

Measuring Happiness in the Twenty-First Century: Ethnomusicology, Evidence-Based Research, and the New Science of Autism

MICHAEL B. BAKAN / Florida State University

Knowledge will then be based on the unimpeachable fact that we are not in a situation like an object in objective space. Our situation is for us the source of our curiosity, our investigations, and our interest in first other situations as variants of our own and then in our own life, illuminated by (and this time considered as a variant of) the lives of others. Ultimately, our situation is what links us to the whole of human experience, no less than what separates us from it. "Science" and "sociology" will designate the effort to construct ideal variables which objectify and schematize the functioning of this effective communication. We shall call "philosophy" the consciousness we must maintain—as our consciousness of the ultimate reality whose functioning our theoretical constructions retrace but could not possibly replace—of the open and successive community of *alter egos* living, speaking, and thinking in one another's presence and in relation to nature as we sense its presence behind, around, and before us at the limits of our historical field.

—Maurice Merleau-Ponty ([1960] 1964:109-10)

My reading of the opening paragraphs of Judith Becker's insightful and thought-provoking article, "Ethnomusicology and Empiricism in the Twenty-First Century," immediately brought to mind the above passage from *Signs*, a book that first made an impression on me in quite different epistemological circumstances a number of years ago (Bakan 1999:13). Today, Merleau-Ponty's ideas concerning the "situation" of the individual relative to the possibilities and limitations of science, as well as of sociology and philosophy, may be seen to take on new relevance as contributions to the ethnomusicological discourse on evidence-based scientific research, understood here to refer to those mainstream, established forms of scientific investigation that rely for their legitimacy on research yielding randomized

controlled studies, quantified measures, statistically significant findings, and the like; and that inhabit a professional milieu wherein these same features of scientific credibility serve as the core prerequisites (necessary but not sufficient conditions) for publishing research in peer-reviewed journals and gaining access to major sources of funding.

In this brief essay, I will explore some dimensions of our situatedness relative to "science" so defined, both as individual researchers and as representative members of a discipline, drawing particularly on Becker's position paper and my own current research on the ethnomusicology of autism.

Situations

Judith Becker begins "Ethnomusicology and Empiricism in the Twenty-First Century" by explaining the thought process that led her to determine that it "would seem that only a physiological experiment could begin to suggest an answer" to the "veracity or falsity of the claim [first proposed by her in the book *Deep Listeners*] that deep listeners and religious ecstasies share some underlying physiological relationship" (478). "This realization," Becker continues, led her "not only to attempt a scientific experiment, but also to ponder the issues surrounding the introduction of scientific approaches into the discipline of ethnomusicology" (478). In other words, it was Becker's situation—in the Merleau-Pontyan sense—regarding the implications, possibilities, and perhaps also responsibilities of her research, that essentially *necessitated* her decision to adopt empirical methods of scientific investigation in her work, and that in turn has compelled her to address larger problems in the philosophy of ethnomusicology's relation to science as well. Readers of this journal are the beneficiaries of her courage in making this bold methodological move and of her candor in reporting so openly, honestly, and revealingly about its processes and outcomes.

The story of my own emergent turn to science, as such, during the current phase of my ethnomusicological career differs in substance but not so much in kind from that of Becker. To paraphrase Becker's characterization of her emotional/epistemological condition upon venturing into the scientific realm (478), the prospect of conducting a study defined and validated principally by quantified measures of "Social-Emotional Growth Indicators" in children on the autism spectrum (Prizant et al. 2006) was "somewhat frightening for a life-long humanist" like myself. Yet this is precisely the kind of research in which I am now engaged, despite its apparent deep incongruity with my thick description-esque, reflexive-ethnographic, there-are-nineteen-ways-to-interpret-the-meaning-of-a-chicken-bone-relative-to-music-and-culture sensibilities. This epistemological shift has required a considerable leap of faith on my part, as well as the support and guidance of valued colleagues in medical/scientific

fields, and, above all, a situation—first personal and then professional—that all but necessitated my decision to move in the direction that I have.

That situation—the source of my curiosities, investigations, and interest (Merleau-Ponty [1960] 1964:110) in studying the potential of free, exploratory music-play as a medium for fostering social reciprocity and emotional well-being in children on the autism spectrum—began at my home in 2003, when I learned from my wife Megan that a 3-year old member of our family, “Mark,” had been diagnosed with an autism spectrum condition (a.k.a. autism spectrum disorder, or ASD) called Asperger’s syndrome. Shortly after receiving this news, my colleague Benjamin Koen and I shared an epiphanal music-play experience with Mark that inspired a remarkable and positive behavioral/emotional transformation in him (Bakan et al. 2008a:3–4). At the same time, this experience motivated Ben and me to conceptualize and ultimately bring to fruition the Music-Play Project (MPP), an ongoing research and applied program for children on the autism spectrum and their families that was launched in 2005 and involves allied researchers from the Florida State University College of Music, College of Medicine, and Center for Autism and Related Disabilities (Bakan et al. 2008b:172–76).

Though MPP was from the outset a collaborative venture combining the expertise of researchers in music, autism science, and medicine, the emphasis through the course of our initial pilot study in 2005 and two follow-up studies in 2006 was on research methods and findings that were principally ethnographic, qualitative, and humanistic. This orientation is reflected in a series of recent publications emerging from this research (Bakan et al. 2008a, 2008b; Koen et al. 2008).

It is only in the most recent phase of MPP, which commenced with a six-week randomized controlled trial (completed March 12, 2009) involving 24 participant children/families and incorporating a research design based on the SCERTS model for ASD assessment and behavioral/emotional measures (Prizant et al. 2006—discussed below), that we have transformed our research protocol into one that quite comprehensively subscribes to the dictates of an evidence-based scientific study *per se*, while at the same time adhering to the humanistic/ethnographic priorities that are, and in our view must always remain, at the heart of our program. At the time of this writing, we are in the process of coding and analyzing the data from the Spring 2009 study, so reports on outcomes must await future publications. However, the preliminary indications of our findings are at least promising.

Bridges

The science-ward transformation of our research design and protocol in MPP has occurred not on account of desires on our part to “go scientific” with

this work, but rather as the result of a fortuitous synergy with the SCERTS model, which has quickly moved to the forefront of ASD research and clinical work across multiple sectors since the publication of the landmark two-volume SCERTS manual three years ago (Prizant et al. 2006).

SCERTS stands for Social Communication (SC), Emotional Regulation (ER), and Transactional Support (TS), which the model's creators identify as the primary developmental domains to be targeted in programs supporting the development of individuals with ASD, especially in areas of communication and social-emotional abilities (Prizant et al. 2006:1). SCERTS may be regarded as an exemplar of what Becker (after Harrington 2007:22) describes in her article as "enabling models" (495-96), that is, research models from the sciences that can help ethnomusicologists to "overcome some of the obstacles [they] may encounter in crossing disciplinary boundaries" *en route* to more evidence-based, scientific approaches (494). In common with the enabling cognitive science models cited in Becker's article, SCERTS is moving autism science toward "fundamentally richer understandings that include the primacy of action, intention, emotion, culture, real-time constraints, real-world opportunities, and the peculiarities [or, better, 'unique qualities'] of living bodies" (Núñez and Freeman 1999:ix; c.f. Becker, this issue, p. 496).

Since, in our own qualitative and ethnographic way, this had been "precisely our terrain" (Becker, this issue, p. 496) in the early development of the Music-Play Project (2005-2006), as is reflected in our first series of publications (Bakan et al. 2008a, 2008b; Koen et al. 2008), integration of our existing approach with the SCERTS model proved a logical next step after we became acquainted with the model in 2007. For us, the bridge of an enabling model had already been built (Bakan et al. 2008b:167), or at least its foundation had been laid firmly in place.

Research Design

How, then, did we actually create and implement a SCERTS-based research design for the Music-Play Project?

In the SCERTS model, each of the three primary domains includes two main divisions: "Joint Attention" and "Symbol Use" within Social Communication, "Mutual Regulation" and "Self-Regulation" within Emotional Regulation, and "Interpersonal Support" and "Learning Support" within Transactional Support. Each division, in turn, comprises several subsets; for example, "Joint Attention" includes the subsets "Shares attention," "Shares emotion," and "Shares intentions for a variety of purposes" (among others). Finally, each subset is comprised of a series of measurable learning/behavioral/emotional objectives; for example, "Monitors attentional focus of a social partner" and "Secures attention to oneself prior to expressing intentions" fall within the

"Shares attention" subset of the "Joint Attention" division of the Social Communication domain.

Selected, targeted objectives of social communication and emotional regulation in children with ASD who participate in SCERTS programs are measured in an ongoing assessment process. The measures are based on a coding procedure that employs a standardized 0-1-2 scoring system, with "0" equaling "criterion not met," "1" equaling "criterion met inconsistently or with assistance," and "2" equaling "criterion met consistently." The coding is done by individuals with specialized training in the SCERTS assessment process who are blind to treatment condition. Multiple coders are used to facilitate statistical reliability. Coding may be done "live" or from video recordings (the latter being the protocol in MPP).

In the SCERTS assessment process, scores on specific objectives from multiple domains (e.g., from both Social Communication and Emotional Regulation) are combined in composite clusters of objectives to holistically measure what are identified as Social-Emotional Growth Indicators. There are eight such indicators: happiness, sense of self, sense of other, active learning and organization, flexibility and resilience, cooperation and appropriateness of behavior, independence, and social membership and friendships. The items in this listing alone suggest the implicitly culture-oriented perspective toward individual agency within social/communal contexts that is inherent to the SCERTS assessment process, and more extensive discussion of this process (which space does not allow for) would demonstrate the model's culture- and agency-driven priorities even more fully (see Prizant et al. 2006:18).

SCERTS-based assessments and research designs may be structured to generate interrelated measures across all three of the model's primary developmental domains (SC, ER, and TS) and all eight of its identified social-emotional growth areas, but the flexibility of SCERTS enables studies with a much narrower range of focus as well. Our current research study in the Music-Play Project is a case in point.

As our aforementioned earlier publications (based on the 2005 and 2006 MPP programs) document, the facilitation and qualitative assessment of happiness, response-ability (Noddings 2003:35), social integration and reciprocity, and the co-creation of culture among groups of children with ASD in the context of E-WoMP (Exploratory World Music Playground) group music-play sessions have been central to our work from the start. In transferring these core areas of emphasis into the context of a SCERTS-based study design—notably, without any need for alteration of the music-play process itself—we were able to accommodate all of these pre-established research interests within two SCERTS domains, Social Communication (SC) and Emotional Regulation (ER), and two related social-emotional growth areas, "happiness" and "social membership and friendships."

Prescribed clusters of SC and ER measurable objectives for assessing happiness ("shares intention for interaction," "expresses success and confidence," etc.) and social membership/friendships ("plays in activity with others," "collaborates and negotiates with peers," etc.) included in the SCERTS manual (see Prizant et al. 2006:157) have formed the basis of the parent-response assessment and blind-to-treatment-condition coding forms customized to our study, which have now been used to generate measurable (quantified) social-emotional growth outcomes data for each participating child from the beginning to the end of his or her music-play program—data which, as mentioned, we are currently in the process of analyzing.

It is important to emphasize that we do not regard this new, evidence-based, quantitative dimension of our research project as either a replacement for or an improvement of our earlier-established qualitative and ethnographic methodologies. Rather, we see it as enhancing, enriching, and converging with the methods and approaches previously developed, while at the same time opening possibilities for publishing our findings in scientific/medical journals and hopefully gaining access to grant funding for the project's continuing development.

Ethnomusicology's Situation

That the Music-Play Project's original priorities have proven so readily adaptable to an evidence-based SCERTS research design may be interpreted as serendipitous or as a testament to the enabling flexibility of the SCERTS model itself. There may be something larger at issue here as well, however, namely, that divergent research models can lead to convergent modes of understanding—and also to synergistic methods and approaches—if the researchers involved on both sides of the equation share a common commitment to truly attending to, listening to, responding to, and serving the interests of the actual people who form the subjects of their investigations.

In the scenario at hand, those people are children on the autism spectrum, and as the SCERTS model's creators and my Music-Play Project collaborators alike can tell you, these are people who have a great deal to tell us that we really do need to know. But we have to make ourselves willing and able to listen to them, sometimes in ways that compel us to reach far beyond our accustomed modes of hearing, seeing, thinking, and feeling, and we have to be willing to learn from them in ways that make our research more meaningful, more purposeful, more inclusive, more integrative, more compassionate, and more humane.

"Knowledge," we are reminded by Merleau-Ponty, is "based on the unimpeachable fact that we are not in a situation like an object in objective space" (Merleau-Ponty [1960] 1964:109–10). As researchers, we should keep

this in mind regarding our own situations, but it is all the more imperative that we do so with respect (literally) to the people whose lives and worlds our research leads us to endeavor to understand, whether as ethnomusicologists, scientists, or both. It matters not if these people are classified in our work as Balinese or autistic, deep listeners or religious ecstasies, Pentecostals or Muslims, subjects or controls. Whatever the designation, they are people first and foremost, and always deserve the honor and dignity of being treated and represented as such. This may seem like preaching to the choir, but as more of us move toward engagement with not just the empirical methods and evidence-based research models of science, but the institutional bodies, funding networks, and systems of values that frame scientific research as well, we would all be well advised to remember the dedication to humanistic ideals that is and should remain our collective trust as a discipline.

Merleau-Ponty was right (again): our situation *is* the source of our curiosity, our investigations, and our interest, and this is true both on the individual and the disciplinary level. Had our ethnomusicological predecessors in the second half of the twentieth century forged a different (and less distancing) relationship with their comparative musicology forebears and positioned our field in a different interdisciplinary and epistemological milieu than they did, our relationship with science as such would surely be of a very different order than it is currently, possibly in some advantageous ways.

On the flip side, however, had the powerful critiques of ethnocentrism and scientific reductionism that have largely defined ethnomusicology's modern history not emerged as they did, we would certainly be much the weaker for that, and arguably less well equipped to make the kinds of unique and valuable contributions to cutting-edge scientific research on music and *its* situations than we now find ourselves to be. Our attention and sensitivity to the messiness and unpredictability of culture, our humanistic ethnographic sensibilities, and our healthy skepticism regarding empiricism and its bedfellows find a sympathetic audience in at least some progressive scientific quarters.

From the neuro-phenomenologists described by Becker (496) to the autism researchers behind the SCERTS model, denizens of the world of evidence-based research, much like ourselves, are asking new questions and seeking new ways to find answers. They are being compelled, by virtue of their situations, to think more qualitatively, more humanistically, and more culturally than has been their custom. And in my experience, at least, they are often quite receptive to and enthusiastic about what we have to offer along these lines, as is evident in the following excerpt from a letter I received shortly after the publication of our first Music-Play Project article in this journal (Bakan et al. 2008b):

Dear Professor Bakan:

I was powerfully impressed by your careful, systematic, and humane research report in the current number of *Ethnomusicology* and write to ask if I might have a couple of reprints to share with [my colleagues] . . . As a pediatrician with a strong interest in culture and human behavior (and a life member of SEM), I think your and your colleagues' work deserves wide dissemination and should affect the thinking and practice not only of academics and professionals who see music as a medium to elevate the human experience and to allay suffering. For people in my profession, too, this conceptualization and methodology holds promise for breaking the strictures of diagnosis and classification and informing the search for helpful interventions . . .

With admiration and many thanks,

Eli H. Newberger, M.D.
Dept. of Pediatrics
Harvard Medical School

Conclusion

Judith Becker, in tandem with the scientists advancing brain plasticity research that she cites in her essay, is right: "our brains and our bodies are changing at every moment of our lives. We are continually learning; we are continually being transformed" (480). This is true of individuals, but it is likewise the case for academic disciplines and the dynamics of epistemological perspective that define them. As ethnomusicologists, we find ourselves at the precipice of an exciting new era of scholarly inquiry and interdisciplinary endeavor in these early years of the twenty-first century. We face both wonderful opportunities and considerable challenges in our individual and collective deliberations concerning how to move forward as a discipline, and the prospective roles and contributions of scientific methods and evidence-based research models in ethnomusicology will surely figure prominently in those deliberations for many of us.

So how shall we proceed? How shall we best deal with our current situation? An anonymous, pearl-of-wisdom email tag I received a few years ago could provide a good place to start: "If it leads to compassion, it's knowledge; if it doesn't, it's just more information."

References

- Bakan, Michael B., Benajmin D. Koen, Megan Bakan, Fred Kobylarz, Lindee Morgan, Rachel Goff, and Sally Kahn. 2008a. "Saying Something Else: Improvisation and Facilitative Music-Play in a Medical Ethnomusicology Program for Children on the Autism Spectrum." *College Music Symposium* 48:1-30.
- Bakan, Michael B., Benajmin Koen, Fred Kobylarz, Lindee Morgan, Rachel Goff, Sally Kahn, and Megan Bakan. 2008b. "Following Frank: Response-Ability and the Co-Creation of Culture

- in a Medical Ethnomusicology Program for Children on the Autism Spectrum." *Ethnomusicology* 52(2):163-202.
- Bakan, Michael B. 1999. *Music of Death and New Creation: Experiences in the World of Balinese Gamelan Beleganjur*. Chicago: University of Chicago Press.
- Becker, Judith. 2004. *Deep Listeners: Music, Emotion, and Trancing*. Bloomington: Indiana University Press.
- Harrington, Anne. 2007. "Enabling Strategies—A Great Problem Is Not Enough." In *Pain and Its Transformations: The Interface of Biology and Culture*, edited by Sarah Coakley and Kay Kaufman Shelemay, 21-23. Cambridge, Mass.: Harvard University Press.
- Koen, Benjamin D., Michael B. Bakan, Fred Kobylarz, Lindee Morgan, Rachel Goff, Sally Kahn, and Megan Bakan. 2008. "Personhood Consciousness: A Child-Ability-Centered Approach to Socio-Musical Healing and Autism Spectrum 'Disorders.'" In *The Oxford Handbook of Medical Ethnomusicology: Music, Medicine, and Culture*, edited by Benjamin D. Koen, 461-81. New York: Oxford University Press.
- Merleau-Ponty, Maurice. [1960] 1964. *Signs*. Translated by Richard Calverton McCleary. Evanston, Ill.: Northwestern University Press.
- Noddings, Nel. 2003. *Happiness and Education*. Cambridge, UK: Cambridge University Press.
- Núñez, Rafael, and Walter J. Freeman, eds. 1999. *Reclaiming Cognition: The Primacy of Action, Intention and Emotion*. Bowling Green, Ohio: Imprint Academic.
- Prizant, Barry M., Amy M. Wetherby, Emily Rubin, Amy C. Laurent, and Patrick Rydell. 2006. *The SCERTS Model: A Comprehensive Educational Approach for Children with Autism Spectrum Disorders*, vols. 1 and 2. Baltimore, Md.: Paul H. Brookes.