



“Computerwelt” Charting the Digital Revolution in Popular Music

Sven Kube, Winning Proposal for the 2022 MusicID Digital Research Fellowship

Digital sounds reached wide audiences for the first time when synthesizer-driven pop songs became chart hits in the mid-1980s. Adopting aesthetic standards that pioneers of electronic music from Kraftwerk to Giorgio Moroder had set during the 1970s, and embracing the first all-digital instruments that went on sale in the early 1980s, “synth pop” artists created an international phenomenon with social, economic, and political implications. The new style boosted diversity in the top tier of popular performers, launching the careers of female superstars such as Madonna and Whitney Houston, and allowing LGBTQ+ acts like Soft Cell, Pet Shop Boys, and Frankie Goes To Hollywood to become fixtures on the hit lists. Spurring collaboration and specialization in music production, particularly with regard to technological applications and marketing strategies, it catalyzed the formation of corporate “hit factories” like Stock Aitken Waterman, which today’s K-Pop music studios cite as role models. In the context of the Cold War’s cultural competition, it sonically emblemized the capitalist promise of excitement through novelty and captivated listeners across Eastern Europe, where original “synth poppers” like Alphaville and Depeche Mode still maintain enormous fan bases. A future-facing genre that introduced the clean and crisp aesthetics of digital noise to mass audiences around the world, synth pop has remained persistently overlooked in the scholarship on modern popular music.

This project uses synth pop as a lens to investigate when, where, and in what specific forms digital sounds broke into the charts. Covering the 1980s, it focuses on the first half of the decade, when artists and producers started to utilize first-generation digital instruments like Roland’s TR-808, a programmable drum machine that generated previously unheard bass lines, and Yamaha’s DX7, the first widely available electronic keyboard to perform frequency modulation synthesis. The shiny, spikey, and stringent sonic output of these new devices had an instant impact on music charts around the world—within a year of its market debut, the DX7 featured prominently on “West End Girls” by Pet Shop Boys, “Take On Me” by a-ha, “Fresh” by Kool & The Gang, and other number-one hits. Expanding the aural spectrum of pop and inspiring experimentation with artificial noise, digital instruments swiftly transformed the soundscapes of hit music.

In my effort to explain the beginnings of this aesthetic revolution, I will combine evidence from a variety of sources. In a preparatory step, I will identify early chart hits that showcased the potential of digital instrumentation and the performers who used the synthesizers of pioneering manufactures like Casio, Korg, Roland, and Yamaha. The development

of this new musical equipment is well documented in periodicals for creative professionals, record industry trade magazines, and similar publications to which few university libraries subscribe. In addition, rare volumes on the history of electronic music detail the use of specific machines on particular songs. Since this information is scattered across different types of secondary literature, I will invest the fellowship stipend into gaining access to these sources.

In the main phase of the research, I will empirically evaluate pertinent music charts from the 1980s that are available through MusicID. Since sonic trends tend to debut on individual tracks rather than song collections, I will concentrate my analysis on the singles charts of three countries that yielded particularly vibrant synth pop scenes and, at the same time, represented the period's largest record markets. Thus, I will scrutinize the United States *Billboard* Hot 100, Great Britain's Official Chart Company Top 200, and Germany's Media Control Top 100 (Germany) from the 1980s to explain patterns in how recorded songs that sonically heralded the digital age turned into popular hits. MusicID's holdings permitting, I would like to include hard-to-find chart data from Canada, Austria, and Switzerland for comparative purposes, hoping to clarify whether smaller markets responded to digital trends in different ways.

The aim of this undertaking is to produce a journal article that explains what types of performers, songs, and noises were successful when pop started to sound digital. The article will inform scholarship on popular music from two distinct angles. First, by illuminating a technological development leap in musical instrumentation that permanently altered aural aesthetics, it emphasizes that sonic novelty has been a driving force in the evolution of popular music. Second, it contributes insights based on quantitative analysis to a multidisciplinary field that has been dominated by qualitative approaches. I am confident that my experience in working with music charts and record sales data—in one instance to measure the commercial effects of Canada's nationalist "CanCon" radio content quotas during the 1970s, and in another to capture how the import of Western recordings transformed an Eastern Bloc country's music market over the Cold War decades—will enable me to successfully complete this project.