4th Traveling Music Education Research Seminar

Escola Superior de Musica de Catalunya

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School of Arts and Humanities
Institute of Education
University of London
Profiling female singers of Contemporary Commercial Music

The sounds of female singers of Contemporary Commercial Music ['CCM'] are typically very different from those of singers in the Western Lyric tradition. Additionally, the vocal pitch range for female singers of ‘CCM’ tends to be lower than that of Western Lyric, even for voices that might be classified as lyric or light soprano in timbre.

The aims of the study are (i) to identify vocal and stylistic features that might be definitive of CCM singer practice within selected subgenres; and (ii) in particular, to develop an appropriate methodology for investigating register behaviours in female ‘CCM’ singers relevant to their performance practice.

For this study, ‘CCM’ has been divided into two overarching categories: Musical Theatre and ‘other’. In this initial phase, four singers were selected: two from musical theatre [MT] and two from other popular music genres [Pop].

Singers were profiled according to age, genre speciality and voice-body type. Participants performed a reading test, singing range tests and two self-selected song extracts. Range tests were divided into ‘full singing range’ and ‘comfort zone’, i.e. the latter being where the singer felt that her voice worked ‘most easily and well’. Singers were also asked to explore singing their song extracts ‘higher’ and ‘lower’. In a semi-structured interview, participants listened back to their recorded vocal tasks, commenting on vocal production, stylistic and interpretive choices and other performance elements that they considered relevant to their genre.

Early indications are of a speech-like vocal production in female 'CCM' singers taken to higher frequencies than 'chest' register in Western Lyric singing.

Music and children with complex needs (profound and multiple learning difficulties (PMLD) or severe learning difficulties (SLD))

Many researchers believe that music has a special value for children and young people with disabilities (Jellison, 2006). It can help and facilitate such children’s communication and awareness, hand-eye co-ordination, body movement, and self-expression. Music can also promote wider learning, development, and wellbeing. In other literature, teachers and parents report that music is a significant component in the lives of young people with complex needs (Ockelford et al, 2006; Paterson and Zimmermann, 2006). However, the literature is relatively scarce concerning (i) the details of actual behaviour and development that might be expected of these pupils within music and (ii) the nature of music provision in the UK special education sector for such pupils.

Research Aims

This research is focused on an investigation of the musical behaviour and development of children and young people with complex needs, and the varieties of music provision in their special education, in order to enhance the understanding and (ultimately) teaching provision for these pupils, both in and through the use of music.
Research questions

- What might be expected in terms of musical behaviour and development for children and young people with complex needs?
- How do these expectations compare with the available literature on ‘normal’ musical behaviour and development in the first three years of life – the period that is the notional equivalence for those with severe learning disabilities (SLD) (0-36 months) and which embraces Profound and Multiple Learning Difficulties (PMLD) development (0-12 months)?
- How do music educators make sense of and foster SLD/PMLD musical development?

Research methods

The research is exploratory in nature. It draws on qualitative research approaches using ethnographic fieldwork and school-based case studies. The fieldwork is conducted in an inner city special school in London, with selected case studies of children and young people who have PMLD or SLD, in order to provide longitudinal data of their musical behaviour and development. The selected cases studies will then be contrasted with comparative data from other children in the same school. Interviews with teachers and parents will also take place during the research period.

Progress so far

Through various literature reviews, I have mapped the normal development in young children, as well as normal and other than-normal musical development in the first three years of life. Fieldwork has been undertaken for the past 6 months, one day a week. Gathered data include audio and video, school documents, informal interview notes and field notes. I have also analysed the demographic background information from the school and pupils to understand the school context.

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Cognition and Musical Improvisation in Individual and Group Contexts: the effect of musical expertise in classical and jazz genres on the development of improvisatory skills

In an individual context, becoming an expert improviser requires the development of high levels of musical skills and a relevant domain knowledge. When improvising at a high level, learners need to acquire an automaticity in musical performance skills so that the transfer of learning and skills to real-time creative processes can materialize. Memorisation skills and musical memory strategies play significant roles in retrieval and in accessing the required domain knowledge. Various actors – such as leadership, member characteristics, information flow, memory related factors, organizational configuration and resources – are believed to influence the outcome of improvising in a group.

The aims of this study were to investigate how novice and expert musicians from classical and jazz musical backgrounds learn to improvise in individual and group context. It focuses upon the links between musical expertise in different musical genres on the development of improvisatory skills.
An exploratory self case study was carried out on a domain specific memory performance in relation to learning to improvise and in the transition of generic specific skills acquisition within classical and jazz musical genres. A planned sequential model was used; a) sight-reading; b) memorising; and c) improvising. The evidence suggested that memory related skills and music memory practice strategies were significant in learning to improvise in familiar and unfamiliar genres.

The transition of generic specific skills increased in learning to improvise in a familiar genre, i.e. the higher the frequency in dual activities, the deeper the impact in transfer of learning. The impact of self-efficacy belief on practice strategy application to developing improvisatory skills in an unfamiliar musical genre was negative.

Three longitudinal case studies of novice and expert improvisers who were learning to improvise in individual and group contexts using visual and aural stimuli, cognitive task experiments and semi-structured interviews were derived from an exploratory self case study and completed by 35 classical and jazz specialist musicians.

The framework of the ‘Geneplore Model’ (Finke et al, 1991) and an adaptation of Poole’s (1983) multi-sequence model of ‘musical structure’, ‘social structure and communicative behaviour’ (Bastien and Hostager, 2000:21) were used to analyse generative and exploratory processes, as well as the cognitive and behavioural components of change events in individual and group improvisation data.

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**Pedagogical strategies for ensuring the continued survival of China’s musical folksong heritage: A case study**

Chinese traditional music is threatened by two powerful forces. The first threat is from the increasing Westernization of the traditional music culture by widespread access to global music media. In addition to generating a non-Chinese bias in the national music curriculum, the second threat arises from another by-product of this cultural importation, namely the ‘translation’ of a few traditional Chinese musical examples into modern performance idioms. Although this allows the folk adaptation to become accessible and enjoyed by a wider public, the oral folk tradition, by which succeeding generations of family musicians pass on both the music and its ‘authentic’ performance stylistics, is being overtaken by Westernised musical arrangements that ‘modernized’ this particular art form. One possible outcome for the current research is to enrich music education in Chinese universities by providing insights into indigenous folksong and performance, as well as practical strategies that can be adopted in its musical pedagogy.

The first phase of the research has focused on identifying and quantifying distinctive musical features of case study folksong performance within the oral culture and its social context from one particular region of China. Subsequent phases of the research will extend the evaluation of the performance model through analysis-by-synthesis and also seek to identify possible pedagogic approaches for the effective introduction of example folksongs into higher education music studies.
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To what extent are dyslexic musicians similar or different to other dyslexic and non-dyslexics in terms of auditory perception relating to timing

This research aims to investigate some of the complex relationships between dyslexia and music, particularly looking at possible links between the role of timing in speech and music. There is growing anecdotal evidence that dyslexic musicians at the University/conservatoire level have persistent difficulties with aspects of musical learning as well as literacy. This part of the research aims to investigate to what extent the higher education music population are similar to other dyslexic and non-dyslexic musicians in terms of auditory perception. N=9 dyslexic musicians and n=9 non-dyslexic musicians participated. Data was collected in five different areas:

1. IQ (verbal and non-verbal);
2. Literacy skills (single word reading and spelling);
3. Cognitive skills (phonological processing and short-term auditory memory);
4. Computerised tests from MIT in America investigating the rate of response and accuracy in differentiating speech sounds and the rate of response and accuracy of reproducing sequences of high and low sounds;
5. Computerised tests from Cambridge University, UK investigating the accuracy of response on different aspects of auditory perception, which relate to timing in speech sounds.

The initial findings will be presented.

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An investigation into the relationship between performance anxiety in adolescent musicians and different student typologies

The data presented in this presentation form part of a larger study looking at the experience of performance anxiety in adolescent musicians. 410 music performance students aged 12-19 responded to a newly developed self-report questionnaire that dealt with a range of learning and performance issues. All students were attending junior conservatoires and youth orchestras in the UK and Cyprus at the time. K-Means cluster analysis was used to analyse the data for the purposes of this paper. Cluster analysis assisted in examining the student responses to the questionnaire through grouping students into clusters based on the similarity of their responses, which facilitated the establishment of different typologies of students.

Results revealed the presence of three music student typologies, namely ‘unmotivated and inefficient students’, ‘students susceptible to maladaptive performance anxiety’ and ‘confident students that experience adaptive performance anxiety’. The
efficiency of the cluster solution was assessed using discriminant analysis, which showed that the cluster solution obtained was highly efficient.

A more in-depth analysis of student responses was conducted using qualitative data obtained from open-ended questions appearing in the final section of the questionnaire. Representative cases from each of the three clusters were inspected.

An inspection of both quantitative and qualitative data from the questionnaire showed that each student typology had different experiences of performance anxiety and pre-performance arousal. Implications of these findings for education, and specifically instrumental teachers, are discussed.

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**Investigating Female Cathedral Choristers**

Choral music is a long established feature of formal Christian worship in English cathedrals, stretching back over a thousand years to the time of the first monastic foundation in Canterbury. The ritual of cathedral music performance has continued across the centuries, almost without a break, as an all-make tradition by boy choristers and men who have been professionally trained. This long-standing tradition of English Choral music, known as the Choral Foundation, has been valued and upheld by successive generations and is known customarily worldwide as the ‘English Choral Tradition’.

In 1991, this ancient perpetuating tradition where boy choristers sang exclusively in cathedral choirs came to an end. History was made when Salisbury Cathedral introduced the first girls’ cathedral choir in one of the country’s oldest cathedrals. Since then, many other cathedrals have introduced female choristers as separate, additional choirs. The research aims to examine what effects this introduction has had on the English Choral Tradition.

As part of the research, the Cathedral Organists Association agreed to support a small-scale questionnaire survey of the current situation. This forms part of a multi-methods approach that includes interviews with cathedral organists, a questionnaire, two case studies and video recordings of weekly rehearsals at a cathedral that recently introduced female choristers in September 2006.

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**A Comparison of One Director In Two Different Operatic Productions: A Lanigraph analysis of communication style changes**

This presentation is part of a larger study that is investigating the nature of the process of rehearsal in an opera, using a specially designed observation tool. The aim has been, firstly to analyse each opera separately and thereby create a communication profile of directorial style, both overall and as it changes through the rehearsal process; and secondly, to follow this with a comparison of the two operas in order to see if the directorial style changes and, if so, why this might be.
Using an observation schedule with a set of protocols, rehearsals are analysed one hour at a time. Each observation of the types of communication (as listed in the protocol categories) is registered and later counted. The completed study uses over twenty hours of viewing per opera to create a profile of company interactions as they a) change over the rehearsal process, and b) how they differ from one project to another. Preliminary findings reveal that the director's interaction style is determined to an extent by the different needs of the chosen presentation style for each production.

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Simultaneous dual-fMRI, sparse temporal scanning of singing duetters

Singing is a form of communication that is a fine, socially organized, cognitive, sensory-motor, and emotional behavior that is highly representative of the human species. However, it is only recently that it has been subjected to study using the latest neuroscientific methods and there has been no previous investigation of the underlying neurological behaviours for singing with someone else – a feature of vocal duets, ensembles and choirs.

To begin such investigations, the author is part of a research team that conducted a simultaneous, dual fMRI study using sparse temporal sampling of pairs of musicians sight-reading and singing complex and simple folksongs. Each member of the duetting pair performed under three conditions: solo singing, singing in unison with their human partner and singing in unison with a computerized piano performance.

This paper will discuss the technological challenges that were faced in order to conduct this highly innovative study.

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And All that Jazz…
Understanding Jazz Improvisation and its role in Music Education

From the innovative and experimental solos of jazz players such Charlie Parker at late night jam sessions in the 1940s to an 11 year olds’ improvisation over a 12 bar blues backing track in a modern day classroom – are these two extremes of one music?

Since its introduction into mainstream education, jazz and improvisation have become popular topics for debate, in particular, the ways in which they should be taught and assessed. The main aim of this research is to develop a jazz pedagogy, which is suitable for young students learning to play jazz and improvise.

Using historical data from interviews with professional jazz musicians and a longitudinal study observing the development of young students' improvisation skills, this research will attempt to understand the crucial processes involved in learning to play jazz and to identify the most appropriate ways to teach it in a formal education setting.
Musical Improvisation in a Musical Savant

Savants are rare individuals with autism, or other developmental disorders, who exhibit exceptionally high performance in restricted areas of cognition, in contrast to below average levels of achievement in other domains. Musical savants demonstrate very particular skills in the field of music. Through our observations of this skill, we are offered a window into the complex nature of musical behaviour and development.

The overall aim of this doctoral research is to provide a comprehensive understanding of savant syndrome as applied to music. The focus for the presentation will be to offer an overview of one particular case (DP) with regard to aspects of musical improvisation. DP is a 26-year-old musical savant, one of a handful of people who share a mysterious combination of blindness, mental disability and exceptional musical talent. He has severe learning difficulties with a verbal IQ of 58 - as measured on the WAIS-R (1981) - and a diagnosis of autism. Although these are significant developmental deficits, as an infant, he acquired a fascination for music and sound, such that by the age of two he had taught himself to play many complex melodic and harmonic pieces on the piano.

Through an investigation of particular aspects of DP’s creative (improvisational) skills, the research also hopes to deal with a variety of contemporary issues in music and disability studies, including the potential for exceptional musical development in the context of special needs and the significance of this exceptionality for our wider understanding of musical talent. Music is a channel for human interaction, but for DP his talent has enabled him to develop a more ‘normal’ relationship with his environment.

The Music Classroom at Key Stage 3: Pupil experience and engagement

The numbers of pupils opting to continue the study of music in English schools past the age of 14 years is consistently low (at around 7%) despite numerous changes in curriculum content and practice. The research aims to investigate if it is the experiences of pupils during the final year of compulsory music education that influences the decision of 93% of pupils, when given the choice, to opt out.

In a qualitative case study carried out in two secondary schools, n=147 Year 9 pupils were interviewed in order to ascertain their views and experiences of the music classroom. The pupil responses were used to create sets of characteristics, describing seven different positions that pupils may adopt, in relation to their music education. These sets of characteristics describe various elements of the pupil’s experiences, such as peer support, perceived level of risk and skill development.

Two main findings from the research are discussed in the presentation: (1) the distribution of pupils across the sets of characteristics, linked to the impact of gender on the distribution and (2) the categorisation of pupils in terms of engagement and disengagement and the implications for music educators.
Culture and musical development: Evidence from a comparative study of Absolute Pitch

In recent years, more than ever, the theory of the biological foundations and the innate potential of our musicality has found many supportive studies from areas such as neurology, psychology and genetics. This juncture has encouraged many researchers to focus on the cultural study of music and the notion that music and culture are interrelated and, through ‘enculturation’, responsible for the development of our musical abilities.

The main impact of enculturation is that of a rapidly changing cognitive system as the many other skills supported by the culture are learned. By establishing the relationship between Absolute Pitch and Culture, the present research hopes to give a new insight into the ability itself, as well as suggesting a new approach to the studies of cognitive abilities.

In accordance with ‘bioecological theory’, the study has found differences in the way that AP is conceptualised as far as its susceptibility to development is concerned. Results suggest that the ability occurs in bigger proportions in a culture that values and promotes its development. Time, in terms of early musical learning and continuous musical practice, also has a great impact on the manifestation of the ability. It seems that AP has a variable cultural significance that is responsible for the formation of the educational and musical environments that promote or hinder its development.

Using Specialist Software for Qualitative Data Analysis

In this session we will explore the possibilities of using software for qualitative data analysis, an emerging area of expertise also known as Computer Assisted Qualitative Data Analysis (CAQDAS). Issues under discussion will include: introduction to content analysis, advantages and misconceptions of using computers for qualitative analysis, possibilities with NVivo and other specialist programmes, sources of further information and support.

This is an introductory session. There are no requirements for previous knowledge of computer programmes or content analysis.

Escola Presenters

Clara Bes. Afinat: consciencia per a tocar l'instrument / Tune-yourself: awareness for instrumental performance
Helena Brau. Cooperació-acció: la cooperació en l'educació musical / Cooperative-action: cooperation in music education
Daniel Arias. La iniciació al clarinet amb petit chalumeau / Starting to learn the clarinet with ‘petit chalumeau’
Montse Diez. Música per a gent gran resident en institucions / Music for the elderly in care homes
La iniciació al clarinet amb un petit Chalumeau / Staring to play the clarinet with a little Chalumeau

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Extracte [Catalan]
La iniciació al clarinet, així com d’altres instruments de vent, es fa al voltant dels 8 anys d’edat. Però en aquesta edat, el pes i la mida de l’instrument són un problema al principi. Avui dia és molt comú que a les escoles de música, els infants comencin a escollir instrument als 6 anys d’edat. D’aquesta manera, instruments com el clarinet es queden fora del seu abast. La família d’instruments de cora fregada són un clar exemple d’adaptació a la persona i no a l’inrevés. Quan l’infant creix, igual que canvia de talla de roba, canvia de quarts d’instrument. D’aquesta manera la mida de l’instrument s’ajusta a la persona per tal de mantenir la col·locació òptima, evitant dolors d’esquena i braç i futures lesions. És per això que proposo una nova manera de treballar per tal de que el nen/a de 6 anys pugui iniciar-se en el clarinet de forma natural. Els problemes de pes i mida queden solucionats amb un nou instrument inspirat en el Chalumeau (clarinet històric) però adaptant-hi la digitació del clarinet modern. Per tal de poder treballar amb infants d’aquesta edat, s’ha elaborat un material didàctic en el que s’hi recull i adapta música apropiada per la iniciació, presentada de manera agradable i engrescadora, juntament amb jocs i activitats musicals per a guiar l’aprenentage. Tot plegat una proposta didàctica concreta, on el professor compta amb objectius de cada apartat i material addicional per tal de que pugui reforçar els aspectes que cada infant necessiti.

Abstract
As with other wind instruments, clarinet playing is started usually when the child is around 8 years old. Up until this age the length and weight of the instrument are a problem. Nowadays it is common in music schools for children to choose to start playing an instrument at around 6 years of age, and the clarinet is often not chosen because of these problems. In contrast, string instruments are a clear example of the instruments’ shape being adapted to the students’ size: as young violin players grow and need to increase their clothes’ size, their violins’ size changes accordingly. In this way, the instrument is adjusted to the individual in order to maintain a good body posture, avoiding back/arm pain and future injuries. It is for this reason that I propose a new way of working with the clarinet, so that children of 6 years of age can start playing it without any problems. Length and weight problems can be solved with a new instrument inspired on the Chalumeau (historical clarinet) with the fingering of de modern clarinet. New didactic material was created to teach these young students, including appropriate music for pre-elementary grades displayed in an enjoyable way, together with games and learning activities. Examples of activities for each section and additional material to reinforce individual learning needs are also discussed.

Afinar’t: conciencia per a tocar l’instrument / Tune yourself: body awareness for instrumental playing
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Extracte [Catalan]
Aquest projecte de recerca pretén: en primer lloc, argumentar la rellevància del treball de consciència corporal i psicològica a l’hora d’aprendre a tocar un instrument; en segon lloc, presentar un seguit de propostes i exercicis destinats tant al cos com a la ment. En aquest projecte es fan moltes preguntes i no es pretén donar respostes o solucions màgiques, sinó només propostes que cada persona haurà de valorar per a si mateixa.
Abstract
This investigation project claims: first of all, to argue the relevancy of a mind and body awareness work in the process of learning how to play a musical instrument; secondly, to present a series of proposals and exercises destined so much for the body as for the mind. In this project many questions are formulated and one does not try to give responses or magic solutions, but only proposals that each person will have to value for themselves.

Música per a gent gran resident en institucions / Music for the elderly in care homes
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Extracte [Catalan]
Aquest projecte entén la música com un recurs educatiu i socialitzador, no com una finalitat en si mateixa. El seu disseny i la seva aplicació estan pensats per a un sector social concret, la gent gran resident en institucions, i s’ha desenvolupat, des d’una fonamentació teòrica –basada en la psicologia de l’enveliment, la gerontagogia i el constructivisme– i amb la utilització d’una metodologia bàsicament etnogràfica, a la Residència Pare Vilaseca. Així doncs, el disseny, la planificació i el desenvolupament de les sessions didàctiques s’han dut a terme a partir d’un treball de camp i tenint en compte el context sociocultural i institucional que envolta aquest grup de persones. Tant el disseny com la planificació i la posada en pràctica del projecte han estat avaluats a partir de la tècnica etnogràfica de l’observació participativa i a través de la utilització d’eines dissenyades específicament per a la recopilació de dades.

Extracto [Spanish]
Este proyecto entiende la música como un recurso educativo y socializador, no como una finalidad en sí misma. Su diseño y aplicación están pensados para un sector social concreto, la gente mayor residente en instituciones, y se ha desarrollado, desde una fundamentación teórica –basada en la psicología del envejecimiento, la gerontagogía y el constructivismo– y con la utilización de una metodología básicamente etnográfica, en la residencia Pare Vilaseca. Así pues, el diseño, la planificación y el desarrollo de las sesiones didácticas se han llevado a cabo a partir de un trabajo de campo y teniendo en cuenta el contexto sociocultural e institucional que rodea a este grupo de personas. Tanto el diseño como la planificación y la puesta en práctica del proyecto han sido evaluados a partir de la técnica etnográfica de la observación participativa y a través de la utilización de herramientas diseñadas específicamente para la recopilación de datos.

Abstract
In this project, music is treated as an educational and socializing resource, not as a purpose in itself. Its design and application are aimed at one particular social group, elderly people living in institutions, and it has been developed, from a theoretical foundation –based on the psychology of aging, the teaching of elderly people and Constructivism– and using an essentially ethnographic methodology, in the Pare Vilaseca residence for the elderly, in Igualada. Therefore, the design, planning and development of the didactic sessions have been based on field work and taking into account the socio-cultural and institutional context in which this group of people lives. The design, planning and practical implementation of the project have been evaluated using the ethnographical technique of taking part while observing, as well as using tools which have been specially designed for data compilation.
The local host for the Research Seminar is:

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Currently working as a Research Fellow, NFER at Queen’s University Belfast, while at Queen’s he also coordinated the ESRC project ‘Consulting Pupils on the Assessment of their Learning’ (www.cpal.qub.ac.uk). Having held teaching positions at the University of Barcelona as well as the Superior School of Music of Catalonia, Dr Odena has published on a wide variety of topics including musical creativity and research methods. He is a former doctoral student in music education at the Institute of Education, University of London.

The host institution for the 4th Travelling Music Education Research Seminar:

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For more information about research at the Institute of Education, check out the new international music education research centre website: www.imerc.org