

## Tonality, Fuzzy Voice Leading, and all that Jazz

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The concept of voice leading is pervasive in a wide variety of music theory: traditional and more recent approaches to tonality and chromaticism, and post-tonal repertoires. While there is a neat geometric model for *bijective* (one-to-one) voice leadings, *non-bijective* voice leadings are also critically important. Similarly, many basic musical concepts (such as tonality and harmony) require a generalization of pitch-class sets to *pitch-class vectors* (weightings of the 12 pitch-classes). David Lewin's *interval function* provides a way to talk about voice leading that allows for non-bijective voice leadings and applies to pitch-class vectors. Interval functions are intimately related to *Fourier spectra*. This talk argues for Fourier spectra and phase spaces as a tool for talking about voice leading on these grounds, and applies these to a discussion of standard practice jazz harmony.