A list of everything a novelist ate and drank for a year, a book of poetry in which each chapter uses only a single vowel, a palimpsest of Shakespeare's Sonnets. Simple to describe, fiendishly difficult to execute, such texts are examples of potential literature - after the Oulipo, or Ouvroir de Littérature Potentielle, a group of poets and mathematicians devoted to the art of writing under constraint. My dissertation reads the work of five authors in this tradition – Georges Perec, Italo Calvino, Christian Bök, Caroline Bergvall, and Jen Bervin – through the lens of new media theory, arguing that their use of literary constraints both resonates with and pushes back against the rise of digital automation. On the one hand, these authors subject themselves to routines and procedures that resemble the logic of an algorithm, forging analogies between rhetorical forms – the epic catalogue, for example, which seeks to enumerate information in a discrete sequence – and the data structures that drive computation. On other hand, by framing this algorithmic logic within the domain of literature, and by carrying out programmatic tasks by hand, these writers also resist the lure of the digital by revealing its capacity for failure and error. Read closely, their writing registers slippages and omissions that betray its procedural rigor, colliding with a world that is too chaotic, too granular, to conform to the protocols that govern digital logic. My dissertation challenges the commonplace view of potential literature as a cerebrial practice that brackets the body and its social entanglements: on the contrary, I argue, these texts bear witness to the embodied act of writing and the unexpected swerves and detours that define aesthetic experience. By suspending chronological time and withdrawing from the narrative demand for consequential action, they explore forms of lyric time where nothing happens (or that make nothing happen), resisting the relentless clockwork of algorithmic culture and its effort to quantify every facet of human endeavour. In this way, *Tuneless Numbers* makes a unique contribution to contemporary poetry studies, pushing back against a long-standing opposition between conceptualism and the lyric, while also offering a fresh perspective on the broader relation between experimental poetry and electronic media at the turn of the new millenium.