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# Songs from Overseas: Music Downloading as a Marker of Migration

**Abstract:** Findings from the Digital Music Lab in Association with Nokia at McMaster University are reported. Diasporas and migration patterns are studied by comparing the popularity of genres in their "mother" country, i.e. place of origin, with their popularity in subsequent host countries. The human stories that underlie these comparisons, whether related to work, war, famine, or simply the desire to "seek a better life" are, where possible, linked to the research findings.

#### Résumé:

## 1. Introduction and Background

Music plays an important role in the formation of personal identity (Clark, Dibben & Pitts, 2010). People, especially in adolescence, often project, accentuate or magnify their personas with the appropriation of musical styles and genres associated with specific socio-cultural values. For example, the American rock band *Pearl Jam* is closely linked to "green issues", allegedly donating some \$100,000 to organisations working on climate change, renewable energy, and other green causes. Grammy-winning hip-hop group *The Roots* also has strong links to the environmental movement; the band's members are animal lovers, working with "People for the Ethical Treatment of Animals" (PETA) on a campaign to "Stop the Violence: Go Veg". Alternatively, the music of Christian rock groups such as *MercyMe*, *Casting Crowns* and *Third Day* focuses on religious devotion and faith, and are therefore likely to attract a different following to *Pearl Jam* and *The Roots*. Wearing a t-shirt emblazoned with the logos of either *Pearl Jam* or *The Roots* projects a different image to that of *MercyMe* or *Casting Crowns*, and in so doing helps to create and reinforce a different sense of self.

Concomitant with the important relationship between music and identity is the resilience of the tie between an individual and the music of their youth (North & Hargreaves, 2008). Although attitudes may mature and the "values" of the band(s) that were once the focus of our interests and infatuations discarded, the sounds and rhythms of our formative years continue to hold our affections and loyalties. Consequently, genres, bands and individual recording artist continue to be listened to (and downloaded) in later life, and as a result listening practices are a marker of a one's cultural origins and attitudes.

The close and long-lived association of individuals and their musical preferences – their musical cultural baggage, so to speak – can be used to trace the movement of people globally, through the process of migration. This is especially the case in instances where members of a mainstream culture become a minority, either because they emigrate to a country in which their (musical) culture is relatively alien or because of large-scale immigration within a country.

## 2. Digital Music Lab in Association with Nokia

In the summer of 2012 the author entered into a 5-year data sharing and cooperation agreement with the Nokia Corporation with the aim of establishing a digital music lab at McMaster University dedicated to the analysis of Nokia's vast music-download database from socio-cultural and musicological perspectives. Nokia currently has online music stores in some 40 countries, representing all areas of the globe; in total, over 20 million tracks are available in all genres. The data provided by Nokia cover a five-year period from 2007 to the present, which allows music-listening patterns to be studied longitudinally and at a global level. The dataset contains hundreds of millions of metadata downloads, with information pertaining to country, (anonymised) user, date, time, artist, genre, subgenre, and so on. The agreement with Nokia is built on a previous project in which the author was the consultant psychologist for the Nokia Corporation's global *Psychology of Music Campaign*, a research programme designed to evaluate current global music downloading trends.

During this initial project a number of different factors were explored, including the level of musical diversity and individual adventurousness within each country in the study, and the amount of domestic versus international music consumed. To précis the results very briefly, the amount of domestic versus international music downloaded in a particular country correlated positively and significantly with the level of migration into that country. Moreover, the overall musical adventurousness of a country also depended on levels of migration; that is, the higher the migration the greater the adventurousness. However, overall musical adventurousness does not necessarily mean that the individuals with a particular country are eclectic in their musical tastes – it can be the case that the individuals remain relatively conservative musically, but that the degree of diversity across the society is large.

Take Khaleeji, for example, a popular style of music indigenous to the Arab states of the Persian Gulf, characterized by the heavy use of the traditional *tabl* drum and *oud*, and dominated by male unison singing. In the study Khaleeji accounted for less than 7% of all music downloads in the United Arab Emirates (UAE), while "Oriental Pop", sometimes referred to as "Chinese Pop", made up over 15% of downloads. It is worth noting that in a 30-year period from 1975 to 2005 the UAE has witnessed a 7-fold population increase, largely due to the arrival of migrant workers from the Far East. This unprecedented expansion has meant that Emiratis now account for less than a fifth of the population, while people from Asia, may of whom work in service industries, constitute over 50%. The changing demographic landscape of the UAE is clearly reflected in the

musical preferences of the newly landed population, preferences that can be observed in the download data. What one might have expected to be mainstream – Khaleeji – is relatively marginal, while music from thousands of miles away is now commonplace.

## 3. Research Outline and Methodology

In tune with the conference theme of narrative voices "from the edge", this research explores the concept of marginal music and seeks to understand the human stories that may have lead to its minority status relative to the mainstream. What is marginal in one country may not be marginal in another. Diasporas and migration patterns are studied by comparing the popularity of genres in their "mother" country, i.e. place of origin, with their popularity in subsequent host countries. The human stories that underlie these comparisons, whether related to work, famine, war, or simply the desire to "seek a better life" are, where possible, linked to the research findings.

From a methodological perspective music download metadata are organized into a series of relational database tables and searched using the MySQL implementation of SQL (Structured Query Language; e.g. Groff, et al. 2009). Data generated by these queries are analyzed using statistical software and graphed accordingly. Cluster analysis is applied to establish typical download profiles for each geographical location. These, in turn, enable atypical or "foreign" download behavior patterns to be identified, which can be compared against demographic information, and give rise to an inferred characterization of migration-related changes, invariance in musical taste, and cultural identity. Deviations from mainstream download patterns can thus be identified and analyzed, along with their possible reasons, such as migration, foreign influences, alternative or minority cultures, trends, non-musical factors (e.g. political or economic events), etc.

## 4. Concluding Remarks

The contribution of the Nokia music-download database to our understanding of the unfolding story of music's globalization is potentially very significant. To date, multinational communications companies have been reluctant to allow their commercially generated data to be anlaysed with the intention of illuminating the ways in which music is currently being used and consumed on a global scale. The author is therefore heavily indebted to the staff within Nokia for their generosity in providing unfettered access to the data to be reported in this study, and for continued access in support of further research areas. These data are a unique snapshot of current global music listening practices and give an insightful view of the rapidly changing patterns in music consumption presently sweeping the globe.

### References

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