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Digital Radio Cultures in Europe: Progress to Date and Prospects for the Future. A review of research produced by DRACE

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Introduction

Digital Radio Cultures in Europe (DRACE), was established in 2004 under the COST Action A20 “The Impact of the Internet on Mass Media in Europe”. The original configuration of the COST A20 group included provision for an internet and music research group but this was re-focussed following a re-organisation in which DRACE was more formally incorporated. The group comprises 14 researchers with specific interests in radio from Norway, Finland, Denmark, Greece, Germany, Hungary, Portugal, Croatia, the United Kingdom and Ireland. The objective of the research group is to be at the forefront of empirical research on changes in radio cultures arising from the move from analogue to digital broadcasting platforms. In addition to tracing the recent history of digital radio in Europe, the group has examined various strategies and scenarios for radio’s future development in European broadcasting. Research outcomes are aimed at media researchers with an interest in radio and new technology, policy makers, public service broadcasters and private businesses.

The work of the research group has been organised around a number of projects which examine respectively the impact of the internet on radio, the changing technological landscape in which it operates, and the different modalities of access and participation in digital radio. While the COST A20 Action of which DRACE was formally a working group has now completed, the work of the research group continues and findings related to the above are in the process of being published in a number of international journals.

Two projects within DRACE concern the different technologies of digital radio. The term ‘digital radio’ embraces a host of different delivery mechanisms, some being used for ‘traditional’ radio, live broadcasting of speech and music content, while increasingly radio is delivered in alternative formats, such as time-shifted streamed and downloaded programming via the web.

DAB in Europe

The most common platform for digital radio in a number of European countries is the terrestrial transmission system known as DAB, for Digital Audio Broadcasting, based on the Eureka 147 technology developed in Europe from the mid-1980s. One of the DRACE projects examined how DAB digital radio had fared in four different European countries: Denmark, Finland, Ireland and the UK (Lax et al 2006; O'Neill, 2007). The level of development of DAB in each of these countries varies significantly – the UK is the world

leader in DAB receiver sales and number of stations carried, while in Ireland there is no domestic DAB service, and so a negligible number of receivers. During the course of the research project the state of DAB in Denmark and in Finland changed dramatically – the number of receivers sold in Denmark accelerated rapidly and it now approaches the levels found in the UK, while broadcasters in Finland, maintaining a modest level of DAB service in 2004, ended transmissions completely in August 2005 on the basis that very few receivers had been sold.

Clearly then we find widely varying fortunes for DAB, and the research project aimed to establish why this should be so, given that, on the face of it, radio broadcasting in each country was based on a similar pattern of a strong public service broadcasting monopoly for many years, joined in recent decades by a number of local and national commercial broadcasters.

In fact, the variable development paths are largely the result of the policies adopted by the respective governments, policies which reflected the existing radio ‘landscape’ in each country. In the UK, from the outset commercial radio was expected, and encouraged through regulatory changes, to become involved in digital radio. Denmark relied on the public service broadcaster to drive DAB, while in Finland media policy concentrated on digital video transmission, its ability also to carry radio stations making it the default digital radio platform. Finally, Irish digital radio policy reflected the continuing availability of analogue radio spectrum and the poor suitability of the DAB technology to small, local commercial stations.

Digital radio’s technological landscape

A second DRACE project has tried to survey the range of technological options for digital radio. By monitoring industry statements and government initiatives, we have identified at least 15 different platforms for digital radio. Some of these (such as DAB) are already up and running while others are nascent techniques. While, as already discussed, some platforms such as DAB offer a radio that is familiar but with enhancements, others such as web-based delivery allow innovations that, we might argue, challenge the term ‘radio’.

We have conducted a series of 60 interviews with broadcasters, regulators and equipment manufacturers from the UK, Ireland, Canada, Denmark and Finland. We seek to identify which technologies are seen as promising and which are problematic, based on a number of criteria: a) regulation, b) ownership, c) market penetration, d) economic issues, d) production practices, e) geographic coverage area, f) functionality and g) user practices.

The results of these interviews are currently under analysis.

The Impact of the Internet

In addition to changing technologies of transmission, one of the central questions for DRACE within the COST project was to examine the impact of the internet on radio as a medium and to provide an insight into how web-based strategies, it is clear, have become centrally incorporated into radio’s model of delivery (O’Neill, 2006). The project ‘Online Radio Cultures’ studied the online presence of radio stations, and new forms of content, production goals and cultural spaces that the Internet allows for.

For this research, several radio station websites from Hungary, Greece, and the ARTERadio.com have been analysed as case studies taking into account the textual information, website layout, navigation schemes, audio content and the role of accessible archiving systems. The cases studied include commercial, public, and community radio stations, both with aired and Internet-only programs. Based on this analysis, the research discusses the multifaceted impact that the Internet has and might have on the radio both as a medium and as a form of mass communication. A comparative analysis and a classification derived from radio stations' use the Internet includes:

- a) Innovative aspects, in which the use of the internet is considered a new medium to produce new types of content, apply new forms, models and patterns of production;
- b) Established modes in which the internet is viewed as a way to reach new target audiences using already known and well tested patterns of content presentation.

A study of radio's 'rearviewmirrorism' and 'innovation' trajectories as revealed by looking radio web pages leads, the research concludes, to a questioning of the traditional concept of radio and a radically different and highly competitive, culturally differentiated environment for the medium.

Access and Participation

An overarching theme pursued within DRACE research has been the democratic potential of new and emerging forms of radio in a digital environment. Drawing on McQuail's definition (1992), access is defined as the degree of openness of media channels to a diverse, wide range of voices and the ability of those with limited powers to gain entry to the media space owned by public and private media. While it is recognised that that radio now routinely incorporates enhanced opportunities for comment, feedback and direct participation via conventional technical means as well as new digital technologies of email, SMS, and the web, this does not necessarily mean that listeners *in fact* participate in any substantial way or that enhanced access as a whole has contributed to media diversity.

Participation encompasses a wide spectrum of activities which in terms of radio range from consumption itself as a form of participation, to engaging with the content in some way either directly with the media operator or more contextually by incorporating radio-originated content into daily life. A series of empirical questions follow which seek to establish the kind and extent of participation in digital radio and include exploring the actual needs for interactivity among the listening public, qualitative and quantitative assessment of interactive experiences and assessing the added-value created by interactivity in digital radio.

A three country qualitative study of listener participation in Norway, Portugal and Ireland explored and compared the experiences of media interaction as articulated by audience members; evaluated public platforms for access, participation and interaction, particularly radio in its emerging digital form; examined opinions about layperson media participation among members of the general public (Nyre and Appel, 2006). The research has resulted in a typology of listener participation that seeks to characterise the different dimensions of interaction and 'near-interaction on a spectrum ranging from private through forms of social interaction to public gains.

The discussion of the modalities of access and participation in the digital landscape are set within a normative framework and seek in an ‘instructive way’ (Nyre, 2006) to contribute to professional practice and public policy. Processes of communication have become more sophisticated and efficient through the process of digitalization but they have not necessarily become more democratic nor has the quality of communication improved through the availability or the use of such technologies. In many instances, the pace of technological development and the rapid uptake by constituent groups of new tools of communication precedes any obvious application or communicative practice. For this reason, a concern within DRACE has been to debate the nature of good communication values and to interrogate possible forms of participation that enhance the quality of communication in everyday life.

Emerging models of digital radio may, or perhaps should, in fact alter models of access and participation as currently represented and provide methods of communication and interaction that cut across the boundaries in which radio currently operates. As it is, digital technology has quickly changed the nature of access to live radio from being a once-off media event to an extended, multi-platform and transnational experience. Listening to radio is no longer constrained by being available at a broadcaster’s time and location of choosing; the radio event is now available locally or globally, in real time or on demand, on the platform and device chosen by listeners. An emerging feature of the digital transformation of radio has been a dissemination of the tools of production into the hands of ordinary members of the public enabling them to make and distribute their own programmes.

New models of communicative practice, however, are required to meet the challenges facing increasingly diverse European societies. Digital radio is well placed to act as an experimental ground of good communication practice. The expansion of spectrum brought about by digital radio removes scarcity as an argument in the rationing of a public resource and provides opportunities for innovative programming and scheduling by multiplex operators. However, market-driven regulatory policies have to date displayed little interest in supporting or encouraging new approaches to digital audio services, and in practice digital service provision has been predominantly consumer-oriented. Enhanced access, or participation, is not guaranteed by the availability of new channels; indeed, a worst case scenario is that digital radio may actually lead to narrower and tightly controlled access than before.

Future research

At a time when it can be argued that there is a resurgence of an audio culture as opposed to an audiovisual culture, research into the role of new sound media is at an early stage. This is a rich field for exploration. There is evidence to support the idea of the growing importance of sound media as opposed to audiovisual media. Studies have reported the rise in radio and other audio media usage as a complementary activity to ‘web surfing’ for example, with a consequent fall in television viewing. The dramatic emergence of user-generated audio content (podcasting) vastly exceeds any comparative video equivalent. Similarly, one of the most economically successful personal media products, the iPod, is predominantly an audio device. While evidence suggests that such technologies will increasingly incorporate audiovisual capabilities in the future, studying the emergence of these new sound media and their relationship with radio will provide important insights into emerging media more generally.

We foresee three (at least) approaches to research:

- A theoretical perspective. How do emerging media challenge or replace existing media, and to what extent can existing media be repurposed in response to those challenges.
- An analytical perspective. How audiences are using new sound media, both as consumers and as producers. How are radio industry organisations responding to these new developments, both in terms of content and business strategies?
- A methodological perspective. There are methodological challenges in researching sound media. How do we research internet users' radio listening for example? What are the implications of time-shifted listening for broadcast radio programmes?

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