

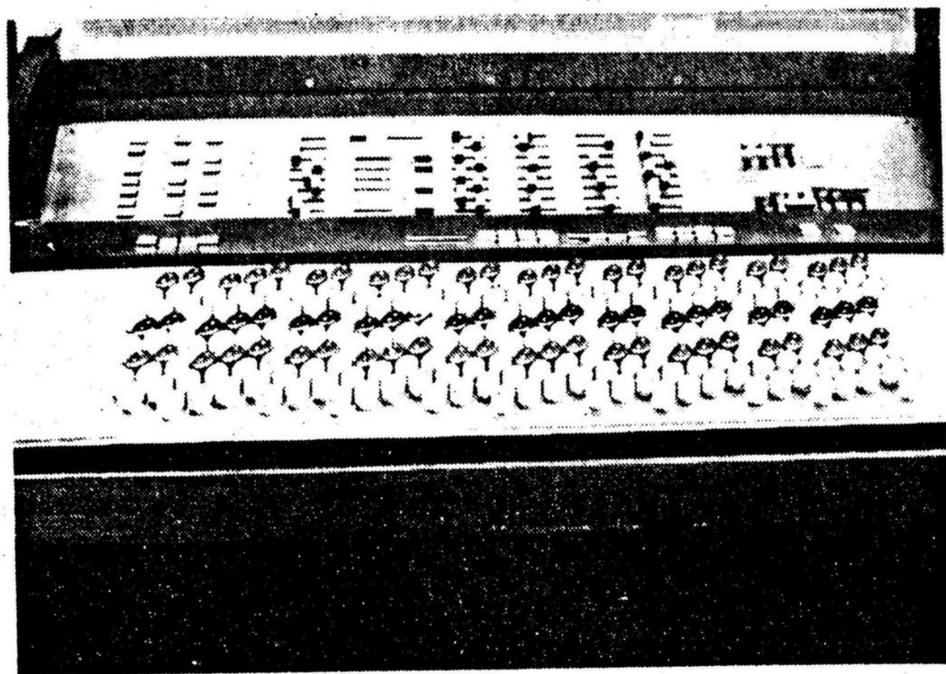
## Marching to a Different Ratio

Since its beginning, each issue of the *Computer Music Journal* has carried an announcement of our interest in scales and intonation systems other than the customary 12-tone equal-tempered one. So far, we've gotten no interesting material on the subject, especially related to computer applications of intonational exploration. We hope to have an article sometime soon however, from one of the most active contemporary xenharmonicists. See also Ivor Darreg's letter in this issue which might be called a "xenharmonicist's message to the computer musicians".

The purpose of this review is to let our readers know about two publications that concentrate almost exclusively on this subject. First though, a few words of introduction might be in order. Xenharmonics is a word for music beyond the 12-tone equal-tempered system. The word comes from the Greek word *xenos*, meaning "strange". Of course, music in our 12-tone system would have sounded *xenos* to the ancient Greeks—the total domination of the 12-tone equal-tempered scale is relatively recent, historically. In any case, xenharmonics is concerned both with equal-tempered scales based on a different number of tones to the octave (especially 19, 22 and 31 tones), and with scales based on just intervals.

Just intervals are essentially those based on small-number ratios. An example is the perfect fifth, where the ratio of the upper to lower tone's frequencies is 3:2 (1.5). The fifth in 12-tone equal-temperament is pretty close to this: 1.4983, which generally is different by only ½ Hertz or so from the just fifth. But the 12-tone equal-tempered scale has a minor third interval quite different from the just minor third: 1.1892 vs 1.2 (= 6:5).

Both magazines have a circulation on the order of 150—very small by most publishing standards. The older of the two is called *Xenharmonikon*, subtitled "An Informal Journal of Experimental Music". It was started in 1974 by John Chalmers, initially with each contributor editing, typing, laying out and printing his own work, and Chalmers assembling, stapling

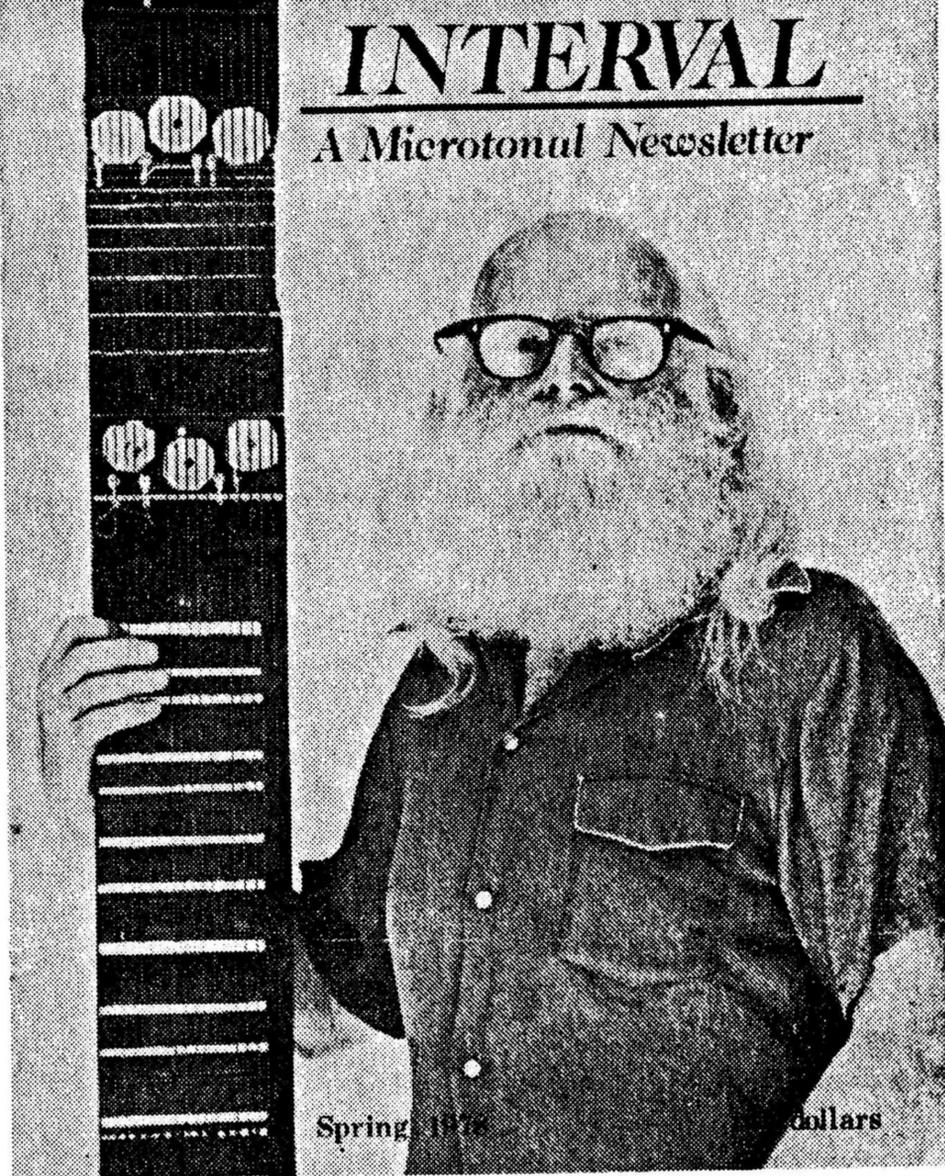


George Secor's Generalized Keyboard for the Motorola Scalatron, from an article originally published in *Xenharmonikon* 4 (Fall 1975).

Curtis Abbott: Magazine Review

# INTERVAL

A Microtonal Newsletter



Spring 1976

dollars

and mailing the lot. At that time, it came out approximately twice a year. More recently, it comes out about once a year and Chalmers has essentially taken over the financial burden, trying to break even on sales.

Issues I've seen (4 through 6) range from 70 to 120 pages, each printed on one side only. Often, there will be one or two color illustrations pasted in by hand. Each contributor generally types his own text and lays out his own figures; which means that each issue features a variety of typographical and editorial styles. My impression is that the error rate is pretty low, and the articles are generally comprehensible (or at least if they're not, it's not because of bad English). Physically, the magazine is durable, printed on heavy paper, with even heavier covers front and back.

The latest issue is number 6; number 7 should come out late this fall. A few issues of 6 are still on hand (\$4 each); number 7 will cost \$5 (with a full-color cover). Earlier issues are available through University Microfilms International (Dept. F. A., 300 North Zeeb Rd., Ann Arbor, Mich. 48106). John Chalmers' address is: 10819 Shannon Hills Drive, Houston, Texas 77099.

The content of *Xenharmonikon* is often theoretical, articles for example, on notational problems with different scale systems, the 19-tone or 31-tone equal-tempered scales, translations of classical works in other languages, etc. Theory is not the only focus though—*Xenharmonikon* also publishes practical information such as how to tune pianos to other tuning systems, and reports on new instruments and tools for exploring intonations—the Motorola Scalatron being a good example. Also published are scores conceived outside of the 12-tone equal-tempered system.

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# LINGUA CATALOGUE TWO

This work can't really be reviewed. There is neither space nor time. It's not really subject to compression — not without irreparable damage. It serves as the catalogue for Lingua Press, although it's clearly conceived differently than the usual catalogue.

The driving force behind Lingua Press is a composer, traditionally of music, named Kenneth Gaburo. He's interested in music: linguistic, performance, electronic, biological . . . he's interested in letting many people know about a lot of other people and what they've produced. Lingua Press oversees printing and distribution but encourages the creator of a work to participate in all the aspects of production that can be considered creative: editing, layout, choice of paper and ink.

There's a certain elusive sense of selectivity — clearly, the materials in the catalogue haven't been included at random — but you'll have to discover for yourself just what brings it about. Consistently, I feel that Lingua Press brings a real concern for craft to each object it touches: carefulness, skill, respect. This imbues each object with a kind of beauty, or perhaps, artistry. The catalogue itself is lithographed on heavy paper and contains numerous pages suitable for framing. Glued on the cover is a color print of a painting by Harley Gaber.

Kenneth charges \$3.95 for his catalogue and it's well worth that. It's a beautiful object full of imaginative shapes, ideas, images, and incidentally, things to buy.

— Curtis Abbott

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## ABOUT INTERVAL

The other journal I'm reviewing here is a brand new one called "Interval: A Microtonal Newsletter". This is published by Jon Glasier (P.O. Box 8027, San Diego, Ca. 92102). Only the first issue exists so far, but Jon says that his response is encouraging, so that it will apparently live to publish again. Stylistically, it's different from *Xenharmonikon*: the format is 16 pages, printed on clay paper (the kind the big magazines use) with half-tone illustrations and typed on a composer (like *Computer Music Journal*). *Interval* intends to publish quarterly, sells subscriptions for \$8 a year, and invites submissions (with return envelopes, please). Jon says that he wants it to be mostly concerned with microtonal music, to have a practical orientation, and also to discuss improvisation which Jon (and many other xenharmonists) see as essential to the full exploration of the potential of new scales. It might be fair to say that *Interval* bases itself, more than *Xenharmonikon*, on the example provided by Harry Partch, a composer of music in a 43-tone scale of his own devising, instrument builder, and author of a book, *Genesis of a Music*, about both his work and the history of tuning systems.

The first issue of *Interval* includes reports on new scales (17 and 22 tones), new instruments, and a "letter-to-the-editor" and response. Also included are two reviews: of a recent book on tuning, and of a concert by a San Diego based improvisation group which has engaged in both instrument building and microtonal exploration. The back cover lists "Materials and Services", including *Xenharmonikon* (cooperation prevails in the xenharmonic world), and persons cooperating in a tape exchange — meaning that if you send a tape of your music, to someone on the list, you get back a tape of their music. There's a novel and useful idea.

In summary, both these journals reflect the engaging qualities of the people behind them (authors as well as publishers): a small but fervent band who are doing it for love and the vision of new melodic and harmonic resources. We wish them both good luck.

—Curtis Abbott

(continued from p. 2)

I haven't met anyone active in that field yet, since I have no means of travelling over Los Angeles County to visit them. So I have to mail out propaganda in the hope someone will come here.

My present reason for writing you is to try to prevent a certain trend which has been expanding for thoroughly understandable reasons, but which it is time to stem. The Piano has been dominating the musical scene from almost the time of the French Revolution to the present, and only now is retreating under pressure from guitars, synthesizers, and . . . the computer.

I have tuned organs and pianos to the 12-tone equal temperament for 38 years now, and this should give me the right to be tired of it and to try other systems. I have composed for nearly 50 years and accumulated an impressive backlog of conventional music, and there is no point wasting my time repeating Debussy or Schoenberg or Rimsky-Korsakov. The 12-tone system has been mined to exhaustion, and so

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