

# **Transformational analysis in practice**

Music-analytical studies on composers and  
musicians from around the world

Edited by

**Bozhidar Chapkanov**

**Series in Music**



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The Editor

## Contributors

**Antonio Grande** is Professor of Music Analysis at the Conservatory of Como (Italy) and in postgraduate courses at the University of Calabria. He is currently Head Editor of the International Journal of Musical Analysis and Theory *RATM*. He has written numerous papers for analytical journals as “Analisi” (*Ricordi*), “Spectrum” (*Curci*), *RATM* (Lim), “*Quaderni dell’Istituto Liszt*”, “*De Musica*” (University of Milan). One of his works, Temporal Perspectives in Scriabin’s Late Music is included in the recent volume *Demystifying Scriabin*, edited by Vasilis Kallis & Kenneth Smith, Boydell & Brewer, 2022. He also published *Una rete di ascolti. Viaggio nell’universo musicale neo-riemanniano* (Rome, 2020), *Lezioni sulla Forma Sonata* (Rome 2015), and *Il moto e la quiete. Dinamica delle strutture musicali in età tonale* (Rome 2011).

Dr. **Bozhidar Chapkanov** is a pianist, composer and researcher who specializes in the field of neo-Riemannian theory and analysis. His doctoral thesis titled “*Harmony and Tonality in Liszt’s Late Piano Music – Functional and Transformational Analytical Perspectives*” develops a hybrid methodology for the transitional repertoires of the late nineteenth century, utilizing the strengths of both Hugo Riemann’s *Funktionstheorie* and the innovative approaches of neo-Riemannian analysis. Commencing his doctoral studies in 2017 at City, University of London, and completing in 2022, Bozhidar Chapkanov has enjoyed frequent appearances at international conferences, presenting his findings in Italy, France, Portugal, Croatia and the UK. His publication in the Italian *Rivista di analisi e teoria musicale (RATM)* titled “*An Analytical Study into Weitzmann Regions in the late Piano Works of Franz Liszt*” shows the importance of the augmented triad for Liszt and claims that a visually enhanced neo-Riemannian methodology can put enough emphasis on this sonority and demonstrate that it was a generator of musical syntax for the composer. Having similar motivations as a lead editor for the current book, Dr. Chapkanov believes that transformational analysis can open our eyes and ears to many harmonic details in the music of the nineteenth and twentieth centuries, which may remain obscure in other modes of analysis.

Dr. **Yosef Goldenberg** is a music theorist and a scholar of Israeli music. He teaches at the Jerusalem Academy of Music and Dance, where he also serves as head librarian. Dr. Goldenberg is the author of *Prolongation of Seventh Chords in Tonal Music* (Edwin Mellen Press, 2008) and co-editor of *SMT*

Outstanding Multi-Author Award-winning *Bach to Brahms: Essays on Design and Structure* (University of Rochester Press, 2015). In music theory, he also published in *Gamut*, *Indiana Theory Review*, *Intégral*, *Journal of Music Theory*, *Journal of Schenkerian Studies*, *Music Analysis*, *Music Theory and Analysis*, *Music Theory Online* and *Theory and Practice*.

**Robert Peck** is Professor of Music Theory at Louisiana State University. He is a prominent scholar in mathematics and music studies, transformational theory, and post-tonal music analysis. A founder of the *Journal of Mathematics and Music*, he served as its Co-Editor-in-Chief from 2007 to 2012. He is co-editor of the book *Mathematical Music Theory: Algebraic, Geometric, Combinatorial, Topological and Applied Approaches to Understanding Musical Phenomena* (World Scientific, 2018). His research appears in *Journal of Music Theory*, *Perspectives of New Music*, *Music Theory Online*, *Journal of Mathematics and Music*, *MusMat: The Brazilian Journal of Music and Mathematics*, *Intégral*, and other publications. He has presented his research at numerous conferences in the United States, Germany, France, England, Canada, Mexico, and Brazil. He has co-organized seven special sessions on mathematics and music for the American Mathematical Society. He holds a Doctor of Music degree from the Indiana University Jacobs School of Music.

**Desirée Mayr** is a Professor of Music at Bahia State University and a violinist in the Brazilian Symphony Orchestra. She studied at Durham University on a CAPES scholarship and obtained her doctorate from the Federal University of Rio de Janeiro, where she subsequently taught analysis of Brazilian Romantic works as a postdoctoral fellow. Her research covers the work of the Brazilian nineteenth-century composer Leopoldo Miguéz. She is currently a member of a research group working on Latin American sonatinas that published its first volume in 2022. Dr Mayr has presented her research at international conferences including the International Musicology Society and the Society for Music Theory; she was the 2022 recipient of the IMS and SMT Travel Grants. She serves as co-chair of the SMT's Global Interculturalism and Musical Peripheries interest group and publishes her works in journals such as *Music Theory and Analysis* (MTA).

Dr. **Recep Gül** holds a doctorate degree in music composition from the University of Michigan and is currently an assistant professor of composition at İstanbul Technical University. He studied composition with Bright Sheng, Evan Chambers, Kamran İnce, Paul Schoenfield and Pieter Snapper. His music has been performed in the USA, Italy, Germany, Turkey and Switzerland. He was



awarded the prestigious Rackham predoctoral fellowship and Institute for the Humanities - Graduate Student Fellowship at the University of Michigan. Recent awards and honors included second prize in the Choral Composition Competition by the Culture of Ministry in 2018, second prize for piano quartet in Süreyya Opera national composition competition in 2019 and first prize for Cello Concerto in Ezcacıbaşı National Competition in 2021. He is also the musical director of the award-winning a cappella ensemble *A Cappella Boğaziçi* and head of the music commission in the Choir Culture Foundation in Istanbul.

**Ozan Baysal** is a faculty member at the Department of Musicology, Istanbul Technical University. His research areas are history of music theory, analysis and popular music. His output on history of music theory examines Turkish makam music treatises (*edvâr*), and the influences of early Greek music theory within the foundations of the Turkish makam theoretical tradition. In terms of music analysis Baysal has proposed two prolongational models for analyzing makam-based traditional Turkish music: Cyclical Analysis Model, and Time-Makam Analysis Model. His recent works investigate the poetics of makam through the Ayin compositions within the Mevlevi tradition while bringing together structural, hermeneutic and intertextual approaches to analysis, and were presented in various international meetings including *Musica Analytica* (Porto 2019), Analytical Approaches to World Music (AAWM 2014 & 2021) and the Annual Meeting of American Musicological Society (AMS 2021).

**Edward Gollin** is Professor of Music Theory at Williams College. He has published numerous articles and book chapters on transformational theory, neo-Riemannian theory, and on the music of Béla Bartók. He was a co-editor of the *Oxford Handbook of Neo-Riemannian Theories*, which received a Special Citation of Merit from the Society for Music Theory. He received his Ph.D. in music theory from Harvard University, and a Master of Arts degree in theory from Queens College, C.U.N.Y.

Dr. **Stephen Brown** is Professor of Music Theory at Northern Arizona University, where he also coordinates the academic area within the School of Music. Dr. Brown earned his BA in Music and History from Harvard in 1991 and his Ph.D. in Music Theory from Yale in 1999, studying under Allen Forte. Before coming to NAU, he taught at the University of Connecticut (Assistant Professor, 2000-2001) and the Oberlin Conservatory (Assistant Professor, 2001-2007; promoted to Associate Professor with tenure, 2007). Dr. Brown has done research in post-tonal theory and analysis, transformational theory, and

the music of Shostakovich. His articles have appeared in *Music Theory Spectrum*, *Music Analysis*, the *Journal of Music Theory*, and *Music Theory Online*, among other journals. He has served on the editorial boards of *Music Theory Online* and *SMT-V*, is a past president of the Rocky Mountain Society for Music Theory, and was on the program committee for the annual conference of the Society for Music Theory (AMS-SEM-SMT 2022).

**Yvonne Teo** holds a Ph.D. from Durham University, where her funded research sought to develop a hybrid theoretical model, amalgamating several well-known theories to early twentieth-century works. Her work also sought to bridge the divide between performance and music analysis through an investigation into music perception and cognition. She also holds a Master's in Music in Musicology with a First from the University of Melbourne under the Australian Postgraduate Award scheme, a Bachelor's of Music with a First in Musicology, a Graduate Diploma in Education from the University of Queensland, and a Diploma in Piano Performance from ABRSM.

**Jennifer Harding** is a music theorist, educator, and communicator based in Western Massachusetts. Her research seeks to answer questions about harmonic relationships in both notated and recorded music using mathematical and computational methods, with an emphasis on the discrete Fourier transform. She has presented her work in both national and international venues, with some of her research appearing in the proceedings of the Music Encoding Conference. Her interests also include issues of visual representations of music and is the co-founder of the Society for Music Theory's Music Notation and Visualization Interest Group. She has taught music theory at the University of Massachusetts Amherst, University of Florida, and Florida State University.

**Rich Pellegrin** is Assistant Professor of Music Theory at the University of Florida and Affiliate Assistant Professor at the Center for Arts, Migration, and Entrepreneurship. His work has been published in *Jazz Perspectives*, *Engaging Students*, the *Journal of Schenkerian Studies*, *The Conversation*, and in volumes by Cambridge Scholars Publishing and KFU Publishing House. Pellegrin recently served as Guest Editor of a special issue of *Jazz Perspectives* devoted to John Coltrane. As a jazz pianist, composer, and bandleader, he has released four albums on Origin Records' OA2 label. His recent record *Down* was reviewed in the leading jazz periodical, *Downbeat Magazine*, which described "moments of absolute bliss" and wrote: "Pellegrin does as the great pianists do, supplying encouragement and graceful touches in the background, before diving forward to take solos that are by turns florid and

cracked, balletic and modern.” He is currently working on a multi-volume solo project.

**Tim Clarkson** teaches in the jazz performance and musicology departments of the Sydney Conservatorium of Music. He is a jazz saxophonist, composer, bandleader residing in Sydney, soon to begin his final year of DMA candidature at the Sydney Conservatorium. His research explores theory and practice of tonal transformation and superimposition in modern jazz improvisation, and performer agency in group creative processes.

Previous research during his Master’s Degree analyzed the polytonal improvisation techniques of American saxophonist Mark Turner, specifically chromatic third relationships through octatonic and hexatonic collections. Tim has received several grants for overseas research and study, including the Australia Council for the Arts Skills Development Grant and JB Seed Fund Grant.

A highly creative and unique voice on saxophone, his albums feature regularly on national radio as leader or sideman and has performed with George Benson, The Temptations, Grammy Award winner Elio Villafranca and recorded in New York with drummer Dan Weiss, bassist Hans Glawischnig and pianist Barney McAll. In Australia, he performs and tours with the Tim Clarkson Trio, Dan Barnett Big Band, Dave Panichi Orchestra and multi ARIA award winners The MARA! Band.

**Hussein Boon** is a multi-instrumentalist, songwriter, composer, music educator and YouTube video maker. He has taught for many institutions, including Goldsmiths, City Lit, CM and IoE and organizations, the Prince’s Trust, BBC, and music and arts services. He has worked for artists including Beats International, Eusebe, DeLa Soul and many others. He is an Independent artist, live coder, improvising modular synthesist and London Ableton Live User Group organizer. His recent published works include a chapter on Shift Registers in semi-improvised writing and performance contexts and an article illustrating how to use Digital Audio Workstations as design tools to develop unconventional production and composition approaches.



## Preface

Since the 1990s, transformational music theory has slowly but steadily been gaining momentum as an important branch of the theoretical subfields, which aim to explain why music is harmonically organized the way it is. It arose with the attempts of a handful of theorists (predominantly American) to more fully explain the harmonic complexity of the highly chromatic music composed from around the middle of the nineteenth century onwards. This was in response to traditional tonal theories (such as Schenkerian or Roman numeral) and their difficulties in addressing the ever-larger tonal freedom in the styles of composers such as Wagner, Liszt, Franck or Bruckner. Abandoning the need to subordinate harmonic structures to a tonal hierarchy and to unify phrases with a single overarching tonic, but instead focusing on the types and logic of direct chord-to-chord relations (the so-called transformations), theorists such as David Lewin, Brian Hyer, David Kopp and Richard Cohn, among a number of others referenced throughout this book, managed to fill a significant gap in music analysis – the lack of satisfactory theory for the tonally transitional music of the late Romantic and early modern repertoires; music which could not be described as strictly tonal, but was at the same time based on the familiar consonant triads and seventh chords, which were already conventional harmonic blocks in the eighteenth and early nineteenth centuries. While defining the initial motivations for developing what is today widely recognizable as “neo-Riemannian theory and analysis” – those analytical threads and theoretical ideas derived from Hugo Riemann’s highly influential Functional theory – we must admit that the “transformational” music-theoretical project nowadays far surpasses those nineteenth-century concepts such as functionality and harmonic dualism. Therefore, upon realizing how wide the variety of analytical methodologies and repertoires included in this volume is, we have decided to move away from the initially conceived “Neo-Riemannian analysis in practice” and instead title this book “Transformational analysis in practice”.

It can be claimed that the sequence of chapters in this collection loosely follows the chronological development of transformational theory (with *neo-Riemannian analysis* being a more suitable labelling for Part I) – moving from the chromatic tonal music of the nineteenth century towards the atonal music of the twentieth, then towards jazz and popular music. In view of this, a brief literature review tracing the development of the field from the 1980s onwards would not only be appropriate to integrate here, but it can also inform readers about the connections between ideas, methodologies and developments

presented throughout this anthology. As an additional supplement for everyone researching in the field, the extensive bibliography, presented towards the end of the volume, serves to trace the chronology of research outputs in the broader field, having studies grouped on a decade-by-decade basis.

Hugo Riemann's extensive theoretical writings and especially those of the period 1877-90 (see final bibliography) laid the foundations of what we call functional harmony today, before gradually moving away from the strict rules of the common-practice functional tonality and towards integrating more chromatic, third-related and other supposedly less conventional harmonic relations into his theoretical model. It is precisely those later developments that have been taken on and recontextualized almost a century later by theorists such as David Lewin (1967, 1982, 1984, culminating in 1987), Richard Cohn (1988, consider especially his studies from 1996-98), Brian Hyer (1989, 1995), David Kopp (1995, 2002), Michael Kevin Mooney (1996), and Julian Hook (2002), to name a representative portion of the studies from the earlier years of neo-Riemannian theory, which gradually was getting replaced or becoming part of the more widely encompassing transformational theory.

As talking about chord or pitch proximity has been an essential part of Riemannian (and later neo-Riemannian) thinking, showing pitch relations in geometrical spaces such as the celebrated *Tonnetz* has been a most potent device for discussing harmony since Hostinský (1879). Geometrical representations of harmony have then been adapted and developed in multifaceted ways, from the familiar major-minor triadic *Tonnetz* as in Cohn (1998, "An Introduction to Neo-Riemannian Theory"), through more complex geometries for depicting relations between chords of more than three pitches, as in Douthett and Steinbach (1998) or Tymoczko (2006), to analyzing the atonal music of the twentieth century with adapted *Tonnetze* and other geometrical devices, as in Brown (1999) and Gollin (2000). The ability to represent harmony geometrically is what distinguishes transformational analysis from other, predominantly notation-based analytical systems. Bearing this in mind, it has been one of the primary motivations for the current project to put together a selection of visually appealing, and hence approachable and widely understandable analytical methodologies. We hope that analytical surveys, which are based on easily understandable and geometrically conceived figures and diagrams would have a wide readership and can motivate a growing integration of transformational theory into the undergraduate curriculums across music departments in English-speaking countries and beyond.

What distinguishes transformational from neo-Riemannian theoretical thinking is, perhaps to a largest extent, the development of a more abstract, mathematically-conceived way of discussing music, which started with David Lewin's *Generalized Musical Intervals and Transformations* in 1987. This

approach has been continued by scholars such as Eytan Agmon (1989), Julian Hook (2002, 2011 and 2013) and Dmitri Tymoczko (2008, 2009 and 2011) and has arguably developed into the most prevalent thread in the field. Modeling musical transformations as elements of a mathematical group (basically applying group theory to music) has opened the doors for discussing all possible kinds of chords and chord or pitch relations, regardless of style, and hence transformational theory has become extremely flexible.<sup>1</sup> Its extension to more dissonant and more complex sonorities, as well as to transformations between dyads, has led to the application of transformational methodologies to ever wider repertoires, including jazz, atonal music, as well as film music. The current volume presents a selection of analytical studies on jazz and post-tonal repertoires, the latter being represented by discussions of Webern, Copland, Vaughan Williams, Messiaen and Thomas Adès. There is a balance between more approachable, music-centered essays as in chapters 7 and 8, and more mathematically-rigorous surveys, as in chapters 9 and 10. For the latter, some background in mathematics would be beneficial to readers, while we believe that the discussion of musical examples can still be within everyone's scope of understanding.

The more one delves into the theoretical and analytical landscapes as outlined crudely and perhaps overly succinctly above, the more one realizes that transformational music theories (supposedly more appropriate to be referred to in the plural) seem to have evolved piece-by-piece and continue to accommodate numerous semi-independent threads. This makes it possible for individual essays in the current anthology to situate themselves in numerous branches of the field, while chapters have been grouped into four distinct parts, based on the repertoires under discussion. Starting with the music which inspired the development of neo-Riemannian analytical thinking – the European Romantic music of the nineteenth century – essays proceed in a rough chronological order, firstly making a geographical excursion to art music from Brazil and Turkey, then returning to Europe for the atonal music of Anton Webern, before touching on other post-tonal composers, and, finally, acknowledging the suitability of transformational analysis to jazz and popular music.

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<sup>1</sup> Group theory is a mathematical framework that studies the properties and relationships of sets of elements, allowing for the exploration of symmetries, transformations, and patterns within a given system. In music theory, group theory is applied to analyze and understand chord progressions, pitch relations, and harmonic transformations across various musical styles.

While needing to admit that a book such as the one we have put together, cannot do full justice on all the important trends in the multifaceted field of transformational music theory that are simultaneously evolving today, we have striven to represent a wide variety of approaches to analysis – one that can be of interest to many musicology students, music practitioners, scholars in the field, and those who would like to broaden their understanding of music without limiting themselves to a particular style and epoch. As you delve into the forthcoming chapters, we encourage you to embrace the transformative power of music analysis and embark on a journey of discovery. Engage with the rich array of methodologies presented within these pages, explore the intricate landscapes of diverse musical styles, and let the essays inspire new perspectives and insights.



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