

RHYTHMIC CONSONANCE AND DISSONANCE IN ECKHARD KOPETZKI'S WORKS FOR SOLO

PERCUSSION: *TOPF-TANZ* AND *CANNED HEAT*

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This study examines the compositional devices Eckhard Kopetzki used to create consonance and dissonance throughout his two works for solo percussion, *Topf-Tanz* and *Canned Heat*. By manipulating meter, ostinato, syncopation, polyrhythm, note values and overlapping figures, Kopetzki creates high levels of musical tension and release that shape phrase structure and large-scale form.

After a discussion of rhythmic consonance and dissonance, and specific rhythmic devices, both works are considered in detail, illuminating the composer's compositional language. *Topf-Tanz* is an exploration of contrasting ideas: the rhythmic and the lyrical, the call and the response, the loud and the soft. It is manifested first in the opposition of antecedent and consequent phrases and second in the overlapping of contrasting metric ideas, which creates prolonged rhythmic dissonance. *Canned Heat*, on the other hand, is composed through a process of continuing melodic variation. Throughout the piece, melodic motives are prolonged and abridged, creating both delay and acceleration to cadential figures. In contrast to these melodic ideas, each phrase is concluded with stark and syncopated rhythmic punctuations.

*Topf-Tanz* and *Canned Heat* share Kopetzki's creation of rhythmic consonance and dissonance. Most notably is the overlapping of contrasting metric ideas between the two hands, and highlighting this contrast through the use of two contrasting instrument families; skin and metal. On the large scale, both works progress from of a place of rhythmic consonance to one of dissonance.

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## CHAPTER 1

### INTRODUCTION: SIGNIFICANCE AND STATE OF RESEARCH

The purpose of this study is to explore the compositional devices found within Eckhard Kopetzki's advanced works for solo percussion, *Canned Heat* and *Topf-Tanz*, with an aim to inform their preparation and performance. Within the realm of non-specific pitch space, Kopetzki successfully constructs two compelling and engaging works by manipulating perceivable types of meter, ostinato, syncopation, polyrhythms and layered meters. In a manner analogous to common practice tonality, the composer utilizes both rhythmic consonance (stability) and rhythmic dissonance (instability) creating phrase structure and musical variety throughout both pieces. These rhythmic devices serve as the primary DNA of both works and provide the foundation for the musical aesthetic evident in them. It is imperative for the performer to understand and accurately present these musical ideas for an effective performance. Other considerations such as instrumentation, implement choice, "found" instruments, orchestration, and setup are noteworthy and will be included as necessary to support the primary focus.

Multiple-percussion is a staple within University curriculums as well as for professional performers. *New Grove Dictionary of Music and Musicians* and the *Oxford Dictionary of Music* omit any definition of the term; however, it does appear in John Beck and James Strain's entry for "Percussion Music." Here the authors reference the term three times, most notably when describing Stravinsky's use of the "multiple-percussion" compositional style in *'histoire du*

*Soldat*.<sup>1</sup> Steven Schick elaborates on the nature of multiple-percussion in *The Percussionist's Art: Same Bed, Different Dreams*. He writes that percussion "is not even an instrument...not a single instrument anyway...there is not an instrument that defines percussion playing."<sup>2</sup>

Percussion is a collection of thousands of instruments from across the world with as many traditions and musical contexts. Therefore, "multiple-percussion music is collective-the unified result of the accumulated sounds of single instruments."<sup>3</sup> In that way, multiple-percussion, albeit the youngest of percussion art music mediums, is a reflection of the vast variety found within percussion traditions. I believe that this multitude of possibilities makes multi-percussion compelling to performers and audiences. It is an open canvas, a catch all for all art music composed for a collection of percussion instruments within a limitless creative landscape.

In 1956, nearly four decades after *'histoire* (and the birth of the drum set), John Cage composed the first multiple-percussion solo with his *27' 10.554"*.<sup>4</sup> In many ways Cage was the grandfather of the classical percussion ensemble, offering six major works during the preceding two decades, and it is fitting that he offered the first composition for solo multiple-percussion. Compositions for this new open-ended medium sprang to life immediately afterwards and have

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<sup>1</sup> John H. Beck and James A. Strain, "Percussion music." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed January 23, 2014, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2225030>. *Histoire* is often credited as the first true multi-percussion part in a chamber work. The other mentions refer to ensemble works requiring performers to play multiple instruments as "similar to a multiple percussion setup," and when discussing percussion solo music, or works for "multiple percussion instruments performed by one person. It is also worth noting that Beck chose to define and list works for multiple-percussion before any discussion of concerti or solo literature for keyboard or timpani.

<sup>2</sup> Steven Schick. *A Percussionist's Art: Same Bed, Different Dreams* (Rochester, NY: University of Rochester Press, 2006), 3.

<sup>3</sup> *Ibid*, 16.

<sup>4</sup> Along with the mixed chamber works of the early 20<sup>th</sup> century, beginning with Edgar Varèse, who composed *Ionization* in 1929, composers including Henry Cowell, William Russell, Amadeo Roldan, Alan Hovanes, Carlos Chavez, Lou Harrison and John Cage introduced the first classical percussion ensembles.



continued to do so until the present.<sup>5</sup> Through collaboration with performers including Steven Schick, Evelyn Glennie, and others, composers continually add to the multiple-percussion repertoire. In the same spirit, the Percussive Arts Society (PAS) sponsors composition contests each year with the mission of increasing the number of high quality compositions for percussion.

Eckhard Kopetzki exploded onto the international stage in the early 2000's.<sup>6</sup> In three years he received two PAS 1<sup>st</sup> Place Awards and a 3<sup>rd</sup> Place Award with his *Canned Heat* for solo multi-percussion, *Three Movements for a Solo Dancer* for solo marimba, and his sextet, *Exploration of Time*. His repertoire of nearly 200 works, five for multi-percussion, spans a variety of genres, styles and ability levels required of the performers, reflecting his experience as a music educator.<sup>7</sup> *Canned Heat* and *Topf-tanz* occupy an important space within the multi-percussion repertoire and by extension percussion curriculums; namely between the more straightforward works of Ricky Tagawa, Dave Hollinden, and William Kraft and the more avant-garde works of Iannis Xenakis, David Lang, Karlheinz Stockhausen, and Morten Feldman.<sup>8</sup> Kopetzki is distinct from these other composers in that he treads the thin line between metric pulse expectation (groove) and its complete dissolution. More specifically, the composer plays on the listener's connection to the pulse by displacing accents, oscillating between meters, and

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<sup>5</sup> See Appendix B for a sample list of influential solo works composed until the 21<sup>st</sup> century.

Stockhausen, Kraft, Feldman, Tagawa and Wuorinen were among the first contributors to the budding repertoire.

<sup>6</sup> Eckhard Kopetzki currently teaches percussion and music theory at the "Vocational School of Music" in Sulzbach - Rosenberg. He is a sought-after juror and commissioned composer, having provided the "SET PIECE" for the International Marimba Competition in Belgium in 2004 entitled *Night of Moon Dances*.

<sup>7</sup> See Appendix A for a complete works list.

<sup>8</sup> Kraft, Tagawa, and Hollinden each focus on melody and/or musical styles. Their use of syncopation and obscuring perceptions does not venture too far from center. In contrast, Xenakis used mathematical equations in his works, David Lang's *Anvil Chorus* employs separate rhythmic cycles for each instrument and in Feldman's *King of Denmark* listeners would be hard pressed to identify the architecture since the work is a study in subtle textural landscaping.

cycling motivic fragments across the established meter. This manipulation of rhythm creates perceivable dissonance to varying degrees, which is then resolved back to the primary pulse.

To date, there has been little study of Kopetzki and his compositions. Dr. Darin Olsen focused solely on two of Kopetzki's marimba works for his doctoral document,<sup>9</sup> while Andrew Guzik focused on a variety of Kopetzki's works in his master's thesis several years earlier.<sup>10</sup> His document discusses Kopetzki's *Concerto for Marimba and String Orchestra, Three Movements for a Solo Dancer, Exploration of Time* and *Canned Heat*. Within, he provides a short biography of the composer and introduces his compositional style as utilizing "energetic contemporary rhythms and unique timbres."<sup>11</sup> He continues by describing Kopetzki's compositional traits as including odd metering, syncopation, post tonal harmonies, grace notes, and octaves.<sup>12</sup> The chapter devoted to *Canned Heat*, which contains the sections "Analysis" and "Practice and Performance Techniques", provides merely a surface level survey of the work's formal structure, phrase-by-phrase descriptions, and suggestions to performers in preparing them.<sup>13</sup> Guzik does briefly touch on "overlapping ostinatos," but he omits any discussion of metric stress patterns, the establishment and variation of pulse centers, or the ever-increasing rhythmic dissonance created through overlaid counterpoint.<sup>14</sup>

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<sup>9</sup> Darin Olsen, "Eckhard Kopetzki's Compositions for Marimba Competitions: An Examination and Comparison of Three Movements for a Solo Dancer and Night of Moon Dances" (D.M.A. Diss., Ohio State University, 2011).

<sup>10</sup> Andrew Guzik, "Works of Eckhard Kopetzki" (MM Thesis, Indiana University of Pennsylvania, 2007).

<sup>11</sup> Guzik is unclear what he means by "contemporary rhythms," as all of the rhythmic values utilized in these works fall within the common practice; however, I believe that he is referring to the interplay between meter and polyrhythm as the heart of his study.

<sup>12</sup> Guzik, "Works of Eckhard Kopetzki," 4.

<sup>13</sup> Ibid, 30-39.

<sup>14</sup> Ibid, 33.

Although I appreciate the author's contributions, a deeper understanding of Kopetzki's rhythmic constructions and their effect on the listener's pulse perception is necessary. These devices are integral to the formal structure and development found within Kopetzki's compositions. Moreover, *Canned Heat's* predecessor and sister piece, *Topf-tanz*, has not been included in any writing devoted to Kopetzki's compositional style. These works share the compositional traits mentioned before, namely Kopetzki's use of rhythmic consonance and dissonance, and they should be considered side-by-side.

Within the broader realm of music scholarship, study of metric consonance and dissonance has been notable. Justin London provides a bibliography of current scholarship in "Recent Rhythmic Research in North American Music Theory," providing a brief list of several recent articles on the topic.<sup>15</sup> In the "Metric Dissonance and other Analytical Projects" subsection, London cites Harald Krebs's 1999 *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*, as an extension of his influential, seminal work, "Some Extensions of the Concepts of Metrical Consonances and Dissonance," as well as additional references ranging from studies on Bartok, Brahms, the German Lied, Haydn, Nancarrow, Reich, Stravinsky and Torke.<sup>16</sup> Although London references Richard Cohn's 2001 article "Complex Hemiolas, Ski-Hill Graphs and Metric Spaces," he omits his 1992 article, "Metric and Hypermetric Dissonance in the Menuetto of Mozart's Symphony in G minor, K. 550," which would fit nicely with other chosen selections. Also omitted from London's article is Pieter C. Van den Toom's 2004 article, "Stravinsky, Adorno, and the Art of Displacement," which focuses on Stravinsky's use of metric

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<sup>15</sup> Justin London, "Recent Rhythmic Research in North American Music Theory," *Zeitschrift der Gesellschaft für Musiktheorie* (2005): 163-168.

<sup>16</sup> *Ibid*, 165.

displacement and also critiques Adorno's analysis and musical philosophy.<sup>17</sup>

London attributes a great deal of influence on current rhythmic analysis to Fred Lerdahl and Ray Jackendoff's book, *A Generative Theory of Tonal Music*,<sup>18</sup> as well as Carl Schachter's trio of articles concerning rhythm (the third dealing specifically with meter).<sup>19</sup> These sources discuss a broader approach to rhythm and its variants, serving as a stepping off point for many of the composer-specific studies noted in London's bibliography. However, as London also acknowledges, there are other significant contributions to rhythmic scholarship.

Maury Yeston is often referenced in recent writings on rhythmic dissonance. In his 1976 book, *The Stratification of Musical Rhythm* (published the same year as Schachter's trio of articles), he provides a quasi-Schenkerian methodology for understanding rhythmic stratification.<sup>20</sup> Less than a year after its publication, Charles J. Smith responded with his review, "Rhythm Re-stratified." Smith took issue with Yeston's approach as at times unnecessary and misleading and sought to elaborate and clarify many of Yeston's concepts.<sup>21</sup> A primary criticism of Yeston's work was its seeming detachment from the human perception of musical rhythm and meter, whether on the part of the performer or listener.

Henry Cowell's *New Musical Resources* is a work that provides insight into "the influence [that] the overtone series has exerted on music throughout its history."<sup>22</sup> Cowell systematically

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<sup>17</sup> Pieter C. Van Den Toom, "Stravinsky, Adorno, and the Art of Displacement," *The Musical Quarterly* 87, no. 3, (2004): 468-509.

<sup>18</sup> Fred Lerdahl and Ray Jackendoff. *A Generative Theory of Tonal Music*, (Cambridge: MIT Press, 1983).

<sup>19</sup> Carl Schachter, "Rhythm and Linear Analysis: A Preliminary Study," *The Music Forum* 4, ed. F. (1976): 281-334; "Rhythm and Linear Analysis: Durational Reduction," *The Music Forum* 5, ed. (1980): 197- 232; "Rhythm and Linear Analysis: Aspects of Meter," *The Music Forum* 6.1, (1987): 1-59.

<sup>20</sup> Maury Yeston, *The Stratification of Musical Rhythm* (New haven: Yale University Press, 1976).

<sup>21</sup> Charles J. Smith, "Rhythm Re-stratified," *Perspectives of New Music* 16, no. 1 (Autumn-Winter 1977): 144-176.

<sup>22</sup> Henry Cowell. *New Musical Resources*, (Cambridge, MA Cambridge University Press, 1930), x.

applied the mathematical relationships found in the overtone series to the many facets of music. Although brilliant, Cowell approached musical understanding through a profound detachment and provided no commentary on aesthetics nor did he provide analysis of musical examples from the repertory.<sup>23</sup> His work serves as a compendium of possibilities rather than providing practical analysis of known musical practices.

On the other hand, several works speak to the issues inherent in rhythmic and metric perception. First, Christopher Hasty's *Meter as Rhythm* explores both the dichotomy between meter and rhythm and their mutual relationship. He exhaustively discusses perceptions of duration, repetition, immediacy, and expectation.<sup>24</sup> He also references the shortfall of strict theoretical definitions. In practice, rhythm and meter are truly the "most complex and luxuriantly differentiated aspect of musical experience."<sup>25</sup> Second, John Roeder's "Interacting Pulse Streams in Schoenberg's Atonal Polyphony" is an example of interpreting perceived rhythmic content in works less hindered by a recurring metric pulse. He categorizes rhythmic polyphony as pulse streams, or a combination of two or more regularly recurring accents.<sup>26</sup> Roeder uses this rhythmic analysis, along with musical contour and dynamics, to illuminate the syntax of the text found in "Mondestrunk" and "Columbine" from *Pierrot Lunaire*, as well as other compositional similarities between the works.<sup>27</sup>

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<sup>23</sup> Ibid, xiii. Cowell expressly states that "Because the present work is not an attempt to explain the methods of specific composers, no quotations have been taken from actual compositions, but all necessary examples have been specially constructed to illustrate the various points." He does reference composers throughout the book in a historical context, identifying composer's unique contributions.

<sup>24</sup> Christopher F. Hasty. *Meter as Rhythm*, (New York, Oxford University Press, 1997).

<sup>25</sup> Ibid, viii.

<sup>26</sup> John Roeder, "Interacting Pulse Streams in Schoenberg's Atonal Polyphony, *Music Theory Spectrum* 16, no. 2 (Autumn 1994): 231-249.

<sup>27</sup> Ibid, 249.

Finally, Grant Fletcher, in his “Rhythm – Notation and Production,” goes into detail about the nature of rhythm, with a focus on its effect on perception, feel, and performance.<sup>28</sup> His intended audience includes composers, performers and conductors, who most benefit from a thorough understanding of metric stress and rhythmic manipulations. Fletcher discusses several factors that are applicable to Kopetzki’s works. First, establishing metric expectation and destroying it; second, “pulse pattern” or the emphasis on recurring rhythmic figures; third, “cross rhythms,” or metric pulse ideas that do not fit the notated time signature and finally “hiatus” or the use of silence to heighten musical tension.<sup>29</sup>

Although the works by Krebs, Yeston, and Cowell (among others) provide a thorough and logical approach to the nature of rhythm and meter, a bias toward performance and perception will guide this study of Kopetzki’s two works. Fletcher’s nomenclature provides a stepping-off point to consider the rhythmic language found within *Canned Heat* and *Topf-Tanz*, and will help to establish how and why his music is successful in manipulating rhythmic consonance and dissonance.

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<sup>28</sup> Grant Fletcher. *Rhythm – Notation and Production* (Tempe, Self-Published, 1969).

<sup>29</sup> *Ibid*, 7.

## CHAPTER 2

### CONSONANCE AND DISSONANCE

The term consonance stems from the Latin word *consonare*, which is translated into English as “sounding together.” Referring to sounds that are combined or overlapping, this term was a synonym for interval, and later used to identify those of a “special quality of harmonious agreement.”<sup>30</sup> Perhaps the purest form of consonance can be found in the merger of two identical pitches such as the unison or the octave. The blending of these wavelengths would be free of clashing waveforms and thus represent complete sonic unification. Although consonance implies this unification, and by extension dissonance to include contrasting pitches, throughout history there has been an ever-changing distinction between what pitches, intervals or chords were to be considered consonant or dissonant within a given context. Therefore, consonance and dissonance can be better understood as functions of one another. Set in opposition to dissonance, consonance can serve as both the foundation from which dissonance is introduced or the resolution of dissonant instability.<sup>31</sup>

#### 2.1 Rhythmic Consonance

Literally applied to rhythm, the term consonance would be defined as sounds articulated together. However, in practice, rhythmic consonance can be better understood as an established and predictable series of pulses. The steady stream of articulated or implied points in time, or recurring durations, constitute the music’s pulse. More than a series of

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<sup>30</sup> Norman Cazden, “The Definition of Consonance and Dissonance,” *International Review of the Aesthetics and Sociology of Music* 11, no. 2 (December 1980): 126.

<sup>31</sup> *Ibid*, 166.

articulations, when present long enough that the mind can perceive its consistency, the pulse provides the foundation upon which rhythms can be placed. When these pulses are organized into recurring patterns, a hierarchy of unevenly weighted beats form what Fletcher calls “metric pulsation.”<sup>32</sup> The term meter originally meant “to measure” but through its application to poetry and music has shifted to refer to stress patterns. For example, common time contains primary stresses on beats one and three, while 3/4 is firmly weighted on the first pulse followed by two weaker pulses.<sup>33</sup> The repetition of pulse patterns provides an anchor for the listener and establishes a sense of rhythmic consonance from which musical tension can build and resolve again.

Of course pulse patterns can be grouped in a multitude of ways, whether in patterns of regularly occurring pulses or in collections of long and short pulses. When varied, there is a natural tendency to emphasize the longer pulse, which is known as agogic stress.<sup>34</sup> Uneven agogic stresses found in compound or complex meter, such as 5/8, 7/8, 13/8 etc., create a more powerful sense of agitation or dissonance, and can be utilized to create metric dissonance when juxtaposed with a simpler meter. However, if the pattern is recurring and predictable, these asymmetrical meters can also establish a sense of rhythmic and metric consonance. In fact, any recognizable repetitive meter pattern can function as the rhythmic consonance in a phrase, for it sets a framework to build and explore rhythmic composition.

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<sup>32</sup> Fletcher, *Rhythm – Notation and Production*, 22.

<sup>33</sup> Ibid, 51. The importance of strong and weak beats can also be found in music of various periods. Fletcher states “In styles where consonance was paramount, dissonance was only allowed on weak beats where it was relatively unobtrusive.”

<sup>34</sup> Ibid, 44. Fletcher cites many definitions of agogic stress including *Grove’s Dictionary*, *Webster’s New International Dictionary* and the *Oxford Companion to Music*. This collection of definitions points more specifically to notes whose length is slightly altered, whether in tempo or as an element in rubato. However, the term is here referring to the long pulse in a collection of irregular pulse patterns.



## 2.2 Rhythmic Dissonance

As in tonal music, the creation of phrases and formal structure in non-tonal music is based on tension and resolution.<sup>35</sup> Without the aid of harmonic function and tonal melodies, rhythmically based music must utilize “increased tensions of dissonance, irregularity of stress, dynamic and articulative tensions, and linear concepts” to communicate phrases effectively.<sup>36</sup> Rhythmic dissonance therefore can be defined as articulations or pulses that are sounding apart from the perceived pulse pattern, and they can be constructed through a number of compositional devices.

The first and simplest of rhythmic dissonances is created by a contrasting meter. With a series of repetitive pulse patterns conveying the meter of a work, the inclusion of a contrasting pattern constitutes a departure from the listener’s expectation. Whether moving from 4/4 to 3/4 or another, more complex combination, the contrast between two stress patterns creates rhythmic, or in this case metric, dissonance. Taking metric dissonance a step further, metric pulse ideas can be organized into a pattern that contrasts with the notated time signature. For example, if the phrase is set in 4/4 and a 7/8 pattern emerges, that figure creates a cross rhythm.<sup>37</sup> Representing a contrasting meter, this dissonant pattern can then be repeated until the primary stresses are realigned. This full series of repetitions creates a sense of linear flow across the bar line and constitutes what I call a cross rhythm cycle. Depending on the difference between the contrasting meters, these cross rhythm cycles may have variable lengths and thus

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<sup>35</sup> Fletcher, *Rhythm – Notation and Production*, 50-52. Fletcher describes musical phrases as units organized with a set of stress relationships that approach and recede from the greatest point of stress. He describes formal design similarly as a combination of phrases that build to climatic points and then recede from them.

<sup>36</sup> *Ibid*, 116.

<sup>37</sup> *Ibid*, 40.

variable dissonant prolongation.

Rhythmic dissonance can also be created by isolated attack points that are set apart from the pulse, or syncopation. These would include any occurrences that do not imply contrasting meter, but rather are perceived in contrast to the current pulse pattern.<sup>38</sup> As Grave points out in his work on Haydn, “Metrical dissonance...may be distinguished from syncopation, whose effect depends on the listener's continued projection of the principal meter in the face of rhythmic conflict.”<sup>39</sup> In many ways the term syncopation can serve as a catchall for any event set apart from the established pulse but is here distinguished from those occurrences that have recognizable patterns to the listener.

In addition to metric manipulation and articulated syncopations, dissonance can be created through contrasts in rhythmic density as well as through changes in tempo, or rubato. Both of these tools manipulate the listener's perception of pulse through acceleration or deceleration rather than distorting pulse patterns. In both instances, the change in frequency creates or resolves musical tension. Acceleration increases the tension of a phrase while the deceleration or slowing of rhythmic values alleviates that tension.

Finally, silence can be used as a form of rhythmic dissonance. Placed within a phrase or at the culmination of rhythmic tension, a hiatus can serve to heighten the climactic point of a phrase or to allow the rhythmic tension to fully dissipate. The placement and length of each hiatus function in relation to the preceding phrase and have the power to completely nullify any expectations on the part of the listener.<sup>40</sup>

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<sup>38</sup> Fletcher, *Rhythm – Notation and Production*, 39.

<sup>39</sup> Floyd Grave, “Metrical Dissonance in Haydn,” *The Journal of Musicology* 13, no. 2 (Spring 1995): 176.

<sup>40</sup> Fletcher, *Rhythm – Notation and Production*, 51.

Understanding rhythmic consonance and dissonance is of paramount importance in appreciating non-tonal works such as *Topf-Tanz* and *Canned Heat*. Without the help of melody and harmony, composers must confine himself to the use of primarily rhythmic devices to create effective phrase structure and overall formal development. As Fitch and Rosenfeld state:

Our hypothesis of rhythmic dissonance predicts that listeners should experience heightened physical arousal when tapping the pulse with more complex rhythms. Most interesting, this arousal would presumably decrease again with resetting, as subjects would have resolved the apparent rhythmic dissonance by "re-hearing" the pattern as less complex.<sup>41</sup>

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<sup>41</sup> W. Tecumseh Fitch and Andrew J. Rosenfeld, "Perception and Production of Syncopated Rhythms," *Music Perception* 25, no. 1 (2007): 43-58 (22).

## CHAPTER 3

### *TOPF-TANZ*

The notation key is presented on a single five-line staff. It is titled "NOTATION KEY" in the upper left corner. The staff is divided into sections for different instruments, each with a specific note placement: Bass Drum (first space), Tom Toms (second space), Bongos (third space), and Three pots (fourth space). Below the staff, specific notes are labeled: "low" (second space), "high" (third space), "w/ tamb." (third space with an 'x' above the note), "high" (fourth space), "low" (fourth space), "medium" (fifth space), and "high" (fifth space).

Example 1: Notation Key for *Topf-Tanz*

*Topf-Tanz*, or *Pot Dance*, is composed for a modest collection of non-pitched percussion instruments. Utilizing a mounted bass drum, two tom toms, one set of bongos and three pots, this work presents a combination of traditional and non-traditional or “found” percussion instruments. In addition to the uniqueness of the three pots, the low bongo drum is embellished with a tambourine laid across the head.<sup>42</sup> This combination creates a unique timbre with the articulation of a bongo drum laced with the jingle of the tambourine, which is showcased throughout the piece. As you can see in Example 1, Kopetzki notates his works on a 5-line staff with specific line and space designations for each instrument. Although not aligned with specific pitches, the implied register relationships between the instruments are consistent with standard staff usage. Throughout the composition, Kopetzki takes advantage of the contrasting timbre of each instrument group, i.e. the skins and metals. He does this by consigning the metals exclusively to the right hand, and the bass drum and tom toms to the left only, allowing the bongos to be shared between the hands.

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<sup>42</sup> I have chosen to use three cast iron skillet rather than pots. In Kopetzki’s score he asks for resonant pots and I have found the skillet provide a full sustain along with a focused metal timbre.

### 3.1 Measures 1-84

*Topf-Tanz* begins with a stark and driving 16<sup>th</sup> note statement between the bass drum and bongos, or skin family. For the first three measures, an unbroken stream of 16<sup>th</sup> notes stated on the lower bongo drum (overlaid with a tambourine), highlights the meter with strong accents on beats one and three. These accents oscillate between the bass drum and the high bongo drum, establishing a repetitive cadence of strongly weighted beats. In common time, the first and third beats are considered the strongest and Kopetzki sets the stage with an unflinching statement, underscoring these agogic stresses (see Example 2).<sup>43</sup>

The image shows a musical score for two staves. The top staff is in common time (C) and contains a continuous stream of 16th notes with accents (>) on beats 1 and 3. The bottom staff is in 3/4 time and contains a dotted quarter note rhythm. The tempo is marked as quarter note = 144. Dynamics include mf, ff, and p.

Example 2: *Topf-Tanz*, mm. 1-12

The initial statement is immediately answered by a shift to 3/4, a *subito piano* and a rhythmic shift to the dotted quarter note. Still remaining on the skins and tambourine, the composer contrasts the antecedent phrase with a subtle repeated syncopation that, when combined with the shift in time signature, unhinges the listener from the pulse that was strongly iterated before. The dotted quarter note rhythm creates a 3:2 relationship with the pulse, which plays off the listeners' memory of the preceding statement. Following this metric shift, Kopetzki introduces the pots in measure 7 with a repeated half-note hemiola rhythm. This first melodic

<sup>43</sup> It's worth noting that the composer's orchestration also supports the hierarchy of strong and weak pulses. The bass drum, as the lower sounding instrument emphasizes the primacy of beat one while the small bongo aligns with the secondary strong beat, beat three.

material is heard at the same rhythmic frequency as the opening accents. However, unlike in the opening three measures, this statement is set against the dotted quarter syncopation established in the skins. This pairing further detaches the listener from the pulse with an aggregate 4:3 between the two instrument families. Although rhythmically consonant with the underlying pulse and of equal duration to the opening accents, the skin syncopation successfully stands between the two. To conclude the opening statement the skin family retakes the rhythm of the pots (and that of the initial statement) by shifting back to common time, and diminuendos into silence.

This metered pause, or hiatus to use Fletcher's term, is significant as well.<sup>44</sup> Within the following two nearly identical iterations of this phrase Kopetzki makes subtle but telling alterations (see Example 3).

Example 3: *Topf-Tanz*, mm. 13-25

The first alteration can be seen in measure 16. Although the second and third antecedent phrases remain identical to the opening measures, Kopetzki moves the dotted quarter note ostinato to the pots and the melody to the skin family. This shift is a simple re-orchestration, and it is clearly understood by the listener due to the contrasting timbres. In addition, the

<sup>44</sup> Grant Fletcher. *Rhythm – Notation and Production* (Tempe, Self-Published, 1969), 67. Fletcher specifically uses this term, hiatus, to describe silence as it supports musical climax. However, I believe it is an essential element in non-climaxing moments as well and have included it throughout this study in both forms.

exchange of material points to the relationship between these two instrument families. Thus far, both have played the accompaniment as well as the melody. In the third phrase the orchestration remains much the same, with the small addition of the bongo/tambourine to the dotted quarter note ostinato in the pots.

The second alteration is much more subtle, and is found at the end of the second period. Here Kopetzki elongates the hiatus by a single pulse. The durations of the final notes are identical to those in the preceding phrase but are re-notated in 3/4 and followed by four silent pulses. This increased silence allows both the performer and the listener to further detach from the established pulse, thus setting the third phrase apart. With the delayed entrance and increase to forte, the third phrase is more insistent on itself, as if refusing to let go of common time, only to be followed again by the same syncopation. The phrase once again concludes with a diminuendo into silence; however, this time it is in the pots and without the rhythmic shift back to the half-note feel. It would seem that the dotted quarter note syncopation has won, metaphorically speaking, over the duple feel, forecasting the strong shift to 3/4 meter in the next phrase group at measure 39.

The opening three phrases represent the work's thesis, i.e. the interplay between rhythmic consonance and dissonance. Although not fully fleshed out as a sonata exposition, this material states the fundamental process the composer will employ for musical development throughout the work. These are strongly establishing the pulse, blurring that pulse through the use of syncopation or an ostinato, and using interplay between two instrument families, skins and metals.

Immediately after the opening phrases, which could be considered to represent a complete move away from common time, Kopetzki shifts to 3/4 meter. Both instrument families are present at the outset, each representing its own interpretation of the meter. The pots highlight beat one, commonly accepted as the strong pulse within 3/4 time, while the skin family subdivides the measure, highlighting the dotted quarter feel from the previous section (see Example 4).

The image shows a musical score for measures 39-46 of 'Topf-Tanz'. It consists of two staves. The upper staff is a treble clef with a 3/4 time signature. It contains a series of chords, with some measures having a fermata over them. The lower staff is a bass clef with a 3/4 time signature, showing a rhythmic pattern of eighth and dotted quarter notes. There are 'x' marks above some notes in the lower staff. Dynamics markings 'ff' and 'mf' are placed below the lower staff.

Example 4: *Topf-Tanz*, mm. 39-46

Again, the contrast between instrument families supports transparency of this rhythmic interplay. The lowest sounding instrument gives weight to the dotted quarter note, but can also be heard as outlining the agogic stress found within 6/8. Combined with the bongo/tambourine in 8<sup>th</sup> note couplets, a rolling compound rhythmic feel emerges, setting the pots (rather than the skin family) as the source of syncopation. The interpretation of a 6/8 feel is also supported in measures 42 and 46 with both families resolving firmly on the dotted quarter note.

While syncopated on its own, the 6/8 material in Example 4 serves as the new consonance in the following phrases. After the initial statement seen above, the original pot melody returns, serving as the new antecedent in the following repeated phrase (see Example 5).





Example 5: *Topf-Tanz*, mm. 47-54

The first four measures of this phrase are answered with an aggregated 16<sup>th</sup> note figure set in 5/16. Not only do the rhythmic values and dramatic crescendos sharply contrast with the playful nature of the preceding measures, but also the meter serves as the furthest departure yet from the steady cadence of measure 1. The pattern pulse found here, which divides the measure into 2 + 3 note groupings, sounds jagged and driving, in juxtaposition with the more lyrical preceding material. This metric interplay echoes the process that Kopetzki outlined in the opening passages. Certainly more metrically dissonant in their own right, the 3/4 measures constitute a new consonance and the 5/16 provides more than enough metric dissonance to serve as its consequent, creating rhythmic tension that then resolves back into the 6/8 feel in the next seven measures (see Example 6).



Example 6: *Topf-Tanz*, mm. 63-69

Intriguingly, this final 3/4 statement concludes with an incomplete cross rhythm or rhythmic figure that represents a contrasting meter, foreshadowing the compositional technique employed next. Kopetzki hints at a 7/8 fragment, which is repeated 2.5 times in the pots. This fragment is so brief that it sails by listeners and performers alike and is hardly noticed. Further,

the rhythms set against the skin ostinato create a satisfying cadential figure at measure 67 that evokes the cascara patterns in Afro-Cuban music.

Resolving the music squarely in measure 70, Kopetzki establishes a third metric foundation. Seemingly out of nowhere, a new ostinato is heard in the skin family, set in 5/4 and constructed with a rhythmic accelerando of sorts (see Example 7).



Example 7: *Topf-Tanz*, mm. 70-71

Whether understood as an elaboration of the previous 5/16 interjection or the next step in the devolving of metric consonance, this ostinato outlines the asymmetry of the new meter and provides an identifiable agogic stress. Again the bass drum sits firmly on the primary pulse as well as subdivides the measure into two equal parts. This emphasis is underscored by the high-pitched pot to help establish the new home base without any other rhythmic distraction.

Once the new metric consonance is established, Kopetzki introduces the first cross rhythm of the work. As discussed previously, Fletcher defines cross rhythm as a recurring melodic or metric pulse idea that contrasts with the notated meter.<sup>45</sup> In this case, the composer has set a melodic fragment in a 9/8 pulse pattern against the 5/4 ostinato. As the high pitched pot helped to emphasize the 5/4 pulse pattern in measures 70-71, so does it also highlight the agogic stress of the cross rhythm. Using a pair of ascending figures, one broken and one connected, the top pot marks the resolution of the two cross rhythm fragments.

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<sup>45</sup> Grant Fletcher. *Rhythm – Notation and Production* (Tempe, Self-Published, 1969), 40.

Below, each 9/8 fragment is bracketed to display how they contrast with the skin ostinato during all ten iterations (see Example 8).

Example 8: *Topf-Tanz*, mm. 70-84

The cross-rhythm cycle found here represents the culminating disintegration of the metric consonance found in measure 1. Without a balanced period phrase structure between consonance and dissonance, this cycle prolongs rhythmic tension through its linear nine-measure cycle before resolving again on beat one. Concluding the first 30% of the work, Kopetzki cadences into measure 81 with one last statement from the pots, a slight variation of measure 80, and then allows the skin ostinato to unravel into a half note cadence reminiscent of the first three phrases.

### 3.2 Measures 85-182

Revisiting the compositional structure from the beginning, Kopetzki constructs the following three periods as nearly parallel in content to the preceding ones. Each antecedent is focused on a steady and heavy-handed rhythmic drive followed by a more lyrical consequent phrase. Notated in 3/2, the half note agogic stress is now implicit rather than plainly stated.

Previously the bongo/tambourine provided the rhythmic backbone, but it is now replaced by the low pot struck with the mallet shaft. Although soft throughout, this new timbre is prominent and can easily be distinguished while syncopated explosions are set against it. These figures replace the former half note cadence in the skin family and oscillate between the remaining pots. To add significant weight to these accents, the bass drum and low bongo are scored tutti in the first phrase and later oscillate between the bass drum and high bongo, paralleling the motion in the pots. Although the listener perceives the dance between the high and low sounds, no consistent pulse pattern emerges and therefore no contrasting meter. These syncopated accents are then understood in their relationship to the implied half note pulse and continue to function within the new metric consonance (see Example 9).

Example 9: *Topf-Tanz*, mm. 85-95

Also in line with the opening periods are the lyrical consequent phrases. Rather than using a shift in duration and polyrhythms to blur the sense of metric pulsation, here the composer utilizes rhythmic density, resonance, and space to create a melodic statement on the pots. Played with two mallet shafts and restrained dynamics, this melodic material hints at a playful improvisation or, at least, suggests the use of rubato. At the written tempo, the nine and ten

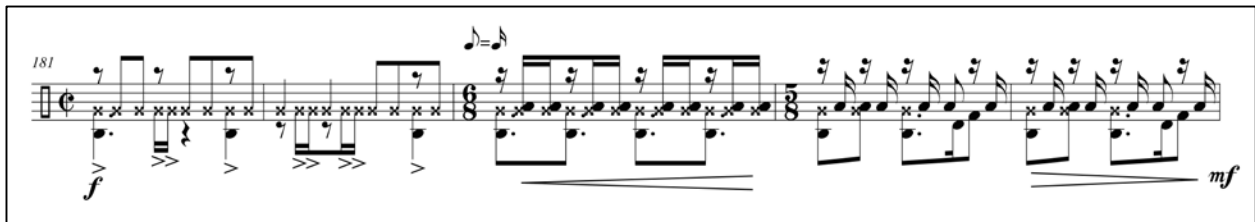
note rhythmic figures, or nonuplets and decuplets, are nearly impossible to perform and lend themselves to a more subtle manipulation of the pulse center. Those characteristics combined with the preceding *rallentando* and the breath marks before and after support an intentional separation from the pulse, marking these periods as a contrasting section that dissolves the previous aggressive metric pulse.

As with the beginning of the work, each of these three periods has subtle variations. The syncopated figures in the antecedent phrase are varied each time as are the melodic consequent phrases. All three periods contain identical building blocks that are varied slightly, which supports an interpretation of improvisation as a component of the musical aesthetic. In addition to featuring the aforementioned characteristics, these three periods are set to terraced tempo markings. The first begins at the previous tempo, while each subsequent period is increased by 8 beats per minute. The third and final tempo bump occurs at the beginning of the following section and resolves the tempo ramp. These tempo changes combined with a *rallentando* and a hiatus between the phrases successfully create a new sense of rhythmic dissonance through the use of space and the manipulation of time.

The following major portion of *Topf-Tanz*, beginning in the third tempo bump at measure 116, consists of a more homogenous exploration of metric pulse patterns. Through its use of seven time signatures, duple and triple agogic stresses, drag figures, and a shifting dance between pot double stops, this section constitutes the most integrated and ever changing metric landscape. Serving as a development of sorts and contrasting with the former period phrase structure, this group of phrases explores a quicker interplay between long and short agogic stress. Measures 116-157 are repeated, giving the listener an opportunity to digest this

asymmetrical dance, and are followed by a three beat hiatus each time. The final phrase within this section returns the focus to the bongo/tambourine for a series of isolated syncopated drag figures, followed by tutti four-mallet statements that echo the dance between high and low present throughout.

The middle section does not firmly cadence with a resolution of rhythmic tension but rather smoothly transitions from cut time through 6/8 and into 5/8 in measures 181-185. The use of identical aggregate rhythm, and the slight variation in skin family punctuation creates a metric modulation that seamlessly shifts into a new meter. The following 5/8 ostinato is reminiscent of and is an abbreviated version of the previous 5/4 material (see Example 10).



Example 10: *Topf-Tanz*, mm. 181-185

### 3.3 Measures 183-End

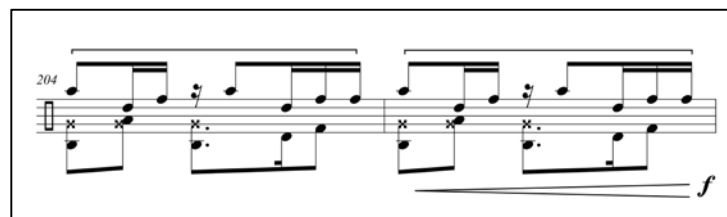
Designated *Piu Mosso*, this statement sets up the new metric pulse pattern as well as the new rhythmic consonance. Not only has the meter returned to a 5 pattern but it has also taken on an increased agitation through metric diminution into compound meter and a slightly quicker tempo. To add to the significance of this return to 5, the right hand material moves through a durational quasi-accelerando. Utilizing dotted quarter, quarter note, 8<sup>th</sup> note, dotted 8<sup>th</sup>, and syncopated 16<sup>th</sup> note values, Kopetzki firmly re-establishes a new meter in a manner

not unlike a major key change in a tonal work. Example 11 displays the right hand material without the ostinato to illustrate the implied durational accelerando.



Example 11: *Topf-Tanz*, mm. 186-201

Once the section is firmly planted in the new meter, Kopetzki begins the counterpoint in the pots similar to events earlier in the work. First, beginning with a two measure figure that helps outline the current 5/8 meter, the melodic material in the pans is shifted into a 12/16 cross rhythm. Rather than construct an entire cycle, Kopetzki chooses to allow this cross rhythm only three complete iterations plus one beat before it resolves back to the ostinato. He then extends this cadence with a brief 7/16 figure, cycled four times plus one beat. See Examples 12, 13 and 14 for comparison of the three pot fragments. Example 12 shows the parallel outlining of the 5/8 meter, Example 13 shows the incomplete 12/16 cross rhythmic cycle, and Example 14 displays the 7/16 cross rhythm in its four iterations.



Example 12: *Topf-Tanz*, mm. 204-205

206

*f*

Example 13: *Topf-Tanz*, mm. 206-211

212

*mp*

Example 14: *Topf-Tanz*, mm. 212-217

Note that at the close of each cross rhythm, a brief consonant cadence, two and three measures respectively, occurs. Rather than utilize the hiatus as before, the composer has opted to separate the more linear counterpoint using brief moments of consonance to allow the listener to begin fresh for the next cycle. After repeating the Example 13 cycle once more, Kopetzki takes one more opportunity to clear the air by passing through a repeated pot soli, which ends with a diminuendo and a pause. The listener is now able to enter into the final dance of the two instrument families and contrasted metric pulse patterns.

The final section returns to the interplay between the instrument families with the return of familiar material. Beginning in measure 231, the meter moves into 9/16 with a dotted 8<sup>th</sup> note ostinato in the skins, reminiscent of the opening material but rhythmically diminished. Also reminiscent of the opening material is the oscillation between the bass drum and high bongo. Over the top of this ostinato is the same pot motive introduced in the 5/4 section, returning in its complete and rhythmically diminished forms (see Example 15).



Example 15: *Topf-Tanz*, mm. 231-234

This phrase serves to establish a new, albeit brief, sense of pulse for the listener. The pot fragment, helping to support the pulse center by its emphasis on the first and second pulses, is finally heard accompanied by its own pulse pattern, unifying the 9/16 measures as a brief metric consonance. What follows, as we might expect at this point, serves to blur the pulse pattern. The skins immediately shift back to the 5/8 ostinato heard at the start of the *Piu Mosso*, while the melodic fragment continues uninterrupted. This repetition sets the motive into a cross rhythm cycle taking a full ten iterations to complete. At this point, the listener recognizes both the skin ostinato and the melodic fragment as they are spun out one last time. Example 16 shows each of the ten iterations bracketed against the skin ostinato, as well as a similar two-measure repose Kopetzki has used frequently during this final section.

Example 16: *Topf-Tanz*, mm. 235-245

Once again, this cross rhythm blurs the listener's perception of pulse. Although the material is familiar, the 9/16 motive cascades through the bar lines in a continuous linear flow. In a matter

of thirteen measures the composer has effectively established and convoluted a new pulse center.

Once this cycle is completed, Kopetzki resets the stage once again, this time with a more grounded shift to 2/4. A steady drone of 8<sup>th</sup> notes in the skins is overlaid with a syncopated motive not unlike an 80's punk-rock drum set groove. Similar to the 9/16, both families are present in establishing this new meter. In this case the direction of the melodic motion is reversed for a more downward trajectory. This melodic shift helps cue that the end is near (see Example 17).



Example 17: *Topf-Tanz*, mm. 246-248

Although agitated and driving, the material found here emphasizes a clear pulse and rhythmic structure that harkens back to the opening. By now the listener is keenly aware of the compositional process Kopetzki has used and will continue to employ, and as expected, the motive in the metals continues uninterrupted as the left hand returns to the 5/8 ostinato. This final cross rhythm cycle is shown in Example 18. The five total iterations are bracketed with a dashed bracket, showing a slight variation employed in the final iteration that supports a cadence in the familiar measures of repose.

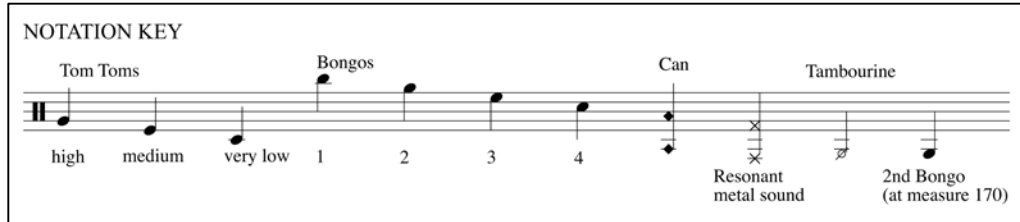


Example 18: *Topf-Tanz*, mm. 249-254

The listener, of course, continues to hear the motive in its repetitive cycle, unchanged while the landscape beneath it undulates and breaks apart. As the work moves toward its conclusion, the rhythmic material seemingly reduces and accelerates. To underscore this intensification Kopetzki brings back a portion of the durational accelerando that leads into the final eleven measures. A 3/16 motive then emerges from within the quotation, a fragment of the figure seen in Example 18, which cascades through the bar line into the final seven measures. *Topf-Tanz* concludes with a strong syncopated statement incorporating a 32<sup>nd</sup> note flourish in the pans, finally ending with an accented pair of tutti 8<sup>th</sup> notes.

## CHAPTER 4

### CANNED HEAT



The notation key is presented on a single non-pitched staff with a double bar line at the beginning. It defines the following notes and symbols:

- Tom Toms:** Three notes labeled 'high', 'medium', and 'very low'.
- Bongos:** Four notes labeled '1', '2', '3', and '4'.
- Can:** A note with a downward-pointing arrow.
- Resonant metal sound:** A note with a downward-pointing arrow and an asterisk.
- Tambourine:** A note with a downward-pointing arrow and a diagonal slash.
- 2nd Bongo (at measure 170):** A note with a downward-pointing arrow.

Example 19: Notation Key for *Canned Heat*

*Canned Heat* is composed with a very similar instrumentation as *Topf-Tanz*. Again Kopetzki chooses two contrasting instrument families: a collection of skinned instruments and a collection of metallic instruments. He also has continued the incorporation of traditional and found instruments. Opting for three tom toms and an additional set of bongos, Kopetzki creates a seven-drum collection more suitable for melodic writing. The tambourine previously combined with the low bongo drum is now joined with the other metal instruments, creating another trio of metallic instruments. As the title suggests, one of the found instruments is a tin can and, combined with the tambourine and an unspecified resonant metal, creates a more eclectic family of instruments than the trio of pots found in *Topf-Tanz*. Kopetzki again has scored his work on a non-pitched staff and follows the relative pitch relationships of the skinned instruments. However, alternate notations are needed for both the second bongo and the metal instruments for more integrated passages. To help clarify which instrument the performer must use, the trio of metal instruments is notated with different note heads.

#### 4.1 Exposition - Measures 1-60

*Canned Heat* opens with a flourish, a 4-stroke ruff across the setup from the low tom, through the resonant metal and tin can, to the highest of four bongos. The initial phrase contains a repeated seven note melodic fragment, scored on the four bongos, and is accompanied by punctuations in the opening instrument cluster. Each statement of the melodic fragment is demarcated with a single ruff gesture and extended by inserting progressively more punctuations. Written in a variety of meters, this opening statement is reminiscent of Xenakis's *Rebonds B* or even Stravinsky's *Rite of Spring*, both of which utilize a consistent rhythm with intermittent punctuation (see Example 20).<sup>46</sup>

Example 20: *Canned Heat*, mm. 1-9

After four elongated statements, a three-measure 6/8 statement answers the melodic material. Shifting to 16<sup>th</sup> note rhythms, the toms join in the melodic motion and continue in an ascending diminuendo into the next phrase. The clearly repeated figure and the consistent metric pulse pattern heard within the 6/8 provide clarity and resolution to the first set of variations.

Right away Kopetzki presents a compositional approach of continuing variation, which contrasts with the comparative process of *Topf-Tanz*. Rather than setting up clear expectations

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<sup>46</sup> *Rebonds B* contains a frequent ruff gesture, while maintaining a relatively steady pulse pattern, whereas *The Rite of Spring* contains a passage of dramatic sforzando syncopations set against a consistent 8<sup>th</sup> note rhythm.

of metric consonance and then thwarting those expectations, *Canned Heat* begins with a tapestry of syncopated punctuations threaded within melodic material. Ironically, this series of varied agogic stresses functions as the work's initial metric consonance. The elongation of each phrase builds the musical tension that resolves into the 16<sup>th</sup> note gestures. In fact, the subsequent phrase nearly follows this exact process: elongating a new seven-note melody by additional punctuations. Again the phrase resolves into a clear metric pattern, in this case, two identical 5/8 statements after a single 6/8 measure.

Next the process reverses itself. The third phrase begins with an elongated nine-note melody that is then reduced gradually until a three-note fragment is kicked back and forth between ruff gestures. Once this melody is condensed into small fragments, the 8<sup>th</sup> note substructure slows its melodic motion and lingers on the high bongo and tin can. This lingering, or articulated sustain, creates a sense of slowing or repose after such consistent melodic motion. These repeated strikes on the tin can are further exhibited in the following phrase (see Example 21).

Example 21: *Canned Heat*, mm. 27-33

At this point the forward momentum has completely stopped. The septuplet on the tin can then acts as a motivator for resumed melodic motion. Unsuccessful on the first try, each subsequent attempt builds more energy, one note at a time, until the motor fully restarts. Once

he has returned it to its original fervor, Kopetzki again utilizes a strong 16<sup>th</sup> note statement (followed by accented punctuations) to conclude the phrase.

Contrasting with the Exposition's first half, the following thirteen measures contain a steady stream of 16<sup>th</sup> notes built with aggregated right hand melodies and left hand accompaniments. Beginning lyrically, with a subito piano and undulating dynamics, the syncopated nature of the melodies begin to speak out. Since the meter has shifted into 3/4 and 4/4 meter, the rhythmic content is able to create syncopated grooves against a steady pulse. These grooves are constructed with combinations of 8<sup>th</sup>, dotted 8<sup>th</sup>, and 16<sup>th</sup> note groupings, each one set securely against the notated meter. Kopetzki then uses these same building blocks for the stark and jagged cadence seen in Example 22. Already saturated with 16<sup>th</sup> notes in the preceding phrases, the composer chooses to allow space between these syncopated rhythms for cadential clarity.



Example 22: *Canned Heat*, mm. 48-51

Separated from the melodies by a lingering decrescendo of the tin can, this interjection combines the ruff gesture, the repetitive tin can, and the syncopated melodic rhythms. It proclaims itself aggressively with subito fortissimo and angular double strokes, and serves to slow the forward momentum through its stark syncopation and further use of the tin can decrescendos.

After briefly returning to the 16<sup>th</sup> note melody, Kopetzki rebuilds into the concluding gesture of the Exposition. These final five measures are based on two overlapping ideas.



Example 23: *Canned Heat*, mm. 56-60

In the left hand, a repeated dotted 8<sup>th</sup> note figure creates a foundation upon which an ascending 8<sup>th</sup> note line is placed. During these five measures, shown in Example 23, both the rhythmic density and the dynamics quickly recede and rebuild into a final fermata. This cadence both concludes the exposition by drawing together recognizable components of its music and foreshadows the following section.

After a brief pause, the Exposition is repeated in its entirety. This restatement provides an essential opportunity for the listener to digest the fundamental building blocks of the work. These include: melodic variation through prolongation, moments of stillness, prolonged lyrical melodies and syncopated cadential figures. Throughout the first half of the Exposition, the composer uses varied agogic stress and articulated sustain on the tin can to obscure the sense of a repetitive pulse pattern. This is then answered by a firm foundation in simple meter, within which stark and aggressive syncopations appear. A key element displayed in the Exposition is continued variation or the evolution of melodic and rhythmic material. This sense of development and rhythmic contrast is evident throughout the work.



#### 4.2 Melodic Cycles - Measures 61-115

After the Exposition's conclusion, the final measure drops the fermata and functions as a pick-up into the second major section. Kopetzki creates a seamless transition by continuing the dotted 8<sup>th</sup> note figure through the bar line and resolving it into the next phrase, where it continues for nearly the whole section. Above this syncopated ostinato, which creates a 4:3 polyrhythm with the underlying pulse, a series of melodic fragments form cross-rhythmic cycles. Although this compositional tool was not used in the Exposition, salient features reveal its connection to the compositional processes used before. Example 24 displays the five melodic fragments in order of appearance. The first melody is again set in a seven note collection, as were the first two melodies of the work. Kopetzki reduces and regrows the melodic material as the section develops. Although the B and D motives are identical, the inclusion of both is necessary to create the reduction and expansion of the melodic material. Also, a dynamic change and change of implement highlight a shift in the musical development.

The image displays five melodic motives, labeled A through E, arranged vertically. Each motive is written on a single staff with a treble clef and a key signature of one sharp (F#).  
- Motive A: Labeled '3X' and '7/4'. It begins with a dynamic marking of *f* and consists of a dotted quarter note followed by a half note, then a quarter note, a dotted quarter note, and a half note.  
- Motive B: Labeled '3X' and '7/4'. It consists of a dotted quarter note, a half note, a quarter rest, and a half note.  
- Motive C: Labeled '3X' and '7/4'. It consists of a quarter note, a dotted quarter note, a quarter note, and a half note.  
- Motive D: Labeled '3X' and '7/4'. It includes the instruction 'with drum stick' above the staff and a dynamic marking of *p* below. The notation is identical to Motive B.  
- Motive E: Labeled '6X' and '13/8'. It begins with an accent (>) and a dynamic marking of *p*. It consists of a dotted quarter note, a quarter note, a dotted quarter note, a quarter note, a dotted quarter note, a quarter note, and a half note. The instruction 'crescendo throughout' is written below the staff.

Example 24: *Canned Heat*, Melodic motives found between mm. 61-102

Unlike the contrasting counterpoint in *Topf-Tanz*, these melodies are laid across a simpler rhythmic ostinato set in 3/4. This allows for fewer repetitions to complete the cycle and increases the transparency of the melodic progression. But as in the opening consequent phrases in *Topf-Tanz*, Kopetzki has confused the 3/4 pulse pattern with a dotted 8<sup>th</sup> note figure superimposed by a simpler motive on top. As evident in Example 24, each melodic motive requires only three repetitions to resolve, all except motive E.

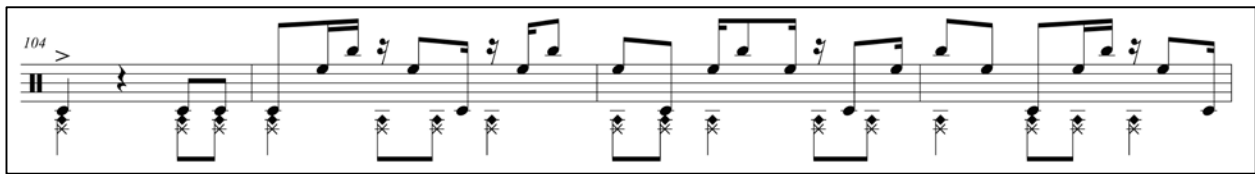
The image displays a musical score for three systems of music, labeled with measure numbers 89, 94, and 99. Each system consists of a melodic line on a five-line staff and a complex rhythmic ostinato below it. The ostinato is a 4:3 polyrhythm in 3/4 time, featuring a dotted eighth note figure superimposed on a simpler motive. The melodic lines are bracketed to show their progression across the systems. The notation includes various note values, rests, and dynamic markings such as accents and hairpins.

Example 25: *Canned Heat*, mm. 89-103

Example 25 shows motive E's complete cross rhythm cycle with each of the six iterations bracketed. This more sophisticated motive includes a pressed roll on the high bongo and a dynamic accent on the low tom, emphasizing the asymmetry of its metric pulse pattern. This melody begins softly and, with the press roll on the top bongo, speaks with a more lyrical quality as it builds toward the resolution in measure 102. The following two measures punctuate the cycle's fulfillment with a side-by-side comparison of the 4:3 polyrhythm and a tutti dotted 8<sup>th</sup> figure. As in the Exposition, Kopetzki has constricted and expanded the melodic

material to build musical development within this section. In this case, these melodies exist in a freer rhythmic feel that exposes the evolution from one into the next.

Continuing into an extended cadence, this sense of weightlessness is resolved back onto the pulse with driving syncopation. Once again, 16<sup>th</sup> note combinations and shorter phrase length resolve the musical idea. Fittingly, the syncopated cross rhythm is set in 7/16 and against a strong duple rhythmic figure heavily emphasizing a steady 2/4 pulse, shown in Example 26.



Example 26: *Canned Heat*, mm. 104-107

After concluding this section, Kopetzki unravels the rhythmic durations into a final fermata. This hiatus provides a needed respite from the aggressive syncopated figures and from the section as a whole. It also serves as a musical palate cleanser, nullifying the previous meter and clearing the air for a new start in the following section.

#### 4.3 Scherzo - Measures 116-174

The third major division is labeled a Scherzo due to its placement in the work as well as its dance-like character. Largely based in 6/8, the section contains the clearest commitment within this piece to predictable pulse patterns as well as a recognizable musical style, i.e. a waltz. The passage opens with strong emphasis on the dotted quarter note and triple subdivisions, as one would expect in 6/8 meter. The opening is devoid of any significant contrasting rhythmic figures that might blur the listener's perception of the waltz feel. Consequently, Kopetzki creates rhythmic dissonance with new compositional tools. The

following phrase introduces both the tambourine as well as a 4:3 polyrhythm on the first beat of measures 130 and 133 (see Example 27). The polyrhythm in itself is not significant: a brief playful accompaniment to the melody. Still, the use of left hand accompaniments is a new device that will be developed on throughout the remainder of the work.

Example 27: *Canned Heat*, mm. 130-138

Up until this point, both hands have worked together to create development through horizontal means, or to set a foundation for melodic development. Here, the three metal instruments are treated individually and as a collection to accompany the primary voice. Another example of this treatment can be seen in measures 131 and 135. Here, the two contrasting figures create an aggregate rhythm similar to that in snare drum rudiments, such as the Swiss-Army Triplet, while serving the melody.

The use of hand combinations continues in the following phrases, revisiting the use of mixed meters briefly and building to the most virtuosic section in the work. Having created a passage devoid of significant metric manipulation, Kopetzki now introduces a series of 32<sup>nd</sup> note flourishes between the skins and tambourine. Since the metric pulse is consistent, the composer turns to rhythmic density to create musical tension and release. Each 32<sup>nd</sup> note motive is answered by 16<sup>th</sup> note aggregate patterns between the two hands, one set in 7/16

and the others continuing in 6/8. It is not until measure 162, when the waltz-like material returns for a moment of repose, that these flourishes relent. After progressively increasing the rhythmic density from the first dotted quarter notes to the 32<sup>nd</sup> note riffs, Kopetzki shifts the rhythmic value again to conclude the Scherzo. Moving to aggregate nonuplet figures, the final phrases display another example of melodic prolongation and conclude with a fermata.

#### 4.4 Coda - Measures 175-End

Returning to *a Tempo* and to common time, the fourth and final segment serves as a Coda, revisiting and recombining many of the compositional ideas previously heard. Staying consistent to the principle of development through variation, Kopetzki avoids explicit quotations, and instead reinvents previously stated music. The entire Coda is based on the juxtaposition of small fragments and is constructed of three phrases of reducing length, each beginning with an aggregate 16<sup>th</sup> note melody similar to those heard in the Exposition. These melodies, varied throughout, serve as the stepping off point for each of the final three phrases. As before, these are constructed with syncopated rhythms set against simple meter, but in the Coda the accompanying hand is asked to play lingering press rolls to fill in the space, embellishing its lyrical and sustained quality underneath (see Example 28).



Example 28: *Canned Heat*, mm. 175-177

The character of the melodic material is retained yet reinvented to be more angular with larger skips around the drums, the inclusion of all the skinned instruments, and a focus on leading to the high bongo.

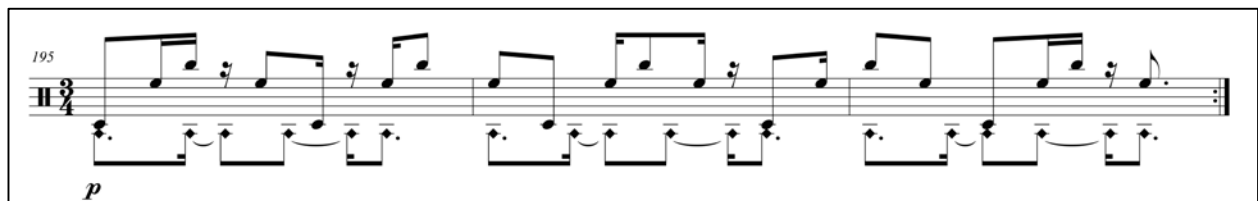
Following each of the melodic statements, a series of syncopated fragments prolong and complete each phrase. The first answer includes five different ideas including a quarter note triplet figure, two two-handed counterpoints, the 7/16 figure from the Scherzo, and a single 6-tuplet flourish from the same segment. Example 29 gives the complete first phrase with its many fragments.

Example 29: *Canned Heat*, mm. 175-190

Measures 186-190 almost directly quote from the Scherzo and are easily recognized as doing this. The two syncopated counterpoints, in contrast, are more sophisticated rhythmic manipulations of the material from the cross rhythm cycles. The first example, measures 179-182, contains the dotted 8<sup>th</sup> note ostinato traveling around the metal instruments with a 12/16

pattern set against a five drum sequence. The second example, seen in measures 184-185, takes two separate syncopated figures and sets them against one another. The right hand contains a 3/4 groove while the left hand oscillates between the resonant metal and tin can in a 5/16 pattern. Neither of these fragments is meant to play out an entire cross rhythm cycle, but rather to prolong this first phrase with intensifying rhythmic tension. Following a three-measure melody, these thirteen measures create a significant imbalance in the phrase length as well as significant rhythmic tension that resolves into the following phrase.

The second phrase begins much the same; however, it is answered by a shorter rhythmic gesture. Most notable is the use of the same right hand material found at the end of the second section (see Example 26), superimposed on the dotted 8<sup>th</sup> note ostinato on the tin can. Heard previously against a strong 2/4 statement, here its character is changed drastically through a subito piano and the new accompaniment (see Example 30).



Example 30: *Canned Heat*, mm. 195-197

Kopetzki brings together two important components that were separated when previously introduced, and then modifies their aesthetic and their function within the phrase.

In the final step towards the work's conclusion, the third and shortest phrase begins with the expected melodic statement. Both preceding phrases are repeated, highlighting their content and diminution in length (thirty-two reduced to fourteen measures respectively), a process that is continued through the third phrase with its single statement (nine measures).

The brief length of the final phrase, combined with aggressive syncopations and a *Piu Mosso* marking, sends the final moments of *Canned Heat* rocketing to an abrupt halt.



## CHAPTER 5

### CONCLUSION

It is now necessary to take a step back and comprehend the overarching construction of these works. Of course, generalizations about music are often problematic and can oversimplify its complexity. On the one hand, subtle variations and nuance give each work its unique character, and on the other, distilled principles of a work's construction can help inform its preparation, performance, and reception. As discussed in the previous two chapters, both *Topf-Tanz* and *Canned Heat* are composed with a strong sense of musical phrase through the manipulation of rhythmic consonance and dissonance. However, each work communicates a distinct voice due to the manner in which Kopetzki chose to build phrases and the works as wholes.

#### 5.1 *Topf-Tanz*

*Topf-Tanz*, at its core, is a dance of contrasting ideas: the consonant and the dissonant, the rhythmic and the lyrical, the call and response, the loud and the soft. Each phrase establishes metric consonance and dissolves it, and two consistent approaches emerge. The first is the contrast between antecedent and consequent phrases. Of the work's eight discernable phrase groups, half are constructed with starkly contrasted ideas between the antecedent and consequent. The first phrase group, measures 1-38, displays the contrast between the steady cadence of accents with the soft lyrical melodies set across the dotted quarter ostinato. The second phrase group creates a dichotomy between the lilting 3/4 interplay and its jagged 5/16 rebuttals. Measures 85-115 parallel the opening with dialogue

between sharply stated syncopations in 3/2 versus the lyrical rubato of the answering phrases.

In addition to the starkly contrasted rhythmic content, the use of the mallet shafts increases the contrast in the affects of these phrases. And finally, measures 158-182 are constructed as a call and response between a solo tambourine and 4-mallet impacts. In this case, the difference in instrumentation choice and the attendant difference in timbre further sets the antecedent and consequent apart from each other. Each of these phrase groups presents at least three iterations so that their conversational nature can be adequately digested.

The second approach to showcasing contrasting ideas is found in the three phrases set in rhythmic groups of 5. Each of these phrase groups creates a simultaneous hand-to-hand clash of metric pulse patterns. In the case of measures 70-84, the cross rhythm cycle is set against the 5/4 ostinato while the final two phrase groups are set in 5/8 and based on a variety of different rhythmic processes. In all three passages Kopetzki sets contrasting material in both hands that must play out before resolving back onto the primary pulse. Considering them together, and remembering that the same melody from measure 72 returns in the final phrase group, makes it clear that these phrase groups are constructed with a sense of linear development from top to bottom.

The only portions not accounted for in these two ideas are the repeated section from measures 116-157 and the small transition between 5/8 phrase groups. The later functions as a palate cleanser between two densely composed explorations of 5/8. The former constitutes the longest homophonic interplay of different meters in the piece. Setting itself apart from the rest of the work, this section is devoid of lyrical melodies, contains only double-stop strokes on the pots and skin instruments, and introduces the rhapsodic figures on the single tambourine. The

salient features of this section are its dramatic dynamic contrasts, steady and driving 8<sup>th</sup> note undercurrent, dance back and forth between pot double stops, and double lateral “ruff” gestures on the tambourine that are continued in the next section.

## 5.2 *Canned Heat*

*Canned Heat* creates consonance and dissonance through its own compositional voice, namely a process of continuing melodic variation. Throughout the piece melodic motives are prolonged and abridged through different means, thus creating both delay and acceleration to cadential figures. Balancing the work’s focus on linear variation, and the tension created therein, each melodic phrase group concludes with stark and syncopated rhythmic punctuations.

The Exposition, set in a variety of meters, is divided into two main segments. The first contains four phrases that manipulate phrase length. The first two are composed with melodic prolongation, the third reversing the process by gradually reducing its melody, and the fourth, containing the septuplet gestures, once again uses a process of prolongation to grow from static momentum into its 16<sup>th</sup> note conclusion. Each of these four phrases is composed, for the most part, of a melodic voice set in an 8<sup>th</sup> note context and cadencing with a clear 16<sup>th</sup> note idea. The second half of the Exposition retains the melodic focus but contrasts with the rhythmic basis through its 16<sup>th</sup> note context. The first portion is a thirteen-measure collection of lyrical melodies followed by an aggressive syncopated cadence and then by a truncated version of itself. Even these final measures exemplify the nature of reduction and extension by quickly reducing and increasing each measure’s rhythmic content.

The Melodic Cycles in the following section follow these characteristics as well. Focusing solely on the melodies in the right hand and set against a dotted 8<sup>th</sup> note ostinato. The five consecutive melodies are organized in a reducing/increasing process, 7/4, 5/4, 4/4, 5/4, and 13/8 respectively. They are each stated in succession except for one pause to exchange implements and to motivate the phrase to elongate. This entire section is based on the development of these five melodies, from reduction to elongation, and is concluded with a pair of strong rhythmic statements, as we would expect at this point.

The Scherzo, contradicting the first main feature stated above, remains consistent in its focus on melodic content and manipulation. However in this case Kopetzki develops the melodic material on a smaller scale. When considering each small phrase, you can see the subtle elongation or truncations but only in and between recognizable melodic figures. What the Scherzo truly introduces, in place of phrase length manipulation, is the exploration of rhythmic density. From the first phrase, focused exclusively on the melodic material on the skins, to the 32<sup>nd</sup> note flourishes in the second half, Kopetzki steadily increases the utilization of the metal instruments, first as a contrapuntal accompaniment in the second phrase, then to help cadence in the third phrase, and finally to fill in both the 32<sup>nd</sup> note and nonuplet figures.

Closing the piece, the Coda returns to a clear process of phrase reduction, however, rather than manipulating the length of the melodic material Kopetzki alters the length of the syncopated cadential figures. Constructed in three phrases, the antecedent phrases are built with three measure melodies and are answered first by thirteen measures of complex rhythmic material, then three measures (each repeated) and finally with a single accelerated six measure statement.

### 5.3 Shared Elements

Although each piece attains its sense of musical development by different means, they share certain compositional tools that set them as sister pieces. First and foremost, is the creation of rhythmic consonance and dissonance through the manipulation of both rhythmic contrasts, note values, cross rhythms and metric pulse patterns. In both works Kopetzki set the hands in opposition to form a series of cross rhythm cycles to increase the rhythmic tension. He also utilized a variety of meters to set portions of the work “off kilter,” giving both a certain dance-like quality, playing with the expectations of the listener. Second, is the use of two instrument families. Kopetzki utilized both sets of instruments in a homophonic texture and to highlight the counterpoint created with overlapping meters. Third, both pieces utilize moments of repose and hiatus to increase the drama of a passage or to clear the air to begin down a new path. Fourth, Kopetzki utilized double lateral “ruff” gestures, in the left hand, to accentuate the musical passage.

Finally and most importantly, both works progressed from a place of rhythmic and metric consonance to one of dissonance and agitation on the large scale. *Topf-Tanz* began with a simple statement of contrasting agogic stress followed by clear polyrhythms and evolved into a set of overlapping cross rhythm cycles set against a 5/8 ostinato. Each phrase group throughout the piece displayed an ever-increasing sense of rhythmic complexity, dynamic contrast and note density. Similarly, *Canned Heat* progressed from a series of patient melodic statements, albeit set in more sophisticated meters, and evolved into an exploration of syncopated gestures, all accelerating into its final conclusion.

APPENDIX A

ECKHARD KOPETZKI'S COMPLETE WORKS

## Marimba Solos

<i>BAOBAB</i>	12 solos for four-mallets for Beginners
<i>Marimba Joy, VOL.1</i>	10 solos for four-mallets
<i>Marimba Joy, VOL. 2</i>	9 solos for four-mallets
<i>Two Etudes for Marimba</i>	2 solos for four-mallets
<i>Marimba Meeting</i>	2 solos for four-mallets
<i>Bottom Line</i>	four-mallet piece with a 5/4 groove
<i>Stout Sonata</i>	four-mallet solo dedicated to Gordon Stout
<i>Etude Homage II</i>	a short etude for 4 Mallets
<i>Kaskada</i>	four-mallets solo
<i>Three Movements for a Solo Dancer</i>	- 1st Prize PAS Composition Contest 2003-

## Vibraphone Solos

<i>Samba De Cacao</i>	10 solos for two-mallets
<i>Three Songs for Vibraphone</i>	3 solos for four-mallets
<i>6 Little Pieces for Vibraphone</i>	four-mallet solos for Vibraphone beginners
<i>Two Latin Songs</i>	"Latin Rock Café"/"Summer Beach Bossa" for four-mallets
<i>Festival Songs</i>	four-mallet piece
<i>Escape from Rio</i>	four-mallet Latin style piece

## Mallet Duos

<i>Circles of Ice</i>	Marimba – Vibraphone Duo, four-mallets
<i>Siebentanz</i>	Marimba – Vibraphone Duo, four-mallets
<i>Wooden Delight</i>	four-mallet Marimba duo
<i>Marimba Splash</i>	2 Marimbas and 4 percussionists; difficult

## Marimba Solo – with Percussion Ensemble

<i>Night of Moon Dances</i>	Solo Marimba with three percussionists
<i>- Set piece for the final round of the</i>	<i>"International Marimba Competition" Belgium 2004</i>
<i>Young Young</i>	Solo Marimba with three percussionists
<i>Marimba Music</i>	Solo Marimba with two (or one) percussionists

## Multi-Percussion Solo

<i>Canned Heat</i>	-1 <sup>st</sup> Prize PAS Composition Contest 2002
<i>Topf-Tanz</i>	four-mallet multi-percussion solo
<i>Wild Garden</i>	small multi-percussion solo
<i>Groove Yard</i>	three solos for Bongos, Snare and BD
<i>Flaschenpost</i>	multi-percussion solo

## Timpani Solo

*Stormy Sea* 5 timpani solos  
*Different Ways* two movements with different styles

## Concertos

*Double Concerto for Saxophone and Marimba*  
*Concerto for Marimba and String Orchestra*, dedicated to Katarzyna Mycka  
*Three Elements* 3 movement Marimba Solo with Orchestra  
*Marimba in the Wind* marimba solo and Brass Band  
*Summer Waltz* four-mallets Marimba solo with Brass Band

## Chamber Music

*In Memoriam* String Quartet and Soprano  
*5 Easy Folk Songs* 2 Clarinets  
*Satin Flowers* 4 pieces for 2 Clarinets  
*Sketches of an Autumn Day* Saxophone Quartet  
*Music 4Voices,* 4 female voices  
*In a Jolly Mood* Vibraphone and Flute  
*Canzoni da Sonar* French Horn (or Alto Sax) and Marimba  
*Shadows of Wood* Alto Saxophone and Marimba  
*Mixed Music* Marimba/Percussion and Alto Saxophone  
*Two Ragtimes* Marimba and Alto Saxophone  
*The Garden of Love for Soprano,* Viola and Marimba  
*The Mirror* Soprano and Marimba  
*What Color is a Soul?* Soprano and Vibraphone  
*Contemplationes* Organ and Percussion, three movements  
*Il Cantico di frate sole* Soprano and 3 percussionists  
*Three Pieces* Clarinet and Marimba/Percussion  
*"Ex Epistola Max Pechstein"* Marimba and Soprano

## Percussion Ensemble – without Mallets

*Exploration of Time* 6 percussionists, 3<sup>rd</sup> Prize 2004 PAS Composition Contest  
*Drumming Rites* 4 players  
*Drummers Circus* 5 players  
*Pole Position* 4 Snare Drums  
*Le Chant du Serpent* 4 players each with two drums played by hands  
*Kalläers* 4 players each with two drums  
*Cayenne* Timpani, Drum-Set and Set up  
*Wood Stick* 4 Snare Drums, Bass Drum and Cymbal  
*Crystal Beats* 3 Snare Drums



<i>Drums Ahead</i>	4 players each with two drums, intermediate
<i>Trio Snares</i>	3 Snare Drums in 3 different movements
<i>Hau Rock!</i>	3 Snare Drums
<i>Jamaica Plain</i>	5-6 players in an easy Latin style
<i>Paper Tigers</i>	2 movements for 4 percussionists
<i>Hand in Hand</i>	2 Cajons and 2 Drum Heads
<i>Aller Hand</i>	3 Cajons and 2 Broomsticks
<i>ABACUS</i>	4 Percussionists

### **Body Percussion Quartets**

*Samba Life*  
*Sweet Dance Suite*  
*Rumba Stomp*  
*Disco Time*

### **Percussion Ensemble - with Mallets**

**EASY** (for 4 – 7 players)

*Easy Latin*  
*Easy Blues*  
*Easy Rock*  
*Rockin' High*  
*Piet spielt Biet*  
*Percussion Carneval*  
*Räkkteim*  
*Mallets on the Rock*  
*Fancy Dreams*  
*Sunny Mallets*  
*Swing Encore*  
*Merry Mallets*  
*Polka Drops & Ballroom Tango*

**INTERMEDIATE** (for 3 – 7 players)

*Funky Stuff*  
*When the Moon shines Blue*  
*Tequila Sunrise*  
*Bamboo Leaves*  
*Danco Cabaza*  
*Fusion Mallets*  
*Saltina*            *African*  
*Wind*                *Up to Seven*

*Double Groove* *Rhythm Attacca*  
*Fiesta del Sol* (intermediate-difficult)

### **Drum Set Solos**

#### **EASY**

*Dinos Dance*  
*Fata Morgana*  
*Drachenfest*  
*Hamster Race*  
*Drum Beats*

#### **INTERMEDIATE**

*Beat Box*  
*Caramba*  
*Walk, Man!*  
*Four Stickers*

#### **DIFFICULT**

*6 Solos for Drum Set*

### **Drum Set Duos**

*Festival for Sticks*  
*Maize Maze*

### **Snare Drum Solos**

#### **EASY**

*1,2,...*  
*...3,4!*  
*Flaming Snare*  
*Rockin' Stix*

#### **INTERMEDIATE**

*Snare Race*  
*Rhythm@Stickin'*  
*Summer Suite*

#### **DIFFICULT**

*Concert Suite*  
*13 Snare Drum Studies*

### **New Works: 2012/2013**

*Fluid Dance*  
*Salsoalsa*  
*Trike Turn*  
*2 Pieces for 3*  
*Mosaiques Africaines*  
*Sahölyx*  
*Groove Cut*  
*Hey Day*  
*Cha-Cha Kiss*

2 flutes und 2 timpani  
Sextet for 3 Mallets and percussion in the salsa style  
3 players and one Marimba  
2 easy pieces for 3 players on one Marimba  
Marimba, Vibraphone, Percussion, Alto Sax  
Marimba, Vibraphone, Drum Set; Latin-Funk Ensemble  
Percussion and Flute  
ragtime waltzes to the "Lohengrin" and "Lucky Devils"  
3-4 mallets and 3 percussion

APPENDIX B

HISTORICAL MULTI-PERCUSSION WORKS FROM 1918-2002

## Early Chamber Works including Multiple-Percussion

1918	Igor Stravinsky	<i>'Histoire du Soldat</i>
1922	Willam Walton	<i>Façade</i>
1923	Darius Milhaud	<i>La Création du monde</i>
1929	Darius Milhaud	<i>Concerto for Percussion and Orchestra</i>
1929	Edgar Varese	<i>Ionisation</i>
1935	John Cage	<i>Quartet</i>
1937	Bela Bartok	<i>Concerto for 2 Pianos and Percussion</i>
1939	John Cage	<i>First Construction</i>
1940	John Cage	<i>Second Construction</i>
1940	John Cage	<i>Imaginary Landscape 2</i>
1941	John Cage	<i>Double Music</i>
1941	John Cage	<i>Third Construction</i>
1942	John Cage	<i>Imaginary Landscape 3</i>

## First Solo Multiple-Percussion Works

1956	John Cage	<i>27' 10.554</i>
1959	Karlheinz Stockhausen	<i>Zyklus NO. 9</i>
1962	William Kraft	<i>French Suite</i>
1964	Morton Feldman	<i>King of Denmark</i>
1965	Ricky Tagawa	<i>Inspirations Diabolique</i>
1966	Charles Wourinen	<i>Janissary Music</i>
1973	Charles DeLancey	<i>The Love of L'Histoire</i>
1975	John Cage	<i>Child of Tree</i>
1975	William Kraft	<i>English Suite</i>
1975	Iannis Xenakis	<i>Psappha</i>
1985	Frederic Rzewski	<i>To the Earth</i>
1985	Maki Ishii	<i>13 Drums</i>
1986	James Wood	<i>Rogosanti</i>
1989	Iannis Xenakis	<i>Rebonds A/B</i>
1990	David Hollinden	<i>Cold Pressed</i>
1991	David Lang	<i>Anvil Chorus</i>
1991	Bruce Hamilton	<i>Edge: A corrugated Box</i>
1991	Brian Ferneyhough	<i>Bone Alphabet</i>
1995	David Hollinden	<i>Dustin the Connecting Link</i>
1995	Askell Masson	<i>Frum: A drum song</i>
1995	Roger Reynolds	<i>Watershed</i>
1997	Michael Gordon	<i>XY</i>
1999	Eckhard Kopetzki	<i>Topf-Tanz</i>
2002	Eckhard Kopetzki	<i>Canned Heat</i>

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