

INTRODUCTION

The drone genre originated in the second half of the 20th century and occupied a relevant position in the areas of experimental music. Many musicians of electronic, electroacoustic and acoustic music, institutional and non-institutional music all over the world created music using sustained, continuous sounds. Despite the spread of the sustained sound concept and its wide migration into the area of applied music, there is a lack of in-depth research and analysis in musical literature. Also, there are several definitions of the drone genre in literature.

The drone genre belongs to a broad spectrum of experimental and electronic music genres that have not yet been sufficiently studied, despite worldwide prevalence. As radical technological innovation emerged in the 20th century (electronic sound generation, processing, analysis, computer music, etc.) and music and sound processing methods changed unrecognisably, analytical methods that focused on the note text exclusively have become obsolete. They do not help us to understand the essence, structural components or aspects of the origin of this music.

Comments from some authors studying experimental music prove the relevance of the topic. For example, the musicologist Joanna Demers observes that the music of sustained sounds (drone) is analysed mostly in the context of ethnomusicology, focusing on specific case studies and ignoring cross-cultural aspects (Demers 2010).

In the field of music research, there is broad agreement that the American composer La Monte Young (Phill Niblock and Charlemagne Palestine are also mentioned among the pioneers) started this genre. He defined drone music as 'the sustained tone branch of minimalism'; however, other sources provide alternative definitions. Often, drone music is collated with similarly sounding ambient music.¹ In *The Cambridge History of Twentieth-Century Music* (Cook and Pople 2004), drone music is considered a branch of ambient music, although it is noted that the early drone music affected the development of ambient music. The musicologist Joanna Demers writes about these two directions in separate chapters of her book *Listening Through Noise*, assigning the drone direction to the maximal music genres (noise music, dub techno), while describing ambient music in a chapter on space-oriented music (soundscapes, field recordings) (Demers 2010).

In this context, it is not surprising that confusion arises when trying to define the genre. Equally problematic is the analysis of music, which is often

1 Ambient music is a 20th-century genre of instrumental music with a strong emphasis on timbre, atmosphere and space. Slow pace and slow change in musical events prevail. The term was introduced by British composer Brian Eno (b. 1948).

intermittent, fragmented and non-descriptive in terms of the essence. 'Technical descriptions of drone take only a few words to state that one tone or chord lasts minutes or hours,' says Demers. There are also unclear assumptions of genre and the compositional strategies used. This, on the other hand, is due to the experimental nature of this genre and the lack of landmark information: One or more sustained sounds do not create any syntax relationship and leave little known directions for interpretation. Only sounds and their characteristics, multidimensional changes and proportions and perceptions of such music can be analysed in the music of sustained sounds.

The lack of clue points in the literature also causes problems. Although the drone genre belongs to minimalism, it far less analysed than repetitive minimalism (Potter, Mertens, Fink). This has limited the potential to understand drone more clearly since minimalism refers to too many types of music to be of much use (Demers 2010, 92). Likely, the extensive genre development (drones originated in the academic medium and later spread into electronic experimental music) and novelty has led researchers to ask many unanswered questions that have limited the ability to analyse such music. Another problem lies in the very characteristics of the music itself: Sustained, continuous sounds do not create syntax relationships or an usual flow of information, and do not provide many preconditions for research, moreover raise many questions about the perception of such music. Western music theory, which has prevailed for several centuries and has been based on syntactically rich material, has not formulated a suitable methodology for the study of static music. However, the growth in research on music perception and experimental music aesthetics and structure at the end of the 20th century and the beginning of the 21st century makes it possible to analyse the creative paths not yet studied. It is worth noting that recently, important studies on the drone genre have been conducted (Coggins 2018; Sword 2021) that have taken an interdisciplinary approach, helping us understand the drone genre and phenomenon better.

This monograph studies the drone genre, its definition, aspects of its origin (prototypes in the environment, archaic music and contemporary artistic processes), the imprint this form of expression has had in the second half of the 20th century and the beginning of the 21st century, and the compositional aspects. The perception of slow sound processes is a challenge requiring a wide-ranging cognitive review of contexts and has therefore not been explored further, focusing mainly on the analysis of the acoustic characteristics and structuring of micro-dimensional changes, and compositional techniques.

This book seeks to define the concept of the drone genre, to encode its origin and expression and to define compositional aspects. The monograph refers to literature on experimental electronic music and sound technologies, reflection of the authors' creativity, general music literature and scientific non-musical literature.

The first group includes books and articles which generally analyse experimental, electronic music and sound technologies. The second group consists of literature on creators and their works. General musical literature on harmony, tuning, as well as cognitive aspects and specific sound dimensions have been selected for the analysis of certain aspects of a sustained sound. The research also uses non-musical natural science literature, research on infrasound and works on geophonic and biophonic sounds which lies in the context of acoustic ecology. Analysis of the origin of the drone genre has helped to clarify the genre and to highlight the relevant characteristics of its sound and the genetic aspects of its form.

Spectrograms were used widely in the work to illustrate the musical structures. These were created using Sonic Visualiser software, using mostly a melodic range spectrogram (1–1400 Hz), and using other parameters in some examples, when a different range of frequencies was more applicable due to the structure of the work. Window sizes of 16384 or 32768 samples were used, depending on the context of the piece.

This monograph consists of three main parts. The first part analyses the historical aspects of the drone genre and examines its prototypes. The second part maps the genre's spectrum and presents its principal representative works. The third part explores compositional aspects and creative strategies based on the expression of the four dimensions of sound (duration, pitch, timbre and loudness) in the composition.

It is expected that this work will serve as a medium for broader reflection on the drone genre, as well as providing analysis and theory for actively evolving experimental music and its techniques.