Research Report

The Epistemology of 20th-Century Music Theories

The initial motivation for this study, which is funded by an Australian Research Council Fellowship, was to examine the widely differing assumptions about knowledge that are evident in current theories of tonal music. It has now expanded, with the aim of providing an original contribution to the theory of musical interpretation.

The epistemological differences between tonal theories reflect their absorption of divergent interdisciplinary frameworks. One concern of the project is to examine the consequences of transferring ideas between these frameworks. Heinrich Schenker absorbed ideas from German idealist philosophy, including the ideas of Goethe, Kant and Hegel. When Fred Lerdahl and the linguist Ray Jackendoff adopt his concept of tonal prolongation to their *Generative Theory of Tonal Music*, they do so on the assumption that its practical application is not significantly affected by Schenker's own descriptive language or metaphysics. The generative theory (including prolongational rules influenced by Schenker) has been incorporated by Jackendoff in an account of the mind that includes music as a 'cognitive module' along side visual and language- processing modules.[1] This account attempts to extend the view of the mind put forward by Jerry Fodor in *The Modularity of Mind*, and it necessarily accepts the adapted prolongational rules as having psychological reality. Lerdahl and Jackendoff's theory has also been used by Diana Raffman as the basis for her philosophical account of the ineffable in music.[2] She does not make reference to Schenker, whose sensitivity to the ineffable is quite evident in his descriptive language.

Schenker's metaphysics is frequently rejected by Anglo-American academics, and transformed into alternative metaphors. In the process its aesthetic connotations are lost and the theory is endangered by parodies that make of it a mechanistic reductive system. An examination of Schenker's philosophical sources and modes of expression can assist the modern student in appreciating the aesthetic relevance of the theory by clarifying the kinds of musical experience that Schenker intended to enhance. His more abstract representations can seem very distant from the experience of listening. The Ursatz, for example, is a level of generalisation that seems to defy experience, but it does gain more persuasiveness if seen as an intense distillation of aspects of musical experience that are well known in more immediately perceptible structures. Schenker's account of the Ursatz (the most fundamental level of a composition's structure), shows marked dependencies on Kant's doctrine of the self as constituted by the synthesis in memory of causally connected events.[3] Schenker, like Kant, has an insistent commitment to causal connection. He is dogmatic in his assertions of the Ursatz as an expression of what he feels are the necessities embedded in the 'chord of nature' (the triad) as an ultimate musical cause.

This conception of 'causality' in harmonic connection becomes more palatable to the modern reader if translated as an abstraction from Schenker's long experience of analysing tonal works. The Ursatz encapsulates an experience of musical necessity by representing (in its upper part) the tension of a passing note and (in its bass) the unstable dominant chord. It is not necessary to endorse the idea of causality as belonging in any literal sense to these relationships, or to entertain a metaphysical stance that finds the 'origin' of a composition in such a minimal statement as the Ursatz, in order to recognise the experience of tonal connection that he describes. Schenker emphasises an experience of certain tonal compositions as possessing harmonic tensions, which, in their final resolution, lead to a feeling of large-scale closure.

A post-modern reader might be interested in discovering aspects of compositions that do not conform to Schenker's organic model, but scepticism about high-level unity does not discount the experience of varying degrees of felt causal connection in the experience of tonal harmony. Recognising 'causality' in tonal connection is quite a distinct level of description from that which labels harmonies. The apparent need for such non-literal attributions has been assessed by British analytical philosopher, Roger Scruton, as an indication of music's inherent metaphoricity.[4] Coming from quite a different disciplinary stance, the Canadian semiotician David Lidov[5] resists being drawn into the

philosophy of language when dealing with such phenomena as musical causality. He recognises musical content as having a 'virtual' level as well as a more strictly theoretical one, and locates much of Schenker's discussion at that virtual level.

The study of influences on Schenker's belief system provides one point of access to his thought about a phenomenon such as virtual causality in tonal music, but it is just as important to consider the practical experience of musical analysis, in which degrees of felt causal connection are discriminated. Learning Schenkerian analysis can be an inductive process, in which the recognition of short 'causal' spans develops prior to their formal conceptualisation, and without the necessity of high-level abstraction. Knowledge is developed as a habit of listening and performance. It is as much an aural and practical skill as it is a set of beliefs. Although Schenker presents his principal text, *Der freie Satz*, as a deductive system, proceeding from the Ursatz, practical experience suggests quite different priorities and demonstrates that analytical skill cannot be acquired in a deductive fashion.

As part of this project, I will develop a philosophical approach to Schenker's theory that is both semiotic (recognising that he deals with virtual categories) and pragmatic. An emphasis on practice accords with Schenker's own aim in helping students to develop their long-term hearing. Nicholas Cook has pointed out the ethical motivation for this pedagogic aim, and this connection gives some insight into the theory's aesthetic content.[6] Schenkerian analysis is a specialised practical discipline for developing aesthetic awareness. Graphic representations are one of its tools, but not its principal goal.

Schenker's aesthetic position is most closely aligned with that espoused by Eduard Hanslick in its emphasis on purely formal movement. If his analytical practice is designed to enhance aesthetic experience, it is a matter of great interest how it can be related to accounts of musical signification or expressive content. Lidov emphasises that a consideration of tonal hierarchy alone cannot account for important discriminations of content that depend on a mixture of rhythmic, textural and tonal elements.[7] He argues further that interpretations of feeling in music must take account of gestural elements that are closely related to bodily movement.[8] This observation is quite consistent with 18th – century interpretive practice in its reference to gesture and rhetoric. Lidov's belief is that explanations of structural and emotive elements in music occupy two separate realms. A question of interest for this project concerns the point of interface between them. To what extent, and at what level, can voice-leading be interpreted as 'gestural' or as suggesting emotional 'content'? This question is expressed by semioticians as a question of the relationship between 'syntax' and 'semantics'.[9] An absolutist position may deny categorically that music is capable of having semantic content, on the grounds that it lacks reference to anything outside of itself, but the recently initiated international project in musical signification addresses precisely this question, and some of my initial work is being presented for this group.[10]

One rewarding mode of approach to the relationship of structure and content has been to examine Schenker's abstract notion of the musical 'subject'. Kevin Korsyn finds a close parallel between Schenker's Ursatz and the 'subject' of Kant's transcendental apperception.[11] It is a purely formal entity, postulated as the agent for the felt causal processes of a work. Musical passages are, however, capable of creating the illusion of an expressive subject that is highly differentiated in character, and no mere formal entity. A case in point is the violin introduction to the aria 'Erbarme Dich' in Bach's *St. Matthew's Passion*, where a strong illusion is created of a subject expressing grief. This illusion is supported by the narrative context, which foreshadows an expression of Peter's grief in having denied his association with Jesus. An analysis of voice-leading is capable of giving some insight into how that emotive content is suggested, but reference to specific conventional gestures and rhythmic characteristics is also necessary to differentiate it fully. This piece exemplifies a style which maintains a close relationship between voice-leading structures and the expressive indications of gesture. Analyses of violin pieces in a variety of styles from the eighteenth and nineteenth centuries will be used in order to explore this relationship further.

The concept of the 'subject' can be applied both to the analyst as a person, an interpreting subject, and to an illusion created by the music itself, as indicated above. It is a concept that opens up further possibilities for gaining interdisciplinary perspectives on musical explanation. A recent Kant commentator suggests that Kant's transcendental 'subject' addresses a need that is not recognised in current cognitive psychology, a need to focus on the integrating capacity of conscious inter-

preting minds, rather than to maintain an exclusive preoccupation with 'computational' processes that can be quantified.[12] For music, the related distinction is between perceptual input systems that are inaccessible to introspection, and intepretations that occur at a higher, conscious level. This distinction may be used to identify the point of demarcation between 'sub-semiotic' and 'semiotic' levels of musical understanding.[13] Interpretive decisions, whether made by an analyst or a performer of music, must necessarily occur at the latter level. Information provided by cognitive theories may help to explain why certain note or phrase groupings (for example) seem to be 'intuitive' but it cannot directly inform the act of interpretation, which takes into account a wide range of non-quantifiable, culturally determined features.

This project may include some reference to the post-structuralist ideas of Jacques Derrida, particularly as they relate to the interpretation of signs and the application of Kant's ideas. Recent work in literary theory, feminist criticism and hermeneutics also addresses the concept of the 'subject' from a variety of perspectives and will be brought into account. The main goal is to provide an interpretive theory that integrates structuralist approaches with an account of expressive signification. The approach is philosophical but it also aims to be pragmatic and historically sensitive.

Notes

[1] Ray Jackendoff, *Consciousness and the Computational Mind* (Cambridge, Mass.: MIT Press, 1987).

[2] See Naomi Cumming, 'Music Analysis and the Perceiver: a Perspective from Functionalist Philosophy', *Current Musicology*, 54 (1993), pp. 38-53.

[3] Diana Raffman, *Language, Music, AND Mind* (Cambridge, Mass.: MIT Press, 1993).

[4] See Kevin Korsyn, 'Schenker and Kantian Epistemology', *Theoria* 3 (1988), pp. 1-58.

[5] Roger Scruton, *Art and Imagination: A Study in thePhilosophy of Mind* (London: Routledge and Kegan Paul, 1982).
Roger Scruton, *The Aesthetic Understanding* (London: Methuen,1983).
See also Cumming,'Music Analysis', pp. 38-53.

[6] David Lidov, 'Musical Structure and Musical Significance', Part I. Working paper (Victoria University, Toronto; the Toronto Semiotic Circle: Monographs, Working Papers and Prepublications, 1980).

[7] Nicholas Cook, 'Schenker's Theory of Music as Ethics', *The Journal of Musicology* 7.4 (1989), pp. 415-439

[8] David Lidov, 'Our Time with the Druids: What and How we can Recuperate from our Obsession with Segmental Hierarchies and other "Tree Structures." ' (in press).

[9] Lidov, 'Musical Structure'. David Lidov, 'Mind and body in music', *Semiotica* 66, 1.3 (1987), pp. 69-97.

[10] For an introduction see Raymond Monelle, *Linguistics and Semiotics in Music* (Chur, Switzerland: Harwood, 1992).

[12] Korsyn, 'Schenker', pp. 1-58.

[13] Andrew Brook, *Kant and the Mind* (Cambridge: Cambridge University Press, 1994).

[14] David Lidov, 'A Sign Theory of Consciousness', Semiotic Society of America (Chicago, October 1992). *Semiotics 1992.*

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