

cover books from six places, while a Pocket Book could be theirs at any one of 224 outlets, for a quarter. It's easy to assume that the paperback revolution was all about campy artwork and cheesy come-ons, but to pay attention mostly to the covers, as astonishing as some of them are, is to ignore the social impact of an innovation that made writing available widely and cheaply.

Today's mass-market paperbacks are not as inexpensive, even adjusting for inflation; they require more than an hour's work at minimum wage, the early standard for pricing. Neither are they available as widely. Fewer classics and newer books of value are published in the format. With the advent of Vintage paperbacks in the early 1980s, most serious paperbacks, both fiction and nonfiction, began appearing in larger, pricier trade editions. Probably never again will a prospective reader, someone looking for a book, just something to pass the time, be lucky enough to stand within arm's reach of both a Nabokov and a Spillane.

—PAUL MALISZEWSKI

TEMPERAMENT:
*The Idea That Solved
Music's Greatest Riddle.*

By Stuart Isacoff. Knopf. 259 pp. \$23

The lyre of the mythic Orpheus, enchanting even to trees and rocks, and the spirit-healing harp of the psalmist David have everything to do with the story of *Temperament*. Into modern times, musicians and instrument makers have been driven to break the code that gave that ancient music its magical powers. The tuning of notes and their spacing in the octave were thought to be the heart of the matter.

From the sixth century B.C. on, Pythagoras ruled the discussion with his general dictum that the right relationships were mathematical. The top note of the octave resonates exactly twice as fast as the bottom note (in "Over the Rainbow," the vibrational leap in the opening notes on the word "somewhere" is 1:2, as also in Duke Ellington's "Daydream"). Equally important to Pythagoras was the 2:3 ratio between the tones of the "perfect fifth" (the opening notes of "My Favorite Things") and the 3:4

ratio in the "perfect fourth" (the start of "Auld Lang Syne"). The exaltation of the "major third" (the mi-mi-mi-do! opening of Beethoven's Fifth Symphony) came later; with a 5:4 ratio of vibrations, it extended the rule of small integers over the definition of musical value.

Beauty lay not just in the ears but in the clarity of numbers. In the 17th century, Johannes Kepler argued that the courses of the several planets corresponded precisely with the harmonious proportions of musical thirds, fourths, and fifths. That is, music was the language both of man's singing inner life and of the celestial spheres in their orbits. "From earliest times," writes Isacoff, the editor of *Piano Today* magazine, "number, sound and virtue wrapped themselves like intertwining vines around the trunk of Western culture."

The problem with the number mysticism in music was spotted early on, even by Pythagoras. Intervals deemed "perfect" on their own were not neat nesting blocks that fitted perfectly together. Rather, like weeks fitting into months fitting into calendar years (or like mates in blessed matrimony), pleasing musical units had to be stretched here and whittled there to make a workable whole. The expressive voice and the tolerant ear had no trouble with the compromises, but the development of fixed-note instruments and especially keyboards forced hard choices and fierce arguments starting in the Renaissance. This is the terrain of Isacoff's chatty survey, an anecdotal, name-dropping slide show of the evolution that made pianos and orchestras possible.

Many paths led eventually to the system that dominates today, "equal temperament," which divides the octave into 12 uniform "half-tone" intervals. Another approach, "just intonation," preserved perfect fifths and major thirds more adamantly. "Mean-tone temperament" sacrificed the sanctity of the fifth in favor of the third. "Well temperament," which J. S. Bach loved, preserved clear differences of color and character among the scales built on each of 12 keys. Finding the right temperament sounds like an engineering challenge, but innumerable churchmen, sages, scientists, and musicians deemed it vastly more. Vincenzo Galilei,

father of the astronomer, made a humanist cause of liberating music (as singers naturally do anyway) from “the tyranny of inviolable number.” Descartes, by contrast, maintained that equal temperament’s altered proportions were a violation of nature.

The spirit of *Temperament* owes more than a little to Dava Sobel’s marvelous little volume *Longitude* (1995). *Temperament*, unlike *Longitude*, has no breakthrough moment and no single hero (the Baroque composer Jean-Philippe Rameau comes close). Though the book is light sailing, the pleasure here is that it gives readers a glimpse of the oceanic depths of musical metaphors and mysteries still unsolved by cognitive science and evolutionary psychology. Please, God, may we never know just where music comes from, or why it moves us so!

—CHRISTOPHER LYDON

**WHAT LIPS MY LIPS
HAVE KISSED:**

*The Loves and Love Poems of
Edna St. Vincent Millay.*

By Daniel Mark Epstein. Henry Holt.
300 pp. \$26

A poem’s “I” can hypnotize us into believing we have seen through the portals of a poet’s secret anguish. That’s commonly an illusion, but not in the case of Edna St. Vincent Millay. Epstein, a poet who has written biographies of Aimee Semple McPherson and Nat “King” Cole, persuasively links themes in Millay’s life to themes in her verse, including guilt, longing, rituals, religious defiance, and, of course, eroticism.

Millay (1892–1950) grew up in Maine with two younger sisters and a divorced, hardened mother, Cora. To support the impoverished family, Cora often took nursing jobs out of town, which left frail Vincent, as she was known, as de facto parent. The upbringing sparked an uprising of sorts, hushed but heartfelt. “I guess I’m going to explode,” teenage Vincent confided to her diary.

(Epstein enjoyed nearly unprecedented access to the poet’s papers at the Library of Congress.) In another entry, she laments her household responsibilities and longs for carefree “jump-rope and hop-scotch days.” At 19, she wrote that “I have been ecstatic; but I have not been happy”—a passage the biographer deems key to understanding Millay’s personality.

While still living at home, Millay gained a measure of local renown through her poetry. Her fame spread vastly with the poem “Renaissance,” published in a collection of new work by some 60 poets in 1912. One reader maintained that the book’s description of Millay had to be a hoax: “No sweet young thing of 20 ever ended a poem precisely where this one ends; it takes a brawny male of 45 to do that.” Millay went on in 1923 to win the Pulitzer Prize in poetry, the first woman to do so. By her early thirties, she had established herself as America’s best-known poet.

In 1923 she wed the Dutch-born Eugen Boissevain; the marriage proved long and lenient. “She must not be dulled by routine acts; she must ever remain open to fresh contact with life’s intensities,”



Edna St. Vincent Millay (undated photograph)