

## EXTENDED JUST INTONATION: A POSITION PAPER

BEN JOHNSTON

IN 1962 AND 1963, when I was writing "Scalar Order as a Compositional Resource" for *Perspectives of New Music* 2, no. 2 (Spring-Summer 1964): 56-76, I sent several versions to the editors before we agreed on one for publication. The story of the second revision is instructive. I had been trying to meet what I felt was *Perspectives'* rather thorny prose style and was at the same time insisting to myself that the article be readable by other than specialists. In the midst of this effort I gave the manuscript to a teacher of technical prose writing who offered to critique it. I got a scathing criticism and a very intense short course on how to get rid of jargon and related problems. I dutifully rewrote the entire article in short, terse sentences with a deliberately well-known vocabulary and in brief, well-disciplined paragraphs. Finally, I sent it on to the editors.

They scarcely recognized it and in haste urged me to restore it to its former acceptable scholarly style. The rest of the story is not very interesting, concerning, as it does, a compromise of style if not content, and certainly a curtailment of possible readers. Since then the editorship of *Perspectives* has undergone a transforming evolution, and this situation could not arise today. But it gave me a lot to think about and after about a decade bore some surprising fruit.

In the early seventies I grew dissatisfied with the musical style I had been using since beginning in 1961 to compose in extended just intonation. It was a style rooted in serial music, which was what had interested me most just before that. But I was tired of composing music which interested few listeners beyond other composers and participating in specialized concerts which attracted mainly that audience. I was convinced that composers were at least partly to blame for the ignoring of new music by most performers and audiences. In a spirit of defiance against my own prejudices I began a series of works which thoroughly concealed their complexity and which addressed themselves to a far less specialized audience. The response was immediate and dramatic. People came up to me after concerts and thanked me for writing what they had just heard. Performers I had never dreamed would be interested contacted me about new works. Even critics, though some with much suspicion, were markedly more positive in their evaluation of my compositions.

They could not have been more suspicious than I. I gave myself a thorough and searching self-criticism to make sure that I had not simply begun saying only what people already wanted to hear: falling into the trap Herbert Brün calls

“plausibility.” I was assured by nearly everyone I confided in that this was definitely not the case. The seemingly parallel course of writing music in styles and idioms used in earlier music produces an acceptance based too much upon a nostalgia for the past of music and a misperception of the way in which the arts can illuminate the way we live. I wanted at all costs to avoid that. If music of the twentieth century does not reflect the degree to which life today is greatly different from life in the nineteenth or the eighteenth century (to select two periods whose music meets with ready acceptance by contemporary audiences), then it is in an important sense escapist, as is the conventional programming of the music of the past. I am not speaking only of the ugly or negative aspects of contemporary life, but of the climate of it—the feel of being part of it, the typical emotions and patterns of living it entails. Being contemporary is not a matter of following trends and fashions; it is much more a matter of turning one’s attention and actions to bear upon life as we live it rather than to escape by living vicariously in the art products of another time and place.

The concern with just intonation saved me from some of the errors I might otherwise have committed. The differences in structure due to composing with an open, infinite field of pitches rather than a closed, finite system, such as twelve-tone equal temperament, guaranteed new shapes and even a new ambience of sound. The constant heightening of contrast between the simple and the complex by the use of simple arithmetic ratios, the intensification of emotional affective reaction, the inevitable inclusion of microtonally small pitch distinctions, all contributed to protecting my music from a too familiar impression. I became interested in such questions as: How would late romantic chromaticism have developed if untempered extended just intonation had been used rather than twelve-tone equal temperament? Would the atonal movement have occurred? What if one treats a just-tuned scale with atonal techniques? What would a big-band jazz style sound like in extended just intonation? And most important of all, how can the extreme complexity of contemporary life be reconciled with the simplifying and clarifying influences of systems of order based upon ratio scales?

This change of aesthetic intention coincided with my decision to begin to employ relationships based upon overtones higher than the sixth partial, rather than to remain within the triadically generated system I had been using. I became interested in the morphological analogy between structures, such as scales based upon triadically generated bases and the much more complex ones generated by using higher overtone relationships. This led to a type of complexity which, in spite of microtones and large numbers of pitches, was organized by principles similar to those of diatonic triadic music. This gave me the possibility of being complex but nevertheless immediately intelligible. The fact that ratio scale ordering facilitates remembering patterns by ear to a far greater extent than interval scale ordering (of which serial ordering is a familiar example) greatly enhanced this intelligibility.

I have said in other contexts that I was concerned to continue what I considered great traditions of Western music but to purify them of adulterations introduced by the use of temperaments. This remains a central concern. My whole compositional output since I began to use extended just intonation may be considered a demonstration of the enormously varied technical and stylistic procedures which are clarified and subtilized by the use of extended just intonation. This body of works may also be seen as a gradual initiation into the new demands upon the ear, and upon instrumental and vocal techniques which this systematic entails.

To date the best analytical study of my work is Randall Shinn's "Ben Johnston's Fourth String Quartet" (*Perspectives of New Music* 15, no. 2 (Spring–Summer 1977): 145–73). This, with my article "Rational Structure in Music" (A.S.U.C. *Proceedings* 11/12: 102–18) gives a rather good introduction to compositional techniques I have used. A book by Heidi Von Gunden on my music was published this year (1986) by Scarecrow Press. It would certainly be redundant for me to anticipate its survey of my work up to 1985. In any case I believe that nothing can better state my case as a composer than my compositions.