In "Transformational Techniques" and *Generalized Musical Intervals and Transformations,* David Lewin develops a theoretical apparatus that is extraordinarily flexible and multifarious. This flexibility, which is evident in transformation theory's ability to grapple with multiple musical dimensions and musical styles, is certainly one reason for its generally popular reception in the music theory community. In addition, transformation theory invites extension; Lewin's work in *GMIT* is a direct predecessor or three important "current trends" in music theory: "Atonal voice leading," "Chord spaces," and "Neo-Riemannian" theory. Perhaps most extraordinarily, all of this flexibility and extendibility has a solid foundation in mathematical group theory and set theory. Reading *GMIT*, I am struck by the wonderfully musical analysis that arises out of such a high degree of formalism.

In this short response to the readings, I will engage one aspect of Lewin's work that I find interesting—its "pedagogability." Despite its mathematical basis, the transformation toolset seems intuitive and teachable. I will focus on two ideas, in particular. First, transformation theory appreciates relationships between individual pitches in a way that traditional set theory does not. I will argue that this simplification encourages creative analysis and listening. Second, the mathematical basis of transformation theory allows analysis to approach multiple musical dimensions in an roughly equivalent manner. Seeking correspondences between these dimensions through network isographies or transformational similarities is a "hands-on" activity that has pedagogical value.

Traditional set theory tended to marginalize individual pitches, often preferring to subsume them under a larger pitch-class set in order to draw similarity relationships out of the musical surface. For example, many listeners and students of music find it difficult to hear relationships between larger set-classes, like the series of (02469) pentachords indicated in Example 1a. Transformation theory, on the other hand, celebrates individual pitches and the transformational relationships between them, using these pitches as "tracers" that can aid our ability to hear larger and/or more complex relationships. For instance, in Lewin's analysis of this passage (shown in Example 1b), he asks us to direct our attention toward the transpositional relationship between the individual notes with stems up, pointing out their "T_5-and T_5 again" relationship (*MFT* 136–7). After we are able hear these transpositional relationships, it becomes much easier to process the same transpositional relationships between the dyads with down stems, whose particular networks relate to the main theme and its first two variations (Example 1c).

This progressive style of analysis, beginning with small, easily comprehended features of the musical surface and proceeding to more complicated relationships that obtain from these features, is a characteristic of transformation analysis that is pedagogically oriented. Successful teachers of almost any subject begin with graspable concepts and use this shared understanding to create more intricate understanding. In my opinion, our ability to "trace" simpler transformations through individual elements and then search for larger relationships takes advantage of this pedagogical strategy and leads to adventurous listening and analyzing.

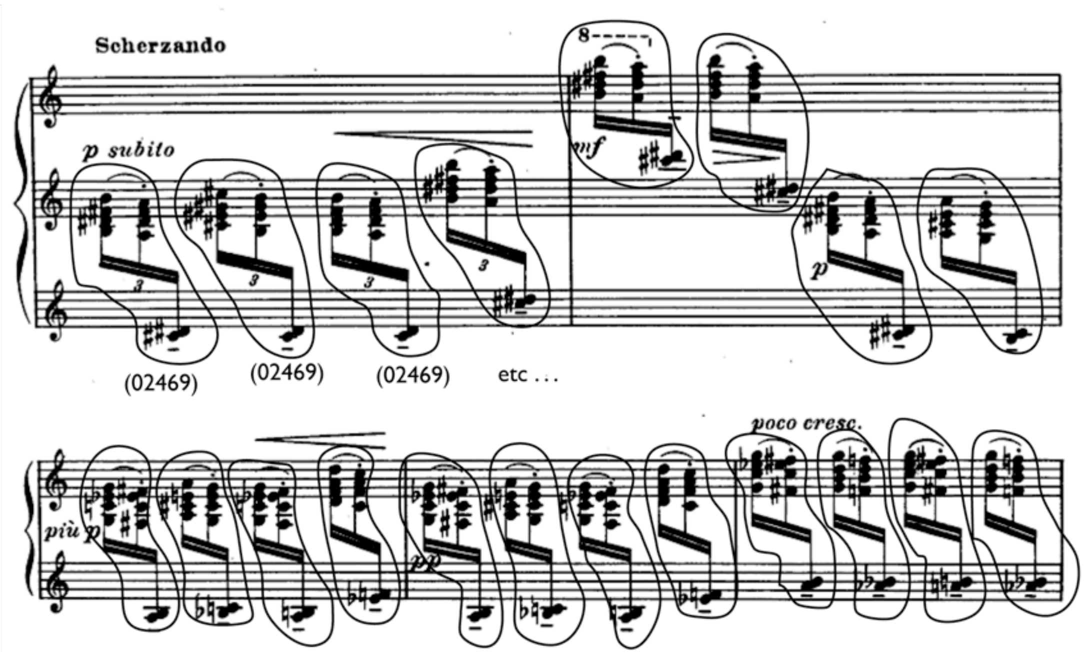
Unlike many other theories of music, transformation theory is able to use similar theoretical tools to analyze different musical dimensions, encouraging the interrelationship between pitch and rhythm that many listeners hear intuitively. This interrelationship is suggested in Lewin's analysis of Webern Op. 5, no. 2 ("Transformational Techniques") and further explored in his analysis of Mozart's G minor symphony in Chapter 10 of *GMIT.* Here, Lewin discusses transformational relationships among durational motives—relationships suggested by similar transformational relationships among pitch motives. In particular, Lewin shows that RICH transformations, which are a characteristic transformational feature of the melodic line, suggest similar relationships among durational motives (*GMIT* 220–2).

From a pedagogical perspective, this type of analysis is particularly appealing because it's "hands-on," encouraging the analyst or listener to correlate an observation in one dimension with features of another. Of course, "hands-on" learning has become quite popular as a pedagogical method, particularly as an aspect of "constructivist learning." Constructivist learning encourages students to actively construct or build new ideas or concepts based upon current and past knowledge. It is a highly personal endeavor that, I believe, appeals to the experience of listening to and analyzing music.

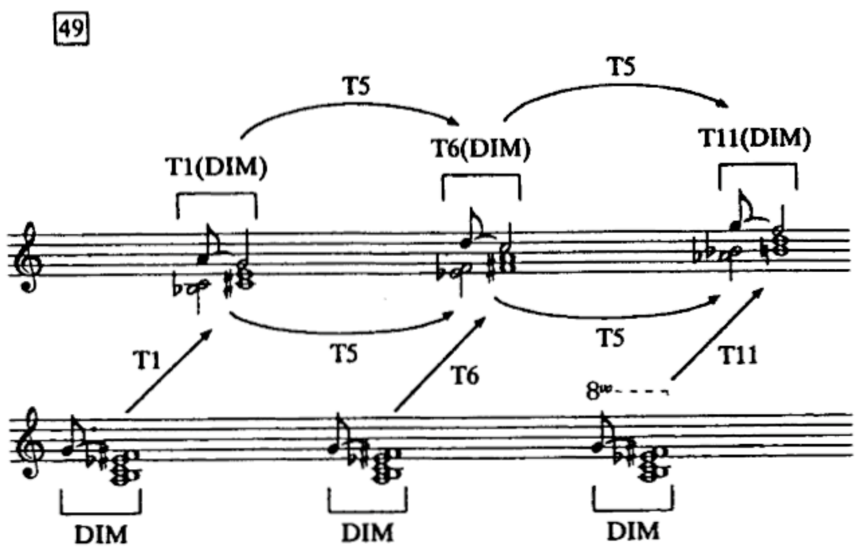
Reading these articles, I could not help but be reminded of V. Kofi Agawu's ideas about analysis as performance. (Agawu 2004) Like a good performance, Lewin's analyses always seem to contribute something very personal. After all, the idea of transformational theory is to act like a performer "inside" the music instead of looking at it from the position of an outside "observer." Again, I think this idea is pedagogically attractive. I always feel that students are disconnected from the analysis of twentieth-century music in particular (and tonal music to a certain extent, as well) because of it seems too objective. Because transformation theory encourages students to treat analysis interpretively, as a performer should treat a piece of music, I can't help but think that it will result in more individual, successful analyses and listening experiences.

Example 1

(a) Debussy, “Feux d’Artifice” mm. 47–51



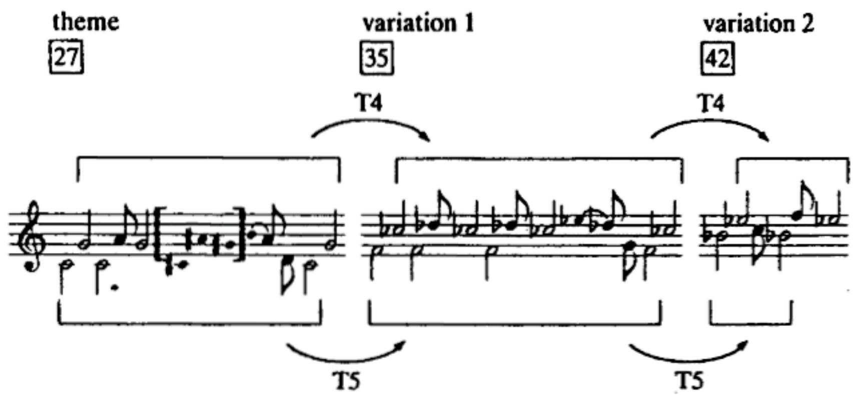
(b) Reproduction of Lewin’s Example 4.22



Example 4.22. Transformational profile of DIM-forms during mm. 49–52.

(c) Reproduction of Lewin’s Example 4.15

T5(WT) above (notes with stems up);
the major seconds with stems up rise by successive T4s
from the theme to variation 1 to variation 2



T5(PENT) below (notes with stems down);
the major seconds with stems down rise by successive T5s
from the theme to variation 1 to variation 2

Example 4.15. Pentatonic and whole-tone structures in the melodic line of mm. 27–43.