Conference Review
SEMPRE Postgraduate Study Day: Research in Music Psychology and Education

Department of Drama & Music, University of Hull, 23 October 2009

This was the first of two successful research events organised by SEMPRE and hosted at the University of Hull during October 2009. Six postgraduate students presented papers on a wide range of interesting topics within the broad domain of music psychology and education. The event was well-attended and there was plenty of opportunity for discussion and debate throughout. The day was divided into three sessions; 'Memorisation and Aural Abilities in Musicians', 'Effects of Background Music' and 'Perspectives on Music Education'. A further poster session took place during lunch followed by an enjoyable lunchtime concert appropriately entitled 'Bach ReLoaded'!

Artemis Apostolaki (University of Hull) opened the study day with a stimulating paper exploring the impact of solfége training on student's ability to memorize music. Expanding on previous theories relating to music memorisation strategies and the working memory model, Apostolaki proposed a fifth type of memory; that of pitch-labelling. This was understood as a specialised working memory function and a music specific sub-component of the phonological loop. For those who are unfamiliar with solfége as a method of aural training, the benefits may not appear immediately obvious. For Apostolaki however, solfége should be considered "an essential tool" for learning about music. Much more than simply a method of understanding pitch-relations, a full understanding of solfége techniques, Apostolaki explained, can significantly enhance musical understanding and communication. Indeed, for those who have been trained from an early age, the skills acquired can influence every aspect of musical endeavour, from listening to and reading music through to performing, analysing and composing. In this respect solfége has the potential to affect our "primary perception" of music with enough training. Indeed, one of the key questions of this particular project relates to the period in which solfége skills are acquired and whether any correlations exist between familiarity with the system and subsequent performance on memorization tasks. The initial results seem to suggest that even one or two years of tuition may not be enough to fully assimilate and effectively make use of the techniques involved.

Miranda Cournane (University of Sheffield) approached the topic of aural learning from a different angle, examining the role of visualisation software as an aid to the study of jazz singing. The analysis of audio recordings has recently gained ground through the development of specialist software packages. One such package called *Sonic Visualiser*, allows for the navigation, analysis and annotation of audio information, and with it the user is able to view and listen to multiple layers of audio information at the same time, from tempo graphs and dynamic contours to micro pitch-variations associated with techniques such as vibrato and portamento. Much of the literature relating to the use of *Sonic Visualiser* has focussed on issues relating to musical works and performance style, although at present it is not clear as to how the results of such research can effectively feed back to performers. Cournane's unique approach tackles this issue head on. She proposed that the technology itself (rather than the results

derived from using such technology) could be used as a primary tool for students endeavouring to study, learn from, or emulate expert performances. Once trained in how to use the software, Cournane explained, students will be able to both hear, and visualise the subtle nuances encoded within the recorded performance. Coupled with the use of feedback technology, singers will also be able to visualise their own performances enabling a more direct comparison with their musical heroes.

What is 'background' music and how should it be defined? It could be argued that the extent to which music, in a given context, can be classed as 'background' or 'foreground' depends on the level with which one chooses to attend to it. The problem with this stance is that the moment one chooses to engage with music in the background, one effectively brings it to the foreground. However one chooses to define background music, and perhaps the term 'music' might suffice, its effects on human behaviour have been well documented. This topic was the focus of the next session, beginning with a unique paper given by Elizabeth Dennis (University of Edinburgh). Dennis investigated the impact of background music within the care-giving profession, focussing specifically on female residents suffering from dementia. After a brief summary of the symptoms and issues associated with Dementia, of which memory loss and language disturbance are a key part, Dennis proposed that music could have a positive influence on Dementia patients, potentially causing a reduction of agitation, depression and other associated negative behavioural characteristics,. For Dennis, the use of music can enhance dignity and self-worth through a re-gaining of control and a sense of accomplishment. She further argued that increased enhancement and reduction of symptoms is possible with the use of familiar or preferred music. Her study involved the incorporation of songs and melodies into the regular morning care-giving routines of a residential home. Care-givers were instructed to play recordings or to sing songs familiar to participating residents. The results suggested that the use of familiar music does indeed have a positive influence, with reductions of negative behavioural characteristics such as aggression and non-cooperation along with increased positive characteristics such as laughing, eye-contact and alleviated mood. In addition, some of the care-givers noticed an increased ease when working with residents and an improved relational bond. Cournane believes this is due to the social activity of engaging in music with the care-giver, whereby the use of familiar music facilitates a "remembrance of the self", offering "a coherent image of who one knows one is" and therefore allowing the residents to "present themselves more completely".

The commercial world has long exploited the hidden meanings, associations, connotations and values encoded within music in order to influence human behaviour. In commercial advertisements, for instance, music is often carefully selected in order to communicate value or quality in relation to the product being advertised, or in supermarkets and shops, where music is chosen to encourage customers to remain in a specific environment for longer. The success of employing music in this manner may depend on the degree to which an individual is familiar with the idioms and the hidden meanings and values associated with them. Alternatively, individuals may respond more to the general mood of the music, irrespective of the genre, or perhaps to the tempo or the instrumentation used. Stephanie Bramley (University of Sheffield) adopted this general theme in a paper that combined the social psychology of music with

gambling studies. For Bramley, the gambling environment offers a range of interesting behavioural characteristics for researchers to explore. She argued that music functions as both a situational and a structural characteristic, both facilitating people to gamble and reinforcing gambling behaviour. Expanding on research undertaken by Dixon (2007), Bramley investigated the hypothesis that fast tempo music increases participants betting speed and that musical genre (in this case the contrast between 'popular' and 'classical' music) influences the amount of money spent whilst gambling. The results showed that participants did indeed place their bets at a quicker rate when fast tempo music was played in comparison to slow tempo music. Bramley attributes this to the arousing effects of the music on the participant, whereby the tempo of the music stimulates increased activity in the auditory nerve. In comparison, the results for musical genre showed no significant correlations with betting speed. This, Bramley suggests, could be due to a lack of musical 'fit', (the music's relevance or appropriateness in relation to a specific environment), and the fact that the student participants were, in general, unfamiliar with the gambling environment. In the discussion that followed, Jane Ginsborg flagged up a fundamental concern relating to the issue of finding suitable participants for psychology projects. "We know a huge amount about psychology students", Ginsborg commented, "but the question is, how generalisable are the results to the rest of the population?" Since the majority of participants in Bramely's study were music students, it was suggested that the music stimuli used may have been too familiar, that it may not have been interpreted as 'background' music and that this may have contributed to a reduction in the level of arousal experienced.

The concern for collecting and analysing 'real life' data was a topic that recurred throughout the conference and reflects a growing trend within the psychological literature to situate experiments in real life contexts. The third and final session of the day focused on music and education with two contrasting perspectives on musical activity within the 'real life' environment of the secondary school. Jodie Underhill (University of Keele) began the session with a paper examining the musical culture of the secondary school and the effects of the cultural context (including the school environment, peers, and the value of music within the school) on the levels of pupil enthusiasm, motivation and commitment to music. Drawing on the theories of Bronfenbrenner (1979), Underhill investigated the hypothesis that musical participation differs by school type, exploring the ways in which music fits into pupil's everyday lives and the culture of the school. The broad scope of this study reflected the multi-method approach adopted, drawing on observations made across the school, documentary sources, interviews, questionnaires, photo- and aural-elicitation (using cameras and recording devices to gather evidence of musical activity within the school) and focus groups. Although the project is clearly in its early stages (Underhill's eventual goal is to create individual case-studies based on data collected across 12 schools), a variety of useful observations were made about the first school visited; an Academy in the South-West of England.

Like many Academies, this particular school is located in an area of severe depravation and has since been re-branded. Underhill's project was undertaken with the school still in a state of transition, as members of staff and pupils awaited the completion of a new, purpose built site. Underhill had little to say that reflected positive attributes relating to musical learning and participation, other than the fact that instrumental lessons were fully subsidised by the school.

The list of negative observations included a lack of available instruments to practice on, scant evidence of extra-curricular activities, tensions between teacher roles, a lack of music-making within the school and low standards of organisation and preparation. The most surprising observations related to the pupil questionnaire, showing how pupils, on the whole, appeared to enjoy the music lessons and expressed an interest in learning an instrument. Current levels of musical participation, Underhill suggests, could relate to the lack of participation offered in previous years.

In stark contrast to such a negative appraisal of musical activity within the school, the final paper, presented by Catherine Preston (The Open University), explored the topic of group composing and collaborative music making within two secondary schools in the North West of England and demonstrated that a lot of learning does indeed take place when pupils are sent off to work in groups. The study was based on the concept of 'flow', relating to autotelic experience (whereby an activity is worthy of attention on its own terms, rather than in relation to an external reward). The concept of flow was considered from two angles; flow as product (the individual experience of flow as determined by self-reports) and as process (experienced through verbal and non-verbal interaction with other pupils). Preston's aim was to observe pupil's experience of flow within the classroom, and the observations were certainly encouraging, revealing a distinct correlation between the experience of flow and the group work sessions that took place during the third and fourth weeks of the topics. The most significant predictors of flow, as one might expect, were high levels of interest in the topic, high levels of concentration and self-expectation. Discourse analysis of the various group collaborations revealed how pupils often sang to each other instead of talking in the group composing tasks, and showed a strong influence of the individual 'in flow' pupil on the rest of the group.

The study day closed with an open discussion, providing delegates with an opportunity to reflect on the findings and the various points made throughout the day. Stephanie Pitts opened the discussion by drawing together some of the general themes; the purposes and processes of learning about music, the challenges of 'real world' research and the many encouraging findings showing that music really does make a difference. Elaine King commented on the various uses of singing in some of the studies and encouraged researchers to consider their position as researchers and the extent to which individual projects are biased in their approach. Colin Wright remarked on the wide scope of the studies, from topics relating to dementia care and gambling to music tuition within the classroom. This prompted a response from Rachel Mathieson, who, whilst supporting the current wave of research aiming to take music into the 'real world', suggested that the results of research projects should ideally feedback directly to source of the data, be it the Universities, the schools, the care-giving profession or the gambling community.

[For further details and copies of abstracts contact Dr Elaine king (SEMPRE Conference Secretary) at e.c.king@hull.ac.uk]

Anthony Fountain (University of Hull)