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Analyzing Form in Popular Music: History, Style, Aesthetics, and Data

ABSTRACT

Background

Various datasets have been used to create corpus studies of popular music. Such sets are typically analyzed to reveal characteristics of the music that might not otherwise be possible without the assistance of powerful computer processing. This approach contrasts strikingly with the way scholars have traditionally come to generalizations about musical structure, style, and development, which builds up a corpus on the basis of preferences and practices that some might consider subjective, skewed, or incomplete. Large datasets thus seem to promise greater objectivity, though some scholars question whether their use always results in useful or even valid insight. I have argued (Covach 2015), for instance, that such studies may lead to misleading or false conclusions, and this is due to both the ways in which the bodies of music examined are formed, as well to the manner in which they are examined.

Several popular music scholars have attempted to blend the objectivity of datasets with more traditional approaches to analysis, producing work based on some body of music that has been assembled by others. This corpus is then examined in traditional ways (not automated by computer) for certain features of interest to the scholar. These studies often present interesting and useful results, but the impact of the results can at times be undermined by the manner in which the corpus was formed. In short: Do such corpus studies always prove what they claim, or are these claims undercut by the nature of the corpus formation employed or even by a misalignment between research questions and corpus formation?

Aims and Repertoire Studied

This paper will consider mostly popular music from 1945–1995, focusing especially on American and British rock music, and centering primarily (but not exclusively) on the analysis of musical form. I will outline how the formation of the corpus can be coordinated with the nature of the questions that the study intends to pursue and argue that such careful coordination is critical in avoiding the pitfalls of employing ready-made corpora.

Methods

Ways in which datasets and musical corpora have been formed in recent research will be compared with traditional ways of determining repertoires. Discussion identifying the problems arising in Mauch *et al.* (2015) and Serrà *et al.* (2012) will lead to a consideration of corpus formation, informed by Gjerdingen (2014), Huron (2013), and London (2013). Corpora as employed by Summach (2012), de Clercq (2016), and Temperley and de Clercq (2013) and others will be compared with the traditional approach of Biamonte (2014 and 2016),

Covach (2005, 2006, 2010 and 2015), Covach and Flory (2015), Doll (2017), Everett (2009), Moore (2012), Tagg (2016), and Stephan-Robinson (2009) to explore how the nature of repertoire selection affects analytical findings and possible conclusions, historical narratives, and theory building.

Implications

This paper argues that meaningful results are most often obtained when the songs included in the dataset or corpus (digital or analog) are informed by contexts, characteristics, and considerations that scholars find significant and not solely by the *Billboard* charts, frequency of streaming in the recent past, *Rolling Stone* lists of top songs, or other ready-made lists. Most importantly, the claims made by any given study must align with the corpus employed. It is clear that traditional historical and analytical lenses are created (sometimes tacitly) by the music-historical and music-aesthetic preferences of scholars, and that this may create blind spots. But without such historically informed sorting applied to the music studied, the answers any given dataset provides may not effectively address questions scholars would find significant or meaningful, even in the most ecumenical sense. Each approach brings with it powerful tools; it may be that a blend of traditional and digital approaches will ultimately produce the most useful results.

Brief discussions of three studies will provide representative examples. Mauch *et al.* (2015) uses the *Billboard* Hot 100 charts, dating from 1960–2010 — a corpus including about 17,000 songs. The authors claim, based on analysis of this corpus, that they have found three key turning points in pop: 1964, 1983 and 1991. It is crucial to note that the *Billboard* Hot 100 chart is devoted to singles, meaning that no albums are listed. This is the first problem: the authors make claims about pop's history based exclusively on singles. After about 1967, however, rock musicians began to focus on the album, as album-oriented rock came to dominate rock and moved more to the FM radio band in the US. The *Billboard* Top 100 largely charts AM hits. It is then no wonder that the pronounced stylistic changes around 1967 — the rise of psychedelia — are invisible to their data; these shifts happened mostly on albums such as the Beatles' *Sgt. Pepper's Lonely Hearts Club Band*. A second problem is that their method samples only thirty seconds of each song. It seems unlikely that one could get both a verse and a chorus, or a verse and a bridge into a single 30-second clip. But whatever does make it into that clip is what represents the entire song. Ironically, one example the authors discuss in the article is a 30-second clip from Queen's 'Bohemian Rhapsody' — a track that clocks in at almost six minutes. The problems in this case arise from the mismatch of the corpus with the goals of the study. The claims simply outrun the support the data is able to provide.

A consideration of de Clercq (2016) raises very different issues. That study is concerned with exploring whether the

actual duration of a measure of music can be useful in establishing meter. Three corpora are employed, one of which is drawn from the almost one hundred examples found in Covach and Flory (2015). As lead author of that textbook, I can attest to how that corpus was formed. While each example is representative of a particular style of rock or pop music, each was chosen to provide easy understanding for general university students with no previous musical training. Had I selected my examples solely to provide the most accurate representation of the styles involved, irrespective of difficulty, other pieces would have been chosen — ones that would probably have introduced at least some degree of metric complexity, perhaps altering the results found in this article and impacting its conclusions. The use of three corpora in this study, however, reduces the overall effect of possible misalignment with any single corpus. In such cases, nonetheless, the author must form her own corpus, directed by knowledge and study of the repertoire involved. While ready-made collections of music seem to offer objectivity and may even speed up the research process, they can also weaken the conclusions that such studies advance.

Everett (2009) represents the approach advocated in this paper. This book examines rock and pop during the 1955–1969 period. Everett forms his own corpus, developing it to insure the greatest possible alignment with the issues he investigates. He includes all the songs in the *Billboard* Top 20, 1955–1969 (2,459 songs). He then adds what he describes as hundreds of ‘notable lesser hits’, and finally, 300 full albums. The resulting corpus produces more than 6,500 songs. If the *Billboard* singles alone produce a skewed result (as discussed above), the inclusion of lesser hits and albums compensate for this, resulting in a balanced and rich corpus. Some might argue that the corpus formation employed by Everett is less objective as a result of his own decisions on what to include, but such historically informed corpus formation greatly fortifies the conclusions and observations offered throughout the book, making it much more useful to popular music scholars than other work that employs more ‘objective’ corpora. As Gjerdingen observes, ‘although historically informed corpus studies can be considerably more difficult to plan and execute, in large part because of the heterogeneous nature of a multitude of patterns, the results are potentially more grounded and useful’ (Gjerdingen 2014, 202).

Keywords

Form, Popular Music, Structure, Analytical Theory, Music Aesthetics, Musical Modeling.

REFERENCES

- Biamonte, Nicole, 2014. ‘Formal Functions of Metric Dissonance in Rock Music’, *Music Theory Online* 20/2, <<https://www.mtosmt.org/issues/mto.14.20.2/mto.14.20.2.biamonte.html>>, accessed 02/06/2023.
- , 2016. ‘Metric Complexity in 1970s Progressive Rock’, paper presented at the *2nd International Conference of the Project Network for the Study of Progressive Rock*. Edinburgh: University of Edinburgh.
- Covach, John, 2005. ‘Form in Rock Music: A Primer’, in Deborah Stein (ed.), *Engaging Music: Essays in Music Analysis*. Oxford/New York: Oxford University Press, 65–76.
- , 2006. ‘From Craft to Art: Formal Structure in the Music of the Beatles’, in Ken Womack and Todd F. Davis (eds.), *Reading the Beatles: Cultural Studies, Literary Criticism, and the Fab Four*. Albany (NY): State University of New York Press, 37–53.
- , 2010. ‘Leiber and Stoller, the Coasters, and the ‘Dramatic AABA’ Form’, in John Covach and Mark Spicer (eds.), *Sounding out Pop: Analytical Essays in Rock Music*. Ann Arbor (MI): University of Michigan Press, 1–17.
- , 2015. ‘Pop History’s Pivotal Moments: Has Big Data Settled the Debate?’, *New Scientist* 6.
- , 2019. ‘George Harrison, Songwriter’, in Mark Osteen (ed.), *Part of Everything: The Beatles’ White Album at Fifty*. Ann Arbor (MI): University of Michigan Press, 177–96.
- Covach, John, and Flory, Andy, 2015. *What’s That Sound? An Introduction to Rock and Its History*. New York (NY): W. W. Norton.
- De Clercq, Trevor, 2016. ‘Measuring a Measure: Absolute Time as a Factor for Determining Bar Lengths in Pop/Rock Music’, *Music Theory Online* 22/3, <<https://mtosmt.org/issues/mto.16.22.3/mto.16.22.3.declercq.html>>, accessed 02/06/2023.
- Doll, Christopher, 2017. *Hearing Harmony: Toward a Tonal Theory for the Rock Era*. Ann Arbor (MI): University of Michigan Press.
- Everett, Walter, 2009. *The Foundations of Rock: From ‘Blue Suede Shoes’ to ‘Suite: Judy Blue Eyes’*. Oxford/New York: Oxford University Press.
- Flor, Lee, 2012. ‘Million Song Dataset Reveals Trends in Rock History’, *Science Fair* 1.
- Gjerdingen, Robert, 2014. ‘“Historically Informed” Corpus Studies’, *Music Perception* 31/3: 192–204.
- Huron, David, 2013. ‘On the Virtuous and Vexatious in the Age of Big Data’, *Music Perception* 31/1: 4–9.
- London, Justin, 2013. ‘Building a Representative Corpus of Classical Music’, *Music Perception* 31/1: 68–90.
- Mauch, Matthias, MacCallum, Robert M., Levy, Mark, and Leroi, Armand M., 2015. ‘The Evolution of Popular Music: USA 1960–2010’, *Royal Society Open Science* 2.
- Moore, Allan F., 2012. *Song Means: Analysing and Interpreting Recorded Popular Song*. Farnham: Ashgate.
- Serrà, Joan, Corral, Álvaro, Boguñá, Marián, Haro, Martín, and Arcos, Josep Ll., 2012. ‘Measuring the Evolution of Contemporary Western Popular Music’, *Scientific Reports* 2.
- Stephan-Robinson, Anna, 2009. *Form in Paul Simon’s Music*. PhD diss. Rochester (NY): University of Rochester.
- Summach, Jay, 2012. *Form in Top-20 Rock Music, 1955–89*. PhD diss. New Haven (CT): Yale University.
- Tagg, Philip, 2016. *Everyday Tonality II: Towards a Tonal Theory of What Most People Hear*. New York (NY)/Liverpool: Mass Media Scholars Press.
- Temperley, David, and de Clercq, Trevor, 2011. ‘A Corpus Analysis of Rock Harmony’, *Popular Music* 30/1: 47–70.
- , 2013. ‘Statistical Analysis of Harmony and Melody in Rock Music’, *Journal of New Music Research* 42: 187–204.