

Antonio Grande

Conservatorio of Music, Como (Italy)

antonio.grande@conservatoriocomo.it

## ABSTRACT

### Background

A special feature of Liszt's compositional technique is his interest in repeating the same structure with small transformations wherein one or more notes are shifted smoothly. As is known in literature, Liszt's Sonata in B min. is based on a thematic background receiving several inflections and reinterpretations which change its structure (Zeke 1986), until it takes on a multi-structure from by transmuting and contrasting with itself. This technique can be linked to the ancient concept of *metàbole*, which was known to Liszt: by using a *synēmmenōn* (conjunct system) a shift of one note - and so a minimal change - could be achieved within a tetrachord (*mesōn*). A new *mesōn* was thus obtained and through this a change in function of the notes (Barbera). This shifting of one, or more internal elements of a compact structure of notes is very similar to the sort of musical technique used by Liszt. A particular case that is known in the literature, arises when transformations consist of minimal inflections on a primitive structure based on internal symmetry. In scholarly community Richard Cohn has recently reactivated the concept of Weitzmann's region (WR), which is linked to the German theorist with the same name and which entails the "mis-tuning" of an augmented triad by a semitone for each note, which produces a coupling of major and minor triads. This device can also be relevant on a larger scale. For example, in *Lebenstraum* n. 3, Liszt provides a progression from WR including the tonic to WR including the dominant, with a singular mixture between first and second tonal-practice (Kinderman & Krebs 1996). In late period Liszt, this technique extended in a non-tonal direction with surprising results which are very close to compositional devices used in 20th-Century music, especially with respect to the style of late-Scriabin. My research points out this very question.

### Aims and repertoire studied

In *Mephisto Valzer* n. 3 we find an interesting example of a melody which is internally transformed by means of small inflections that are able to bring new perspectives and new meanings in each component. For example, moving from mm. 19, the primitive melodic fragment is repeated with the follow changes (Fig. 1):

A: 2 0 2 0 4 2 0 e 9 e 9 0 e 9 \ 2  
 B: 2 1 2 1 4 2 1 e 9 e 9 1 e 9 \ 3  
 C: 3 1 3 1 5 3 1 e 9 e 9 1 e 9 \

Fig. 1

In B, note 0 is changed to 1, in C note 2 is changed to 3 and note 4 to 5, and so on. In turn, *Am Grabe Richard Wagners* (1983), which can be analysed with the tools of set-theory, is essentially based on a restricted number of set classes, in particular: 4-19, 4-20, 4-22, 4-26. These sets are all closely linked through a minimal inflection (1 or 2 semitones) and every set can be connected to a symmetrical prototype, set class 4-24.

The piece *Unstern: Sinistre, Disastro* (1881) can be also turned into seven fragments of notes where minimal semitone shifts transform a subset of a whole-tone scale. In Fig. 2 all the fragments are normalized and compared to whole-tone scale (WT<sub>0</sub>).

	C	D	E	F#	G#	A#
1	c#	D			G#	a
2	c#	D	E	F#	q	
3	c#	D	e#	F#		
4	C		E	F#		A#
5	C	D	E	F#	G#	
6	c#	D	f		G#	a
7		d#	E	F#	G#	A#

Fig. 2

Finally, in the case of *R. W. Venezia* (1883), an interesting progression between set-classes 6-35 and 6-34 can be observed at the end of first Section, while the second Section starts with another material, belonging to set-class 7-31.

This last point actually lets us capture an ideal connection with some compositional techniques used by Scriabin who, as is known, was very interested in organizing paths of minimal inflections around certain symmetrical materials, such as the whole-tone collection or the octatonic one. These topics are managed by some approaches of recent music theory in which, rather than considering crisp sets, thought of as binary terms, a dynamic theory is adopted, wherein sets are seen using fuzzy similarity relations (Quinn 2001).

Regarding Scriabin's music, the theoretical framework introduced by J. Straus shows itself to be a useful tool for analysis, pointing out Uniformity or Balance as an index of proximity degrees between collections of notes. In this regard, many interesting examples are found as studied by Baker, Callender, Kallis, and others. It's possible to start from some exemplary pc sets, such as 6-35 or 8-28 via an intermediate one, i.e. 7-34 (see Callender 1998). This is the typical progression: 6-35, 7-34, 8-28.

For example, *Prelude op. 69 n. 1*, a very well-analysed piece due to its compositional properties, points out the switching from pc-

sets 6-35 and 6-34, or among their sub-sets. There is disagreement among musical theorists about how to consider generative materials. Vasilis Kallis, for example, places the super-set 9-10 at the heart of his theory (which contains the mystical chord, acoustic scale and the Octatonic collection), while giving less structural importance to the whole-tone scale (Kallis, 2008). To the contrary, other scholars consider the major role of the whole-tone collection which provides related pc-sets if transformed by minimal inflections. Other interesting transformations could result by managing collections linked to different symmetrical spaces. This concerns, for instance, pc-sets 6-34 (close to 6-35) and 6-Z49 (sub-set of the octatonic scale): they differ from each other only by a semitone. Several examples by Scriabin will be analysed in order to address these matters.

It is also not without significance that symbolical and philosophical aspects are present in Scriabin's musical works: the mystical chord, employed as a connection between two symmetrical objects (6-35 and 8-28), becomes an essential mediator (a sort of mystical unity linking two other collections) and it is perhaps too perfect to be primitive unities, thereby assuming a role as generative element. It is as if the Universe does not like absolute perfection, but rather pursues even minimal contamination.

### Methods

The conventional approaches of neo-riemannian theory (like Weitzmann's or Boretz's Regions) have been useful tools for my research. Its development, regarding collections with cardinalities greater than 4, were useful too (here I am referring to the classical studies performed by Callender). Moreover, I found the theory of transformational voice leading by J. Straus (2003), very valuable and also the works of several Scriabin scholars, such as Baker (1986), Reise (1983) or Kallis (2008).

### Implications

The focus of my research is to see the connection between some compositional techniques found in Liszt with the late works of Scriabin and observing elements of continuity. In particular, Liszt (in his late works) often used minimal transformations over certain pseudo-modal collections or symmetrical ones. In this respect, some of his pieces display a technique, which can be compared with that of Liszt, to revitalize structurally inert collections, such as symmetrical ones, by means of minor and partial deformations. This makes a high degree of integration between maximal invariance and minimal change possible. Scriabin energetically pursued this goal, but the technique is also reminiscent of a non secondary line of study in the most refined lisztian research.

### Keywords

Weitzmann, *metabolé*, acoustical scale, octatonic scale, Uniformity, Balance, fuzzy-set.

## REFERENCES

BAKER JAMES M. (1986), *The music of Alexander Scriabin*, Yale University Press, New Haven

- BARBERA ANDRÉ, *Metabolé*, New Grove Dictionary  
 CALLENDER CLIFTON (1998), "Voice-leading parsimony in the music of A. Scriabin", *Journal of Music Theory*, 42/2, pp. 219-233.  
 COHN RICHARD (2000), "Weitzmann's regions, my cycles and Douthett's dancing cubes", *Music Theory Spectrum*, 22/1, pp. 89-103.  
 KALLIS VASILIS (2008), Principles of Pitch Organization in Scriabin's Early  
 KINDERMANN W. & KREBS H. (1996), *The Second Practice of Nineteenth-Century Tonality*, University of Nebraska Press  
 QUINN IANN (2001), "Listening to similarity relations", *Perspectives of New Music*, 39/2, pp. 108-158.  
 REISE, JAY (1983), "Late Scriabin: Some Principles Behind the Style." *Nineteenth-Century Music*, 6-3, pp. 220-31  
 STRAUS JOSEPH (2003), "Uniformity, balance and smoothness in atonal voice leading", *Music Theory Spectrum*, 25/2, pp. 305-352.  
 ZEKE LAJOS (1986), "«Successive polymodality» or different juxtaposed modes based on the same final", *Studia Musicologica Academiae Scientiarum Hungaricae*, 28, pp. 173-185.