Faces: The Roman de la Rose and the Poetics of Contingency* (2003). He is the author of *The Enemy of All: Piracy and the Law of Nations*; *The Inner Touch: Archaeology of a Sensation* (2007) which was awarded the Modern Language Association's 2008 Aldo and Jeanne Scaglione Prize for Comparative Literature Studies; *Echolalias: On the Forgetting of Language* (2005); and *Fortune's Faces: The Roman de la Rose and the Poetics of Contingency* (2003). Before joining the Princeton faculty in 2000 he studied philosophy and literature in Toronto Baltimore Venice and Paris (BA in Philosophy University of Toronto; MA in German and PhD in Comparative Literature Johns Hopkins University). Such is the tale that begins Daniel Heller-Roazen's intimate little history tracing the insistence of disharmony across the many attempts to expel it from the world: from the ineliminable 'remainders' of the musical octave to the limitlessness of a universe unbound *The Fifth Hammer* is the tale of a little theme with weighty consequences. Indeed part of the surprise and the delight of H-R's book are the unexpected paths followed in pursuit of its subject moving effortlessly among ancient mathematics Kantian moral philosophy and scholastic musical theory weaving an intellectual web as diverse as it is learned. Can one think of number the same way again for instance after learning that the irrationals for a while were not even considered numbers at all? And how much better can one appreciate the genius of Leibniz once his metaphysics of the best-of-all-possible worlds is cast in the light of a theory of musical harmony as recounted here? If anything the book's problem - to the degree that it has one - is its seemingly arbitrary selection of chronicles which while all linked by the theme of the disharmonious nonetheless do seem like wanderings among a much wider and not-fully-explored expanse. In some ways the book is a victim of its own success - having lit the flame of intellectual curiosity in such an effective manner one can only be let down after the book's relatively small hundred and fifty page heft. Heller-Roazen traces this theme through Boethius and medieval musicologists up to the aesthetics of Kant and the cosmology of Kepler showing how time and again the sounding of the fifth hammer undermines the perfect harmony of their systems.

193540816X This one will give your brain a real workout! I think it's well worth reading if you have any interest at all in harmony and acoustics and how they relate to theoretical mathematics and astronomy. One star taken off because I thought chapter 7 was too much rather tedious and not terribly rewarding Kantian philosophy and I couldn't see a direct connection in it to the thesis of the book. The book opens with an introduction to the legend of the fifth hammer: the story goes that Pythagoras when entering the famous smithy with its musical hammers found that there were in fact five hammers but only four of them were involved in forming the harmonic intervals that had attracted his attention in the first place and the fifth had no place in his scheme of things and so was left out. The implication of the existence of the fifth hammer might be that there is a dimension of reality that cannot be formulated in any of our schemes of things or to put it another way that not only are there more things in heaven and earth than exist in our philosophy but there are things in heaven and earth which cannot be expressed in any system of representation.

193540816X An ancient tradition holds that Pythagoras discovered the secrets of harmony within a forge when he came across five men hammering with five hammers producing a wondrous sound. What was this hammer such that Pythagoras chose so decidedly to reject it? Since antiquity harmony has been a name for more than a theory of musical sounds; it has offered a paradigm for the scientific understanding of the natural world. In eight chapters linked together as are the tones of a single scale *The Fifth Hammer* explores the sounds and echoes of that troubling percussion as they make themselves felt on the most varied of attempts to understand and represent the natural world. From music to metaphysics aesthetics to astronomy and from Plato and Boethius to Kepler Leibniz and Kant this book explores the ways in which the ordering of the sensible world has continued to suggest a reality that no notes or letters can fully transcribe. Marks 19 Professor of Comparative Literature and the Council of the Humanities: These books have been translated or are forthcoming

in translation in Arabic French German Italian Polish Portuguese and Spanish: He has also edited the Norton Critical Edition of The Arabian Nights and has edited translated and introduced Giorgio Agamben's Potentialities: Collected Essays in Philosophy (1999), He has received fellowships from the Social Sciences and Humanities Research Council of Canada the American Council of Learned Societies and the Andrew W. Mellon Foundation. He teaches courses on classical and medieval literature aesthetics and the philosophy of art. 193540816X



Walking past a forge one day a fable tells of Pythagoras enrapt by the sound of five hammers striking in unison consonant in their harmony. Here it seemed was a living allegory of the cosmos itself a well-ordered expanse of unitary motion and proportion, Yet of the five hammers the fifth never did quite fit its discordant chime shattering the spell that so pleased the Greek philosopher: Unwedded then to the conventions of genre *The Fifth Hammer* is at its best when leaning on the bleeding edge of not just history but philosophy too: Still given the range and depth of cultural and historical notes that *The Fifth Hammer* does in fact strike there's very little to complain about, Recommended for anyone looking for a compelling take on an offbeat path of Western intellectual history, 193540816X Having read *Echolalia* and been blown away by the breadth of scholarship I was hit by the depth of it in this one: It is a real deep-dive into the trajectory of Pythagorean philosophy up through Oresme Kant and Kepler, 193540816X Like all of Daniel Heller-Roazen's books this traces an obscure theme through pre-modern cultural history finding implications wildly divergent from the initial thesis. In this case it is the discovery by Pythagoras that musical harmony has its basis in simple integer ratios, The beauty of this system is incomplete and attempts to make it so run into problems of the irrational and disharmonious: The book ends somewhat abruptly without a conclusion and that last few chapters feel like separate essays rather than integrated parts of a whole. I'm not sure if this is a benefit or a liability but certainly requires the reader to make connections that the author only implies: 193540816X I was really hoping for much more of an interesting and coherent argument than this book contained in the end. Daniel Heller-Roazen at first sounds as if he is going to make something of this starting point but he never really goes anywhere except round and round in circles. It seemed to me that the author bit off more than he could properly chew, Just about worth reading for the occasionally interesting passages, Four of the five hammers stood in a marvelous set of proportions harmonizing; but there was also a fifth hammer, Pythagoras saw and heard it but he could not measure it; nor could he understand its discordant sound. Nature through harmony has been transcribed in the ideal signs of mathematics: But time and again the transcription has run up against one fundamental limit: something in nature resists being written down transcribed in a stable set of ideal elements, *The Fifth Hammer: Pythagoras and the Disharmony of the World*.

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Daniel Heller Roazen is the Arthur W. Mellon Foundation. {site_link} I thought it was a raucous good read. But it's still an excellent work. Pythagoras therefore discarded it. A fifth hammer obstinately continues to sound