SysMus08

First International Conference of
Students of Systematic Musicology

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Graz, Austria, 14-15 November 2008

Abstracts

Edited by Manuela M. Marin, Meike Knoche, and
Richard Parncutt

Hosted by the Department of Musicology at the
University of Graz, Austria

Manuela M. Marin, Meike Knoche, and Richard Parncutt (editors)

First International Conference of Students of Systematic Musicology (SysMus08): Abstracts

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Introduction

A warm welcome to SysMus08!

It is my great pleasure to welcome you to SysMus08. The First International Conference of Students of Systematic Musicology, held at the University of Graz, Austria, 14-15 November 2008, is an ideal forum for students from the various subdisciplines of systematic musicology to discuss their own and others' research in a friendly atmosphere and to make contacts that are valuable for their future careers.

There has never before been a student conference in the general area of systematic musicology. SysMus08 not only fills this gap, but also promotes the general idea of student conferences in Austria, where they have so far been relatively rare. SysMus08 is based on an internationally recognized conference model that promotes transparency, objectivity and high academic standards by subjecting all submitted abstracts to a double-blind peer-review procedure. I am proud that we were able to present this conference in Graz, and that so many international students responded to our call for papers and submitted high-quality abstracts.

A student conference can fulfill several needs of graduate students. First, future researchers need to be become acquainted with conference procedures early in their careers. Writing abstracts and proceeding papers and effectively presenting research to international colleagues are essential skills that can only be acquired with practice. SysMus08 has offered participants guidelines on these and similar topics. Second, most international conferences are held in English. Our conference language is English, and we have also organised pre-conference workshops that are intended to help non-native speakers of English to improve their language skills. Third, attending conferences is usually the easiest way to get to know about the latest results in a given field before they are published - indispensable for any ambitious researcher. SysMus08 presents research on a wide range of current topics in systematic musicology, including three outstanding keynote presentations. Fourth, international conferences bring together colleagues that are motivated to work on similar questions, but who would not be able to meet otherwise. SysMus08, with its stimulating academic and social program, will help each participant to extend her or his international network. In summary, student conferences offer students a great opportunity to become familiar with the procedures of professional academic meetings, which is an important factor in any academic career. I hope that all SysMus08 participants will profit from the conference in these various ways.

Another aim of SysMus08 is to demonstrate that successful research depends on more than just intellectual abilities. Successful collaborative research also involves personal qualities such as tolerance, collegiality and modesty. It follows that such qualities can make an indirect positive

contribution to the quantity and quality of each individual's research. In my own research, I want to make a positive contribution to those theories and knowledge that will help us to understand the phenomenon of music. This process, which usually happens in small steps, works best when teams of people with different backgrounds and strengths work constructively together. Team work is most successful when team members are aware of their strengths and weaknesses, are open and honest with each other, possess relevant social skills, and put their research in the foreground – not themselves! In the long term, productive collaboration – based on a keen interest in research questions and an open, (self-)critical exchange of ideas – leads to more fruitful outcomes and a higher academic standard. From this point of view, progress in research may be fostered by encouraging group members to express and discuss their opinions in a friendly atmosphere and without power struggles. We hope to generate such an atmosphere at SysMus08.

SysMus08 is a conference organised for students by students. It was a great adventure to have had the chance to gain experience in organizing an international event at the University of Graz. I wish to express my sincere appreciation to Prof. Richard Parncutt and the Dean of Humanities at the University of Graz, Prof. Gernot Kocher, for trusting me to organize a major conference – without any concrete prior evidence of my ability to do so. I am grateful for having had this opportunity to take responsibility, learn practical skills, and realise many of my ideas. Furthermore, I wish to thank Meike Knoche for her kind assistance in editing this book, Christian Tschinkel for his reliable work on the website and for designing the SysMus08 poster and the cover of this book, and Erhard Marin for his support in issues related to registration and finances and helping me with last minute matters. It was a pleasure to work together with the SysMus08 Support Team and a number of helpful people from the University of Graz, especially Gudrun Pichler. I would like to thank Prof. Walter Bernhart and Prof. Franz Kappel for allowing us to use their lecture rooms free of charge. Likewise, I would like to acknowledge the University of Graz, the Austrian Federal Ministry of Science and Research, and the Government of Styria for their generous financial support. What would a conference on music be without music? Many thanks to all the musicians (Erica Bisesi, Sarah Gruber, Corinna Lehner, & Playgrounds)! Special thanks to Rachel Foulds and her team at *British Postgraduate Musicology* for their offer to publish the best papers of SysMus08 in 2009. Last but not least, I wish to acknowledge the contributions of the keynote speakers (Gerhard Widmer, Silke Borgstedt & Werner Goebl), the professors who lead the workshops (Martina Elicker, Ingrid Pfandl-Buchegger, Annemarie Seither-Preisler, & Richard Parncutt), the members of the review committee, the session chairs, and all the presenters.

I hope you will enjoy your stay in Graz and SysMus08!

Manuela Marin, conference director

Why systematic musicology? Why a student conference?

The concept of systematic musicology (henceforth SysMus) was introduced in an oft-cited paper by the Austrian musicologist Guido Adler in 1885. Musicology has changed enormously since then, but the basic idea of SysMus has not: whereas music historians (and, meanwhile, ethnomusicologists) tend to focus on specific manifestations of music (performances, styles, genres, works, performers, composers, traditions), systematic musicologists tend to ask more general questions about music such as what distinguishes music from sound, how instruments work, what motivates people to make music, what roles music plays in society and culture, what information is communicated by music, and so on.

In Adler's original concept, SysMus included aesthetics, music theory, music education and comparative musicology. The last three of these four have since established themselves as independent disciplines (comparative musicology as ethnomusicology). Today's SysMus still includes aesthetics, which has expanded to include both empirical and theoretical aesthetics as well as other aspects of music philosophy. But modern SysMus is more closely related to Adler's *Hilfswissenschaften* (auxiliary or parent disciplines): acoustics, mathematics, physiology, psychology, logic, linguistics, education and aesthetics. Adler made it clear that any list of this kind must be incomplete, so he presumably would have approved of the modern expansion of SysMus to include sociology (both empirical and theoretical) and the information sciences.

The advantage of the SysMus concept is that it situates many diverse areas of music research within musicology, so that all musicologists can benefit from them and interdisciplinary interactions can flourish. But since SysMus never caught on in a big way outside the German-speaking world, many areas of SysMus are still not regarded as "real" musicology. I see SysMus08 as part of a broader project to solve that problem.

Why a student conference? There are several reasons for that. One of them involves the inherent difficulty of interdisciplinary collaboration. As the many subdisciplines of musicology grow and become more independent, new infrastructures are needed to promote interdisciplinary collaboration among them. If SysMus is to become more unified and coherent, systematic musicologists with different disciplinary backgrounds will need to work together more often and more productively. Since that is not easy to do, it is a good idea to start practising early in your career.

I am glad to be associated with a conference that is bringing so many talented young researchers from so many countries to Graz, and am grateful to Manuela Marin for the enormous amount of work that she has put into the organisation. If you make contacts here that open up new career opportunities, all that work will have been worthwhile.

Richard Parncutt, conference co-director

Committees

Organizing committee

Conference director: **Manuela M. Marin**, University of Graz, Austria; Goldsmiths College, University of London, UK

Conference co-director: **Richard Parncutt**, University of Graz, Austria

Assistant organizer: **Meike Knoche**, PR² classic, Cologne, Germany

Finances, registration: **Erhard Marin**, University of Graz, Austria

Homepage manager: **Christian Tschinkel**, University of Graz, Austria

Review committee

This committee comprises international postgraduate students who were suggested by international experts coming from various fields of systematic musicology. Their anonymous reviews of submitted abstracts helped to guarentee a high academic standard.

Mathias Benedek, Emotion Lab, University of Kiel, Kiel, Germany
Annelie Beronius Haake, Department of Music, University of Sheffield, Sheffield, UK
Alexandre Bouënard, VALORIA Lab, Université de Bretagne-Sud, Vannes, France
Terry W. Clark, Centre for Performance Science, Royal College of Music, London, UK
Terence Curran, Wadham College, Faculty of Music, University of Oxford, Oxford, UK
Johanna Devaney, Schulich School of Music, McGill University, Montreal, Canada
Hauke Egermann, Center for Systems Neuroscience, Hanover University of Music and Drama, Hanover
Lisianne Hoch, CNRS-UMR 5020 Neurosciences & Systèmes Sensoriels Cognition Auditive et Psychoacoustique, Université Claude Bernard Lyon 1, Lyon, France
Nicole Jordan, Department of Music, University of Sheffield, Sheffield, UK
John Koslovsky, Music Theory Department, Eastman School of Music, Rochester, NY, USA
Kaisu Krohn, Cognitive Brain Research Unit, Department of Psychology, University of Helsinki, Helsinki, Finland
Marco Lehmann, Institute for Research in Music Education, Hanover University of Music and Drama, Hanover, Germany

Søren T. Madsen, Austrian Research Institute for Artifical Intelligence, Vienna, Austria

Kaire Maimets-Volt, Department of Musicology, Estonian Academy of Music and Theatre, Tallinn, Estonia

Frédéric Marmel, CNRS-UMR 5020 Neurosciences & Systèmes Sensoriels Cognition Auditive et Psychoacoustique, Université Claude Bernard Lyon 1, Lyon, France

Marcus Noisternig, Laboratoire d'Informatique pour la Méchanique et les Sciences de l'Ingénieur (LIMSI), Centre National de la Recherche Scientifique (CNRS), Orsay, France; Institut de Recherche et Coordination Acoustique, Musique (IRCAM), Paris, France; Institute of Electronic Music and Acoustics (IEM), Graz, Austria

Jens G. Papenburg, Seminar for Musicology, Chair for Popular Music History & Theory, Humboldt University, Berlin, Germany

Anna Pileri, Département de Psychologie, Centre de Recherche en Psychologie et Musicologie Systématique, Université Paris X, Nanterre, France; Faculty of Science of Education, University of Bologna, Bologna, Italy

Elisabetta Piras, School of Research SIEM, Accademia Filarmonica of Bologna, Bologna, Italy

Jonathan Prince, Department of Psychology, University of Toronto at Mississauga, Mississauga, Canada

Laura Ritchie, Royal College of Music, London; University of Chichester, Chichester, UK

Susan Rogers, Department of Psychology, McGill University, Montreal, Canada

Ashley Vanstone, Department of Psychology, Queen's University, Kingston, Canada

Matthew M. Werley, Faculty of Music, Magdalen College, University of Oxford, Oxford, UK

Jens Wissmann, Music Informatics Research Group, City University of London, London, UK

Support team

The support team mainly consists of local and international students. Support team members will be available throughout the conference to answer questions, solve unexpected problems and generally make sure that things run smoothly. They are

Eva Hoffmann, Johannes Lehner, Daniela Prem and Sonja Zechner

Review and evaluation procedures

Abstracts

One important aim of SysMus08 is to introduce students to objective procedures to ensure and enhance the scholarly quality of conference contributions. Therefore, abstract submissions were subject to a *double-blind peer-review procedure* conducted entirely by international students representing the various subdisciplines of systematic musicology.

The ratings and comments given by the reviewers should help contributors to improve the quality of their abstracts and to prepare their talks. The feedback delivered by the abstract reviewers should be regarded as constructive feedback and not as personal criticism; this should also be reflected in the type of comments given by the reviewers (preferably based on a mixture of honesty and tactfulness!).

What makes a good abstract? A review of the literature on this topic reveals that authors aiming at writing a good abstract should focus on two main things: *contents* and *academic writing style*. Indeed, the scientific work behind an abstract is essential; however, the text should also be well written since otherwise the researcher's ideas may not be communicated to colleagues in the way they deserve. Therefore, a lack of writing skills may often lead to the rejection of an abstract. In order to help students to structure their abstracts appropriately, we asked them to structure their abstract according to subheadings that refer to the main parts of an abstract: *background, aims, main contributions (method, results, conclusions), implications and references.*

The SysMus08 review procedure consisted of two steps:

1. Expert rating by a representative of a subdiscipline of systematic musicology: Abstracts were independently reviewed by two students specialized in the specific subfield of systematic musicology to which the abstract has been assigned. Reviewers primarily focused on the *scholarly quality of the research* in their ratings.

2. General rating by any member of the review committee: Abstracts were randomly assigned to two members of the review committee coming from various fields of systematic musicology and not from the specific subfield to which the abstract has been assigned. The focus of their ratings was on the *general impression* of the abstract's *scholarly content*. Students from the field of systematic musicology should be able to judge abstracts coming from various subfields on a general basis. General ratings were also introduced to promote the concept of systematic musicology by making students coming from different disciplines of systematic musicology aware about the research done in other fields. Feedback from other fields can be very enlightening.

The overall rating of an abstract was based on the mean ratings of the two expert ratings (step 1) and the two general ratings (step 2) based on the *scholarly content*. For calculating the average rating the expert rating was counted twice. However, ratings were only one part of feedback. Reviewers gave written feedback about the academic contents and English writing skills.

One of our aims was to help students who are non-native speakers of English to improve their academic writing skills if necessary. That is why we asked reviewers to comment on the English of the abstract and to suggest improvements. *Most importantly, the level of English was not explicitly rated in our conference.* Since we did not want to discriminate against non-native speakers of English, the level of English was secondary in the ratings.

Talks and posters were treated as equal ways of presenting research at SysMus08 (i.e., poster presentations were not considered to be of lower academic quality). Therefore, the weighted mean rating of academic quality had to be above 2.00 for any abstract in order to receive the desired presentation format. The rating scale for academic quality used by the review committee was: 1 = poor, 2 = ok, 3 = good, 4 = excellent.

After the completion of the review procedure, authors received four feedback sheets (two expert ratings, two general ratings) and got to know there overall score with a notification of acceptance as oral or poster presentation or refusal. The feedback sheets used by the SysMus08 review committee can be downloaded from the conference website. The review committee also provided us with some feedback on the review procedure which can be found on the conference website.

SysMus08 received 42 submissions, out of which 33 submissions were accepted. Most students applied for oral presentation. Since it was possible to schedule parallel sessions, all students were invited to give talks. The authors of accepted abstracts were required to revise them in accordance with the reviewers' comments for publication in the abstract book. Finally, 30 students coming from 12 countries confirmed their attendance.

SysMus08 offers nine sessions on the following topics: performance and personality; musical attitudes in the 19th century; music and socio-cultural identity; musical development; timbre and acoustics; compositional processes; cognition and emotion; applied music psychology: education; performance: gestures and expressive strategies.

In collaboration with *British Postgraduate Musicology (BPM)*, the organizing team will select the best five proceeding papers. The authors will be invited to write a full article for publication in 2009. This issue will also include a report on SysMus08 written by Rachel Foulds, Editor-in-Chief of *BPM,* who also gives a special lecture on the postgraduate journal.

Keynotes

Two keynotes will be given by young researchers and one main keynote by a professor. The latter has been chosen and invited by the organizing committee. In addition, we invited Rachel Foulds to give a special lecture on *British Postgraduate Musicology*, an online journal for students by students in the field of musicology.

The selection of young researchers as keynote speakers was based on *a three step procedure* because we wanted to guarentee a fair selection process:

1) List of candidates: The members of the review committee were asked to provide the organizing committee with *one name* of a candidate (PhD student, PostDoc) who could give an interesting keynote at SysMus08. Their choice was based on the candidate's outstanding CV (university education, number and quality of conference presentations, publications, etc.). They could suggest a candidate from their field or any other subfield of systematic musicology. The organizing committee decided on an additional list of names. The final list of candidates was based on suggestions from the review committee and the organizing committee. Werner Goebl was suggested by the review committee and Silke Borgstedt by the organizing committee.

2) Suggestions of candidates: In a second step, the review committee received a list of 15 potential candidates and was asked to choose *three candidates.* Keynote speakers had to come from different subfields of systematic musicology and one of the three candidates had to be male and one female. 19 out of 25 members of the review committee participated in this step of the selection process.

3) Selection of candidates: Based on the review committee's suggestions, the organizing committee finally decided on who to invite. Only candidates within the top five rating were considered. We tried to make sure that keynote speakers are working in different fields of systematic musicology and that one is given by a female researcher.

We hope that SysMus08 attendants will appreciate that we tried to aim for a fair and transparent evaluation and selection process!

Manuela Marin, Meike Knoche & Richard Parncutt

About the SysMus conference logo

SysMus08's logo was designed by Angelika Fischer, an advertising designer working in Vienna, Austria. We chose this specific logo because it conveys the ethos of our students' conference on systematic musicology in many ways. The different strokes of the brush represent the various subdisciplines of systematic musicology. The different colors of the strokes – all close on the spectrum – are meant to express diversity and unity in systematic musicology, i.e., the different subdisciplines working on general questions on music. This concept of diversity in unity is also illustrated by "SysMus08" standing in the middle and thus forming the uniting centre of the logo. The strokes of the brush also represent vitality, energy, and enthusiasm – ideal concepts for a students' conference! The logo should also evoke a sense of openness; therefore, the strokes do not form a closed circle.

In the case of future SysMus students' conferences, related colours coming from a different part of the spectrum could be used.

Manuela Marin

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Abstracts

Keynotes and special lecture

My music, my media, my mindset: Adolescent lifestyles in times of post-fidelity

Silke Borgstedt[1,2]

[1]*GIM Gesellschaft für Innovative Marktforschung Heidelberg, Germany*
[2]*Forschungszentrum Populäre Musik, Humboldt University Berlin, Germany*

Youth is more than a question of age. It is a complex construct encompassing various attitudes towards life, manifold ways of expression, and differentiated systems of styles. Music is only one – though a very important – puzzle piece, that closely interrelates with other life spheres.

In order to see the whole puzzle, music has to be conceptualized as a phenomenon embedded in everyday routines & rituals, i.e. the experience and usage of music can not be separated from overall ways of thinking and acting.

Correspondingly, a methodological approach has to take into account this complexity and serve as a means to explain and illustrate the meaning of music in context of overall mindsets by understanding the specific relations to other realms of interest and expression.

As an example, key results of 'Mindsets 3.0' will be presented, a comprehensive research on youth, commissioned by MTV Networks. For this study a tailor-made research design was developed in order to examine youth cultures from different perspectives. The multi-method approach contains a qualitative exploration phase (workshops, focus groups, online diaries, chats) which built the basis for a quantitative segmentation (n=5.100). Subsequently, the resulting segments were verified and vivified via qualitative in-home interviews.

As former research shows that lifestyles are more and more independent of socio-demographic variables, 'Mindsets 3.0' represents a segmentation beyond aspects such as age, sex, education and household income. Instead, overall attitudes and behavior patterns on the one hand, and specific evaluations (of fashion brands, musicians/bands, websites etc.) on the other hand served as a basis for differentiation in the quantitative part.

Fashion, music and media were identified in the qualitative part as main areas of stylistic expression and as interrelating identity tools.

Despite the extraction of coherent segments/scenes, one of the main results of the study is the overlapping and the fluidity of scenes. Representatives of different segments might dress in a similar way but listen to different music, some might buy the same CDs but have a contrasting attitude towards life.

While the influence of socio-demographic criteria is weakened, the impact of setting – as special arrangement of location, people, contents, devices - is increasing. This also pertains to the specific usage of (new) media and the respective forms of communication.

With regard to music it becomes clear that the kind of media influences the ways of music perception as explained by the approach of mediamorphosis (Blaukopf, Smudits). Especially new formats (music as a file), listening to music 'on the go', and the exchange of music via internet create new requirements and needs regarding music.

Besides the illustration of different youth cultures the paper will outline these new dimensions of music evaluation, focussing on availability, adaptability and connectivity. Finally, these concepts are discussed referring to related studies and theoretical approaches.

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Biography

Silke Borgstedt studied musicology, psychology and educational sciences in Oldenburg and Berlin (M.A. 2001, supervisor: Prof. Helga de la Motte-Haber). She completed her PhD at Humboldt University Berlin in 2007 *(Der Musikstar. Vergleichende Imageanalysen von Alfred Brendel, Stefanie Hertel und Robbie Williams)*. From 2002 to 2005 she received a PhD grant from the Studienstiftung des deutschen Volkes. Since 2005 she has been working as research manager for GIM Gesellschaft für Innovative Marktforschung. Her research focuses on music sociology/psychology and international consumer research (esp. FMCG and entertainment industries).

Contact: S.Borgstedt@g-i-m.com

Studying finger motion in piano performance: Touch and tempo

Werner Goebl

Department of Computational Perception, Johannes Kepler University Linz, Austria

Piano educators disagree in how performers should develop the ability to perform scale passages evenly and dexterously at very fast rates. One side points out the importance of practicing these fast sequences at very slow speeds, while others insist on practicing at the intended fast tempo, easing the task by chopping up the passage into smaller segments. The main argument of the latter is that movement strategies change across different tempi – as human gait changes from walking to running – and wrong movements could be learned if fast passages were practiced slowly. Furthermore, how is the pianist's touch – the way how pianists' fingers approach the piano keys – affected by different tempo conditions?

In this talk, I will present research on how to tackle such questions using modern optical methods of capturing human body movements. Skilled pianists played simple isochronous melodies at different tempi ranging from a medium tempo (500 ms inter-onset interval, IOI) to a very fast tempo (75 ms IOI and shorter). A three-dimensional passive motion capture system equipped with six infrared cameras tracked the movements of small reflective markers glued on pianists' finger joints, hand and wrist at a sampling rate of 250 frames per second. Kinematic features of finger and hand movements, such as finger-key landmarks, key-bottom landmarks, finger peak height, or wrist rotation were computed from the motion trajectories. All measures changed considerably with increasing performance rate suggesting that indeed pianists adapt their movements to the required tempo. The results will be discussed in the light of the above mentioned controversy.

This talk should demonstrate how such motion-based approaches could be established more widely in the future to enhance our understanding of the relationship between motion and sound in the broader context of embodied music research.

Biography

Werner Goebl is a senior researcher at the Department of Computational Perception of the Johannes Kepler University in Linz, Austria. He holds master degrees in piano performance (Vienna Music University) and in Systematic Musicology (University of Vienna) and earned his PhD at the University of Graz under the supervision of Richard Parncutt. Over a period of six years, he worked in the research group of Gerhard Widmer at the Austrian Research Institute for Artificial Intelligence in Vienna. His work addresses aspects of expressive performance from analysis to visualization as well as aspects of piano acoustics. For his research on movement analysis and motor control in piano performance in Caroline Palmer's Sequence Production Lab at the McGill University, Montreal, Canada, he received a prestigious Erwin Schrödinger Fellowship from the Austrian Science Fund.

Contact: werner.goebl@jku.at

In search of the 'Horowitz Factor': Large-scale computational investigations into expressive piano performance

Gerhard Widmer[1,2]

[1]*Department of Computational Perception, Johannes Kepler University Linz, Austria*
[2]*Austrian Research Institute for Artificial Intelligence, Vienna, Austria*

This presentation will give an overview of recent and current research at our institutes that aims at using computers to study the elusive phenomenon of expressive music performance. Specifically, we develop and use intelligent computer methods to measure, visualise, and analyse performances of classical piano music by different pianists (including famous ones). At a very general level, the goal of this research is two-fold. On the one hand, we are interested in discovering *commonalities* between performances, that is, patterns in, e.g., expressive timing and dynamics that seem to be common to most performances; that would point to fundamental principles of performance that are in some sense 'universal' (at least in the context of Western classical music). On the other hand, we also wish to discover and describe *systematic differences* between different performances, particularly by great artists; that would be a first step towards characterising and quantifying aspects of individual artistic performance style.

In the presentation, a broad overview of this research will be given, with many demonstrations. It will be shown how computers can help us measure performance details in recordings, how they can visualise structure in expressive timing and dynamics, how they can be made to discover potentially interesting patterns in performance data – and that computers can even learn to play music 'expressively' themselves (or at least 'musically' (or at least 'in an interesting way')).

Biography

Gerhard Widmer (http://www.cp.jku.at/people/widmer) holds M.Sc. and Ph.D. degrees in computer science from the University of Technology Vienna, and a M.Sc. from the University of Wisconsin/Madison, USA. He is full professor and head of the Department of Computational Perception at the Johannes Kepler University Linz, Austria, and also heads the Intelligent Music Processing and Machine Learning Group at the Austrian Research Institute for Artificial Intelligence (OFAI) in Vienna. He is active both in 'mainstream' Artificial Intelligence (AI) and machine learning research, and in the application of AI techniques to musical problems. This is reflected in the diversity of both his publications and his scientific services. For instance, he is on the editorial boards of major publishers and journals in the AI / machine learning area (AAAI Press, Machine Learning) and music (Journal of New Music Research), and he has been invited speaker at major AI conferences as well as music symposia. He has been awarded several research prizes. In 1998, he was the recipient of one of Austria's highest-funded research awards (the 'START Prize') for his work on Artificial Intelligence and Expressive Music Performance. In 2006, he was elected a Fellow of the European Coordinating Committee for Artificial Intelligence (ECCAI), for his contributions to European Artificial Intelligence Research.

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British Postgraduate Musicology:
A journal run by students for students

Rachel Foulds

Centre for Russian Music, Goldsmiths College, University of London, UK

British Postgraduate Musicology (BPM) is an independent peer-reviewed musicological journal run by postgraduates for postgraduates. Under its title it aims to display the quality and diversity of scholarly studies produced primarily (but not exclusively) by postgraduates or recent postdoctoral students of music in the United Kingdom. Contributions are invited on any topic within the spheres of historical, analytical, critical or ethnomusicology with a short section for reviews and notices particularly pertinent to postgraduate researchers.

This lecture will start at the very beginning, outlining the historic chronology of the *BPM* with particular emphasis on its original launch. A summary of its current activity and structural organisation will then follow with details of the reviewing and selection process of articles for publication. To indicate the structure of a volume of the *BPM*, the latest volume (published 2008) will be used as a case study with an overview of the editorial process provided. The role of the *BPM* will be considered in terms of international scholarship as well as the professional development of those on the editorial board.

At the *BPM* we are constantly trying to establish innovative and collaborative practice but, as with all change, several questions have been thrown up for the editorial board to consider. Recent modifications to the journal include: going online, publishing proceedings of conferences, publishing international papers, and alterations to the editorial body. This paper will review these changes and consider their implications in terms of the running of the *BPM*. With these modifications in mind, we recently took the step of joining the *Association of Postgraduate Journals* (APJ) in order to ensure sound scholarly practice amidst these amendments. The *APJ* is an external body that offers support, advice, and training and skills development to all peer-reviewed postgraduate journals and, as a founding member of this board, I will be able to offer in this paper a broad overview of issues confronting all postgraduate publishing (in all the arts and humanities), as well as the various ways in which we at the *APJ* have attempted to combat them.

Perhaps the largest obstacle confronting any student-based initiative is the financial constraints with which we are challenged. By using the experience of the BPM, these financial obstructions will be surveyed, along with a demonstration of the ways in which the various Editors-in-Chief of the *BPM* have overcome such difficulties in order to ensure the survival of

the journal. An outline of the number of financial options available will be examined and their merits and drawbacks contemplated.

One final consideration will reflect upon the integral disparities between conventional journals and postgraduate publishing networks and the position that postgraduate publishing assumes in this broader sphere. Ultimately, this lecture aims to offer a way in which fellow postgraduates are equipped to return to their institutions able to initiate similar projects having received an insight to the organisational, editorial, marketing, financial and developmental processes of running such a journal.

Biography

Rachel Foulds attained BMus Music (Hons) from City University, London where she graduated the recipient of the Worshipful Company of Carmen Prize. Her undergraduate research at City University was largely centred upon the gendered politics of music and her interest in ethnomusicology was largely cultivated during this time. She was then awarded MMus with distinction in Russian Music Studies, having pursued postgraduate studies at Goldsmiths College, University of London, where her avid interest in the life and music of Galina Ustvolskaya was nurtured. She has furthered this interest in Ustvolskaya by now working towards her PhD at the same institution under the supervision of Professor Alexander Ivashkin, seeing her work presented and published internationally. Rachel has conducted extensive research in Ustvolskaya's home city of St Petersburg and has most recently been awarded a scholarship to work in the Ustvolskaya Collection at the Paul Sacher Stiftung, Basel. Rachel took over as Editor-in-Chief of British Postgraduate Musicology in early 2008 and is a freelance editor.

Contact: editor@britishpostgraduatemusicology.org.uk

Abstracts

Witold Lutosławski's compositional process: The conception and the practice

Aleksandra Bartos

Institute of Art, Polish Academy of Sciences in Warsaw, Poland

Background

One of the main subjects of inquiry, not only in musicology but in all disciplines of art, is creative process. But it is psychology which is most dedicated to this topic. With the development of different psychological conceptions, the approaches to questions related to creative process have been changing. Recent psychological studies bring new depictions of this problem, allowing the use of data not only from empirical research but also from self-observations made by artists (Coughlan & Johnson, 2006).

Witold Lutosławski was aware of his role as a composer in the society. Writing music was for him not only fulfilling his own ambitions but above all, executing his obligations to the world in a response to the special gift which he understood he had received. Therefore, the confrontation of the manuscripts with his public speeches can be a new approach to the studies on his music which so far have concentrated on particular works (Rae, 1994), musical technique (Thomas, 2001) or his thoughts (Skowron, 2001).

Aims

The purpose of this talk is to present Witold Lutosławski's conception of his compositional process and its main components, such as 'key ideas', 'a general view' and 'the aim'. The second part of the research, supported by the analysis of Lutosławski's sketches (mostly for *Piano concerto*), will be to check if he put the theory into practice as a composer.

Main contribution

Method

The analysis of Witold Lutosławski's conception will be conducted with the application of the psychological theory of 'creative interaction', developed by Edward Nęcka. Although the theory was presented for the first time in 1987 (Nęcka, 1987), it is still relevant (Coughlan & Johnson, 2006). According to this theory, the compositional process is formulated as an entirety without any stages in contrast to psychodynamic conceptions which divide the compositional process into phases. Such an approach to the subject allows to focus on two main elements of the creative process such as 'trial structures' and 'the aim' which surprisingly correspond to Lutoslawski's elements of compositional process.

Results

Distinctive elements of a compositional process according to Witold Lutosławski correspond to Nęcka's theory. As the analysis of the sketches reveals, Lutosławski respected his principle that the composer should express his artistic truth while composing.

Conclusions

Self-observations made by a composer became an illustration for the theory of compositional process. However, the results can suggest new research hypotheses. Studies of renowned composers' creative thinking can also be a help in composition teaching.

Implications

The mechanisms of creative process are multi-faceted, regardless of whether the issue is musicology, science or business. Analyses of the musical genius' creative process may help to understand these mechanisms and then to control the creative process. With this knowledge it would be possible to create tests which allow to detect outstanding individuals and then to support their creative thinking.

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Biography

Aleksandra Bartos graduated in musicology from the University of Warsaw in which she defended successfully her master thesis 'Sound colour of Witold Lutosławski's *Piano concerto*. An attempt at applying Robert Cogan's spectrographical analysis to musical work analysis'. In 2003 she was awarded the Paul Sacher's Foundation stipend. In 2004 she began doctoral studies in musicology at the Institute of Art Polish Academy of Sciences in Warsaw where she has been working on her doctorate having as subject *Witold Lutosławski's compositional process*.

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Psychoacoustic aspects of the speed of melody performance

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Background

Performed melodies have to span a certain speed range. At the same time, musicians base their interpretation just on the possibility of selecting any other speed within that range, provided that their choice allows to preserve the required expressive content. There have been a number of attempts to investigate tempo in music (Fraisse, 1974; Sloboda, 1985). Recent results show that listeners are capable of making consistent tempo judgments and that the optimal tempo varies across extracts. Moreover, rhythm is important in making temporal judgments (Quinn & Watt, 2004; 2006). Effects of rhythmic pattern and tempo on periodic grouping are further investigated in Parncutt (1994), by measuring the salience of the various pulse sensations evoked by a range of rhythms. Other findings strongly suggest that the style of musical examples influences the degree of tempo consistency across trials (Lapidaki, 2000).

Aims

Our proposal is to test the role of expressive features, i.e. articulation, timing and dynamics, on the suitability of tempo for a given melody (experiment A). We further investigate the role of different musical structures and grouping on the chosen tempo (experiment B).

Main contribution

Method
Experimental stimuli were (A) 4 classical musical pieces – 3 flute and 1 cello Baroque-style melodies. In the second experiment (B), we used 3 Scarlatti's piano Sonatas of different rhythmic structure. Stimuli consisted of 5 batteries of 7 differently randomized speeds for each performed piece. 22 trained music students were asked to apply a rate from 0 to 4 to each stimulus they listened to. Data were collected on working cards distributed to subjects and processed by statistical data analysis method. Mean values are interpreted as the "best" performance speed, while values distributions account for the degree of tolerance in the final choice.

Results
Our findings showed that (A) the addition of expressive elements to the performance widens the range of possible performing speeds, and (B) that the musical structure plays an important role in the performing speeds. The greater the difference among notes' durations inside a given rhythmic

structure, the lower the span in the distribution of performance speeds, which is in agreement with previous studies on perceptual grouping (Fraisse, 1974; Sloboda, 1985; Deutch, 1999; Honing, 2005, 2006).

Conclusions and Implications

Experiments presented here enabled us to link the speed of melody performance with psychoacoustical and musicological aspects – like acoustical cues relevant for expressive performance, as well as musical structure and rhythmic pattern. Our findings provide indications for a possible alternative way of teaching musical topics in musical academies: by stimulating analytical reasoning through the presentation of results of this kind in academic curricular paths, teachers can lead students to build logical and scientific categories useful to consciously discipline their artistic activity.

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Biography

Erica Bisesi completed a Bc.L. Degree in Piano Performance at Trieste Conservatorium (Italy) in 1996 and a Ph.D. Degree in Mathematics and Physics at Udine University in 2007. Her research activity in music sciences regards aspects of expressive piano performance and computational psychoacoustics. At the same time, she is teaching physics and music education up to undergraduate level and is playing piano professionally as soloist and in chamber music ensembles.

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Issues of stamina in modern music:
Answers from sports science

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Background

As composers extend the boundaries of music, performers are stretched beyond their limits. This creates a chasm between those who are able (at least temporarily) to cope with these demands and those who are not. In modern music, demands on breath control are often excessive. Even professional new music specialists reference difficulty with stamina in performing works of extreme complexity. While there are some things that one may personally risk, they can not be responsibly taught.

Among students, the author conduced a survey among university flute majors and found that only 40% had any experience with any new music and of those, 0% had experience with complex works.

The presentation begins by surveying the pedagogical materials for extended techniques for flute of Robert Dick's *The Other Flute* (1989) and Carin Levine's *The Techniques of Flute Playing* (2000) and contrasting them to the demands made from Salvatore Sciarrino's *L'opera pour flauto* (1977) and Heinz Holliger's *(t)air(e)* (1988).

Aims

To date, a teaching method that covers issues of stamina and breath control for musicians has not been developed. Athletes have known for years how to train themselves. Why don't musicians?

Main contribution

The author applies knowledge gained from courses in *Periodization Training* to address this problem. This medically based theory, stemming from *General Adaptation Syndrome* of Hans Selye, has been modified by sports scientists since the 1950's. In short, periodizing a training program involves systematically alternating *sport-specific practice* with *multi-lateral training* and *rest* to maximize efforts while minimizing the risk of overuse and fatigue. Periodization models from sports are adapted for the demands of modern music with regard to developing breath control and stamina.

Implications

The presentation concludes with suggestions for further research. Measuring increases in vital capacity, which in turn yields more stamina, would prove the benefits of such a program. Other applications for periodizing practice for musicians will also be presented. Periodization training could be a first answer in solving problems of building stamina via a solid, well-established method.

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Biography

Jennifer Borkowski studied flute performance at the Universty of the Arts in Philadelphia, Pa., Yale University in New Haven, Ct. and at the University for Music and Dramatic Arts in Graz, Austria. Concentrating on modern music since 1999, she has performed at the Darmstadt Festival and with the Klangforum Wien and Ensemble Zeitfluss-Graz. Currently a doctoral candidate in Instrumental and Vocal Pedagogy in Graz, she also holds various coaching certifcations from the Professional Skater's Association and the University of Delaware's Ice Skating Science Development Center.

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The effects of harmonic context on melodic memory

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Background

In exploring studies of human memory for melody, we began with the work of W. Jay Dowling. In a 1986 study, he concluded that the best subjects for this research are people with a moderate amount of musical training: their perception is sensitive to the complexity of music without the acuity of a highly trained professional. Dowling hypothesized that melody can be represented in human memory as either "a set of absolute pitches… by melodic contour, by intervals, by relative pitches" (Dowling, 1986, p. 282) or by a combination of those. He found (1991) that a melody is at first stored principally by contour, and then by interval representation with longer delays. In order for musical memory to use a relative pitch model, there must be an established tonal framework. In Dowling's experiments, chords were played before and/or after the target melody, but never simultaneously. This led us to question how a simultaneous condition would affect melodic memory. We hypothesized that memory of a predictable, consonant tonality would complement the simultaneous memory of a target melody and improve recognition performance over other harmonic conditions.

Aims

This study aimed to examine how melodic memory is affected, if at all, when a melody is accompanied by different types of harmonic progressions – i.e., consonant and tonally stable (CS) vs. consonant and tonally unstable (CU) vs. dissonant and tonally unstable (DU).

Main contribution

Method
Our subjects were 12 undergraduate and graduate students at Brown University, all with a moderate amount of musical training. We composed six 11-note melodies in C Major, and for each melody we composed three harmonic progressions that fit our conditions of tonality. Trials consisted of listening to a harmonized melody followed by a solo melody, with the task of determining if the two melodies were the same or different. Our subjects were divided into three groups who would hear different sets of 6 trials. Each group heard two of the CS trials, two CU, and two DU. Within each group subjects heard the same trials, presented in random order.

Results
Subjects performed at 61.11% correct overall (SE=0.0579), 54.17% for only the CS trials (SE=0.1039), 62.50% for CU trials (SE=0.0983), and

66.67% for DU trials (SE=0.1009). Performance varied significantly by melody (p=0.0500).

Conclusions

We could not statistically conclude that melodic memory was affected by varied harmonization, but the data suggest that subjects perform best under the DU condition. It's possible that melody tones are more likely to fuse with harmony tones in the auditory stream under the CS condition, hindering performance. In a repeat of this experiment, there should not only be more subjects and trials, but it might be more conclusive to present the melody and harmony with different timbres. There should also be consistency of the changed tones in the different trials. Research presented by Krumhansl (Agres, 2008) shows that performance in melody recognition improves when the changed note is on a strong beat or if the change is chromatic rather than diatonic, and our results were consistent with that.

Implications

Our conclusions may seem counterintuitive to many musicians who find it easier to learn melodies in a predictable tonal framework. This might suggest that independent memory mechanisms are at work in processing melody and harmony. If that were the case, then it would seem that there is more integration of the melodic and harmonic memories if they are complementary (consonant), making them difficult to distinguish. It would be interesting to test whether there is a difference in performance on these tasks in subjects who have been trained as singers versus those who learned other instruments, because their musical memory may function differently. If it can be determined what musical features facilitate and hinder melodic learning, there could be numerous applications for performing and teaching musicians.

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Biography

Christine did her B.Sc. in Neuroscience at Brown University (USA) and is now studying flute performance with Peter Lloyd at the Royal Northern College of Music in the UK.

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Franz Liszt and the kinsmen: A Humean standard in nineteenth-century Paris

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Background

The public sphere of nineteenth-century Paris rarely received a single cohesive image of Franz Liszt the virtuoso. After a performance, Liszt, in one critical review, may have emerged as a musical demigod, while in another, Liszt potentially scandalized the sanctity of the pianist's craft. The early writings of two polarized critical minds — François-Joseph Fétis and Joseph d'Ortigue — illustrate this divergence in critical interpretation. Fétis, celebrated historian, teacher, and critic, characterized Liszt as a sinful disgrace, whereas d'Ortigue, writer for the *Gazette musicale de Paris*, elevated Liszt to the stature of a piano-proficient Jesus. David Hume's 1757 essay "Of the Standard of Taste," though not historically concurrent with the surfacing of a Liszt-oriented critical spectrum, offers a basis for understanding approaches to Romantic-era music criticism. In its most simplified form, Hume's essay on taste is a "rule"-book for aesthetic referees. By formulating a set of rules and regularities, Hume encouraged the elimination of critical relativism by defining a prescriptive standard — a standard intended to accurately and objectively assess aesthetic value.

Aims

With the consideration of Hume's tenets in incidental relation to the critical writings of Fétis and d'Ortigue, my discussion aims to examine the presence of Humean thought during Liszt's early virtuoso years in Paris.

Main Contributions

Hume's essay outlines the prerequisites one must possess to become a befitting adjudicator of artist merit. Each requirement is a directional guidepost, pointing towards the same aesthetic goal: the unveiling of a normative standard by which one can judge the true nature of art. And although Hume himself admitted that "a true judge in the finer arts is . . . so rare a character" (Hume, 1757 as cited in Cahn and Meskin, 2008), my study ventures to uncover the existence of a seemingly unattainable Humean aesthetic standard. Drawing from the *Revue Musicale* and *Écrits sur la Musique* (L'Écuyer, 2003), I examine the indirect relationship between Hume's judicial qualifications and Fétis's and d'Ortigue's critical methodologies. Additionally, contemporary philosopher Peter Railton's essay "Aesthetic value, moral value, and naturalism" (Railton, 1998) will provide a final digest and application of Humean principles.

Implications

Hume's essay relies on a confidence in a single reality constructed upon objectivity, making aesthetic rulings as definable as objective truth. Today, many music critics, as well as musicologists believe that artistic judgment exists in a purely subjective realm. With my paper, I hope to demonstrate that, in terms of aesthetic valuation, man *can* view his reality through empirical reasoning and man *can* possess a Humean "delicacy of taste."

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Biography

Regina Compton holds a B.M. in Clarinet Performance and a Minor in English Literature from Southern Methodist University. She is currently a master's student in musicology at the University of Cincinnati, College-Conservatory of Music. Her interests include aesthetics, nineteenth-century opera, and interdisciplinary studies, particulary the New German School and American expatriate poet T.S. Eliot. Regina is secretary of the CCM Music Theory and Musicology Society Conference, program annotator for the Dallas Camerata Winds, and recipient of the 2007 Meadows Undergraduate Student Research/Creative Activity Fund (MUSCRAF Research Grant). She plans to write her master's thesis on the allusions to Wagnerian musikdrama in T.S. Eliot's *The Waste Land*.

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Musicians and recording: A qualitative study of musicians' attitudes and approaches

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Background

Recordings have had a profound effect on the making of music and, for many musicians, are an accepted part of professional life. Yet, despite over a century of recordings, there has been almost no research into the psychological factors at work behind the process, and the ways in which musicians respond to the medium.

Publications on recording (including Chanan, 1995; Day, 2000; Eisenberg, 2005; Katz, 2004; Philip, 2004), have largely been concerned with its historical and socio-cultural significance, while the literature on the psychology of music makes no reference to the specific demands of recording. Some interviews have been published which touch on areas of psychological interest (Harvith & Harvith, 1987; Badal, 1996) but, in general, the investigation of the behaviour of musicians in relation to recording remains limited.

Aims

A study was conducted to explore musicians' attitudes and approaches to recording and to consider questions such as:

- How is recording different from concert performance?
- How does it affect musicians' performance?
- What skills and attributes do musicians need to possess in order to become proficient at recording?
- Why do some musicians find it more difficult to record than others?

Main contribution

Method

A qualitative approach was taken, based on interviews with 20 musicians and record producers conducted in 2007. The participants were all established professionals, working in the classical music genre, with significant track records in recording.

The interviews were semi-structured to allow a flexible approach and all interviews were recorded. Transcripts of the interviews were subjected to grounded theory analysis, with the initial analysis made using ATLAS.ti 5.0 software.

Results

Analysis of the data has shown that the recording process typically subverts the real-time nature of a musical event, by interrupting the flow of performance through the need for repeated takes. In this regard, it creates extreme conditions for memory, concentration, and stamina. Recording also disrupts musicians' sense of personal control over their performance and this, linked with tendencies towards perfectionism, was a source of anxiety likely to have a negative impact on performance.

Implications

Establishing how musicians operate in a recording environment, and thus gaining a fuller understanding of the cognitive processes and practical skills involved, has broad implications for the interdisciplinary study of music: for educators involved in the training of musicians; for psychologists researching aspects of musical performance; and for musicologists involved in the study of recordings.

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Biography

Terence Curran studied at Leeds College of Music, the Hochschule für Künste, Bremen, and the University of Sheffield. He has worked in performing, music publishing, the recording industry, and arts management. He is currently reading for a DPhil at Wadham College, Oxford, where his research is focused on the psychology and aesthetics of recording.

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Exploring classical music concert attendance: The effects of concert venue and familiarity on audience experience

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Background

While several musicologists have recently expressed discomfort with the setting and rituals of the classical concert hall (Cook, 1998; Small, 1998; Johnson, 2002), there are few empirical studies investigating the experiences of classical music audience members. Recent studies have addressed audience experience at concerts taking place within a specific chamber music festival (Pitts, 2005) or those performed within a conservatiore setting (Thompson, 2006). There is therefore considerable scope to investigate audience members' experiences of concerts performed by professional ensembles in large-scale concert venues.

Aims

The study aims to explore the factors that affect audience members' decisions to attend classical concerts, and to explore what affects audience members' enjoyment of concert-going. In particular, the research aims to explore the roles that concert venues exert on audience experience. The study concurrently aims to investigate the effects of familiarity on the enjoyment of a performance, taking into consideration audience members' familiarity levels with a) the repertoire performed, b) the concert's performers, and c) the concert venue.

Main contribution

Method

330 questionnaires were distributed to an audience of 560 people attending an English Chamber Orchestra concert at Cadogan Hall, London. 139 completed questionnaires were returned by post, representing 25 per cent of the audience in attendance. The questionnaire elicited data on reasons for attendance, and on the audience members' responses to the concert venue. Rating scales were included for levels of familiarity with the venue, the performers, and the repertoire performed; respondents were also asked to provide ratings for their enjoyment of each piece performed, and for the concert as a whole. Free-response questions addressed the audience members' general views on classical concert-going, while data on the frequency of respondents' live and recorded listening were also obtained.

Results and conclusions

The immediacy and potential for spontaneity in live performance was a key factor in the respondents' enjoyment of concert attendance, with many valuing possible deviations from the 'perfection' of recorded versions of the works. The role of the concert venue was important in providing good acoustics, sight lines and physical comfort. The relatively small size of Cadogan Hall facilitated a valued sense of 'intimacy' through audience members' proximity to the performers, and for some promoted a feeling of shared experience with other audience members. The effects of familiarity on enjoyment of a performance will also be discussed.

Implications

The study contributes to the growing body of empirical research investigating audience experience of live concerts, and holds implications for the practice of orchestras and concert venues in fostering and retaining audiences.

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Biography

Melissa Dobson graduated with first class honours in Music from King's College, London, and subsequently gained an MA (distinction) in Psychology of Music from the University of Sheffield. She is currently in the third year of her PhD investigating audience experience of classical music concerts, supervised by Stephanie Pitts and Christopher Spencer. She also works as a freelance cellist.

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The role of music in cultural integration

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Background

Social, cultural and political integration typically involves many two-way interactions between an indigenous majority and several migrant minorities, plus interactions among the individual minorities. Integration may be facilitated by collective activities that enable the groups to get to know each other (e.g. sport). The existing literature on integration addresses the role of language skills, education, occupation and income, (un-)employment, social capital and the opinions and prejudices of the majority culture. This raises the question of the role of culture and in particular of music in integration. Music supports the construction of cultural identity, which can both promote and hinder integration (Folkestad 2002; Frith 1996; Müller et al. 2002). Pawlig (2003) supports and analyses the role of choral singing in the integration of ethnic minorities in Stockholm.

Aims

We are investigating the role of music in integration, as perceived by culturally diverse residents of Graz, Austria.

Main contribution

Method
Interviews were conducted with 54 people from Albania, China, Egypt (Copts), Iraq (Kurds), Italy, Nigeria and Serbia, and with 20 people born in Austria. The interviewees spoke about the role of music in their everyday lives, their musical practice, cultural identity, social contacts, the music, customs and traditions of their cultural group in Graz, their favourite CDs, and music and integration. Specific theses were formulated on the basis of a qualitative content analysis. We also explored connections between the interviewee's statements and the duration of their residence in Graz, the importance of music for them, their own musical practice, and self-ratings of their integration.

Results
The analyses support the following theses. 63 percent of the interviewees stated that music plays a role in integration in different ways. Intercultural reception of music is easier than that of language; music can facilitate intercultural contact and enhance appreciation of and curiosity for foreign cultures; music can support feelings of community and create a basis for meetings; and the music of one's own cultural group functions as a strong reminder of that culture, strengthening cultural identity. Most interviewees

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expressed an interest in intercultural musical exchange; more migrants than members of the indigenous population expressed the desire to promote their own culture and present it to other groups.

Implications

One consequence of globalisation is the increasing importance of cultural integration. Integration may best be achieved by a range of different strategies, of which musical integration is a promising option.

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Biography

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Embodied cognition applied to timbre and musical appreciation: Theoretical foundation

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Background

Perception can be explained as a system in which dynamic interactions between the components of that system are the constituents of its existence more than the elements themselves (Zeleny, 1980). Such a system can be used to model the cognition of musical phenomena by considering human auditory schemata and the sonic environment as two components in constant interaction (Kaipainen, 1996). The paradigm of embodied cognition (Leman, 2007; Godøy, 2006) synthesizes these ecological views, where the listener can be considered as an adaptive device (Reybrouck, 2005).

Through active interaction with the sonic environment, human beings develop a categorization of musical phenomena (Dura, 2006), including the sounding qualities or timbre (Bregman, 1990). Currently, there is no clear definition or general theory of timbre, and this disadvantage diminishes its relevance to the appreciation of music.

A more inclusive perspective that aims to observe not only the components of the system (i.e. perception, acoustic features, society and culture) but also the interactions between them, would contribute to a better understanding of timbre and its role in music.

Aims

- To identify the processes involved in the perception of timbre within the paradigm of embodied cognition.
- To formulate a solid ecological framework for the linking of the environment-human system, to support further arguments on the influence of timbre (as a sonic environment) in the music appreciation schemata.

Main contribution

This talk will offer a model and epistemological arguments for the explanation of the dynamic relations emerging between the human body and specific timbral environments.

Implications

This research will provide a summary of arguments to support the idea that timbral features are determinant cues for the appreciation of music, probably as relevant as other structural components, such as melody or form. It will provide an epistemological framework for the study of timbre as a sonic environment attached to particular cultures of music production-consumption. Furthermore, this effort is the theoretical foundation for research that will investigate the existing forces that shape the emergence and functionality of perceptual schemata of timbre, targeted to understand the relations between timbre, musical preference and personality.

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Biography

Rafael Ferrer Flores is a doctoral student of musicology at Jyväskylä University in Finland, where he obtained a Master's degree in Music, Mind and Technology. His research interests are mainly related with the perception of low-level features of music (timbre), and how such features influence the emergence and functionality of music appreciation.

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The relevance of acoustical parameters in communicating brand image in commercials

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Background

In the context of TV and radio advertising, sound and its design play an important role in communicating images through connotative impressions. The connotative evaluation of sound qualities, which are determined by its acoustical parameters (Zenter & Scherer, 1998), can be seen as a process which is oriented on the human body. This is drawn on implications of anthropological theories and empirical findings which suggest that a) emotional expression of (human's) voice (Knepler 1977) and body movement (Blacking, 1977; Hama & Tsuda, 1991) are the substructure of basic emotional expressions in sound, b) the quality of sound contains physical information about the sound-generating subject/object (Ohala 1994) and c) there is a close relationship between sound and physiological reaction (Harrer, 1975). Predicated on the connection of body and sound, which is determined by phylogenesis, sound can be used to communicate im-mediately and intuitively.

Aims

This research investigates how change of acoustical parameters, which determines the perception of dynamic, affects the connotative impression of a product when all visual elements are held constant.

Main contribution

Method
Above mentioned theories provide the basis for hypotheses which formulate a change of a product's image when acoustical parameters are changing while all visual elements are held constant. The independent variables are pitch, sound pressure level (SPL), spectral envelope and attack time because together they influence the impression of dynamic. Tempo was held constant because its change also implies modifications of the film structure (e.g. cut). The acoustical material is created by using additive synthesis (MaxMSP) triggered by MIDI which allows precise control and independent variation of above mentioned acoustical parameters. Sounds are created in a way which largely avoids extra-musical meanings. The dependant variable is the connotative impression of the product measured by using the semantic differential. A generic TV-spot of a body lotion was created with structure and format based on analysis of real television ads. Pre-tests of visuals were used to eliminate possible biases, for example tempo of movements and film cuts, as well as

the product's shape (colour white is held constant) should be perceived as neutral. Furthermore, the spot itself has to be neutral with respect to real-world brands. Spots are presented in random order. In a post-questionnaire survey, subjects are asked about personal preferences for and associations with certain brands as well as for socio-demographic data. At the time of submission it was not possible to present first results because the experiment was not finished.

Implications

Results could widen the understanding of the connection between connotative impression and acoustical parameters in a multi-media based communication. These findings are of interest to musicology as well as to media research and can lead to practical applications.

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Biography

Beate Flath was born in Lienz/Osttirol in 1981 and studied musicology at the University of Graz. In 2005, she graduated with her diploma thesis titled "The relevance of the human body as basic principle in creation of music". Since then, she has been working on her PhD thesis on sound design in TV-ads, supported by a scholarship granted by the faculty of arts and humanities of the University of Graz. Her research focuses on music in everyday life in the context of mass media.

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Bootlegs as factors of authenticity in popular music

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Background

The live performance of pop music (and music in general) is of vital importance not only to the producers (artists, bands, etc.) but also to the consumers: the consumers use live performances to authenticate the artist, which otherwise only can be "consumed" via industrial (and therefore inauthentic) products such as CDs and videos (Marshall, 2005; Auslander, 1999). Authenticity is therefore being understood as a strategie; it is ascribed to and not inscribed in music (Moore, 2002). The term bootleg refers to illegally produced recordings of such live performances. Leaving legal aspects mainly aside, this research focuses on the collectors of bootlegs and their motivation to do so. It is therefore based on two pop cultural aspects: collecting and the importance of live performance.

Aims

The aim of this paper is to show whether or in which ways concepts of authenticity are applicable to the cultural practice of bootlegging.

Main contribution

Bootlegs, as substitutes of live performance, are used to authenticate pop music. Part of this authentication is achieved through distinction from the "normal" consumer, to whom the inferior sound of bootleg recordings is not appealing. But the process of collecting contains aspects which are in sharp contrast to this authentication. Through the conservation of an otherwise one-of-a-kind performance and its availability to other collectors, the authentic value of both, performance and bootleg, decreases (Neumann & Simpson, 1997).

Implications

In an attempt to authenticate artists and their performance via a medium not produced in masses by the traditional music industry, the collectors of bootlegs devalue their object of desire by transferring it to another market (Benjamin, 2002).

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Biography

Alexander Forstner is currently finishing his diploma studies in musicology in Graz, Austria, and is also working as a musician and music teacher.

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Emphasizing individual voices in harpsichord performance

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Background

Piano performance research has shown that performers emphasize a melody by playing its notes louder and earlier than nominally simultaneous notes in other voices (Goebl, 2001; Palmer, 1996). However, we know very little about the means used by performers to emphasize individual voices on other keyboard instruments such as the organ and harpsichord (Penttinen, 2006). We have recently shown that organists contrast individual voices mostly through articulation (Gingras, 2006). Since dynamic differentiation is also very limited on the harpsichord, it is hypothesized that harpsichordists rely on other expressive strategies, such as onset asynchrony and articulation differentiation between voices, to a greater extent than pianists.

Aims

This study investigates the means used by harpsichordists to communicate voice-specific melodic emphasis.

Main contribution

Method
Twelve harpsichordists were asked to perform a short Baroque polyphonic piece by Frescobaldi (1583-1643) on an harpsichord equipped with a MIDI console. Three conditions were tested, each requiring performers to emphasize a particular voice in the piece (soprano, alto, tenor). Four parameters were analyzed: velocity, note onset asynchrony, timing deviations, and articulation. The performances were matched to the score of the piece using a matcher developed by Gingras & McAdams (2007).

Results
Mean onset asynchronies were much larger than those observed in organ or piano performance, averaging more than 100 ms between outer voices. However, asynchrony patterns did not vary across conditions. On average, notes belonging to the upper three voices were struck with a higher velocity and played with a more detached articulation when they were emphasized than when they were not. Although tempo patterns were globally similar across all conditions, we observed local differences which

corresponded to passages in which a specific melodic gesture was accentuated by means of ritenuto.

Conclusions

Results suggest that harpsichordists make use of a greater number of expressive strategies than organists or pianists, employing contrasts in articulation and velocity, as well as subtle deviations in timing patterns.

Implications

This study allows us to compare the expressive strategies used by harpsichordists with those used by pianists and organists. Furthermore, it enables us to probe potential links between an instrument's timbral and sonic possibilities and the expressive strategies used by its performers.

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Biography

After having completed a M.Sc. in molecular biology, Bruno Gingras turned to music theory, graduating with a Ph.D from McGill University (Canada) in 2008. His dissertation focused on expressive strategies in organ performance. He has received several fellowships and awards, both as biochemist and as music theorist. His work has been published in *Oncogene* (a journal on cancer research), the *Journal of the Royal Astronomical Society of Canada* (his work on Kepler's *Harmonice Mundi*), and *Eighteenth-Century Music*. Last August, Bruno received the Young Researcher Award at the 10th International Conference on Music Perception and Cognition in Sapporo (Japan). He is currently pursuing a postdoctoral fellowship at Goldsmiths (London, United Kingdom).

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'Socio-musical' identity and musical practice intentions

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Background

In classical music circles, singers are neither automatically recognized, nor labelled as 'musicians' (Farmer, 2001). Self-categorisation theory (Turner et al, 1987) has shown that group labels are related to people's attitudes towards group-normative and stereotyped behaviours (Tajfel & Turner, 1979; Tarrant & Jordan, 2006). One such stereotype about singers is that they practice less than their instrumentalist peers (Kemp, 1996). Although this is assumed to relate to the singers' desire to protect the voice (Davidson, 2002) it may be that musical labels and expectations relate to their practice intentions.

Aims

The aim of this study was to show that 'socio-musical' group labels can influence music students' behaviours based on the stereotypes and norms associated with their relevant personal musical labels.

Main contribution

Method
Two questionnaire-based studies were conducted involving music students at colleges across the United Kingdom. These studies asked participants to report the number of hours they intended to practice over the two weeks following the study. Study 1 involved 97 singers who were encouraged to focus on one of two musical identities, either that of *musician* or that of *singer.* This study hypothesized that singers who strongly identified with the *musician* identity would report better attitudes towards practice than those who identified strongly with the *singer* identity. Study 2 involved 36 pianists who were encouraged to focus either on the identity of *musician* or that of *pianist*. This second study hypothesized that pianists would show no difference in their intentions to practice whether they identified as a *musician* or as a *pianist*.

Results
The results of Study 1 showed that singers who identified strongly as *musicians* reported significantly more hours of intended practice than those who identified as *singer*s. Study 2 showed that piano students who identified strongly as pianists reported significantly more hours of intended practice than those who identified strongly as musicians.

Conclusions
These studies have shown that musical group identification may have some impact on music students' practice intentions. Specifically, singers who identify strongly as musicians intend to practice more than their

singer-identified peers whilst pianists who identify strongly as musicians intend to practice less than their strongly identifies pianist peers.

Implications

These studies demonstrate that music education and social developmental research has some way to go in understanding the impact of socio-musical identity on music students. Musical group labelling may influence how music students perceive themselves as musicians. An awareness of the explicit and implicit social and individual factors at work in the formation of a musical identity, and the origins and potential impact of group stereotypes and norms may provide additional support for music students throughout their education and their careers.

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Biography

Nicole Jordan is a vocal performance graduate of Acadia University in Nova Scotia, Canada. In 2003, Nicole achieved a Masters degree in Music Psychology from Keele University under the supervision of Prof. John Sloboda. She is now in the final stages of completing a PhD in performance studies from the University of Sheffield. Nicole is still an active singer and performs with the Canadian Chamber Choir (dir. Dr Julia Davids, Loyola University) and The Harp Consort (dir. Dr. Andrew Lawrence-King). In the coming months Nicole will be spearheading a new counselling service for performers: www.psychmuse.com

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Students' self-beliefs and music instruction: A literature review

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Background

Only recently research in psychology and education has revealed positive correlations between students' self-beliefs and their academic performance (e.g., Bandura, 1986; Pajares & Miller, 1997). Self-beliefs were found to be strongly related to students' perceptions concerning their abilities and expectations for future success or failure, on the one hand, and their sense of control over their actions, on the other hand. Research findings also demonstrated that these beliefs may affect students' academic achievement and their future choices with respect to elected school subjects (Zimmerman, 1995; Valentine, DuBois, & Cooper, 2004). Moreover, recent research in music education emphasized the need for the study of certain parameters of the sociocultural environment that shape and affect students' beliefs and choices for music activities, and, thus, their musical development and achievement (Moore, Burland, & Davidson, 2003). Along these lines, several studies examined peer-group interactions and student-teacher interactions and the way they shape students' musical identities (e.g., Ramsey and Fitzgibbons, 2005; MacDonald, Hargreaves and Miell, 2002).

Aims

The present review of literature aims to examine and analyze studies on students' self-beliefs in order to uncover the way these self-beliefs shape and change while participating in various musical activities, as they acquire more knowledge and experiences inside a specific school context.

Main contribution

Most research findings show that students with prior musical experiences may already have formed "strong" self-beliefs for various musical activities and their musical abilities, as well. It is worth noting, however, that most of these studies used quantitative methods, thus, limiting students' voices about their school realities.

Results of recent research studies indicated both gender and age differences in students' persistence concerning music and musical activities, the intensity of their engagement, as well as their performance (Leung, 2008; Freedman-Doan et al., 2000; Wigfield et al., 1997).

It would also be of great interest to examine how students with no prior or some musical knowledge decide to participate in a musical group in high

schools and whether gender, age or a specific sociocultural background affect their preferences for participating in certain musical activities.

Implications

The present study proposes that the acknowledgement of the importance of students' self beliefs is not sufficient. Studies should further examine these self-beliefs and attitudes by using methodological approaches that offer students the opportunity to express their inquiries, their needs, and their preferences for music and musical activities, in particular, and their music realities, in general.

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Biography

Katsochi Charikleia studied musicology at the Department of Music Studies of Aristotle University of Thessaloniki. She also completed her violin studies (Diploma, 1999). She is a holder of an MSc in Music Psychology (Keele University, 2001), where she studied children's participation in various musical activities in elementary schools of Greece, under the supervision of Dr. S. O'Neill. At present, she is working on her PhD research on children's self-beliefs during the process of musical learning and instruction. Since 1999 she has been teaching violin and music theory in music schools in Greece.

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Integration or isolation? Considering implications of the designation 'woman composer'

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Background

Since the 1980s, a growing number of musicologists have turned to examine the contributions of women composers to musical life. This singling out of women composers has come under fire from some feminists as it segregates the woman composer by investigating her music in an isolated context. Charles Rosen recognizes that women have been 'harshly excluded from history and attempting to bring them uncritically and naively back into it neither does them posthumous justice nor acknowledge the difficult reality of their lives.' (Rosen, 1985) Rosen is not suggesting that investigation of women's musical activities is futile, but rather he points to the need for a unique approach to these activities in order to reveal their unique achievements despite the struggles they faced. Marian Wilson Kimber, however, alludes to the problematic nature of research in the area and the risk of creating of 'a discourse based on what women might have achieved' (Wilson Kimber, 2002) while the importance of attempting to understand women's achievements in music 'in their own terms' has been highlighted by Marcia Citron. (Citron, 1993).

Aims

This paper aims to probe the implications of the category 'woman composer' while examining a range methodological approaches and the relevance of such approaches in research on female composers in the 19th-century. How can I, for example, apply these techniques in my research on Josephine Lang?

Main contribution

This paper will therefore show that traditional approaches to the music of male composers – which separates biographical studies from textual analysis – do not provide a sufficient framework when examining women composers because women's musical experiences were shaped by confines of their social environments. A critical approach to contemporary social and cultural ideologies of the period is essential to deepen our understanding of the situation of women and their music in the 19th-century. Nancy Reich states that women musicians are becoming more 'visible', (Reich, 1993) but the virtual absence of women in the stock anthologies and histories – despite a growing body of primary and secondary literature is something that should concern us. As Jill Halstead states, 'the belief that any music of quality will sooner or later be recognised as such, no matter who composed it, is widespread.'

(Halstead, 1991) Indeed, because of the lack of education and because of social circumstances, it is an imbalanced and unfair comparison to set works by women alongside the canonical works of Schubert and Beethoven for example. However, women's musical contributions to the 19th-century musical life were an integral part of that musical world, and this deserves to be acknowledged as such.

Implications

It is only in the last few decades that the academic community has become acquainted with names of some female composers; this signifies that scholarship on female composers is (relative to the music of men) in its early stages. Therefore it is only through individual scrutiny at this stage that we can begin to include women composers in a wider historical landscape, so that their contributions to music will be recognised as significant. Scholarship traditionally does not concern the 'potential' of particular individuals. This issue of one's potential, however, becomes relevant in the domain of women composers. What if, for example, Josephine Lang had received a proper musical education? In attempting to answer such questions, one can discover another piece of 'the truth' with regard to women composers' experience of musical life and surely that is scholarship's aim, to unfold an understanding of historical 'truth'.

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Biography

Aisling Kenny is currently pursuing doctoral research on the Lieder of Josephine Lang. She has presented papers at conferences in Ireland and the UK. She has written several articles on Irish singers for *The Encyclopaedia of Music in Ireland*. Her paper on *Josephine Lang's Goethe settings* was published in the *NUI Maynooth Musicology Journal* in 2008*.* Aisling, a Government of Ireland Postgraduate Scholar of the Irish Research Council for the Humanities and Social Sciences, also holds performance diplomas in piano and singing.

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Diversity of the tonal structure of Chopin's Études

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Background

The revealing and original sound of Chopin's music results from his special approach to harmony (Tomaszewski, 1999). In Chopin's time the term 'tonal unity' was understood as an absolute domination of the main key in a piece. A piece characterised by tonal unity had to be distinguished by an identical key in its opening and closing part. In the second half of the 1830s and early 1840s, some trends for 'off-key' treatment of the form appear in Chopin's output, which was caused by a discrepancy between the initial and the ending key (Golab, 1995). Certain deficiencies in the application of Riemann's harmonic analysis method in studies on the Chopin harmonics have been noticed by Ludwik Bronarski (1935), author of "The Chopin Harmonic", because side triads, often characterized by significant independence, get crammed into functional inter-dependencies.

Aims

My presentation concerns the application of an original analytical method (Majchrzak 2005, 2007, 2008) for the purpose to study the tonal structure of Chopin's Études. My presentation also includes the description of selected pieces of early Romanticism (miniatures by Schumann and Mendelssohn) and therefore we can compare the tonal structure of Chopin's Études with other pieces composed in the same period.

Main contribution

Method
With the use of an original analytical system, the quantitative prevalence of chords classified by ranges of a given key in a musical piece can be determined. The method of analysis enables to arrange a given set of keys in a hierarchical order, under which chords have been classified versus the main key in which the piece is maintained (In key range 2 – D major and B minor harmonic – the following chords are classified, for example: DF#A, AC#EG, BDF#, AC#EGB, DF#AB, C#EG or DEF#GABC#).

Results
Early-Romanticism miniatures (several miniatures by Schumann and Mendelssohn) being analyzed appear to be of a similar tonal structure: one-modal type of diagram, a low number of key ranges, frequent symmetry in the distribution series construction. The tonic key range (For example: in F Major and D Minor – KR -1; in A Major and F scharp Minor – KR 3) dominance is characteristic to all the pieces. Noticeable in the Chopin Études is that the main key range sometimes tends to be marginalized.

Conclusions

I distinguish between various types of diagrams of tonal structure of Chopin's Études. The tonal structure of selected Études is much remindful of the tonal structure of miniatures by composers of the former half of 19th century. However, different situation is to be met with others pieces. The analysis explains great originality of the tonal structure of Chopin's Études as compared to the pieces composed in the same historical period.

Implications

My paper suggests a new approach to music analytical comparisons between Chopin's Études and the miniatures of early Romanticism. The analytical method will enable us to observe transformations in the structure of tonal harmony.

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Biography

Miroslaw Majchrzak was born in Krosno (Poland), 1980. He graduated in Music Theory from Academy of Music in Wroclaw (2005) and also in Banking from Higher School of Banking in Wroclaw (2006). He is a PhD student at the Institute of Art, Polish Academy of Sciences in Warsaw (Musicology). Currently he is preparing his doctoral thesis on tonal structure of Chopin's pieces (supervisor: Prof. dr hab. Ludwik Bielawski). Research interests include: music theory, music analysis, computer-aided music theory.

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A cross-cultural approach to emotions evoked by atonal music

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Background

In Western listeners, the emotional language of Western atonal music may not be well established (Kallinen, 2005), which could partly explain the rejection of atonal music compared to tonal music by the same composer (Smith & Witt, 1989). Atonal melodies are associated with unpleasantness, instability and negative emotions (Costa, Fine, & Ricci Bitti, 2004), and it produces less relaxation (Stratton & Zalanowski, 1984). Familiarity with atonal music is a prerequisite for learning the structure of atonal melodies (Dienes & Longuet-Higgins, 2004) and affects preference (Bradley, 1972). Tonal music is based on hierarchical pitch structures and listeners' implicit knowledge of a musical grammar leads to the experience of tension and resolution, stability, and surprise. Atonal music lacks hierarchical predictability (Lerdahl, 1989; Imberty, 1993). Newborns and infants show preference for consonant over dissonant sounds (Hannon & Trainor, 2007), which suggests an auditory predisposition for tonality processing in humans.

Aims

The present paper focuses on the subjective feelings of Western and non-Western listeners in response to atonal music in the context of an experiment on the effect of familiarity on emotional responses.

Main contribution

Method
Stimuli were in three instrumental styles: Western tonal, Western atonal and classical traditional Persian. The emotional content (peacefulness, happiness, sadness, anger, fear) of 50 diverse Western and 25 diverse Persian musical stimuli of 5s duration was assessed by 30 professional Western and Persian musicians. 28 Western and 18 Persian listeners were asked to rate familiarity, arousal, pleasantness, liking, and emotional intensity of each excerpt.

Results
Western listeners were most familiar with tonal music and least familiar with Persian music. Persians were most familiar with Persian music and least familiar with atonal music. For Western listeners, arousal and emotional intensity ratings correlated with familiarity ratings of musical styles. Persians' emotional intensity ratings correlated with familiarity ratings, but they rated unfamiliar atonal music as similarly arousing as

Persian music. Atonal music received the lowest pleasantness and liking ratings in both groups of listeners.

Conclusions

Persian and Western listeners' emotional response to atonal music may indicate that parts of their responses are based on culture-specific grounds and other parts are universal. Further research is clearly needed.

Implications

The cross-cultural study of the emotional response to atonal music provides fruitful insights into the question of why most musical cultures exhibit pitch organization and scales.

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Biography

Currently completing a Master's degree in Systematic Musicology with Prof. Richard Parncutt, Manuela holds a Master's degree in English studies and Physics from the University of Graz. She worked as Prof. Stephen McAdams' research assistant at McGill University and recently moved to London to start a MSc in research methods in psychology at Goldsmiths College, UK.

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"Welcome to our house!": Can house music be considered as a South African music phenomenon?

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Background

Over the past 8 years or so, South Africa has seen an explosion of house music as a genre. Unlike other global music genres, such as Hip-hop, house does not carry any diasporic link amongst blacks around the world. In fact, house music, as it exists in the United States, Great Britain and other parts of the world is largely considered a genre of music popular amongst whites and in the gay clubbing scene (see Amico 2001). Therefore, it would seem, that house music as it exists in this country (in township taverns, upmarket black clubs and minibus taxis) is a 'decontextualized' affair. However, to ordinary South Africans house music is not viewed as foreign music.

Aims

Can house music be considered as a South African music phenomenon?

Main contribution

Method
This is an ethnographic study, based on my own lived experiences as an avid house music follower and on informal conversations with house deejays, house dancers as well as ordinary house music partygoers in Cape Town and other parts of South Africa, but also on a series of open-ended interviews, with follow-up semi-structured interviews with a set of house music stakeholders based in Cape Town.

Results
Writing on the use of the penny-whistle in early twentieth-century South African popular music, Lara Allen suggests that the power of local-global connections can be traced through the extent to which that specific practice is "recognized, desired, and ultimately owned by musicians and audiences". The full recognition of that practice "on the part of local selves and global others occurs once a practice has been indigenized enough to be considered significantly different from the model that inspired it" (2005: 32). In the case of house music, this can be linked to the particular way in which it moves within the commodity 'sphere of exchange' in South Africa, that is from:

1. Euro-American music producers
2. Local Deejays (in their own CD compilations)
3. Local consumer (who buy the CDs and listen to these on radio)

It is through this 3-step flow that most South Africans come to receive house music as a genre. In this paper I argue that this 3-step movement of house music within the South African context plays a very significant role in the indigenization of the genre as a legitimate South African-ized cultural practice.

Conclusions

What this study reveals is that Africans are people who are diverse and are not immune to modernity (Mudimbe 1988). The popularity of house music in South Africa therefore marks a shift away from claims that view certain genres/styles of music as the exclusive domains of Europe and North America.

Implications

Since house music's development in South Africa during the 1990s coincides somewhat with the emergence of a post-apartheid nation state, it offers itself as a useful springboard from which such local versus global interactions can be theorized using a musicological perspective. The implications thereof point to a much wider identity challenge in the face of globalization. This is especially significant from the perspective of those in developing countries, who are often viewed as the biggest 'losers' in the effects of globalization (Kofi Annan 12th March 2003).

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Biography

Thokozani Mhlambi holds a Bachelor of Music in musicology (with distinction) 2006 from the University of Cape Town and is currently completing his Master's in Public Culture (African Studies). His main research interests have been in the field of youth, music and culture in South Africa as well as Nguni indigenous and early Classical music. Highlights in his life include the publication of his article on Kwaito music, in the internationally peer-reviewed *Journal of Musical Arts in Africa* (2004). His current pursuits are in the areas of black radio as well as House music.

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Children's musical imagery of intervals in auditory recognition and singing

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Background

Auditory imagery and listening to a sound activate some of the same cerebral substrates (Halpern, 2001; Yoo et al., 2001; Schürmann et al., 2002). These substrates include the bilateral primary and secondary auditory cortices, the supplementary motor area (SMA) and the right dorsolateral frontal cortex. Furthermore, musical imagery is triggered when short gaps of a familiar musical piece are muted (Kraemer et al., 2005). Therefore, musical imagery may help auditory recognition and singing of musical elements such as intervals.

Aims

Evaluate if musical imagery of intervals contributes to their auditory recognition and singing in 8-9 years old students from the elementary program of the National School of Music, UNAM.

Main contribution

Method
Songs were composed for teaching six intervals: major and minor 2nd, major and minor 3rd, and perfect 4th and 5th. These songs were taught in two groups (without any musical interval background) during four periods of two months each in 25 total sessions of two hours once a week. Each song was taught with a gesture associated to one interval, only to generate selective attention. In one group (24 children) when the studied intervals appeared, the students performed the gestures in silence with the purpose of evoking spontaneous musical imagery. In the other group (26 children) the students sang every time the complete songs with its associated gestures. At the end of each of the four periods evaluations were performed in both groups where the studied intervals were played in the piano and the students were asked to recognize and sing them. *T*-tests were carried out to compare the performance of these tasks in both groups in each of the four periods, with SPSS 13.0.

Results
No significant differences between both groups in the recognition and singing of intervals in each of the four periods was obtained ($p > 0.05$). However, the group of children where musical imagery was evoked in

general performed better in interval recognition. The group of children that sang the complete songs showed better results in singing the intervals. All the evaluations of both groups presented high variances. Overall, children performed better in singing the intervals (the average ranged from 6.2 to 8) than in recognizing them (the average ranged from 2.5 to 5.6).

Conclusions

The high variances that were obtained may explain why no significant differences resulted even when a big mean difference was observed. The higher means that were observed in the group of children where musical imagery was evoked may indicate an association of musical imagery and auditory music analysis. Better results in singing the intervals that were obtained in the group of children that only sang may have been due to the fact that they trained more in that task. It is already stated that there are benefits on using body movement in musical teaching (e. g. Orff & Kodaly), however, the results obtanied in this study show that imagery may be an important aspect to be considered in musical learning.

Implications

Despite the high variance, the fact that in some cases a big mean difference between both groups was obtained may suggest that better interval recognition is observed when musical imagery is elicited. Therefore, further studies with larger groups to reduce high variances where these abilities are developed and compared are necessary.

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Biography

Gabriela Perez-Acosta, mexican, with a piano performance major and a Master in Music Cognition, she has been specialized in the cerebral substrates of auditory imagery and its relation to the peripheral auditory system.

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Communicative aspects of the dyadic musical interaction between mother and child

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Background

It is well known that music covers an essential role in the dyadic interaction of a child even in his first moments of life. It has been observed, particularly in the relationship between mother and son, that a musical stimulus, especially coming from a voice, is effective either from a communicative-affective (Stern, 2004) or from a communicative-attention point of view (Papousek, Papousek, & Boestein, 1985). The characteristics of this interaction, like the presence of the repetition/variation mechanism (Imberty, 2005) and communicative symmetries (Fogel, 1977), are extremely important in order to create self-consciousness inside a child, either in a family or in a school context. The "communicative co-regulation" – Relational Coding System – (Fogel) is an implicit feature of the dyadic relationship, and its decoding process represents an important resource in order to investigate the construction mechanism of self-consciousness in a child throughout the family and scholastic routines (Addessi, 2008).

Aims

The aim is to observe and analyze a communicative aspect, with the implication of a musical element, of a dyadic interaction mother and son during the daily routine.

Main contribution

Method
During a weekend period a mother with her three-year-old son was filmed in various moments such as routine, playing or relax time. A microanalysis with Relational Coding System was made upon a section (approximately 8 minutes long) in which mother and child were interacting with playing instruments-toys and voice.
Results
The categories (RCS) utilized to evaluate the results are: symmetrical communication, when there is a mutual engagement between the partners participating in a communicative process; unsymmetrical communication, when the contribution in creating new features in communication is unsymmetrical between the two partners; one-sided communication, when one of the two partners regulates his own activity upon the other without any form of shared action; disruption when there is an attempt of

mutual innovation that stops the action; not involved communication, when the partners are not co-regulated even with communication possibilities. The results show that there is no evidence of a "not involved" communication, while a substantial "co-regulation", that is most of the time "unsymmetric".

Conclusions
The evidence of an unsymmetric communication appear closely connected to the introduction of new musical elements by the mother, while a total control of the musical production by the son seems to cause a symmetrical communication

Implications

This study employs the observation methodologies derived from the studies in developmental psychology intertwined with the musical dimension of the mother/child interaction in an interdisciplinary way.

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Biography

Elisabetta Piras is a pianist and musicologist; she studied musicology at the University of Bologna, and in research her main interests are the history of contemporary music, psychology of music, and music education. She collaborates with many institutions working both in a popular way, like making concert presentations and magazines columns, and in academic way with scientific contributions.

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Music performance and gesture: Observation of young piano students

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Background

Recent studies have investigated the connection between sound shape and kinetic behaviour. Delalande (1985) observed music behaviour of children in depth, and connected it, on a sensory moving base, to Piaget's theory of symbolic play. Other studies concern the important role of gesture, observed for example by J. Davidson (2002, 2007), and recently observed by A. Fraboulet and M. Imberty in piano performances (2007). In this field, F. Delalande (1985) proposed a distinction between gestures in performance that is necessary to obtain a sound result from the instrument, and a gesture that responds to an expressive intention of the performer.

Aims

Are there differences between expressive and merely functional gestures? Are expressive gestures present in young performers? Is there a transmission of gestures from teachers to students?

Main contribution

Method
The main contribution of this study is to observe and analyze the gesture behavior in piano performances of a sample of young Italian musicians (10-14 years old), and to establish where gesture is exclusively functional to playing the prescribed notes or concerns an expressive aspect of the performance.
The performances were filmed in classroom by a camera in the front and by one at the side of the pupils. The young pianists refer also to their own thoughts on the most important characteristics of the score in a short interview. The teacher supervisioned the work and their performances of the same pieces were recorded.

Results
Gesture in this performance was analyzed with a categorization inspired by that of P. Champagne (2000) a specialist in musician posture, that concerns an observation based on "behavior" of the singular parts of the body involved in the performance. First results show that an "accompanying gesture" is present in the various parts of the body, and the expressive gesture observed in the pupils is quite different from that

of their teachers, that is in general more emphasized and clear, but basically we can find some similar features.

Conclusions

These first qualitative results could represent an important aspect in the instrumental skills development. The data collected so far are not sufficient to show quantitative results, and an analysis supported by a software could help in defining the quality of the gesture. These elements, with the observation of facial expressions and the communicative aspects of gesture, will be the next step of my study.

Implications

This study tries to put in evidence the aspect of gesture in performance in a didactic context. This field of research is still not considered, but the first results and achievements encourage thinking that this is a profitable and helpful topic also considering that gestures are clues of a gradual development of performing technique in young pianists and seem to be an important aspect of teaching.

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Biography

Elisabetta Piras is a pianist and musicologist; she studied musicology at the University of Bologna, and her main research interests are the history of contemporary music, psychology of music, and music education. She collaborates with many institutions working both in a popular way, like making concert presentations and magazines columns, and in academic way with scientific contributions.

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Corporality in the timbre vocabulary of professional female jazz vocalists

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Background

Traube and Depalle (2004) and Bellemare and Traube (2006) worked with pianists and guitarists to explore and document their collective knowledge of timbre. The timbre vocabulary of classical singers refers to perceptible acoustic characteristics, mechanisms of sound production, and the singer's identity and emotional state (Henrich et al., 2007; Garnier et al. 2008). Prem and Parncutt (2007) explored and documented the timbre vocabulary of female jazz vocalists.

Aims

We explored the extent to which the timbre descriptors refer to or imply the human body, as part of a broader documentation of singers' practical knowledge about sound and of the acquisition and sharing of that knowledge in the oral tradition of vocal teaching.

Main contribution

Method
We analysed an inventory of some 250 timbre descriptors, along with their definitions, synonyms, and antonyms as well as physiological or technical correlates. The vocabulary had been assembled from transcriptions of lessons and interviews in which the participants had described the vocal quality of commercially available recordings. In the present study, we categorized the words subjectively according to their corporality.

Results
The biggest category of descriptors refers to subjective sensations (e.g. *pleasant*, *relaxed*). Some describe physical objects (e.g. *sharp*, *peaked*) or directly imply the human body (*more body*, *forceful*).

Conclusions
Timbre descriptors often refer directly or indirectly to the body, suggesting a kind of synaesthesia (cf. Behne, 2008). Corporal references may be more prevalent in the timbre vocabulary of singers (whose body is their instrument) than instrumentalists.

Implications

The results highlight the intrinsic corporality of vocal timbre. The study brings together epistemologically contrasting approaches to questions of musical timbre and corporality.

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Biography

Daniela Prem studies musicology at the University of Graz Austria. She is also an amateur singer with a preference for all kinds of improvised music. Recently she has been doing research on timbre in jazz. Within the scope of her diploma thesis she started doing research on the timbre vocabulary of jazz singers. She currently focuses on corporality and vocal imitation. A synergy of art, pedagogy and science is among her strongest motivations for working as a musicologist.

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Evolution of a musical style: Stylistic transitions in Vivier's first works

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Background

In *Music, the Arts, and Ideas*, Leonard Meyer states the internal dynamics hypothesis in the transformation of a musical style: a style emerges gradually and, thus, isn't the product of a specific decision; a style is *learned*, even by the composers who invent it, and listeners learn in as well.

A personal style can also be understood through its influences, be it from individuals or from culture in general. Accounts of influences on Canadian composer Claude Vivier's (1948-1983) music are numerous: Tremblay (2000) spots traces of Stockhausen, gamelan, and Messiaen; Braes (2001) unveils links between Stockhausen's *Mantra* and Vivier's *Orion*; and Gilmore (2007) accounts for influence of spectral music on Vivier's *Lonely Child*.

Aims

Since Vivier's style is often described by its influences, I aim to shed new light onto it by explaining its internal process. How does Vivier go from one work to another? What are the choices he makes in each work and that he modifies from one another, on a given period of time? This is what I aim to understand in analysing the melodic parameter in the music of Claude Vivier. In this paper, I am going through the internal dynamics of Vivier's emerging melodic style in five vocal works composed between 1973 and 1975: *Chants*, *O! Kosmos*, *Jesus erbarme dich, Lettura di Dante* and *Hymnen an die Nacht*, analysed in the chronological order of their composition.

Main contribution

After a brief summary of paradigmatic analysis (Ruwet, 1972; Nattiez, 2003) of the five works showing they share much of the same melodic material, I follow the evolutional path of a simple yet very significant musical formula, i.e. a motive constantly repeated and transformed throughout the works. By observing the transformation of this specific formula into each work and from one to another, I show a microcosm of the evolution of Vivier's melodic style: a very simple formula is used to structure entire sections of each work; it evolves into more complicated and implicative states, yet simpler versions can still be found. Complexity is by no means a goal in Vivier's style, but merely a passing state. This emerging style is then compared with later vocal works, dating from 1980 onward.

Implications

This paper is an excerpt of an ongoing research that aims to explain the internal evolution of a personal musical style, through the analysis of melody in more than 40 works; it's both a new account of Vivier's style and a new way to analyse a musical style.

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Biography

Founding member of the Cercle de musicologie of the University of Montreal in 2003, Martine Rhéaume remained significantly active in the organization of musicological events throughout her Master's (2005) and her ongoing PhD research. Her thesis, supervised by Jean-Jacques Nattiez and financed by the Social Sciences and Humanity Research Council of Canada (SSHRC), aims to understand Canadian composer Claude Vivier's (1948-1983) style through its internal evolution. Student research member of the OICCM at the University of Montreal, she organized in 2008, for their account, an international symposium on Claude Vivier. She is currently writing material and giving talks on Vivier's life and work for the concert series dedicated to him by the Société de musique contemporaine du Québec since September 2007.

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Differentiating and measuring self-efficacy for musical learning and performing

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Background

Self-efficacy is task-specific and stems from an individual's belief in his or her own ability to carry out an action (Bandura, 1977). By definition, self-efficacy does not cover all situations, and even within a domain one may hold a range of different self-efficacy beliefs (Schunk, 1996).

Aims

This research examines the specific nature of different types of self-efficacy beliefs within the domain of music. In study 1, self-efficacy questionnaires were developed and tested. In Study 2, the nature of these types of self-efficacy was investigated with relation to other skills, abilities, and behaviours.

Main contribution

Method
Students studying music at university and conservatoire were recruited to take part in the research. In Study 1, the Sherer et. al (1982) 'general self-efficacy questionnaire' was adapted to music (Bandura, 2001), and then developed into separate questionnaires to assess self-efficacy for musical learning and for performing. The internal reliability of the new questionnaires was tested with an initial sample of 46, and shown using Cronbach's alpha and factor analysis (Field, 2005). Using a separate sample of 28 the stability of these questionnaires over time was demonstrated through a test-retest, first at the intervals of two weeks and again after four months. In Study 2, a sample of 225 comprising students from both university and conservatoire completed self-efficacy for learning and self-efficacy for performing questionnaires and questionnaires on musical self-regulated learning and on musical skills and abilities.

Results
Conservatoire students' self-efficacy for musical learning scores were statistically significantly higher than university student's scores, whereas the self-efficacy for musical performing scores had no significant differences between the institutions. The types of self-efficacy correlated to different skills and learning behaviours. Self-efficacy for learning scores correlated with students' behaviours to set goals, to seek assistance from peers or teachers, and to seek information from non-social sources,

whereas self-efficacy for musical performing correlated with the ability to manage everyday stress and stage fright.

Conclusions

The results confirmed that these two types of self-efficacy are distinct within music, highlighting the importance of specificity and correspondence when measuring these beliefs.

Implications

This research measuring separate types of self-efficacy within music can serve as a template for more detailed self-efficacy research within other domains.

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Biography

Laura Ritchie, senior lecturer in music at the University of Chichester, is the Coordinator of the Foundation Degree in Instrumental or Vocal Teaching and the Minor in IVT, teaches on the Performance Master's, leads the String Ensemble, and directs the University's annual Cello Weekend. Her teaching focuses on the application of the learning process through a self-directed and problem oriented approach. She also teaches reflective performance analysis at master's level. She is pursuing her DMus at the Royal College of Music, London, researching self-efficacy in music as it relates to performance and learning with specific applications through self-regulated learning. Current research projects include an intervention study relating self-regulating learning, practice habits, and attainment, self-efficacy beliefs across a range of ages and abilities, and the relationship of perceived self-efficacy for musical performance to a given task. Laura, her husband, and their three children live on England's south coast.

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Pianosexual: Fascinations of Tori Amos's sexualized virtuosity in performance

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Background

Best known for straddling the piano bench and singing lyrics such as "I crucify myself everyday," there is much more to American singer-songwriter Tori Amos than meets the ear. Trained as a classical pianist, she performs within a hybrid genre that fuses her classical piano training and popular alternative rock. Amos's style of performance functions aesthetically as a type of performative self-created authenticity that aims to subvert women's traditional roles at the keyboard to emphasize female sexuality. Her music greatly impacted society in the 1990s due to her emotionally intense lyrics that reflect her social commentary on issues such as feminism, religion, rape, and sexuality, while boasting a cult-like fan base similar to many of the virtuosos of the nineteenth century.

Aims

Drawing upon an interdisciplinary methodology including gender studies, cultural studies, aesthetics, philosophy, and the reception of Amos within the popular press, I aim to highlight not only Amos's physical virtuosity, but to demonstrate the ways in which her pianism and vocal style have subverted the role of the female singer-songwriter in popular culture. Often criticized for her manner of playing, I position Amos as a pianosexual performer who uses the piano as an extension of her body and physically manipulates her Bösendorfer as a form of social commentary and musical activism, creating and performing her songs with a libidinal fervor.

Main contribution

Amos's pianistic virtuosity and technical facility alongside her sexualized physicality in performance separate her from most women singer-songwriters who play the piano. She performs with a sexualized athleticism akin to the virtuosic "fascinations" literary theorist Hans Ulrich Gumbrecht describes in *In Praise of Athletic Beauty* (Gumbrecht, 2006)*.* Judith Butler's theories of performativity in *Gender Trouble* (Butler, 1999), provide a model for analyzing the gender construction within Amos's performances. Additionally, I consult Richard Leppert's *The Sight of Sound: Music, Representation, and the History of the Body* (Leppert, 1993), and his essay "Cultural Contradiction, Idolatry, and the Piano Virtuoso: Franz List" in James Parakilas's *Piano Roles: Three Hundred Years of Life With the Piano* (Leppert, 1999), to consider Amos as a current analog of the nineteenth-century tradition.

Implications

Through the survey of piano virtuosity from the nineteenth century, particularly that of women, Amos's sexualized performance style is noteworthy in regards to gender, aesthetics, and cultural critique. As Amos performs her gender and her instrument in new and exciting ways within a popular genre of American music, it allows musicologists to redefine the concept of virtuosity and ways to map this virtuosity onto music not easily categorized within a single genre. Additionally, I hope this research provides new ways for examining the relationships of performing the body within music.

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Biography

Bethany J. Smith is a Ph.D. student in musicology at the University of Cincinnati, College-Conservatory of Music where she is also pursuing a graduate certificate in women's studies. She holds a MM in music history from the University of Cincinnati and a BA in vocal performance from Manhattanville College. Her varied research interests include feminist musicology, popular music, film music, issues in performance and interpretation, American music, and opera. She has presented her research on several conferences on music, gender, and culture. Upcoming conferences include a panel on queer musical genealogies at the UCLA Queer Studies Conference and a paper on music and fashion in Gwen Stefani's Harajuku Girls at the U. S. National Popular Culture and American Culture Associations Conference. Smith's written contributions include several reviews in *Music Research Forum* and *The World of Music*, and entries in the forthcoming *Encyclopedia of African-American Music*. Her master's thesis is entitled "'Song to the Dark Virgin': Race and Gender in Five Art Songs of Florence B. Price (1888–1953)." She plans to write her dissertation on the music of Tori Amos.

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Genre theory and the early nineteenth century

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Background

The following authors have produced significant publications in the area of genre studies and the early nineteenth century: Carl Dahlhaus (1983), Marcia Citron (2000), Jim Samson (1989), and Jeffrey Kallberg (1988). Carl Dahlhaus's argument, in relation to my chosen topic, is that after 1800 the concept of genre in relation to musical compositions ceased to be important. Due to musical works of some genres deviating from pre-established norms e.g. style, Dahlhaus asserted that the concept of an individual work gained increased importance. Marcia J. Citron has contested this argument stating that a genre doesn't have to be completely fixed and predictable. Dahlhaus's view, she argues, prevents a specific genre from developing and expanding. In line with this argument, Jeffrey Kallberg's theory that composers often mixed genres deliberately is directly applicable to works that didn't adhere to the usual style or form of a particular genre.

Aims

This paper aims to critically examine the central arguments of genre theory by exploring seminal texts in genre studies. Building on this, I wish to provide a suitable model or approach in which early nineteenth century works, previously unexplored in this context, can be assessed.

Main contribution

At the beginning of the Nineteenth Century, the concept of 'genre' as a fixed entity was challenged by contemporary composers. One such example is Schubert's piano duet the Grand Duo Sonata in C D812 (1824) which surpassed the usual piano duet style of that time. Research relating to this work and other Schubert piano duets awoke me to such historical questioning and I began to explore genre theories both generally and specifically relating to early nineteenth century music. Although critics such as Jim Samson have contributed to genre theory (using Chopin's Impromptus as a case-study), a gap still exists in this area of research for other composers' works to be considered in this context.

Implications

By critically assessing genre theories and their relation to early nineteenth century music, an alternative interpretation of works that have puzzled critics as being 'outside' the genre norms can be explored.

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Biography

Barbara Strahan is currently in her third year of a research degree specialising in Schubert's unique contribution to the piano duet genre. She gained a first class honours B.Mus. from Maynooth University (2005) and currently holds both a John and Pat Hume Scholarship and a Government of Ireland Scholarship (IRCHSS). Barbara has submitted several articles for the forthcoming *Encyclopedia of Music in Ireland* and has been tutoring for the final year dissertation module in Maynooth Music Department since 2006. This year Barbara has presented papers at the Postgraduate Conference in Maynooth University in March 2008 and at the annual Society of Musicology in Ireland Conference in May 2008. Barbara also holds a performance diploma in piano.

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A naturalistic study of preserved music cognition in dementia

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Background

In recent years, there has been increased scholarly interest in the phenomenon of preserved music abilities in dementia. A growing case study literature has documented a variety of such cases (e.g. Cowles et al., 2003; Fornazzari et al., 2006). Our research group recently published a case report of an individual with preserved memory for music in severe Alzheimer disease (Cuddy & Duffin, 2005). This article provoked a flood of correspondence from professional caregivers and family members of individuals with dementias of varying etiology, who shared informative stories with us about the musical experiences of those in their care. Those stories form the basis for this paper.

Aims

In the present paper, we briefly describe these stories and argue that they allow us to better understand preserved music cognition abilities in individuals with dementia. We then consider how the stories converge with experimental data from our lab (Vanstone, 2006) and suggest directions for further research.

Main Contribution

The key themes of the stories emerged from a content analysis of the correspondence. The responses to music exhibited by people with dementia were often surprising, given the general severity of their cognitive impairment. The stories also contain useful clues as to the nature of preserved music abilities in dementia: certain types of music tended to provoke the most favorable responses and certain types of skills tended to be preserved. Finally, the stories reveal the function of music for caregivers. Musical activities were particularly powerful way of engaging, when other means of communication had been lost.

Implications

The themes extracted from the stories converge with the experimental data collected in our lab and suggest directions for future research. In particular, future studies will need to clarify the relationship between

music and other cognitive domains in people with dementia. This observation is particularly important in the face of mounting evidence for heterogeneity of cognitive deficits in Alzheimer disease (Stopford, Snowden, Thompson, & Neary, 2008). We also discuss the clinical implications of this research.

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Biography

Ashley Vanstone studied music at Brandon University, Canada, obtaining his B.Mus. in 2001 before moving on to study psychology first at York University, Canada, and then Queen's University, where he currently is completing his Ph.D. in Clinical Psychology. His research is concerned primarily with understanding music cognition in the context of dementia, and his clinical interests include geriatric neuropsychological assessment as well psychotherapy with adults.

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Sonification in computational physics: QCD-audio

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Background

Sonification is a scientific method defined as the systematic generation of sound signals that reflect objective properties or relations of input data (Hermann 2008). It is an alternative and complement to visualisation, and particularly useful in the analysis of highly complex and multi-dimensional data sets. In recent years, it emerged in different fields, pushed by the development of real time audio synthesis software and the increased consciousness of human audition. Sonification meets the needs of new approaches to growing amounts of data in society and science (Kramer 1994). Our focus of interest lies in data stemming from lattice-QCD, the computational approach of quantum chromodynamics. This method uses simulations of the most fundamental particles known today, the quarks and gluons. The rapid development of computers and algorithms has led to new insights, but the typically multi-dimensional data sets are very large, and only a few simple observables are considered.

Our interdisciplinary project *QCD-Audio* applies sonification techniques to data of numerical models in physics. This project is a continuation of the SonEnvir project. (Vogt et al., 2007 and 2008).

Aims

The aims of *QCD-Audio* are, on the one hand, to get new insights in the data and new perceptualization methods in the field that might fuel auditory display in many scientific disciplines. Also, listening examples for didactic purposes will be provided, and the sonifications evaluated on a qualitative and aesthetic level. On the other hand, an outcome will be a multi-channel sound installation that allows amateurs to engage in data of lattice-QCD.

Main contribution

Method
Different sonification techniques can be distinguished: *Audification* is the modulation of sound-like data into the auditory domain. In *parameter mapping*, elements of sound - and music - can be used: the combination of pitch, loudness, different aspects of timbre, localisation, (micro)-rhythm etc. results in characteristic auditory streams or *gestalts*. *Model-based sonification* introduces furthermore virtual interaction with the data. All these methods are the basis for our sonifications.

Results

A first result that shall be presented here is a new sonification of the Ising model, a simple numerical spin model. At high temperature (T) the spins of this model behave like noise, at low T they are completely ordered. At a critical T, there is a phase transition between these trivial states. The structures become suddenly interesting – self-similar clusters at all orders of magnitude appear. We apply different parameter mapping strategies to this system. The emergence of a recognizable gestalt (e.g., a full natural sound) or of a (physically missing) fundamental of a series of harmonics shall map the emergence of critical behaviour in the system.

Implications

Systematic Musicology is an interdisciplinary field that often starts its studies on the opposite side of sonification. The first one searches e.g. for ways to describe elements of music and sound and their implication to the listener. Sonification tries to combine these elements and build up understandable sounds. Thus, an exchange might enhance new viewpoints for either side.

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Biography

Katharina Vogt studied Environmental System Sciences with major physics at the University of Graz. Besides, she studied the viola at the Conservatory of Graz and plays now in different ensembles. From October 2005 to March 2007 she worked within the interdisciplinary research project SonEnvir at the Institute of Electronic Music and Acoustics. She co-authored the proposal of *QCD-Audio* that was funded by the FWF and started in July 2008. Within this project she plans to finish her PhD on the sonification of theoretical physics' data.

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Music, new media art, and creativity within the child-computer-interaction: A cognitive approach

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Background

As a consequence of the rapid development of information processing systems in the last decades new fields of research arose: HCI (Human-Computer Interaction) and HRI (Human-Robot Interaction). HCI aims for an improvement of hard- and software and of interfaces to the user by studying the human handling of a computer (Card et al. 1983). HRI concentrates on the relationship between humans and robots. Within HCI and HRI the field of cognitive psychology is significantly involved in the research of learning and problem solving during the use of computable systems.

Fodor (1983) claims that the human mind is also an information processing system and therefore humans are eventually themselves computational ("Computational Theory of Mind"). This amplifies the chance of interaction between man and machine in the sense of communication. His thesis of modularity of mind was an important cognitive approach in the research of language processing (Fodor, 1979). Especially children are often confronted with the contact to computational systems (McKay, 2007). Jean Piaget's developmental psychology describes the stages of cognitive development (Piaget & Inhelder, 1962) and understands the interaction with environment as the foundation of constructing cognitive schemata. Referring to his schema theory Michael Arbib and colleagues (1987) analyzed the language acquisition by children.

Aims

My presentation will mostly focus on the question of how music cognition as an approach within the paradigms of cognitive sciences (that already achieved some results about music perception and processing) can be connected with HCI and HRI. How does a musical interaction proceed and what effect does the interaction partner on music production have? The main aim of my research is to involve the cognitive aspect of HCI/HRI in ideas of schema theory to explore structure and acquisition of a Musical Mind.

Main contribution

My main thesis is that there exists a musical module (Musical Mind), that, similar to a language module, is connected with general cognitive processes and builds up musical schemata via musical interaction. Like

Piaget presents in his theory of cognitive development, this construction works through assimilation and accommodation. In this context, creativity in music production can be seen as a process that is ruled by the musical module. Since I suppose an organization of a Musical Mind parallel to the development of general cognitive processes, an empiric observation of children in a musical interaction seems especially suited. In addition an interaction with a computable system allows a computation of cognitive processes in the sense of a "Computational Theory of Mind".

Implications

My research could be relevant for cognitive musicology as it aims for a description of an acquisition of a Musical Mind that eventually will be also computable. Within New Media Art, the connection with cognitive research in HCI and HRI could lead to an improvement of new musical instruments and musical interfaces. My findings could furthermore be useful for music pedagogy, for they imply the development of a musical competence of children. Finally, outcomes in musical cognition can, because of the modular connection, contribute to general cognitive sciences.

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Biography

Julia Wewers is studying musicology (systematic musicology and history of music), Italian and educational science at the University of Cologne, Germany.

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EARS II: Time for a new approach to electroacoustic music

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Background

Contemporary music, in particular electroacoustic music, is not very well known in today's society. Musicians and researchers should have confronted issues related to making this corpus of music accessible to a wider audience; however, there are only very few projects available that explain electroacoustic music to non-specialists.

The PhD project "EARS II" focuses on this as well as on detailed research about the fundamental concepts of electroacoustic music. At the Music, Technology and Innovation Research Centre there are two existent projects that are related to and will be integrated into the research: The original EARS project (ElectroAcoustic Resource Site, www.ears.dmu.ac.uk), which provides academic information for researchers in the realm of electroacoustic music, and the Intention/Reception (I/R) project (Weale 2006), which has investigated and shown ways of presenting and introducing electroacoustic music to new audiences, thus demonstrating its potential accessibility.

Aims

The goal of the PhD project is to develop a web-based resource for children (11-14 year-olds in the first instance) with an accompanying curriculum based on the current website EARS I. EARS II will introduce and explain the main concepts of electroacoustic music to inexperienced listeners using relevant multimedia tools and applying different forms of navigation based on the learning situation and the ability of the user. It will offer diagnostic information to users and will also involve user-generated feedback and tagging systems. It will call on elements related to music appreciation (I/R project) and creativity (new 'Sound Organiser' software). The research will focus on the understanding of concepts related to electroacoustic music making and associated research.

Main contribution

In these times of far-reaching isolation of a great deal of contemporary arts within society, the project EARS II is designed to help close the gap which has increased for the better part of a century.

The I/R project demonstrated that by introducing children and inexperienced listeners to the basics of electroacoustic music carefully,

one important result is a better understanding and appreciation of this music. The implications for EARS II are: the need to address children in particular is important; they are not only often more curious but also more willing to learn about new realms. Furthermore, it is easier for this focus group to accept new ideas, as they do not have necessarily deeply formed foundational assumptions about what music is.

In the talk the goals of the project and further details concerning its content and method will be presented, exemplified by one of the first concepts being developed and tested, soundscape. Furthermore the employed innovative learning methods will be introduced, and finally some of the problems, which have been arisen during the first phase, shall be pointed out and their solutions will be discussed.

Implications

The outcome is to have a website which can be used as a stand-alone learning tool as well as a classroom-based learning facility. Most projects, which introduce children to contemporary music, do not include electroacoustic music. Furthermore, no other project exists currently in which this integrated holistic approach involving learning, listening and making is offered in a similar manner.

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ElectroAcoustic Resource Site: http://www.ears.dmu.ac.uk

Biography

Motje studied musicology and dramatics at the University of Leipzig (Germany) and University of Graz (Austria) completing her Master's Degree in 2007. Her research focuses on contemporary music as well as on communication theories. In this context she is co-editor of two proceedings and has published several articles. One of her emphases is to give people an understanding of contemporary music, which she has realised through teaching summer classes and a course for undergraduates during her studies. Since February 2008 she has been studying for a PhD at the Music, Technology, Innovation Research Centre (De Montfort University, Leicester). In her PhD project she can combine her music-pedagogical experience and her interest in electroacoustic music.

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