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Hans Keller, Nikos Skalkottas and the notion of symphonic genius

Much of Skalkottas's symphonic genius remains to be discovered: his symphonic music may have to wait as long for full recognition as did Schubert's, whose character and fate he seems to share in quite a few respects, productivity and lack of opportunity (or concern?) to hear his own music included.¹

This insightful remark, albeit biased by the perennial romanticized mythology surrounding the Greek composer Nikos Skalkottas (1904-1949), summarises Hans Keller's admiration for perhaps one of the twentieth-century's most ignored and misunderstood musical figures. Norman Lebrecht's entry in *The Companion to 20th Century Music* encapsulates Skalkottas's image as 'a pupil of Schoenberg, who returned to Athens with a gospel no-one wanted to hear, played violin for a pittance and died at 45'.² Yet in the 1920s Skalkottas was a promising young violinist and composer in Berlin, and a student of Schoenberg between 1927 and 1932.³ It was only after his return to Greece in 1933 that he became an anonymous and obscure figure, who lost touch with Schoenberg and his circle and worked in complete isolation until his death in 1949.

Although Skalkottas's name may be recalled through his association with Schoenberg, his music is neither widely known nor fully understood. Exceptions of course exist to this general rule, and Hans Keller's interest in Skalkottas is just such an exception.⁴ As has been well documented elsewhere,⁵ Keller expressed a passionate support for composers whose work he saw as undervalued or insufficiently understood. The music repertory he focused upon was that of the music he cared about, with writings on music ranging from Bach to the Viennese classics, and from the Romantics to the music of the twentieth century. With respect to this latter period, and the plurality of styles and compositional methods that characterise it, Keller identified certain composers whom he

¹ Hans Keller, 'Schoenberg: The Future of Symphonic Thought', in Christopher Wintle, ed., *Hans Keller: Essays on Music* (Cambridge: Cambridge University Press, 1994), p.183. Henceforth, Keller in *Hans Keller*.

² Norman Lebrecht, *The Companion to 20th Century Music* (London: Simon & Schuster Ltd, 1992), p.327.

³ Although Skalkottas was registered at the Prussian Academy of Fine Arts in Berlin for three years, from 1 November 1927 to 30 September 1930, he attended Schoenberg's masterclasses until the summer semester of 1932 (documents provided by the Arnold Schoenberg Center, Vienna, and the Archive of the Academy of Fine Arts, Berlin, *Frequenznachweise*, p.128).

⁴ The Austrian-born Hans Keller (1919-1985), after his arrival in England in 1938 as a young refugee from occupied Austria, became one of the most celebrated but eccentric figures of the British musical scene. His initial musical activities included playing the violin in chamber ensembles and orchestras, although he soon produced writings on psychology, various musical subjects, as well as venturing into broadcasting and producing for the BBC, gaining worldwide reputation as a musician, writer, lecturer analyst and critic; see Wintle, ed., *Hans Keller*, pp.xiii-xx.

⁵ *Ibid.*, p.xix.

believed particularly retained continuity with the classical tradition and who ‘kept their musicality uncorrupted, making sense of sound and nothing else’⁶ – pre-eminently Schoenberg, Stravinsky, Shostakovich, Britten and Nikos Skalkottas. Keller was in a minority in his appreciation of Skalkottas; yet, in his writings on music, he includes him among ‘our century’s masters of symphonic thought’,⁷ considering him to be the only ‘symphonic genius after Schoenberg’.⁸ It is surprising that Keller should hold Skalkottas in such high regard, while Schoenberg’s more famous students, Berg and Webern, do not make his list of symphonic geniuses. Keller regarded Webern as ‘the ultimate expressionist’,⁹ who was ‘never a symphonist [because] not only did he renounce extended structure, but he was a stater and varier rather than a contraster and developer’;¹⁰ overall, Keller describes him as ‘probably the greatest small master ever’.¹¹ Berg, on the other hand, although faring better in Keller’s list of masters, was included amongst a category of composers Keller describes as ‘the *dodecaphoneys*’, for ‘he did not really write a single genuine twelve-note piece in his life’.¹² Berg also fell short of Schoenberg’s intense symphonism, notwithstanding that ‘he tried his best, which at times was imposing though not all *that* twelve-tonal or indeed atonal’.¹³

Keller’s views, while widely disseminated, are by no means widely accepted, and I shall engage with some of the critique of his work below. Nevertheless, his identification of the relatively unknown Skalkottas as a ‘symphonic genius’ is intriguing, and begs the question as to what he heard in Skalkottas’s music to describe it in this way. What, in Keller’s view, qualify a composer as a symphonic genius and master of symphonic thought, and how might a better understanding of Skalkottas’s music further illuminate our perception of Keller’s work? In this study I shall first give an overview of Keller’s use of the terms genius, mastery and symphonic thought, as presented in his various writings. Subsequently I shall examine certain aspects of Skalkottas’s twelve-note works and the techniques he applies to construct them, which exhibit those characteristics of symphonic thought defined by Keller and which might be used to substantiate the latter’s unexplained assertions.

⁶ Hans Keller and Milein Cosman, *Stravinsky Seen and Heard* (London: Toccata Press, 1982), p.8.

⁷ Hans Keller, ‘Natural Master’, in *Hans Keller*, p.77.

⁸ ‘Schoenberg: The Future of Symphonic Thought’, *Ibid.*, p.191.

⁹ ‘Stravinsky v. Stravinsky’, *Ibid.*, p.104.

¹⁰ ‘Schoenberg: The Future of Symphonic Thought’, *Ibid.*, p.186.

¹¹ ‘Principles of Composition’, *Ibid.*, p.222.

¹² Keller, *Criticism*, ed. Julian Hogg (London: Faber & Faber, 1987), p.75.

¹³ Keller, ‘Schoenberg: The Future of Symphonic Thought’, p.183.

Hans Keller and the notion of symphonic genius

Although the word genius is found throughout Keller's writings and is generally associated with his chosen masters, nowhere does he explicitly define or even problematise the term.¹⁴ Yet we can infer from his use of the word that he subscribed to the Kantian intellectual tradition which valued the concepts of originality and uniqueness in the arts, and music in particular, and emphasizes the importance of the opposition between craft, which is largely dictated by rules, and creation, which emanates from the artist's inspiration.¹⁵ What is important for Keller in determining the status of a composer is the appearance of certain structural elements in the 'work', a term which in its nineteenth-century manifestation 'represents the concrete realisation of an ideal in the mind of an individual'.¹⁶ Keller associated genius with creativity, uniqueness, structural and textural originality, innovation – which he believed was inseparable from the phenomenon of genius – and risk.¹⁷ By contrast, mastery relies on consistency and is characterized by 'the exclusion of those risks on which genius thrives',¹⁸ which for Keller produces 'prototypical boredom – total predictability [because] expectations are being met'.¹⁹ Thus for Keller genius is expressed through innovation and risk taking, while mastery arises from the competent execution of established norms.

With reference to musical composition, this tension between mastery and genius is played out in the composer's manipulation of form and style. In his so-called theory of music, Keller considers music two-dimensionally, to be analyzed in terms of 'background' and 'foreground'.²⁰ In his article 'Schoenberg's Return to Tonality' he adopts these two terms from Schenker's analytical

¹⁴ For a comprehensive examination of musical genius see, Edward, E. Lowinsky, 'Musical Genius', in Philip P. Wiener, ed., *The Dictionary of the History of Ideas*, vol.2, (New York: Scribner, 1973-74), pp.312-326; and Edward, E. Lowinsky, 'Musical Genius – Evolution and Origins of a Concept', *Musical Quarterly*, 50/3 (1964), pp.321-40, and 50/4 (1964), pp.476-95.

¹⁵ In his *Kritik der Urtheilskraft* (1790), Kant called genius 'the talent (natural gift) which gives the rules to art' (p.176); he believed that 'originality must be its first attribute', and he warned that 'genius must be opposed completely to the spirit of imitation' (p.177); in *Immanuel Kant's Sämtliche Werke*, ed. Karl Rosenkranz and Friedr. Wilhelm Schubert, vol.IV (Leipzig, 1838), cited in Lowinsky, 'Musical Genius – Evolution and Origins of a Concept' (Jul. 1964), p.328.

¹⁶ Carl Dahlhaus, *Foundations of Music History*, trans. J.B. Robinson (Cambridge: Cambridge University Press, 1989), p.132. To borrow Dahlhaus's phraseology, we can infer that Keller viewed music in the aesthetic Aristotelian sense as 'poiesis not praxis, i.e. as the creation of forms rather than as actions within a social environment' (*Ibid.*).

¹⁷ Keller and Cosman, *Stravinsky Seen and Heard*, p.56 and p.41.

¹⁸ Keller, 'Sport and Art: the Concept of Mastery', in *Hans Keller*, p.27. In this article Keller was more concerned with the act of performance rather than the creation of a piece when he expressed his thoughts on musical mastery.

¹⁹ Keller, 'Schoenberg's Return to Tonality', *Journal of the Arnold Schoenberg Institute*, 5/1 (1981), pp.2-21, p.4.

²⁰ Wintle, 'The Quest for Keller', *The Musical Times*, 135 (August, 1994), p.489. See also, A.M Garnham, *Hans Keller and the BBC: The Musical Conscience of British Broadcasting, 1959-79* (Aldershot: Ashgate, 2003, pp.29-61, particularly pp.60-61), for a concise summary of the evolution of Keller's theory of music, and the shift in emphasis from the narrow demonstration of thematic unity towards exploring the compositional principle of what he called 'the simultaneous suppression and definite implication of the self-evident' (Keller, 'K.503: The Unity of Contrasting Themes and Movements', *The Music Review*, 17/1 (1956), pp.48-58, p.51; 17/2 (1956), pp.120-29.

vocabulary but without their analytical connotations, and uses them to outline his theoretical approach to style and form in terms of dichotomies, such as style *v.* ideas, form *v.* structure, tradition *v.* innovation, unity *v.* diversity. Thus, style (used in the sense of ‘method of composition’), form (that which different pieces have in common, for example, rondo form, sonata form, etc.) and tradition are all background; that which the composer has inherited or has acquired through engagement with or immersion in the tradition. Ideas and structure (which is true of a single piece of music only), that result from innovation, are foreground.²¹ Consequently, for Keller the background ensures unity, while the foreground provides diversity.²² In his later writings, within the context of his theory, Keller considers background ‘the sum total of well-defined expectations which the composer creates in the course of a structure, but most of which are never met: they are thoroughly suppressed and implied’; whereas foreground is ‘the sum total’ of the meaningful contradictions ‘of what we have been led to expect’.²³ From this, therefore, Keller asserts that ‘the well-defined tension between foreground and background *is* musical meaning’.²⁴

The notion of stylistic impurity lies at the heart of Keller’s beliefs. He argues that the great composer ‘does not only compose in certain forms and styles, but equally against them’.²⁵ Stylistic impurities are always found in the music of the greatest composers. Although Keller does not explicitly associate stylistic purity with mastery and stylistic impurity with genius, it is tempting to infer that this is what he means when he argues that, ‘absolute purity of style seems possible only if you are prepared to say nothing whatsoever, if your work is about your method rather than about what you have to say’;²⁶ in other words, absolute purity is only possible in work which relies on consistency and produces total predictability, where there is thus no tension between foreground and background, between innovation and tradition. In contrast, ‘geniuses seem constitutionally incapable of clean stylistic living [...] the height of maturity is invariably reached through stylistic corruption’.²⁷ And what unifies the mixture of divergent styles (compositional methods) in a work is the character of invention, that is, the composer’s personal aesthetic style.²⁸

For Keller perhaps the most significant dimension of genius is to be a master of symphonic thought. One essential characteristic of symphonic thought, orchestral or chamber, tonal or dodecaphonic, is ‘the large-scale integration of contrasts’.²⁹ The three pillars that allow music to

²¹ Keller, ‘Schoenberg’s Return to Tonality’, p.4, p.11, p.19.

²² Keller, ‘Functional Analysis’, *Musical Opinion*, 81 (December 1958), p.157.

²³ Keller, *1975 (1984 minus 9)* (London: Dobson, 1977), reissued as *Music, Closed Societies and Football* (London: Toccata Press, 1986), pp.136-37.

²⁴ Keller, ‘Schoenberg’s Return to Tonality’, p.4.

²⁵ *Ibid.*, p.19.

²⁶ Keller, ‘Principles of Composition’, p.218.

²⁷ Keller, ‘Schoenberg’s Return to Tonality’, p.20.

²⁸ Keller, ‘Purity and Consistency of Style’ in *Hans Keller*, p.216.

²⁹ Keller, ‘The State of the Symphony: not only Maxwell Davies’s’ in *Hans Keller*, p.108.

stand as large-scale thought are: i) symphonic thematicism (which is the wide range integration of themes and of contrasts); ii) symphonic harmony and *the* symphonic test – development; and iii) symphonic breath, which is the development of a work’s different movements into a consistent and consistently contrasting whole.³⁰ This predominantly organicist viewpoint is almost obsessively reiterated throughout his writings.³¹ By the term ‘symphonic mastery’, which is more narrow than the previous definition of mastery (that which relies on consistency, producing ‘prototypical boredom’) and is inextricably connected with the process of musical composition, Keller means ‘the creation and integration of essential symphonic contrasts [...] contrast between stability and lability [...] together with [the] unification [of such contrasts]’.³² In this sense, and in contradiction to the earlier definition of mastery in general, symphonic mastery does indeed embody tension, thus preventing predictability. In sonata form particularly, it is not contrast between themes (first and second subjects) and keys, but ‘*contrast between statements* (whether monothematic or polythematic) *and developments* (whether they concern themselves with the statements or not)’;³³ statement in this sense is used to mean ‘stability, while development (continual modulation in tonal music) is a labile structure which is not confined to the official development section’.³⁴ In tonal music symphonic mastery is the contrast between harmonic stability and harmonic lability (modulation), while in atonal symphonism, such as in Schoenberg’s Third and Fourth String Quartets for example, the differentiation between statement and development is achieved by a variety of means, which include not only harmony but also melodic and textural juxtapositions, and contrasts in rhythmic articulation. However, this is hardly a new or ground-breaking theoretical position. Other writers on music, including Schoenberg himself, consider these principles to be the cornerstones of organic forms. Similarly, Dahlhaus, in his discussion of ‘functional form’, which both derives from and embodies Schoenberg’s formal principles, suggests that a precondition for establishing large-scale form is formal differentiation, which is ‘the prerequisite of integration’.³⁵

³⁰ Keller discusses these issues with reference to Schumann’s extended symphonic thought in his symphonies; see ‘Schumann was a Symphonist’, in *Hans Keller*, p. 55.

³¹ Keller, in *Hans Keller*: ‘Schumann was a Symphonist’, pp.54-56; ‘Natural Master [On the Creative Personality of Franz Schmidt]’, pp.77-79; ‘The State of the Symphony: not only Maxwell Davies’s’, pp.106-110; ‘Schoenberg: The Future of Symphonic Thought’, pp.179-91; also, in ‘Frankel and the Symphony’, *The Musical Times*, 111/1524 (Febr. 1970), pp.144-147, p.146. This led him to develop in the 1950s and 1960s his famous ‘Functional Analysis’, which was to be experienced in purely musical terms without the support of any commentary, through the composition and performance of musical demonstrations, with which he endeavoured to reveal ‘the unity of contrasting themes and movements in a masterpiece’ which are ‘but different aspects of a single, demonstrable basic idea’; ‘The Musical Analysis of Music [On Functional Analysis]’, in *Hans Keller*, p.126.

³² Keller, ‘Natural Master’, *Ibid.*, p.77.

³³ Keller, ‘The State of the Symphony’, p.109.

³⁴ Keller, ‘Britten’s Last Masterpiece’, in *Hans Keller*, p.111.

³⁵ Carl Dahlhaus, *Analysis and Value Judgment*, trans. Siegmund Levarie (New York: Pendragon Press 1983), pp.44-45.

Taking Schoenberg's String Quartets as examples of symphonic thought in atonal and twelve-note music, Keller summarizes what he describes as guidelines for the 'inspired composer'.³⁶ These include:

1) 'The promotion of rondo and sonata rondo to complex symphonic unificatory status', which is of 'outstanding importance for the future of symphonism'. This is exemplified in all four of Schoenberg's String Quartets, particular his First String Quartet, which Keller believes is 'a macrocosmic sonata rondo reflecting, mirroring, the microcosmic rondo that is the finale section of the continuous movement'.³⁷

2) 'The symphonic implications emerging from the use of two home keys, not by way of progressive tonality³⁸ but within a concentric tonal framework'. Keller exemplifies this point through the discussion of Schoenberg's Second String Quartet, in which the 'home key' is split into two, F# minor and A minor.

3) 'By starting before the beginning and/or finishing after the end, the range of the extended integration of contrasts which *is* symphonic thought can be widened against all atonal odds'. Keller observes that in Schoenberg's Second String Quartet, in particular, both the beginning before the beginning and the end after the end (that is, the extended Coda with its return to F# minor) extend the range of symphonic tension and relaxation, while a rondo background provides the necessary unity of contrasts in an atonal harmonic context.

4) 'The possibilities of contrasts between key and atonality [which] offer a new or novel symphonic territory, barely charted so far'. Keller explores this issue elsewhere, and with particular reference to passages from Schoenberg's String Trio, and the Third and Fourth String Quartets.³⁹

5) 'The possibilities of contrast between dodecaphonic homophony and conventional (contrapuntal) dodecaphony [which] are a powerful help towards the survival of the contrast between statement and development, which itself is a *conditio sine qua non* of symphonic thought'; that is, the use of contrasting textures – homophony versus polyphony – to emphasize the contrast between statement and development.

³⁶ These guidelines first appear in Keller, 'The Future of Symphonic Thought', *Perspectives of New Music*, 13/1 (Fall-Winter, 1974), pp.3-20, p.20. Reprinted in ed. Wintle, *Hans Keller*, 179-91. (The following discussion has been taken from this essay).

³⁷ *Ibid.*, p.183.

³⁸ As for example in the case of the *Ode to Napoleon*, where the tonality 'progresses from nowhere to E flat major'; see Keller's discussion about progressive tonality in Schoenberg's *Ode to Napoleon* in 'Schoenberg's Return to Tonality', p.8.

³⁹ In 'Schoenberg's Return to Tonality', Keller suggests that, harmonically, Schoenberg's dodecaphony 'is composed against the background – accent on "against" – of well-defined, well-implied, but violently suppressed [...] tonal expectations, whose replacement – in principle, *à la* interrupted cadence – makes instinctive sense, and this is why and how his twelve-tone harmony "works", at both the creative end and, equally spontaneously, at the reception end' (*Ibid.*, p.7). Examining the six-bar 'A major' passage (bars 51-56) in the String Trio, Keller asserts his theory, and justifies the above criterion for the possibilities of contrasts between key and atonality (*Ibid.*, p.19).

However, Keller's only partially worked-out synthesis model for post-tonal music is often seen as problematic, while his tonal/serial, opposition/integration structuralism has been both criticized and replaced by new modes of analytical thought. In contemporary musicological discourse opinions about the status of Keller's aesthetic and analytical stance are divided, and the debate about his equivocal position on Schenker's voice-leading concepts (that is, with the composing-out of fundamental harmonic-contrapuntal structures) is well-known. Milton Babbitt, for example, observed that Keller's 'coupling of R ti and Schenker in his writings strengthened the sense of one sidedness, for – at most – the Schenker he appeared to know and value was the Schenker of “diminutions” at foreground level or of context-free communalities’.⁴⁰ Arnold Whittall has suggested that Keller's Haydn/Mozart-derived obsession with the unity of contrasting themes, coupled with his partial understanding of Schenker's analytical method, left him disinclined to accept that post-Wagnerian, modernist musical thinking generated a more open, semi-dialectical state of affairs in which balanced antithesis, rather than unity, provided more viable compositional methodologies than the attempted replication of classical tonal synthesis by serial or other post-tonal means.⁴¹ Although Whittall has challenged Keller's claim that tonal backgrounds can control serial foregrounds in Schoenberg, and queried why the existence of such tonal backgrounds has not been demonstrated by means of Schenkerian or Salzerian voice-leading techniques,⁴² he has admitted that Keller's analytical practice has provided some indications of how Schoenberg's music 'could communicate, if not in the same way as tonal music, then in a manner which made the symbiosis of difference and similarity between genres and procedures of post-tonal and tonal composition aurally explicit'.⁴³ It is also true that Keller was perhaps too willing to use ideas about stylistic impurity as foils for claims that great composers were the ones who made the most successful and far-reaching syntheses out of initial disparities; must this imply that twentieth-century composers particularly who did not subscribe to this axiom of unification of contrasting elements were not, therefore, great?

With respect to the study of twentieth-century, post-tonal music, in place of Keller's reliance upon the unification of contrasting elements, Whittall instead identifies 'confrontation', in the sense of either a literal juxtaposition of materials from past and present, or the preservation of essential features of the past, for example tonality in radically revised forms, such that the music cannot be convincingly explained solely in terms of that preservation; he argues that 'to regard past and

⁴⁰ Milton Babbitt, 'Memoirs' in 'Hans Keller (1919-1985): A Memorial Symposium', *Music Analysis*, 5 (1986), pp.374-376, p.376.

⁴¹ Personal communication.

⁴² Arnold Whittall, 'Schoenberg and the English: Notes Towards a Documentary', *Journal of the Arnold Schoenberg Institute*, 4/1 (1980), pp.24-33, p.29.

⁴³ Whittall, 'Overlapping opposites: Schoenberg observed', in *Exploring Twentieth-Century Music* (Cambridge: Cambridge University Press, 2003), pp.73-88, p.75.

present as irreconcilable in certain musical contexts can be a valuable way of enhancing the perceived contemporaneity of the result'.⁴⁴ In recent studies of post-tonal music, scholars such as Martha Hyde, Michael Cherlin, Joseph Auner, and Richard Kurth have moved beyond Keller's tonal/serial, opposition/integration structuralism to consider the music hermeneutically or to explore matters related to modelling.⁴⁵ Such approaches, as Whittall suggests, transform 'Keller's background/foreground trope from its context of the engagement between form and perception into wider regions of meaning and expression'.⁴⁶

These critiques of Keller's work are both timely and pertinent. But they will not be pursued further here only because Keller's views on Skalkottas were rooted precisely on those Schoenbergian principles (such as comprehensibility and coherence for example) which informed Skalkottas's own approach to composition. Indeed, as will become clearer below, the terminology employed by Skalkottas in his own writings is remarkably similar to that of Keller. The purpose of this study, therefore, is to endeavour to understand in his own terms the reasons for Keller's interest in and idealisation of Skalkottas's music, an interest that was expressed in his unequivocal declaration that, 'All we need, then, is geniuses. To my knowledge, there has been one symphonic genius after Schoenberg – Nikos Skalkottas, who can be shown to have accepted these five guidelines with penetrating insight'.⁴⁷

Given this enthusiastic support, it is surprising that Keller did not analyse in depth any of Skalkottas's music in support of his views, as he did with the works of other composers who, although important to him, are not elevated to such a high plane. His only relatively extensive review of Skalkottas's music is based on an aural analysis of a truncated performance of his Second Piano Concerto (1938), and although this review provides only a superficial description of certain compositional facets of the concerto, nowhere does Keller explain exactly how he believed Skalkottas solved some difficult compositional problems in a twelve-note context.⁴⁸ It is therefore appropriate to explore, in the rest of this study, those aspects of Skalkottas's twelve-note

⁴⁴ Whittall, 'The Theorist's Sense of History: Concepts of Contemporaneity in Composition and Analysis', *Journal of the Royal Musical Association*, 112/1 (1986-87), pp.1-20, p.5.

⁴⁵ See Martha Hyde, 'Neoclassical and Anachronistic Impulses in Twentieth-century Music', *Music Theory Spectrum*, 18 (1996), pp.200-35; Joseph Auner, 'Schoenberg's Handel Concerto and the Ruins of the Tradition', *Journal of the American Musicological Society*, 49 (1996), pp.264-313; Michael Cherlin 'Memory and Rhetorical Trope in Schoenberg's String Trio', *Journal of the American Musicological Society*, 51 (1998), pp.559-602; Richard Kurth, 'Moments of Closure: Thoughts on the Suspension of Tonality in Schoenberg's Fourth Quartet and Trio', in *Music of My Future: The Schoenberg Quartets and Trio*, eds. Reinhold Brinkmann, and Christoph Wolff (Harvard University Press, 2000), pp.139-160.

⁴⁶ Whittall, 'Overlapping opposites: Schoenberg observed', p.76.

⁴⁷ Keller, 'Schoenberg: The Future of Symphonic Thought', p.191.

⁴⁸ In his review Keller appraises Skalkottas's unique compositional qualities in having solved 'six burning modern problems' including 'the sonata problem, the question of asymmetry-versus-or-cum-symmetry of rhythmic structure, the concerto problem, the question of modern piano writing, the puzzle of dodecaphony-versus-or-cum-tonality, and the historical dilemma of anti-romanticism or romanticism'; Keller, 'Nikos Skalkottas: An Original Genius', *The Listener*, 52/134 (Dec. 1954), p.1041.

compositional technique which Keller appeared to have instinctively recognized as fulfilling the criteria he described as characteristic of symphonic genius. Following predominantly Keller's structuralist approach (and referring frequently to his own terminology and analytical discourse) I shall initially focus upon the techniques Skalkottas uses to create contrast between statement and development, and then explore the integration of such contrast through the use of his idiomatic twelve-note technique and formal combination, particularly the unifying power of the rondo form, which for Keller, at least, appears to be the cornerstone of symphonic thought. I shall also examine how Skalkottas creates tension between foreground and background, as discussed by Keller, and the extent to which his music adheres to the five guidelines outlined previously. Examples will be drawn from the second movement, *Thema con Variazioni*, of Skalkottas's First Symphonic Suite for large orchestra (1935), and the first movement, *Allegro moderato*, of the Third String Quartet (1935).

The 'symphonic genius' of Nikos Skalkottas

I

Skalkottas's approach towards both serialism and formal articulation was profoundly influenced by Schoenberg's tonality-based teaching in Berlin. However, unlike Schoenberg, who, after having fully developed the principles of twelve-note composition allowed tonal foreground implications back into his compositions, Skalkottas never abandoned tonal thought and tonal forms of construction. These were inherent aspects of his compositional style from the beginning, from the early atonal pieces of the Berlin period. His formal designs emulate those associated with tonal music, such as sonata, rondo, ternary and theme with variations, while traditional textures (melody with accompaniment, imitative counterpoint, etc.) and traditional conceptions of musical continuity (antecedent and consequent phrases, the differentiation of exposition, development and recapitulation of thematic material) continually underpin his music.

On a purely technical level, that is, in Keller's words, his 'method of composition', the most common technique Skalkottas uses to construct and differentiate main and subsidiary structural sections is his use of an adapted version of Schoenberg's twelve-note method. In his writings Skalkottas declares that 'the twelve-note harmony is strictly connected with the development of the themes, [while] the frequent repetition of the same harmonic material gives the listener the opportunity to grasp more easily the musical meaning of the work, both harmonic and thematic'.⁴⁹ These two precepts, which underpin his musical aesthetic, derive directly from Schoenberg's ideas

⁴⁹ Although this statement was written in the 'Foreword' to the programme Notes of the First Symphonic Suite for large orchestra (1935), it may be applied to all of Skalkottas's twelve-note compositions, and conveniently summarizes his handling of the twelve-note method.

on coherence and comprehensibility.⁵⁰ The technical devices that Skalkottas employs to realise this aesthetic include the use of a modified version of the twelve-note method and the establishment of an analogy between tonal regions and groups of twelve-note sets as a means to delineate form. Furthermore, his adherence to tonal modes of construction, and his desire to achieve comprehensibility through continuous motivic repetition and unity – ‘the binding of the entire form’⁵¹ – dominate his approach to serial composition.

In his twelve-note works Skalkottas consistently employs more than one closely connected twelve-note set, a compositional idiosyncrasy that Keller appears not to have noticed and certainly not to have commented upon. However, what Keller rightly observes is the audible nature of Skalkottas’s sets, which function as ‘melodic motifs’ by retaining their identity even when they are presented with varied or new rhythms, a quality that makes Skalkottas, ‘a realistic follower of Schoenberg’s method’.⁵² For Keller the audibility of the tone-row is a great quality in a composition, and a yardstick by which to measure his chosen masters. Since this is an important element of Keller’s perception of Skalkottas’s ‘genius’, some exploration of the latter’s twelve-note technique is in order.

Skalkottas does not deal exclusively with a single basic set as the binding element between melody and accompaniment, but consistently employs several independent twelve-note sets, which include the following:

- 1) linearly ordered sets, defined by their pitch-class order (although Skalkottas manipulates them in a way different from Schoenberg’s);
- 2) chordal sets; that is, sets partitioned into chordal segments, trichords or tetrachords which are used in this harmonic form throughout the piece;⁵³
- 3) tonal sets; that is sets that include tonal elements in their internal structure (minor, major trichords, dominant and diminished seventh tetrachords);
- 4) sets defined by their segmental content instead of their strict pitch-class order, comparable to Hauer’s tropes;
- 5) supersets; that is twelve-note sets in which the single pitch-class is being replaced by an entire twelve-note set;

⁵⁰ For a discussion on the influence of Schoenberg’s teaching on Skalkottas, see Eva Mantzourani, ‘The disciple’s tale: The reception and assimilation of Schoenberg’s teachings on Grundgestalt, Coherence and Comprehensibility by his pupil, the composer Nikos Skalkottas’, *The Journal of the Arnold Schoenberg Center*, 3 (2001), pp.227-38.

⁵¹ Skalkottas, ‘Style’, MS essay.

⁵² Keller, *Stravinsky Heard and Seen*, p.27.

⁵³ These types of sets are also encountered in Berg’s works, *Lulu* in particular. However, it is unlikely that Skalkottas was aware of them, or had been influenced by Berg’s compositional techniques, as he never had the chance to see or hear this opera in Greece.

6) sets with less than twelve notes, or twelve-note sets with a note missing and another doubled.

He generally presents his twelve-note referential material in groups, each consisting of several discrete sets, usually with a different group for each major section of a piece. However, none of the sets employed possesses the required hierarchical relationship with the others so as to be considered the ‘basic set’ of the movement, although within each group one of the sets has a predominant thematic character. The most salient feature of Skalkottas’s linear sets are their melodic quality, their ‘singability’, which, together with the avoidance of inversions, makes them audible and constantly recognizable. As with Berg and Webern, Skalkottas does not exploit the combinatorial properties of his sets, but instead uses segmental association to connect logically the presentation of the different sets within a group.⁵⁴ Thus, the sets are closely connected through numerous common and transpositionally or inversionally related segments, usually dyads, trichords and tetrachords. Unlike Schoenberg, however, who also relies on segmental association to connect two or more forms of the basic set, Skalkottas uses unordered segments, common to two or more different twelve-note sets of the thematic group, and he exploits the association of the invariant relations between these different sets as one method of providing coherent relationships and organizing the harmonic structure between successive and simultaneous sets within the formal sections of a piece. The use of more than one set as the *Grundgestalt*⁵⁵ of a piece not only provides variety within the unity of the thematic block, it also creates tension between the harmonic implications that arise from the combination of the various discrete sets and the ideal of an all-embracing integration in a twelve-note composition. And the fine balance between and symbiosis of Skalkottas’s idea of unity and contrast, of old and new, is a structural feature of his music.

The First Symphonic Suite for large orchestra (1935) clearly illustrates this approach. In particular, the Thema and each of the three variations of the second movement, Thema con Variazioni, are built on a group of four twelve-note sets shown in Example 1.⁵⁶

⁵⁴ Segmental association refers to the use of segments common to two or more forms of a series (set forms) which can provide a basis for connecting systematically the musical presentations of these set forms. The set segments are generally unordered, thus emphasizing the ‘harmonic’ aspect of any associative exploitation of the relationships between the set forms; see David Lewin, ‘A Theory of Segmental Association in Twelve-Tone Music’, *Perspectives of New Music*, 1 (1962), pp.89-116, pp.95-96.

⁵⁵ For a discussion on the differences between Schoenberg’s and Skalkottas’s understanding and use of *Grundgestalt*, see Mantzourani, ‘Tonal influences and the reinterpretation of classical forms in the twelve-note works of Nikos Skalkottas’, *ex-tempore*, XII/1 (Spring/Summer 2004), pp.47-65, p.48.

⁵⁶ For the description of sets, set segments, motives, chords, and chord progressions I use set theory and the terminology provided by it. A set class will be identified only with the number assigned to it by Allen Forte, as given in *The Structure of Atonal Music*; that is, the Forte set name 3-3, 4-10, 6-Z10, etc., and not with its prime form, that is, with the numbers matching its intervallic content measured in semitones, for example, [014], etc.

Example 1. *Thema con Variazioni*, *Thema*: opening gestures and sets.

The *Thema* consists of four phrases (*aa^lba'*), as shown in Table I:

Table I

Sections	Phrases	Bars	Thematic/serial structure ⁵⁷
A	<i>a</i>	1-5	Statement of the first thematic idea, played by the clarinet and based on set S1; its countertheme, played by the bass clarinet, is based on set S2.
	<i>a^l</i>	6-10	Continuation having the character of a varied repetition of the first phrase with rhythmic variations. The clarinet thematic line is now based on S2, while the countertheme on S1.
B	<i>b</i>	11-14 ²	Contrast. New melodic gesture based on S4 and supported by a change in texture and orchestration.
	<i>a'</i>	14 ³ -18	Repetition of the initial thematic idea on S1 in the basses, played as a duo with a new melody in the clarinets, based on S3.

Thus Skalkottas derives all the elements for his development from the thematic block, which is a complex basic shape consisting of several twelve-note sets in the form of distinct and independent melodic lines or chords; this becomes the generative source of the entire movement, thus functioning as a *Grundgestalt*. From Skalkottas's description of the *Thema*, in conjunction with his assertion in his programme Notes that 'the twelve-note harmony is strictly connected with the development of the themes',⁵⁸ we can infer that he conceives the different sets in thematic terms; he does not regard them as abstract, self-sufficient interval sequences, but as melodic-motivic elements of the theme, each coinciding with one of its four phrases.

The four sets of the thematic block are closely connected through transpositionally or inversionally related segments, and the closely-knit web of relationships that exists among them underpins the entire motivic and harmonic structure of the movement. As shown in Example 2, close motivic and harmonic relationships are already established between the theme, its countertheme and the contrapuntal accompaniment at the opening gesture (bars 1-5).

⁵⁷ Sets 1, 2, and 3 which furnish the theme, its countertheme and the contrapuntal accompaniment are played linearly by one instrument (clarinet, bass clarinet, and contrabassoon respectively), while set 4, played by the horns and trombones and providing the harmonic accompaniment, is presented as a block of four three-note chords; the pitch-class order of the set becomes apparent later during the course of the movement (bars 6-10).

⁵⁸ MS programme Notes to the First Symphonic Suite for large orchestra; see also Footnote 49.

Example 2. *Thema con Variazioni, Thema*: motivic, harmonic relationships in the opening gesture.

For example, the initial simultaneity between the clarinet, playing the first trichord of set S1 (set-class 3-3), and the contrabassoon (playing Ab_1 of S3) is the tetrachord set-class 4-7, which is the same as the opening tetrachord of S1, in bars 1-2¹. The first trichord ($eb^1-e^1-g^1$ (3-3)) of the countertheme in the bass clarinet is inversionally equivalent (I_4) to the first trichord of S1, while its opening four-note motive ($eb^1-e^1-g^1-gb^1$ (set-class 4-3)) is played contrapuntally at T_{10} with the clarinet motive $a^1-g\#^1-f\#^2-f^2$ (pcs 3, 4, 5, 6) in bars 1²-2. The opening three-note thematic motive ($c^2-db^2-a^1$) is answered by the contrabassoon ($A_1-Bb_1-Gb_1$), rhythmically augmented and transposed at T_9 , while in bars 2-4² the four-note motive $A_1-Bb_1-Gb_1-G_1$ (4-3) (a semitone transposition (T_1) of the clarinet motive $a^1-g\#^1-f\#^2-f^2$), accompanies contrapuntally both the upper voices. The trichord set-class 3-5, being a subset of all four sets, saturates the texture and creates a closely-knit web of affinities within the motivic structure.⁵⁹ Further motivic and harmonic relationships within this first phrase are established at its cadence in bars 4-5. The contrabassoon, playing S3, supports the melodic cadence of the clarinet with the tetrachord $G_1-C-F-B_1$ (4-16) played twice; this has a perfect fourth transpositional relationship (T_5) with the first chordal tetrachord $D-G-c-f\#$ of S4 (bar 1), inviting tonal-like associations within the harmonic structure of the passage. This cadence is also punctuated by a double statement of the tetrachord $Bb-c\#-e-a$ (4-18), one of Skalkottas's signature sounds, often used to indicate points of arrival and resolution.⁶⁰ This harmonic tetrachord is a tritone transposition (T_6) of the clarinet's final melodic motive, $eb^3-g^1-bb^1-e$. In the context of the contrapuntal structure of the passage, this cadential tritonal harmonic relationship between the upper melodic line and the chordal accompaniment both mirrors and neutralises the tonally-suggestive overtones of the 4-16 tetrachord which frames the harmonic movement between the chordal accompaniment and the bass melodic line.

In terms of the harmonic change as a determinant for the organization of the phrase structure, at the opening thematic gesture (bars 1-5) the harmonic support is based on a succession of chordal segments from S4 (see Example 3).

Example 3. Schematic pitch-class, harmonic and phrase structure of the *Thema*.

⁵⁹ For example, the motive $f\#^2-f^2-b^1$ in the thematic clarinet voice, transposed a semitone higher (T_1), is accompanied sequentially by both the bass clarinet ($g^1-gb^1-c^2$) and the contra bassoon (Gb_1-G_1-C) (bars 2¹⁻² and 3¹⁻²); also, transposed at the fifth ($gb^1-c^2-db^1$) is played by the clarinet in bar 2²⁻³, and transposed at the tritone is repeated twice punctuating the motivic cadence of the contrabassoon contrapuntal voice.

⁶⁰ The tonally ambiguous tetrachords set-class 4-18 (including in its internal structure both a major and a diminished trichord) and set-class 4-17 (outlining a major and a minor trichord) are often used to frame harmonic progressions, either at the beginning of a passage or as its concluding destination.

In the varied repetition of the opening phrase (bars 6-10) the harmony changes to a succession of dyads derived from S3; this regulates the rate of harmonic change and counteracts the vigorous motivic activity of the contrapuntally structured melodic lines. At the contrasting phrase (bars 11-12) there is a rapid harmonic succession of chordal segments from three different sets which are juxtaposed; this enhances harmonic variety and emphasizes the developmental character of this passage. In the last, recapitulatory phrase a steady alternation of segments from S2 and S4 stabilizes the rate of harmonic change and counteracts the previous harmonic activity, ending with the same harmonic material as that of the first phrase. In Keller's terms, here Skalkottas combines dodecaphonic homophony with contrapuntal dodecaphony to produce the foreground structure of the *Thema*, while the background form, with its rondo-like repetition of phrase *a*, unites the foreground wealth of contrasting thematic and harmonic material and creates unity within the otherwise diverse, thematic set-group.

II

As already mentioned, Skalkottas does not use Schoenberg's method of combinatoriality to delineate harmonic regions. Rather, his use of a different group of new sets for each major section of a piece contributes to the definition of the harmonic structure and effectively delineates the large-scale form by establishing distinct harmonic regions. Each formal section is characterized by and differentiated from surrounding sections by its individual serial, thematic and harmonic content, derived from the new set-group on which it is built and established by the continuous reiteration of the same succession of motivic and harmonic figures, as well as its rhythmic structure and orchestration. Skalkottas conceives the set-groups within a single movement as contrasting 'keys', each theme being associated with a different group. The set-group in the opening section of a movement is treated as functionally similar to the tonic region in a tonal composition; furthermore, the piece always closes in that region, effected by the return of the opening/referential set-group at the end of the movement. Subsidiary sections are built either on new set-groups, or *en bloc* transpositions of the opening thematic group in a manner analogous to modulation. The 'regional' contrasts are always accompanied by thematic contrasts, somewhat reminiscent of traditional sonata practice. Similar to Schoenberg's and Webern's structural techniques, this familiar outline is intended to act as a guide in the listener's perception of formal relationships between larger sections. This resonates with Keller's belief that 'one can only make oneself comprehensible against the background of something which both the audience and the composer know before the music starts'.⁶¹ The majority of Skalkottas's twelve-note works are based on this set-group technique.

⁶¹ Keller, lecture 'Schoenberg's String Quartet No.4' on BBC Radio 3, 22 September, 1974; transcription of the lecture in Alison Garnham, *Hans Keller and the BBC* (unpublished PhD dissertation, Goldsmiths College, University of London, 1999), pp.547-48.

The first movement, *Allegro moderato*, of the Third String Quartet is an example of this technique, and I shall provide a reading of its structure here in the light of Keller's guidelines, given previously. The form of the movement combines the sequential presentation of two sections A and B, and their varied repetitions, with that of a sonata movement, as shown in Table II:

Table II

<i>Allegro moderato</i>	Sonata movement	Thematic structure	Set structure
Section A	Exposition	First subject group. First theme: three-phrase period. (1-14) Antecedent; (14 ⁴ -23 ²)-(23 ³ -27) Consequent. (28-33 ¹) Varied and condensed repetition of antecedent. (33 ⁴ -42 ¹) Transition and chordal cadence.	S1, S2, S3, S4
Section B		Second subject group. Second theme: (42 ² -51) Antecedent; (51 ⁴ -60) Consequent. (61-64) (65-75) Developmental passage. (76-79 ²) (79 ⁴ -82 ²) Cadence.	S5, S5(T ₃), S6, S7
Section A ¹	Development	Material from the first subject group. (82 ⁴ -90 ³) (90 ⁴ -101) (102-106) (106 ⁴ -117) (117 ⁴ -121 ³ cadence).	S1, S2, S3, S4
Section B ¹		Material from the second subject group. (121 ⁴ -128) (128 ⁴ -134) (135-141) (141 ⁴ -148) (149-155 cadence).	S5, S5(T ₃), S6, S7
Section A'	Truncated Recapitulation	First subject group. (156-168 ²) Antecedent; (168 ⁴ -176) Consequent. (177-183) Continuation and cadence.	S1, S2, S3, S4
Section B'		(184-187 ¹) (187 ³ -190 ¹). Recapitulation of the second theme's extended cadential passage/(Coda).	S5, S5(T ₃), S6, S7
Section A''	Coda	(190-191) Chords based on pitch-class material from the first theme.	S1, S2, S3, S4

Section A is built on a group of four closely connected sets,⁶² shown in Example 4. The assignment of sets to individual instruments is a distinctive characteristic of this section, with each set played by the same instrument throughout the Exposition and Recapitulation of section A; the first violin plays set S1, the second violin S2, the viola S3 and the cello S4, thus each being identified with one instrumental colour. However, in the development there are some part exchanges, which to some extent differentiate this section from those surrounding it.

Example 4. Third String Quartet, *Allegro moderato*, section A – opening gesture and sets.⁶³

Section A is quite unique among Skalkottas's twelve-note compositions. It 'begins before the beginning', in the sense that it is characterized by the exposition of the twelve-note pitch-class material, initially presented one at a time and progressively as chords (bars 1-14), followed by the compositional elaboration or 'realization' of this material. In the slow introduction each of the first three notes of the sets (order numbers 1 2 3) is presented sequentially at one-bar intervals, which ensures aural clarity and comprehensibility, but also sets out the compositional properties of the movement. As shown in Example 5, which outlines schematically the harmonic structure of the opening gesture, this slow presentation in bars 1-10 results in three, four-note tetrachords, starting with the descending chromatic tetrachord $g^2-f\#^2-f^2-e^2$ (set-class 4-1), followed by the whole-tone tetrachord $eb^2-db^2-cb^2-a^1$ (4-21) and concluding with the diminished seventh $g\#^1-f^1-d^1-b$ (4-28).

Example 5. *Allegro moderato*, section A – Harmonic structure of the opening gesture.

The remaining of the sets are presented as nine tetrachords with the same order number sounding together, establishing the harmonic premise of the section (which, as shown in Example 5, includes the frequent reiteration of equivalent chords) against which the thematic material unfolds.⁶⁴

⁶² In section A each set is played by the same instrument throughout the stable formal passages of the exposition and recapitulation of the section, with the first violin playing set S1, the second violin S2, the viola S3 and the cello S4. However, in the development there are extensive part exchanges, which to some extent differentiate this section from those surrounding it.

⁶³ Set S4 derives from S3; each of its hexachords is an unordered inversion, transposed at the major seventh (I_{11}), of each hexachord of S3. Skalkottas constantly presents them linearly in their prime form and uses them as independent sets. This is his most frequent type of derivation and is based on the unordered presentation of the pitch-classes within each hexachord of a set under the twelve-note operations of transposition and/or inversion. Such sets, although members of the same set-class of the P_0 form, are constantly and deliberately used by Skalkottas as independent ordered sets. The reordering within each hexachord of a set does not undermine the serial principles of twelve-note set handling, because the resulting set is not regarded as a different form of the basic set, but as a 'new' set, albeit closely connected motivically and harmonically with the original one, and which during the course of the piece establishes its own identity. Skalkottas is primarily interested in the motivic relationships of his various sets, and this type of serial manipulation is one of the developmental motivic techniques which make his twelve-note works aurally accessible.

⁶⁴ There is a difference between Skalkottas's and Schoenberg's use of the twelve-note harmony, not least in Skalkottas's reluctance to use hexachordal combinatoriality. In terms of strict twelve-note technique (which,

These tetrachords frame section A, and constitute its cadential gesture in all the varied repetitions of this section.

Apart from the exploitation and expansion of the sonic space (from the minor third, e^2-g^2 , of the first chord to an octave plus a minor seventh, $D\#-c\#^1$, of the last chord of the introduction) the atonal-tonal implications and associations that permeate this piece are already established in the opening four chords of the movement. It is as though the piece grows out of a concentrated, semitonal tetrachord to the most ambiguous chord of tonal music, the diminished seventh; this chord, often used as a device for creating mystery, confusion or unpredictable modulation, is used here as a stable chord, the point of arrival after the progressive opening out of the harmony. In this context, paradoxically, it both unbalances the dodecaphonic expectations established by the opening two tetrachords, but also creates a degree of stability and rest. But the $G\#$ diminished seventh in first inversion also, in turn, needs resolution to an A chord. This harmonic resolution, and the release from the previous escalation of tension, is provided on the downbeat of bar 11 by the tonally ambiguous tetrachord $a\#-c\#^1-e^1-a^1$ (4-18). The rate of chord progression quickens, ending, in bar 14, on the tetrachord $D\#-e-g\#-c\#^1$ (4-14); the bass note of this chord, $D\#$, played by the cello, functions as a leading-note to the following e^1 which initiates the exposition proper of the section's thematic material. Furthermore, the textural layout of the introductory passage, aurally emphasizing the triadic content of several tetrachords, and in particular the first and last simultaneities (tetrachords $a\#-c\#^1-e^1-a^1$ at bar 10, and $D\#-e-g\#-c\#^1$ at bar 14), outlines a harmonic movement from an A-major/A#-diminished to C# minor triad (see Example 5).

Skalkottas was preoccupied with the audibility of his music and the perceptibility of the thematic and harmonic shifts and nuances within each piece. To achieve this he retained certain ties with the past, with tonality; overt or disguised tonal harmonic relationships are deliberately used within the twelve-note structure as recognizable sonorities to highlight certain structural points, and/or to allude to a key, thus contributing towards the definition of the harmonic regions. Here all the dodecaphonic and diatonic material is presented in a condensed form. Skalkottas sets out his compositional principles from the outset and poses a challenge to his audience by introducing his

incidentally, Skalkottas never used), and contrary to the total unification of Schoenberg's twelve-note harmonic structure – resulting from the use of one basic set – Skalkottas's twelve-note harmony – resulting from the simultaneous unfolding of several discrete sets – produces a significant amount of vertical disorder with frequent pitch-class repetitions and pitch duplications between chords. However, Skalkottas was more interested in the constant audibility of the different sets in each contrapuntal voice, and the instant recognition of certain chordal configurations and progressions, rather than the moment-by-moment vertical consequences of set combination, and their resulting digression from a theoretical rule; and he compensated for this disorder with the high degree of linear segmental invariance in the internal structure of each of the sets of the referential set-group. This approach is reminiscent of some of Webern's harmonic practices, and, borrowing from Whittall's discussion of them, it is tempting to consider the possibility that in Skalkottas's dodecaphonic works, also, 'the conjunction of consistent linear order with a degree of vertical disorder could be an exemplary strategy for keeping unity of musical space at arm's length; and this is [... partially] achieved by using invariance as a tension-creating as well as integrative force.' (Whittall, 'Webern and Multiple Meaning' *Music Analysis*, 6/3 (1987), pp.333-53, p.338).

twelve-note sets within a clearly implied tonal context, thus creating tension between atonality and diatonicism. To revert to Keller's terminology, background and foreground are juxtaposed as if Skalkottas wishes to make clear to the listener the contrasts upon which the piece is predicated and the different styles it includes.

The unfolding of the set-group and the contour and harmonic rhythm determine the phrase structure of section A. The opening twenty-seven bars outline a phrase structure comparable to a three-phrase period. The antecedent outlines the opening-out of the pitch-class material and the main musical 'idea' (G-F#-F-E) in bars 1-10, followed by 'contrasting motive-forms' of staccato chords. The first consequent phrase (bars 14⁴-23²) is introduced with the opening gesture inverted and metrically displaced. The melodic theme (bars 18-27), played by the first violin and comprising two consecutive statements of S1, outlines an antecedent-consequent-like periodic phrase structure. The cadence of the thematic passage at bar 27 is established through changes in articulation (the accompanying strings playing *arco*), contour direction in the final motivic gesture (ascending major sixth motive, e²-c#³ as opposed to the previous descending minor third e¹-c#¹), and motivic liquidation to the final trichord Eb-g#¹-e² (set-class 3-4).

Section B, exposing the second, more 'lyrical' theme is composed from the group of four new sets shown in Example 6,⁶⁵ thus establishing a new 'key'.

Example 6. *Allegro moderato*, section B – opening gesture and sets.

Its contrapuntal texture, dance-like character, fluid phrase rhythm and overtly tonal character contrast notably with the homophonically constructed section A. The contrapuntal texture, dance-like character and overtly tonal context of this section could not contrast more with that of the homophonically constructed section A. Its opening passage (bars 42³-60), initiated with an expanded, 'diatonic' idea, C-B-A-G, as opposed to section A's chromatic G-F#-F-E, is structured as a trio (first, second violins and cello), with certain segments of the sets S5, S5(T₃) and S6 played as ostinato-like patterns. Set S7 is introduced later, at the developmental passage of bars 61-68, supporting the bass line of the four-part texture also in an ostinato-like fashion. As shown in Example 7, all four sets include insertions and repetitions of segments, which temporarily interrupt the linear presentation of their pitch-class order.

⁶⁵ Set S7 derives from S5; it is formed by interchanging the pitch-classes F# and G#(Ab) in each unordered hexachord of the retrograde form of S5. This reordering ensures a close motivic and harmonic similarity between these two sets of section B and is exploited by Skalkottas for his motivic developmental technique.

Example 7. *Allegro moderato*, section B – segmental structure of the sets.

Skalkottas frequently employs this type of free serial technique as part of his motivic treatment of the sets, and although this disrupts the continuity and logic of each set's intervallic structure it both emphasizes certain motivic/harmonic links between different formal sections and establishes particular motivic configurations.

In this piece Skalkottas pays homage to his classical inheritance through his use and reinterpretation of traditional sonorities, motives, forms and gestures. In section *B* particularly, the inclusion of tonal elements within the twelve-note texture is striking and deliberately used to show the fusion of two styles, twelve-note and tonal. For example, in set S5, which supports the main thematic idea of the section played by the first violin, the insertion and continuous repetition of the tetrachord $c^2-b^1-a^1-g^1$ (4-11) during the exposition of the set accentuates the C major context of the thematic line. Similarly, its contrapuntal accompaniment in the second violin, based on its minor third transposed form (T_3), inserts and reiterates the tetrachord $eb^1-d^1-c^1-bb$, while the cello reiterates the trichord $Db-Eb-E$ (3-2), which further reinforces the C major/minor context of this thematic gesture. More importantly, the motive, $c^2-b^1-a^1-g^1-g^1-g^1$ is a direct quotation from the fourth movement of Beethoven's Fifth Symphony (see Example 8); not only does the motive C-B-A-G permeate the motivic surface of this movement, in this particular gestural presentation it is the thematic idea of the fourth movement's second subject in the recapitulation, transposed to the tonic C major.

Example 8. *Allegro moderato*, section *B* – Beethovenian quotation of the second theme.

Its obsessive reiteration within section *B* of the *Allegro moderato*, which is also the second subject area in this sonata movement, ensures that the listener does not miss the reference to Beethoven, whose symphonic originality Skalkottas deeply admired. Skalkottas believed that imitation in the context of an original work is episodic, and his justification for such a quotation is that it can be inserted 'in small phrases and as an element which does not disturb, but stylistically reminds us of a classical music episode worthy of attention and imitation'.⁶⁶

Within the loosely constructed section *B* the compositional character moves away from the stricter twelve-note technique and harmonic differences of section *A* and towards the developing variation of thematic elements. For example, as shown in Example 9, in bars 61-68 the opening gesture of the C major/minor theme, played by the upper strings (bars 61-62), is accompanied

⁶⁶ Skalkottas, 'Originality and Imitation', MS essay.

contrapuntally by the cello playing an arpeggio based on pitch-classes with order number 1...10 of set S7.

Example 9. *Allegro moderato*, section *B* – developmental passage, bars 61-68.

The latter includes the motivic tetrachord $c\#^1-f\#^1-f^1-e^1$ (4-11 at T_6), while its final motivic gesture outlines the tonally reminiscent tetrachord $eb^1-g^1-c^1-b$ (C minor with added major seventh), which shares three pitch-classes (g^1-c^1-b) with the C-B-A-G tetrachord. Aurally the motive is resolved in the viola melodic line which, on the last quaver of the bar, plays a^1 of set 6, the latter approached by the leading-note-like movement $g\#^2-a^1$. The completion of set S7 in the cello (pitch-classes A, G#) is reserved for the cadential gesture of the passage at bar 68; this is a recurring feature within section *B* with the dyad A-G# punctuating its final cadence and each of its repetitions. Furthermore, the final tetrachord of S7, C-B-A-G# (4-3), is not only a motivic variation of the segments C-B-A-G of S5, C-B-G-G# (4-7) of S2, and C-Bb-A-G# (4-2) of S3 (thus further reinforcing motivic connections in the fabric of the music across contrasting sections),⁶⁷ but also another direct reference to the fourth movement of Beethoven's Fifth Symphony. As shown in Example 10, it derives from the third motivic unit of the movement's second subject in the exposition, and, played by the first violin, is used as the melodic cadence of the final developmental phrase of both sections *B* and *B'* (bars 74³-75 and 147³-48) before the forceful, chordal cadence to these sections.

Example 10. *Allegro moderato*, section *B* – Beethovenian quotation within a melodic gesture based on set S7.

The motive C-B-A-G/C-B-A-G#, being the first and last melodic gesture of the section, emphasizes both the compositional significance of associative relationships between the different sets of the group and the unifying power of Skalkottas's developmental motivic technique, which integrates the contrasts between the opening phrase and the more loosely constructed developmental passages of section *B*. Such integration is further emphasized by the pervasive use of the tetrachord set-class 4-11, which frames the section, being not only its opening gesture but also its last cadential tetrachord, presented as two consecutive dyads, $f\#^1-e^2 - A-g\#$ (see Example 11, and Example 12 (bars 154-55)). The precompositional considerations that determine the construction of the different sets are used by Skalkottas not only to ensure coherence of contrasting structural elements but also for the purpose of

⁶⁷ There are several associative relationships between the different sets of the two sections. For instance, the last hexachord of the 11-note set S6, F-G-B-C-Bb-F# (6-Z6), is an unordered transposition at the tritone (T_6) of the second hexachord of S1 (see Examples 4 and 6), while the first tetrachord of S6, Db-Eb-E-G# (4-14), played by the cello in the lower register, is exactly the same as the final cadential chord of section *A* (D#-E-G#-C#).

his motivic technique, which further reinforces relationships between contrasting events since these can be understood to originate from changes made in the repetitions of earlier motivic gestures.⁶⁸

Although motivic repetition and variation ensure coherence, the necessary contrasts result from the episodic structure of the movement, outlining diverse twelve-note harmonic regions. As shown in Example 11, which represents schematically the harmonic structure within sections *A* and *B* (and their varied repetitions), each harmonic region, apart from its different serial content and structure, is further differentiated by the tonally suggestive harmonic movement (particularly that of the bass line) within its boundaries.

Example 11. *Allegro moderato*, schematic presentation of the harmonic movement within sections *A* and *B*.

The harmonic character of Skalkottas's twelve-note music (in principle similar to Berg's), is different from that of Schoenberg's and Webern's. Unlike their serial compositional practices, where every pitch derives from a single series, regardless of its melodic or harmonic function, in Skalkottas's works harmonic formations derive from several twelve-note sets and belong to a pervasive harmonic texture. This implies an association with tonal music, particularly through the movement of the outer voices, despite the dodecaphonic harmonic content. The bass line in particular is frequently structured in a way that suggests tonally-orientated harmonic movement and direction. Overall, the large-scale harmonic structure of section *A* outlines a movement from the opening semitonal tetrachord to a diminished seventh chord, and the latter's subsequent resolution to an A-major/A#-diminished tetrachord, finally to a C# minor triad included in the cadential chord of section *A*. These tonally reminiscent sonorities, framing the section's chordal structure (as seen in Example 5), together with their continuous repetitions, define the harmonic region *A*. In section *B* the tonal emphasis shifts abruptly and the harmonic movement, although predominantly centred on C

⁶⁸ Although this technique appears to be similar to Schoenberg's developing variation, in which motivic changes allow new ideas to arise (see Schoenberg, *Zusammenhang, Kontrapunkt, Instrumentation, Formenlehre (ZKIF)*, ed. Severine Neff, trans. Charlotte M. Cross and Severine Neff (Lincoln: University of Nebraska Press, 1994), pp.38-39; and Ethan Haimo, 'Developing Variation and Schoenberg's Serial Music', *Music Analysis*, 16/3 (1997), pp.349-65), it is not identical, since Schoenberg regarded developing variation as a process evolving primarily within a given melodic line (although Frisch has shown that the accompaniment was occasionally involved in the process; Walter Frisch in *Brahms and the Principle of Developing Variation* (Berkeley, Los Angeles: University of California Press, 1990), p.17)). (For a discussion about Schoenberg's approach to and various definitions of developing variation (and its related terms, theme, motive and *Grundgestalt*), see Mantzourani, 'Tonal influences and the reinterpretation of classical forms in the twelve-note works of Nikos Skalkottas', p.48. By contrast, Skalkottas does not deal exclusively with one melody, or one basic motive from which other motive-forms are derived and subsequently developed. Instead, he derives all the elements for his development from both the linear and vertical dimensions of the thematic block. Each of the melodic lines is developed individually during the course of a movement, acquiring thematic status at some point, and becoming a source of new motivic material. His developmental motivic process, therefore, inevitably does not apply exclusively to a principal melodic line, but it does involve the interaction between lines.

(emphasized by its temporal position and supported by a G-C dominant-tonic-like progression in the bass and the C major/minor motivic gesture in the upper voices), eventually cadences on a *ff*, rhythmically augmented and texturally prominent A, coupled to its leading-note G#. The last cadential tetrachord of the section, and its varied repetitions, has a major sixth (T₉) transpositional relationship with the opening, recurring melodic tetrachord C-B-A-G. This surprising, ‘quasi-interrupted’ type of cadential gesture shifts the harmonic emphasis of the section from C to A, thus frustrating the expectations that Skalkottas has created in the course of the structure. This aural surprise is repeated unchanged at the end of each varied repetition of section B, becoming a structural feature of the piece – in other words, a structural motive. Yet, as the listener becomes accustomed to the established pattern of harmonic events, Skalkottas frustrates expectations yet again at the very end of the piece. The Coda, built on the set-group material from section A, cadences on a C in the bass, while the final chord of the piece is built on the diatonic C-E dyad and includes a C major triad in its internal structure.

The foreground diatonic elements in the *Allegro moderato*, the C major/minor quotation from Beethoven’s Fifth Symphony and its continuous reiteration, the large-scale movement C-G-C in the bass line of section B, and the final C-chord of the piece, all suggest that Skalkottas writes against a tonal background, with the C major ‘tonality’, although frequently suppressed and disguised, unequivocally coming to the fore in the final gesture of the movement.⁶⁹ Appropriating Keller’s terminology, this could be seen as the ‘latent unity’ behind the ‘manifest contrasts’⁷⁰ of the foreground twelve-note structure, which paradoxically also includes C major/minor elements. In turn, the unifying background function of the C major ‘tonality’ contradicts both its harmonic context and the expectations arising in the course of the piece; and this for Keller creates a wealth of meaning which can only be understood in terms of stylistic impurity.

These tonal/serial interactions and the ensuing tension and relaxation they create are played out against the background of sonata form. Although no real harmonic conflict and resolution exists in the traditional sense (that is, the dominant key resolving to the tonic in the recapitulation), the sonata form is emphasised here through clear contrasting themes and harmonic regions and the tension and relaxation created through textural changes. Similar to section A, section B ends with a forceful, chordal cadence, which through the use of double stops takes on the character of an octet. Such extreme textural contrasts define the boundaries of thematic statements and provide the climaxes to the restless forward movement of the music. The traditional sonata form requirement of harmonic

⁶⁹ Here Skalkottas applies Schoenberg’s postulate that, ‘the ear accepts the final chord [...] just as it does a tonic and it might almost seem as if the preceding dissonances were really standing in legitimate relation to this tonic. [...] “The last prevails”.’ (Schoenberg, ‘Problems of Harmony’, p.282).

⁷⁰ Taking the model of Freud’s analysis of the ‘latent’ content of a ‘manifest’ dream, Keller intended to demonstrate the latent unity that lies behind manifest musical contrasts. For a discussion on this topic, see Garnham, *Hans Keller and the BBC* (Aldershot, 2003), p.30; also, Keller, ‘Chamber Music’, *The Mozart Companion*, eds Robins Landon and Mitchell (Westport, 1981), p.91.

tension and resolution is replaced here by textural considerations. The tension produced by the continuous textural contrasts resolves, as would be expected, at the beginning of the recapitulation which, following a six-bar texturally dense cadence, enters an octave higher than the introduction, with long, *ppp*, single notes and an ethereal sound produced by harmonics, as shown in Example 12.

Example 12. *Allegro moderato*, cadence to section *B*¹ and opening gesture of the Recapitulation.

This point of total relaxation, more suitable for and expected in the Coda, is followed by the last restatement of the main thematic and harmonic material of the movement and a return to the chordal texture of the cadential passage of section *B*. Perceptually, there is the sense that the movement ‘finishes after the end’.⁷¹

Overall, in the *Allegro moderato* Skalkottas skilfully establishes contrasts between statements and developments, between ‘dodecaphonic homophony’ in the opening gesture and throughout section *A*, and ‘contrapuntal dodecaphony’ in section *B* and the development section, as well as by the use of ‘two key’ areas within a well defined harmonic framework. He creates tension between contrasting textures, the strict serial technique of section *A* and the free serial technique of section *B*, between key and atonality (possible only in circumstances of stylistic impurity), and between the foreground serial structure and background form. More specifically, applying here Keller’s argument that (in Schoenberg) tonal backgrounds can control serial foreground,⁷² we can read Skalkottas’s *Allegro moderato* as being composed against the background of certain clearly implied tonal expectations which, to borrow Keller’s words, ‘make instinctive sense and this is why [Skalkottas’s] twelve-note harmony works at both the creative end and equally spontaneously at the reception end’.⁷³ ‘Symphonic thematicism’ (for Keller one of the pillars of large-scale symphonic thought) is manifested in the rondo background with the final reappearance of the opening twelve-note material, presented in the dense, cadential chordal texture associated with section *B*, which unifies the entire structure and ensures the wide-ranging integration of themes and contrasts.

Conclusion

For Keller a symphonic genius is a composer who adheres to the five guidelines outlined above, takes risks, meaningfully contradicts established formal principles, creates tension between background form and foreground structure, and mixes divergent styles to express complex inner

⁷¹ This formal and textural layout was favoured by Skalkottas, and is also used in the *Ouverture* from the First Symphonic Suite (1935), composed the same year as the Third String Quartet.

⁷² Keller, *1975 (1984 minus 9) (1977)*, reissued as *Music, Closed Societies and Football*, p.189.

⁷³ Keller, ‘Schoenberg’s Return to Tonality’, p.7.

truths.⁷⁴ And in his view Skalkottas had been the only symphonic genius after Schoenberg because he accepted these compositional guidelines ‘with penetrating insight’.⁷⁵ Skalkottas, who worked in isolation in Greece and who died when Keller was thirty years old, was neither familiar with the latter’s theoretical work nor its later critique. Nevertheless, the two men had much common, not least their shared interest in the audibility of the music and the principle of variety within the unity of themes. Indeed it is perhaps Skalkottas’s reliance on and enthusiasm for the audible nature of his music, even within its diversity, which in part accounts for Keller’s elevation of him to the level of ‘symphonic genius’. The similarities between the two men’s views arise from a common source; they were both influenced by Schoenberg’s principles of form (and the integration of classical formal prototypes in his own compositions), comprehensibility and coherence, unity (particularly thematic unity) and contrast, motive and variation, repetition, memory and recognition. It is therefore unsurprising that Skalkottas’s own writings about music resonate intriguingly with Keller’s ideas. In his essays on music, written in the late 1930s and early 1940s,⁷⁶ Skalkottas addressed the issue of symphonic thought. In a remarkably similar vein to Keller he suggested that the important criteria for symphonic thought, ‘orchestral, chamber or solo, tonal, romantic or modern’, is that the music should have ‘many contrasts, variations in its different parts which confirm the general direction of the entire piece’, while ‘the symphonic form will be revealed by its inner “logic”, which derives from the composition itself’.⁷⁷ In Keller’s terms, ‘the composition itself’, would be construed as the musical structure, which with its manifest diversity equates to the foreground, while ‘symphonic form’, which provides an underlying unity, equates to background. Furthermore, Keller’s suggestion that style and form constitute the background of a composition while ideas and structure comprise the foreground, appears to resonate with Skalkottas’s own views. He too considered structure and ideas (‘the musical content which dominates the interest’⁷⁸) to be the foreground, and style the background; he explained that ‘musical style derives from the structure of the entire musical composition [...] but it is also something invisible, something that is not heard in the harmony of sounds! [...] The good style that characterises a musical composition is the uniform work in terms of the means that the craftsman has, the binding of the entire form [...] Musical style is more internal feeling than an external garment of the musical structure’.⁷⁹ And this evokes

⁷⁴ Keller, ‘Purity and Consistency of Style’, p.216.

⁷⁵ Keller, ‘Schoenberg: The Future of Symphonic Thought’, p.191.

⁷⁶ These unedited essays, written in an idiosyncratic, somewhat impenetrable style, allow occasional glimpses into Skalkottas’s thoughts on matters of musical composition.

⁷⁷ Skalkottas, ‘The Symphony’, MS essay.

⁷⁸ Nikos Skalkottas, ‘The Symphony’, MS essay.

⁷⁹ Skalkottas, ‘Style’, MS essay.

Keller's belief, that the sounding logic behind the music of his chosen geniuses is a 'message, revelation or both'.⁸⁰

Unity within each formal section of Skalkottas's music is established by the set-group, which functions as the generative source for that section, providing coherent pitch-class and harmonic articulations. Although there is an abundance of thematic, motivic and rhythmic material, the obsessive recurrence of the theme or fragments of it, the repetition of particular harmonic sequences, and the reiteration of common or equivalent segments embedded within the various sets, as well as the tonal elements which highlight certain structural points, all reinforce relationships and coherence, help memorability, and contribute to the immediacy of his music. Yet, considering Skalkottas's compositional treatment of free proliferation of sets, with the inherent variety and tension within the unity of the thematic block, and his approach to symphonic thought as revealed in his writings, I suggest that unity for Skalkottas might be understood not so much as integration but as the 'symbiosis of contrasts', whose inherent tension safeguards musical meaning. This approach does not undermine Keller's basic tenet, because apart from the audibility and accessibility of Skalkottas's dodecaphonic music, what defines the musical meaning of his works is the expressive contrasts and contradictions between background and foreground, which create a wealth of simultaneous conflict and resolution, of contrast and conformity, of tension and relaxation.

Finally, Skalkottas's manipulation of compositional material not only to differentiate the formal sections of a movement but also to integrate contrasts clearly illustrates the characteristics of symphonic thought that Keller identified. Although there is no record of Skalkottas's views on formal design it is apparent that he adapted classical formal prototypes to a dodecaphonic context, often exploring the possibilities provided by the integration of different forms, particularly sonata- and rondo-like integration,⁸¹ which for Keller was 'very important from the viewpoint of the future of symphonism'.⁸² And although such integration might result in formal ambiguity, it could also take the tradition forward, exemplifying Keller's fourth guideline relating to the new symphonic territories which may arise from such combinations. Overall, Skalkottas's imaginative, if rather unorthodox approach to dodecaphonic composition, his reinterpretation of traditional forms and

⁸⁰ Keller and Cosman, *Stravinsky Seen and Heard*, p.8.

⁸¹ In several large-scale works, as for example the Second String Trio (1935) and the Third Concerto for Piano and Ten Wind Instruments (1939), Skalkottas uses the sets of the first movement to construct an entire multi-movement piece. This approach ensures 'symphonic breath' and a high degree of integration of contrasting elements, not only within each section of a movement but also between movements, thus providing a large-scale unified structure. Furthermore, Skalkottas often extensively modifies the traditional tonal forms he uses as models to construct the formal design of a piece. His sonata and/or ternary structures are frequently combined with some other form (rondo, variations) to produce a complex synthesis of the two, procedures that are clearly derived from nineteenth-century compositional practices and Schoenberg's own approach to form. For a detailed discussion of Skalkottas's formal integration, see Mantzourani, 'Nikos Skalkottas: Sets and styles in the Octet', pp.82-86, and 'In the greater scheme of things: Musical form in the twelve-note works of Nikos Skalkottas', in Nina-Maria Wanek, ed., *Nikos Skalkottas (1904-1949) Zum 100. Geburtstag* (Vienna: Der Österreichischen Akademie der Wissenschaften, 2006), pp.71-101.

⁸² Keller, 'Schoenberg: The Future of Symphonic Thought', p.188.

stylistic corruption, and the merging of two styles (tonal and dodecaphonic), lead to new and interesting musical structures, while simultaneously revealing his symphonic thinking and, if Keller is to be believed, his symphonic genius.

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EXAMPLES

Example 1. *Thema con Variazioni, Thema: opening gestures and sets.*

Allegretto

The score is for a woodwind ensemble in 3/8 time. It features six staves: Clarinet (Cl), Bass Clarinet (BCl), Contrabassoon (CBsn), Horns 1-3 (Hns), Horns 2-4 (Hns), and Trombones 1-3 (Tbn). The music is marked with 'Allegretto' and includes several sets of notes labeled S1, S2, S3, and S4. S1 is the first set of notes in the Cl staff, S2 is in the BCl staff, S3 is in the CBsn staff, and S4 is in the Hns and Tbn staves. The score shows the first two measures of the piece, with measure numbers 1 through 12 indicated above the Cl staff.

Set 1

Set 1 is a single melodic line in treble clef. It consists of eight notes: G4, A4, B4, C5, B4, A4, G4, F4. Above the notes are intervals: 3-3, 3-2, 3-3, 3-10. Below the notes are intervals: 4-7, 4-3, 4-18, 4-18.

Set 2

Set 2 is a single melodic line in treble clef. It consists of eight notes: G4, A4, B4, C5, B4, A4, G4, F4. Above the notes are intervals: 3-3, 3-5, 3-5, 3-5. Below the notes are intervals: 4-3, 4-5, 4-5.

Set 3

Set 3 is a single melodic line in treble clef. It consists of eight notes: G4, A4, B4, C5, B4, A4, G4, F4. Above the notes are intervals: 3-1, 3-9, 3-8, 3-1. Below the notes are intervals: 4-2, 4-16, 4-1.

Set 4

Set 4 is a single melodic line in treble clef. It consists of eight notes: G4, A4, B4, C5, B4, A4, G4, F4. Above the notes are intervals: 3-9, 3-5, 3-9, 3-11. Below the notes are intervals: 4-16, 4-27, 4-18.

Example 4. Third String Quartet, *Allegro moderato*, section A – opening gesture and sets.

Allegro moderato

12

Set 1

Set 2

Set 3

Set 4

Example 5. *Allegro moderato*, section A – Harmonic structure of the opening gesture.

The image displays a musical score for the opening gesture of section A in *Allegro moderato*. The score is presented in two systems, each with a treble and bass clef staff. The first system includes a series of chord labels above the treble staff: 4 - 1, 4 - 21, 4 - 28, 4 - 18, 4 - 21(T1), 4 - 14, 4 - 18(T5), 4 - 22, 4 - 8, 4 - 21(T2), 4 - Z29, 4 - 14(T6), and 4 - 17. Below the bass staff, three horizontal lines with arrows indicate intervallic relationships: 4 - 21, 4 - 18, and 4 - 14. The second system shows a continuation of the harmonic structure with a few more notes and chords, including a tritone interval (b) in the bass staff.

Example 6. *Allegro moderato*, section B – opening gesture and sets.

Musical score for measures 42-45. The score is for four staves: Violin 1 (Vln 1), Violin 2 (Vln 2), Viola (Vla), and Violoncello (Vlc).
- Vln 1: Starts with a pizzicato (pizz.) note, then arco. Dynamics: *p*. Fingerings: 1 2 3 4, 5 6 7, 1 2 3 4.
- Vln 2: Starts with a pizzicato (pizz.) note, then arco. Dynamics: *pp*. Fingerings: 1 2 3 4 5 6 7, 1 2 3 4.
- Vla: Starts with a pizzicato (pizz.) note, then arco. Dynamics: *pp*.
- Vlc: Starts with a pizzicato (pizz.) note, then arco. Dynamics: *pp*. Fingerings: 1 2 3 4 5, 1 2.

Musical score for measures 46-49. The score is for four staves: Violin 1 (Vln 1), Violin 2 (Vln 2), Viola (Vla), and Violoncello (Vlc).
- Vln 1: Continues the melodic line. Fingerings: 8 9 10 11 12.
- Vln 2: Continues the rhythmic accompaniment. Fingerings: 8 9 10 1 2 3 4 11 12.
- Vla: Continues the rhythmic accompaniment. Fingerings: 3 6 7 8 9 1 2 3 10 11.
- Vlc: Continues the rhythmic accompaniment. Fingerings: 3 6 7 8 9 1 2 3 10 11.

Musical score for measures 50-53. The score is for four staves: Violin 1 (Vln 1), Violin 2 (Vln 2), Viola (Vla), and Violoncello (Vlc).
- Vln 1: Continues the melodic line. Dynamics: *pp*.
- Vln 2: Continues the rhythmic accompaniment. Dynamics: *mf*.
- Vla: Continues the rhythmic accompaniment. Dynamics: *mf*.
- Vlc: Continues the rhythmic accompaniment. Dynamics: *mf*.
- Measure 53 includes a dynamic change to *pp* and a fermata over a note.

Set 5

Set 5(T3)

Set 6

Set 7

Example 7. *Allegro moderato*, section *B* – segmental structure of the sets.

Set 5

Set 5(T3)

Set 6

Set 7

Example 8. *Allegro moderato*, section *B* – Beethovenian quotation of the second theme.

Beethoven, Fifth Symphony, iv (*Allegro*), recapitulation of the second theme



Skalkottas, Third String Quartet, *Allegro* (section *B*), second theme



Example 9. *Allegro moderato*, section B – developmental passage, bars 61-68.

The musical score consists of four staves: Violin I (VI1), Violin II (VI2), Viola (Vla), and Violoncello (Vlc). The music is in 4/4 time and begins at bar 61. The Violin I part starts with a forte (*f*) dynamic and features a melodic line with a 4-11 interval marked above the first measure. The Violin II part starts with a mezzo-forte (*mf*) dynamic and includes a section labeled S5(T3). The Viola part starts with a mezzo-forte (*mf*) dynamic and includes a section labeled S6 and a 4-11 (T6) interval. The Violoncello part starts with a mezzo-forte (*mf*) dynamic and includes a section labeled S7 and a pizzicato (*pizz.*) instruction. The score continues through bar 68, with dynamics ranging from *f* to *mf*. The bottom of the page shows bar numbers 1 through 12, with the first system covering bars 61-65 and the second system covering bars 66-70.

Example 10. *Allegro moderato*, section *B* – Beethovenian quotation within a melodic gesture based on set *S7*.

Beethoven, Fifth Symphony, iv (*Allegro*), exposition of the second theme



Skalkottas, Third String Quartet, *Allegro* (section *B*), melodic gesture based on set *S7*



Example 11. *Allegro moderato*, schematic presentation of the harmonic movement within sections A and B.

The image displays a musical score for a piece in *Allegro moderato*. The score is divided into three sections: 'Intro - Section A', 'Section B', and 'Coda'. The notation is presented in two staves, treble and bass clef. The key signature is one sharp (F#), and the time signature is 4/4. The 'Intro - Section A' section consists of the first four measures. The 'Section B' section begins at measure 5 and continues through measure 10. The 'Coda' section is the final measure, measure 11. The score uses various musical notations including chords, single notes, and rests. A dashed line with an arrow indicates a continuation of the bass line from the end of Section B into the Coda. A solid line with an arrow indicates a continuation of the treble line from the end of Section B into the Coda.

Example 12. *Allegro moderato*, cadence to section *B*¹ and opening gesture of the recapitulation.

The image displays a musical score for a string ensemble, divided into two sections: a cadence and a recapitulation.

Cadence to B¹ (Measures 151-153):
This section involves four string parts: Violin 1 (Vln 1), Violin 2 (Vln 2), Viola (Vla), and Violoncello (Vlc).
- **Vln 1:** Starts at measure 151 with a sixteenth-note figure, marked with a box containing '151' and a slur labeled 'S5'. It concludes at measure 153 with a final chord, marked with a box containing '153'.
- **Vln 2:** Starts at measure 151 with a sixteenth-note figure, marked with a box containing '151' and a slur labeled 'S5(T3)'. It concludes at measure 153 with a final chord.
- **Vla:** Starts at measure 151 with a sixteenth-note figure, marked with a box containing '151' and a slur labeled 'S6'. It concludes at measure 153 with a final chord.
- **Vlc:** Starts at measure 151 with a sixteenth-note figure, marked with a box containing '151' and a slur labeled 'S7'. It concludes at measure 153 with a final chord, marked with a box containing '153' and a slur labeled 'S6'. A fortissimo (*ff*) dynamic marking is present at the end of this section.

Recapitulation (Measures 160-165):
This section features four string parts: Violin 1 (Vln 1), Violin 2 (Vln 2), Viola (Vla), and Violoncello (Vlc).
- **Vln 1:** Starts at measure 160 with a slur labeled 'S1' and a *ppp* dynamic marking. It concludes at measure 165 with a slur labeled 'S2' and a *mp* dynamic marking.
- **Vln 2:** Starts at measure 160 with a slur labeled 'S2' and a *ppp* dynamic marking.
- **Vla:** Starts at measure 160 with a slur labeled 'S3' and a *ppp* dynamic marking.
- **Vlc:** Starts at measure 160 with a slur labeled 'S4' and a *ppp* dynamic marking.