From the Chair
Unfamiliar Territory; Familiar Questions

Earlier this year, one of my School of Music colleagues and I were fortunate enough to attend an informal meeting of neuroscientists, psychoacousticians, statisticians and research technicians at the university medical center, a quick walk down the hill from our venerable music building. Issues of methodology and analysis quickly became the focus of discussion of a recent study on music’s effect on neural activity. With slight trepidation, our initial foray into the conversation was, “What music was used?” Surprisingly, this was a question that had not been considered by the group . . . or by the authors of the study—the music was not identified in the report.

A lively discussion followed about the implications choice of musical stimulus, extent and type of subjects’ training, major performance area, music-cultural background, genre preferences, and home environment might have on research findings. As usual with conversations of this sort, everyone left the room with many more questions than we had at the beginning of the day. However, it was instructive to note the eagerness with which our questions, as musicians and music educators, were greeted.

Recent methodological developments in cognition research allow investigators to glimpse further than ever into the human brain . . . one might even say the human mind (for the Cartesians out there). The rapidity of these developments and the complexity of the associated technological demands can be daunting. At first glance, it may be easy to conclude that there is little we as musicians and teachers can bring to a seemingly very cluttered table. With further investigation, it becomes clear that we are able to bring what we always have brought—first, the questions and second, an expectation of what the answers might look like.

Far from being divisive, breakthroughs in research methods allow even greater opportunities for music educators to interact with colleagues across campuses. Well accustomed to collaborative research, scholars in the sciences are in the process of identifying what issues may be addressed by the tools now available. The music research community join in this effort by presenting persistent questions that may be looked at in new ways, or by presenting questions that we have not been able to address up to this point.

With so much technological “fire power” at our disposal, the focus of the initial research question looms even larger as a factor in determining the eventual contribution of our findings. Earlier discussions in this newsletter have underscored the importance of a firm
theoretical foundation in the launching of any investigation. For example, with the present ability to take a snapshot of the mind at work, of the millions of activities that take place in the brain at any given moment, what sorts of activity might we expect? How might this change according to subject, stimulus or environmental variables?

More often than not, in the music education community research is a solo activity rather than an ensemble undertaking. The wide range of expertise demanded by new investigative procedures will force us to revise this model. The music researcher will become a team player, framing questions and interpreting answers. Not too unlike what we do in the classroom.

MEJ to Publish Special Issue on Psycho- and Neuromusical Research

An upcoming issue of the Music Educators Journal will be devoted to “Music, Mind, and Brain.” The special focus issue will be edited by Don Hodges of the University of Texas at San Antonio.

As Dr. Hodges describes, “Neuroscience, in general, and music neuroscience, specifically, are receiving much attention in the press. As is common with complicated issues, attempts to put sophisticated research into accessible terminology have caused some confusion and misunderstanding. Because this topic has enormous implications for music education a special focus issue is being proposed so that music educators at all levels can have a ready resource at hand.”

The issue will tentatively include, “A guided tour of the musical brain” by Don Hodges; “Music and baby brains” by Donna Brink Fox; “What's going on in there? Monitoring children's brain activity during musical experiences” by John Flohr and Dan Miller; “Does music make you smarter?” by Steve Demorest and Steve Morrison; and an “Ask the Experts” virtual panel discussion including Howard Gardner, Peter Fox, Andrea Halpern, Ursula Bellugi, and Frank Wilson, among others.

SRIG Changes

No, you have not missed a meeting! Dr. Eugenia Costa-Giomi of McGill University was the Chair of the Perception & Cognition SRIG when you left our last session in Phoenix. Since that time, Prof. Costa-Giomi has been elected to the Editorial Board of the Journal of Research in Music Education and has, as the rules require, relinquished the chair. Congratulations and best wishes to Eugenia.

Also at that session, the members present voted to change the SRIG name from “Perception” to “Perception & Cognition.” What’s in a name? This change was intended to more accurately reflect the broadening of music education research to include not only issues of musical input and reception, but processing and response as well. Toward that end, the two abstracts included in this issue of the newsletter report investigations that provide tantalizing clues about the complexity of human musical

Funding Opportunity

The International Foundation for Music Research promotes and funds research in the broad field of music and behavior including cognitive science, psychology, education, neuroscience, medicine, health, therapy, child development, adolescence, aging and allied disciplines.

Requests for research support start with submission of a brief pre-proposal which will undergo a peer-review process. There is no lower or upper limit for amount of funding requested. Research support is available for period of 1-3 years. Deadlines for the submission of pre-proposals are November 1st and May 1st.

For further information, visit the IFMR web site at www.music-research.org or contact Dr. Norman M. Weinberger, Executive Director, 5790 Armada Drive, Suite 200, Carlsbad, CA 92008, phone: (760) 438.5530/fax: (760) 438-7327.

Data To Share?

Have you been working on research projects in the area of perception and cognition? Do you have data you would like to pass on to other SRIG members? A regular feature of this newsletter is the sharing of preliminary results and findings awaiting publication or wider dissemination.

Please send abstracts to the address printed elsewhere in this issue. Though space is limited, I will try to publish as many summaries as possible.
Abstracts of Recent and Ongoing Research

Eugenia Costa-Giomi of McGill University has undertaken further study into the relationship between music and spatial abilities. They found that differences between musicians and nonmusicians disappeared when absolute pitch ability was taken into account. It has been argued that absolute pitch ability represents a unique way of processing musical information rather than merely a more advanced level of pitch recognition. Perhaps strong spatial reasoning abilities are an additional reflection of this underlying cognitive strategy.

An Exploratory Study on the Relationship Between Absolute Pitch and Spatial Abilities

The relationship between absolute pitch and spatial abilities was studied by comparing the performance of 11 nonmusicians, 12 absolute pitch possessors, 7 pseudo absolute pitch possessors, and 14 relative pitch possessors in three spatial abilities tests: the Hidden Figures Test and the Spatial and Object Assembly subtests of the Multidimensional Aptitude Battery, Form L.

In agreement with previous research on the effects of music training on spatial abilities, I found that musicians’ scores in the Hidden Figures Test and the Object Assembly subtest were significantly higher than those of nonmusicians. However, when I analyzed the data in more detail to include absolute pitch as a variable, I found that absolute pitch musicians obtained significantly higher scores in the Hidden Figure Test than did the other groups. I also found that pseudo absolute pitch musicians and relative pitch musicians did not score significantly higher than nonmusicians. This suggests that the relationship between music training and spatial abilities may be dependent upon the development of absolute pitch and that music training might not be solely responsible for the superior spatial abilities of musicians reported in the literature. The results of regression analysis indicated that music instruction (measured in years of lessons) was not a significant predictor of performance in the tests while participation in ensembles (also measured in years) was a significant predictor of subjects’ performance in the Hidden Figures Test.

Prof. Costa-Giomi can be contacted through the McGill University Faculty of Music at www.music.mcgill.ca

Patricia Flowers and Chao-hui Wang of the Ohio State University looked at the language used by blind and sighted children to describe music. Among their findings, they noted a tendency for blind students to increase their focus on elemental musical issues (rhythm, pitch, instruments, etc.) as they grew older, while sighted students tended to develop more metaphorical and emotional descriptive strategies. These findings suggest that the manner in which listeners interact with a largely aural experience may be shaped by a broader sensory and experiential palette.

Matching Verbal Description to Music Excerpt: The Use of Language by Blind and Sighted Children

The purpose of the study was to expand research about children’s abilities to identify aural examples through musical description. A total of 58 children in kindergarten through upper elementary grades participated in the study: 17 students attended a residential school for blind students, and 41 students attended an urban elementary school. The children listened individually to six short music excerpts and described them orally. Each child’s six descriptions were tape recorded, transcribed, and randomly ordered. Then, a panel of ten music teachers attempted to assign each description to its intended excerpt. In addition to number of correct description-to-excerpt matches made by the panel of teachers, certain types of descriptors used by the children were categorized and counted: (1) musical elements, (2) metaphor and emotional descriptors, and (3) temporal language.

Results showed that the oral descriptions of blind and sighted children were matched to excerpt at about the same rate, and that both groups used about the same number of words in describing the excerpts. There were age-group differences on both correct matches and number of words, with younger children using fewer words and achieving fewer matches. However, there was a low correlation between correct matches and word count, suggesting that the use of more words did not engender greater accuracy or precision in musical description. Analysis of types of language used showed that sighted children remained stable in number of elements described from kindergarten through fifth grade; however, the blind students increased in their description of musical elements at each successive age group (kindergarten, primary, upper elementary). On the other hand, blind students used significantly fewer metaphors and emotional descriptors than did sighted children. The use of temporal language increased with age, particularly among the blind students, but there were no statistical differences due to visual ability in the present study.

Prof. Flowers can be contacted through the Ohio State University School of Music at www.arts.ohio-state.edu/Music/
Washington, DC 2000

Call for Proposals

The MENC National Conference will be taking place next March 8-11 in Washington, DC. Proposals for Perception & Cognition SRIG presentations are welcome. For this conference we will take the opportunity to share new research being conducted among our members. To propose a presentation, submit 3 copies of a 1-page proposal abstract to the SRIG chair at the address below. As all proposals will be subject to blind peer review, the proposal should include a separate cover sheet that includes your name, affiliation, address, phone, fax and e-mail. The postmark deadline for submissions is September 15, 1999. Suggestions for other presenters are also welcome.

National Chair-Elect
Call for Nominations

There is currently no Chair-Elect for our SRIG! Nominations are requested for candidates to serve as Chair-Elect beginning Spring, 2000 and taking over as National Chair in Spring 2002. Please forward names to me at sjmorris@u.washington.edu before September 15, 1999. A list of candidates will be circulated among SRIG members before our meeting next March in Washington, DC.

Want to Let Everyone Know About Your Event?
Do you know of a conference, meeting or symposium that would be of interest to other SRIG members? Let me know so I can include it in upcoming newsletters and on the SRIG home page.

Events & Announcements

The Society for Music Perception and Cognition will be holding its 1999 conference August 14-17, 1999 at Northwestern University, Evanston, Illinois. One of the highlights of this event will be a gala opening reception at the Ravinia Music Festival featuring a performance by the Chicago Symphony Orchestra. Details and registration information can be found at www.nwu.edu/musicschool/specialEvents/smpc/index.htm.

Research submissions are invited for the biennial MENC National Conference is taking place March 8-11, 2000 in Washington, DC. Researchers whose reports are chosen for presentation will be required to prepare a poster describing their research and to be available during the presentation session to discuss their work with interested music educators. Submissions should be postmarked no later than September 1, 1999 and sent to Roseanne K. Rosenthal, VanderCook College of Music, 3140 S. Federal Street, Chicago, IL 60616. More information can be found at www.menc.org/information/mma2000/2000pap.htm.

The Research Commission of the International Society for Music Education announces the Eighteenth International Seminar on Research in Music Education to be held in Salt Lake City, Utah, July 8-14, 2000. The seminar will precede the ISME International Conference in Edmonton, Alberta, July 17-22, 2000. The Research Commission of the International Society for Music Education invites: (a) Reports of recent research in music education for the Seventeenth International Seminar to be held in Salt Lake City, and (b) Research Posters for the XXIVth International Conference of ISME to be held from July 17-22, 2000 in Edmonton, Canada. Deadline for submissions is November 1, 1999. For complete information, visit the ISME Commission web site at www.isme.org/commissions.html.

The 6th International Conference. Music Perception and Cognition is scheduled for August 5-10, 2000 at Keele University, United Kingdom. Submissions in abstract form are invited for four types of event: (1) spoken papers; (2) poster papers; (3) demonstration papers; or (4) symposia. The deadline for submissions is December 1, 1999. Requests for information should be directed to Antonia Ivaldi, Conference Secretariat, ICMPC6, Department of Psychology, Keele University, Newcastle, Staffs ST5 5BG, U.K. Complete submission information can be found at www.keele.ac.uk/depts/ps/icmpc6.html.

Share With The SRIG: Send any ideas, notices, announcements, abstracts and articles to: Dr. Steven Morrison, School of Music 353450, University of Washington, Seattle, WA 98195-3450. Or contact me by phone (206-543-8986) or e-mail (sjmorris@u.washington.edu).