DRAFT--Comments Welcome

Towards a Social Demography of Musics and Musicians*

by

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Abstract

We use the term "social demography" of musics and musicians in the sense of Hirschman and Tolnay (2003) to denote a logic and methods of demographic analysis for the sociology of musics, i.e. to study the social structure of production, distribution, and reception of musics, rather than as body-counts with social or socio-economic stubs and parameters. In an earlier presentation (Matras and Stanford, 2004), we argued that the sociology of musics could be viewed or defined as the "sociology of production, distribution, and reception of musics," a definition which can comprehend and accommodate virtually the entire range of current themes and issues, from Theodor W Adorno's notion of music as homologous to society, to the Howard Becker *Art Worlds* (or *Music* Worlds) tradition of analyses of the social contexts and patterns of production and distribution of works of art and music, to the ideas of Simon Frith and Tia DeNora about music as an individual and group resource for behaviour, health and well-being, and social organization, and about musical components of social reality, to the concepts of John Shepherd and Peter Wicke of musical dimensions of culture. We listed some of the more familiar methodological approaches employed and we argued the need for more extensive use of procedures which allow simple, or elaborate or complex, *comparative* analyses and, in particular, for development of well-defined *Indicators* for description, measurement, and analyses of variations and of changes in production (i.e., in composition, improvisation, and performance), distribution, and reception of musics. And we proposed and illustrated the "musical life course of cohorts" as an analytical approach to studying the types and frequencies of musical activities, including performing, creating, and responding to activities and their intensities.

In this paper we elaborate the ideas of social demographies of musics and of musicians as the social demography of exposure to, "consumption," and reception of musics, and as the social demography of socialization, training, and employment in musical production, respectively. We note and review a body of survey- and census-based data on the social demographies of musics and of musicians, some issues and questions which these data have been used to address, and some important findings in the sociology of musics which have emerged from their analyses, relating e.g., to class divisions in consumption and patronage of musics (Peterson and Simkus, 1992; Katz-Gerro and Shavit, 1998) and to the bearing of early musical education and training on subsequent creativity and musical production (NAEP Facts, 1999). We conclude with notes and recommendations for using the social demography of musics and musicians to address some of the more elusive current hypotheses and conjectures in the sociology of musics.

Introduction

The Sociology of Musics (or as more commonly titled: the Sociology of Music) is a relatively new subfield of Sociology, and is probably more familiar to musicologists than it is to sociologists. This is partly because many of those engaged in the sociology of musics are or have been themselves musicians or qualified musicologists (we are not), have addressed topics in or close to musicology, and have frequently published in musicological journals. It is partly because sociologists in this subfield have, for the most part, been modest and cautious about claiming results, findings, or analyses with major bearing on social organization and on social behavior generally, and whose work has accordingly been ignored by colleagues lacking any special or academic interest in music and its organization *per se.* It is partly because the number of sociologists in this subfield has been relatively small and, until recently, less well-organized and less assertive than those of other sociological subfields. And, possibly, it relates to doubts and disagreements among sociologists of musics about the subject matter, objectives, theories, propositions and hypotheses, and research agendas and methodologies of the subfield, which may operate to diminish its visibility and prominence among the sociologists as a whole (see, e.g., Etzkorn, 1979;" Boehmer, 1980; Blaukopf, 1992, pp. 1-6; Supicic, 1987, Part I; Becker, 1989; Martin, 1995, Preface; DeNora, 2000, pp. 1-7; Dowd, 2002; Shepherd, 2003). The latter are probably best exemplified in the critique of and dialogue with the views and writings on the sociology of musics of Max Weber, of T.W. Adorno, and, more recently, of Howard S. Becker, John Shepherd, Simon Frith, and Tia DeNora.

It is not entirely clear that Max Weber himself viewed his work on *The Rational And Social Foundations of Music* (1958) as one of the pillars of modern sociology of musics as it has subsequently been assigned. Weber did not himself assign this title to the notes and analyses that were published under this title. In this essay Weber argues that, although Western tone intervals were known and calculated elsewhere, rational harmonic music, harmony, counterpoint, the orchestra with its nucleus in the string quartet, and musical notation developed in the West through the continued application of rational and scientific thought to musical expression. He famously ignores composers, performers, audiences, patrons, impresarios, and musical institutions and phenomena beyond harmony, counterpoint, notation, tonal systems, and development of musical instruments which have supported these. In other writings his mention of problems of the social origins of musical theory and practice suggest that his references to music were generally by way of illustrating and fortifying other points he wished to make, though according to Blaukopf (1992) he had planned to write a full book on the sociology of art. Aside from his central proposition concerning the rationalization of Western musical notation and forms, Weber advanced a number of propositions concerning the role of magicians and virtuosi in music production, the emergence of professional musicians, social stratification of performance and demand for the various musical instruments, social factors in technical development and production of the various instruments, and tensions between rational and affective motives in Western music. K.Peter Etzkorn has asserted (1979, pp. 34-38) that the work of Paul Honigsheim, including writings addressing a

large number of topics ranging from "the Uses of Music in Society" through "Music in Totalitarian States" and "On Forms of Music and Forms of Society," was massively influenced by Weber's writings and by conversations with Weber (cf. Peter J. Martin, 1995, pp. 218-225); but Honigsheim himself does not cite Weber and there is no evident line of influence or choice of problems between them. T.W. Adorno credited Weber 's essay with being the "most comprehensive and ambitious attempt at a sociology of music" and Weber with having first identified "rationalization" as the crucial concept for sociology of music and mentions this in various of his writings on music. In so far as we are willing to equate Adorno's "commodification" with Weber's "rationalization," it is true that Adorno, and other scholars, did actually make use of this concept; but the equivalence is not at all self-evident (but see Feher, 1987, for discussion of this point). Altogether, it would seem that, as a very prominent figure in the history of sociology and as author of a learned work relating Western music to the major trends of rationalization affecting western capitalist societies generally, Max Weber is frequently cast as one of the "fathers" of sociology of musics. And mention is made of his insights and analysis concerning rationalization of Western music; but in fact his actual influence on subsequent sociological investigation and discussion (-- beyond the idea of "commodification of music" if indeed the latter concept originates in the "rationalization" analysis --) has been minor.

In contrast to Weber, it seems clear that T.W. Adorno did view himself as a pioneering figure in the sociology of music (not "musics," because he restricted his interests and discussions to 18th, 19th, and early 20-th century Western "Art" music), for he wrote and published a book entitled *Introduction to the Sociology of Music* (original edition in German published in 1962; English translation published 1976), has numerous references to the field of sociology of music in other writings, includes innumerable sociological "points," or propositions, insights, or hypotheses throughout his writings, and uses sociologically-derived or -relevant categories variously in his analyses and discussions of music. Adorno himself was an accomplished musician, composer, and musicologist as well as a credentialed sociologist and philosopher; and his view of the sociology of music was evidently not only that it encompasses all relationships between music and society and social history, but also that it is informed by musicological and philosophical as well as historical and political considerations. Adorno subscribed to the part of the Germanic tradition in art history which views art as *homology*, or structural analogue of social relations. That is, he expected to find the same inherent tendencies in the philosophy of the time that were present in the social institutions, economy, religious systems, and artworks of the period (Witkin, 1998a, pp.38-39; Leppert, 2002, pp.32-40,). In Adorno's sociology of music, he inquires about the social, historical, and political conditions generating "autonomous" music, the music to which he was prepared to accord musicological, social, political, and humanistic legitimacy. (Adorno, 1976, pp.209-217; reprinted in Adorno, 1998, pp. 43-47; Subotnik, 1991, Chapter 2; Leppert, 2002, pp.514-15; 552-3). It is "autonomous" musicians and autonomous music and listeners which together have the capability of expressing and inducing social critique and possible effects. The famous examples chosen by Adorno to illustrate this idea are those of Beethoven in his later period, Schoenberg, Webern, and Berg. But it is essentially only Adorno himself who, because of the breadth and depth of his musicological,

philosophical, and historical skills and his political sophistication can identify and judge the autonomy of music: we are not informed of the precise criteria for Adorno's assessments and we are offered no method for creating our own (cf. Martin, 1995, pp.115-125), perhaps related entirely or partly to his own and the Frankfurt School's consistent rejection of empiricism and positivistic epistemology. Beginning with his typology of listeners to musics in the initial chapter of *Introduction to the Sociology of Music* and continuing with the topics of succeeding chapters in that book, in the famous analysis (together with his collaborator, Max Horkheimer) of the "Culture Industry," ideas of the commodification of music, the notorious analysis of jazz, through the development of the concepts of the "fetish character of music" and of "the regression of listening" Adorno laid out concepts for sociological analysis of music production, distribution, and reception and often used them in depth in his own discussions. But he nowhere presented or sought "findings" or even carefully grounded comparisons; and, on the contrary, intimidates those who would seek to advance empirical investigations of his proposed topics by calling them studies that are of the kind that serve the interests of the mass media and evil capitalist controllers and manipulators of music and by imputing cooptation, collusion, sellout, and betrayal to those who would consider undertaking such studies (Adorno, 1976, p. 194). While Adorno has been broadly acknowledged as a "father of the sociology of music," his sociological hypotheses and projects have until very recently not been widely followed up.

A quite different vision of sociologies of the arts in general, and of sociology of musics in particular, is offered by Howard S. Becker in his monograph, *Art Worlds* (1982). This book, which has become almost a bible for institutional and interactionist analysis of the social networks whose cooperative activity produce the great and less great works of art in societies, departs drastically and explicitly from the approaches seeking to decode and fathom the meanings of art works as reflections of society. According to Becker, the principle of analysis is social organizational rather than aesthetic, and the approach stands "in direct contradiction to the dominant tradition in the sociology of art, which defines art as something more special, in which creativity comes to the surface and the essential character of the society expresses itself, especially in great works of genius" (Becker, 1982, xi). If the dominant tradition ("Grand" tradition, as cited by DeNora (1995, 296; 2000, 1-4) focuses on artists and works of art, Becker's approach is akin to that of sociology of occupations or sociology of organizations in focusing on networks of cooperation as central to the analysis of art as a social phenomenon ("little" tradition, as described by DeNora, 2000, 4-5). The musician works in the center of a network of cooperating people, all of whose work is essential to the final outcome, and her/his involvement with and dependence on the cooperative links constrains the kind of music she/he can produce. Conventions regulate the relations between musicians and between musicians and audience specifying the rights and obligations of all. Conventions make possible the easy and efficient coordination of activity among artists and support personnel. Art worlds, and musical worlds in particular, typically have intimate and extensive relations with the worlds from which they try to distinguish themselves. They share resources of supply with those other worlds, recruit personnel from them, adopt ideas that originate in them, and compete with them for audiences and financial support. Becker lists and elaborates a set of problem areas for sociological investigation more or

less common to art worlds and for the most part applying to music as well, including: division of labor in musical production, cooperative links, and conventions; patronage and mobilizing personnel and material resources; distribution of music and audiences; recognition, aesthetics, aestheticians, and criticism; music and the state, including support and property rights, censorship; and professional vs. maverick vs. folk musicians. Becker also discusses "Arts and Crafts," by which he means the relation of skilled less-than-artistic activity, by some aesthetic standards, to the artistic activity in question, in less than "high art" settings, with interchange or movement possible between the relevant "art world" and "craft world." Finally, he devotes a chapter to "Change in Art Worlds," which can come about, in music as in the other arts, by change in any of the areas studied (e.g. in music: in division of labor, personnel change or turnover, conventions, patronage, audiences, aesthetic considerations, state intervention, etc.) or in technological developments (in music: inventions or improvements in instruments, media, electronic reproduction, and the like). In more recent discussion of art worlds, Becker (1995) points out that a) if we remember that one of the cooperating parties in production of any work of art is the audience, we can think of a work as coming into existence anew every time someone looks at it, reads it, hears it, so that the physical object is in a real sense not the whole art work, which is always being reinterpreted and as a result the interpreter helps to create the work's character; b) the quality of a work is not necessarily affected by the kind of system it is made in, with good work (generally so recognized) having been produced under every sort of system, including the most vulgarly commercial (e.g. Hollywood film); and that c) participants may invest the apparatus, the art world, with an aura of "rightness" so that their particular, conventional, way of producing art seems moral and other ways immoral (e.g. in classical ballet, in jazz, in opera). Martin (1995, p180) has viewed Becker's "Art Worlds" approach to the sociology of music as offering a useful analytic framework within which to examine questions of power and stratification, not inconsistent with the work of those who have focused on the issue of social class, but free of the difficulties encountered by "reflection" theories which see art (and all cultural forms) as representations of underlying structural patterns, such as class divisions. DeNora (2000, pp.4-5) credits the "Art Worlds Approach" (the "little tradition") with helping to specify the ways that art (music) works were shaped by social organizations, interests, conventions, and capacities available within their realms of production and showed its greatest potential when it addressed the question of how society got into art (similar to the way that studies of the laboratory have illuminated scientific inquiry as a human product). But she faults this approach for its failure to examine the realm of the aesthetic as an "active and dynamic material in social life, content instead to treat it, e.g. as the "production of culture" and as an object of explanation alone. Along with Martin and DeNora, we ourselves view the Becker "art worlds" approach as encompassing a very large part of recent empirically-grounded sociological investigation of both historical and contemporary social organizational factors in recruitment and socialization of musicians, patronage of musics, social differentiation of audiences, careers and social status of musicians, formation and internal relations of performing ensembles, effects of technological and commercial innovations, political inputs and outcomes, migration of musicians, and other topics and issues.

In a sequence of publications exploring the implications of music and musical forms for cultural practice and, academically, of critical musicology for cultural theory, John Shepherd has tried to develop a theory for the social and cultural constitution of music as a special and basic, irreducible, form of human expression and knowledge and explore its theoretical implications for post-1950s Cultural Studies. The initial case for the argument is made by means of comparison of the "deep structure" of three kinds of musics: pre-literate, sacred Medieval, and tonal, and then relating these deep structures to the social milieux of their creation (Shepherd, et al., 1977, Chapter 3; 1991 Chapters 1, 6). Musical "meanings" are socially constructed, and the meanings of societies are encoded and creatively articulated by musics to an extent that denies the putative assignment of a higher rational priority to both verbally encoded meanings and to the political-economic infrastructure of society. Pre-literate cultures are denoted "oral-aural" to indicate that the pre-literate persons have neither the objectivity nor the high division of labour necessary to divorce sounds and music for the immediacy of the social context, so that there is no distancing from the aural or musical experience, as frequently observed and reported by anthropologists and enthnomusicologists. With no notation, music cannot be viewed or manipulated, and is largely functional, e.g. for curing, dancing, intervention in natural phenomena, etc., and pre-literate man mediates his relationship with a revelationary and unpredictable universe through music. In early medieval society, the orality which was still strong and very much at the basis of theocracies prevented any development of organized harmony, and the Plainchant is characterized, according to Shephard's analysis, by an underlying pentatonic structure (1977, pp. 78-89; 1991, pp. 107-111). The pentatonic structure underlying much medieval music in itself serves to articulate the ideal feudal structure: the fundamentals of pentatonicism are complementary and mutually dependent upon one another, as is the "social order in which cleric and peasant mutually succoured each other, one providing for the needs of the body, the other for the needs of the soul (quoted by Shepherd from Mellers, 1946)" and Shepherd mobilizes additional evidence in support of the relationship. By contrast, western tonality represented a creative articulation and encoding of the changes in the structure of society and consciousness enabled by phonetic literacy, the adoption of signs and notation and typography and emergence from the oral-aural states. As Shepherd casts it, "the architectonicism of the tonal structure articulates the world sense of industrial man… The concept of progress through spatialised time towards culmination at a focal point finds expression in tonality through [its] spatial and temporal aspects." (1977, pp. 105-107; 1991, pp. 122-126). Shepherd has recognized that these comparative analyses only begin the project of spelling out the mechanisms relating music to culture. This rests in considerable measure upon imputing meanings to music and to sounds (as distinct from lyrics, prayers, settings and historical associations and the like) and is somehow similar to connecting "language' to culture, where language enables and circumscribes the range of ideas, interactions, relationships, values, and the like possible in a culture. In a recent work, Shepherd and his collaborator, Peter Wicke (1997) reexamine the relationships between language and music (Is music a "language?" They subscribe to the negative consensus) and culture, adopting ultimately a semiological-type concept of a "sonic saddle": music as a social medium is constituted through structured and structuring sounds and matrices of sounds that give rise to a continuously unfolding 'sonic saddle.' Akin to language, the 'sonic saddle' is asserted to be "capable of offering up possibilities

and potentials for the investment in it of various states of awareness flowing from and sustaining the structures of the human world. (Shepherd and Wicke, 1997, p. 170). The discussion and the argument are very complex and often obscure. It is not entirely clear if they are convincing to the authors, and readers are left primarily with the message that both meanings and values of music are not "inherent," not "structural," not psychological but rather are socially constructed, and that they get incorporated into culture both homologically and by sonic saddle mechanisms.

In a sequence of books and writings devoted to the sociology of rock music, Prof. Simon Frith (1978, 1981, 1988. 1996) has inquired about (a) meanings and (b) evaluations of popular music on the part of audiences and about their interactions with (c) the genres or classification rules and (d) production, marketing, and distribution schemes adopted by record companies and communications media (the "mass culture industry"). For Frith popular music serves as a force of identity for individuals in society as well as a force for forming collective identities upon which individuals draw in formation of sense of self and personal identities. Frith was a pioneer in use of various public sources of data to analyze youth activity and youth culture, and he also made use of his own survey materials to study "use" of music as a basis for his analyses of "meanings" and value of music (rather than depend upon data on record sales and the like). Commercial production and circulation of music and records typically is informed by audience tastes and evaluations, rather than manipulating them as charged by Adorno and followers of that school.

In two recent important books, Prof. Tia DeNora (2000, 2003) has announced and developed what she views as a new direction for the sociology of musics (or, for "music sociology," as she seems to prefer) which:

1. is based on what Prof.DeNora views as a new interpretation and extension of Theodor W. Adorno's conceptualization of music as simulacrum for social organization, that music is a "force" in social life, a building material of consciousness and social structure (2000, p.2; 2003, Chapter 6), that music is "not about, or caused by the social; it is part of whatever we take to be the social writ large, music is a constitutive ingredient of social life" (2003, p.151.) and she introduces and elaborates a concept of "musical affordance" i.e. affording actors resources for social-musical world building of any kind.
2. explores music as it functions, its "social powers," and what it "affords" *in situ*, as it is "used" rather than as it is "interpreted," going beyond the traditional studies of musical production and reception by empirical study and analysis of the "Musical Event" and its conditions (2000, Chapter 6; 2003, Chapter 2). Music informs cognition generally and informs cultural production in particular (2003, Chapter 3). She offers examples of music both being mobilized or used in everyday activities as well as providing focal points for individual and collective action across space and time. (see also DeNora 1995, 1999, and 2002). In *Music in Everyday Life* (2000) DeNora also reports initial findings of her investigations of uses of music in everyday life, in music therapy, in aerobic classes, in retail marketing, in karaoke sessions and in romantic interaction settings based on what she calls "ethnographic methods," though she does not report details of either the findings or the methods employed. She interprets these in terms of a theory of music as capable of creating and influencing moods, emotions, and establishing bases for individual and

collective action, and operating as a force for social ordering at the level of individual behavior and of collectivities. In *After Adorno,* (2003) DeNora uses these findings and interpretations to revive and return to what she views as now-empirically-grounded legitimacy to and support for T.W.Adorno's argument that music affects consciousness and is a means of social management and control, and to extend this argument to musics generally, popular as well as Adorno-favored classical musics, non-Western as well as Western.

Sociology of Musics and Social Demography of Musics and Musicians

Altogether, we think that a view and definition of the Sociology of Musics as encompassing the sociological study and analysis of production, distribution, and reception of musics, where "production" includes both composition and performance; where "distribution" includes both live performance and printed and electronic reproduction of musics; and "reception" includes both differentiation of audiences *and* psychological, social, cultural, and political outcomes of reception of musics, encompasses and accommodates the range of topics and issues mentioned above. By "*sociological* study and analysis" of production, distribution, and reception of musics, we have in mind studies and analyses which address actual or potentially *recurring* problems or issues comparatively or analytically in ways leading to formulation of propositions or generalizations concerning their variations and changes. Just as general social demography is the heart of sociological investigation of marriage, the family, and aging and elderly, and the social demographies of employment and educational attainment and training lie at the heart of sociological investigation of inequality and stratification, and the social demography of health, morbidity and survival is the heart of medical sociology, so the social demography of musics and musicians ought to be the heart of the sociology of musics. The social demography of musics and musicians addresses questions of the type:

1. What is the distribution over populations, or over a single population, of the types of "musical conduct" (i.e. categories of listening and reception behavior proposed by Adorno in his book, *Introduction to the Sociology of Music,* or some modified or improved set of categories of listening and reception*)? What is the distribution of the types or categories of musical production or participation, amateur for pleasure, or "professional" for pay or profit? How are these activities and behaviors and relationships differentially distributed among different populations, and how have such distributions changed over time?

[*The "Types of Musical Conduct" proposed by Adorno (1976, Chapter 1) are: "Expert," "Good Listener," "Culture Consumer," "Emotional Listener," "Resentment Listener," "Jazz Expert, or Jazz Fan" "'Music is Entertainment' Listener," and "Indifferent, Unmusical, and Anti-musical."]

2. To what extent do socio-demographic locations and identities predispose individuals or groups to "musical conduct" or behaviors or relationships which are the subject matter for sociology of musics investigations? Why? What causal or correlational factors operate

to link socio-demographic categories or addresses with the musical reception or participation?

3. In what ways are the outcomes of musical conduct, behaviors, or relationships specific to or differentiated by socio-demographic locations and identities, or by population categories and subgroups? How do the meanings, social identities, social interactions, empowerment or alienation generated or "afforded" by musical activity, events, or participation vary among the subgroups: youths as compared to adults? males compared to females? minority compared to majority groups? migrants compared to old-timers? elites compared to non-elites? How do their trends and changes over time vary among the socio-demographic locations and population categories and subgroups?

Census- and Survey-Based Studies

There is a well-established tradition in North America, in Western Europe, and in selected other areas, of census- or survey-based measurement and description of attributes and frequencies of participation in "cultural activities" or in "arts" activities or events. These have typically used the data obtained in "culture modules" included in more general surveys such as the Current Population Survey (CPS) or General Social Survey (GSS) in the United States, Americans and the Arts (Louis Harris) Surveys, Canadian General Social Survey, the Euro-Barometer Surveys, the European Social Survey (ESS), the International Social Survey Program (ISSP), the European Foundation's Quality of Life Survey in 28 countries, and in similar modules in more specialized surveys, say, of youth, of elderly, of migrants, or of other population groups. The "culture modules" have included questions intended to measure personal values and predispositions to public policy and action, cultural and artistic tastes, activities, and attitudes. In the United States the National Endowment for the Arts (NEA) has been the most prominent sponsor of collection and analyses in the national Surveys of Public Participation in the Arts (SPPA) carried out by the U.S. Bureau of the Census. Other bodies have sponsored surveys and analyses, more or less extensive, typically for specialized purposes and objectives.

In a detailed review of issues of conceptualization and measurement of cultural items in surveys, including examples from the 1993 GSS, Marsdale and Swingle (1994) note the broad cooperation and cross-referencing of interview items developed and used in past surveys worldwide. Of particular interest to us here, Marsdale and Swingle discuss the difference between survey questions assessing music tastes by means of questions about respondents' "feelings" about specific types of music (ranging from "like it very much" to "dislike it very much," with also the possibility of "don't know much about it" responses) and behavioral questions which measure participation in the form of "attendance" at a live concert or performance, or, alternatively, "playing a musical instrument" or "taking part in a performance," during a specified period in the recent past.

Thus based on responses to "behavioral questions" in the 2002 Survey of Public Participation in the Arts, 11.6 percent of U.S. adults, representing about 23.8 million persons, reported attending a classical music concert or performance at least once in the 12 months prior to the survey. A slightly smaller number, 10.8 percent (22.2 million persons) attended a jazz performance or concert; and 3.2 percent (6.6 million) reported attending an opera, in the 2002 SPPA survey. According to the findings of this survey,

much larger percentages of the adult population listened to classical music, jazz, or opera on radio broadcasts (23.9 %; 23.5%; and 5.7% respectively) or on audio recordings (19.3 %; 17.2 %; and 5.5 % respectively) or watched and heard performances of classical music, jazz, or opera on TV, VCR, or DVD (18.1 %; 16.4%; and 5.8% respectively), and these are, of course, not mutually-exclusive. Altogether some 31.7% of US adults reported attending live music performances and 51.8% reported listening to or watching musical performances on radio, TV, Record Media, or Internet facilities. The SPPA survey includes questions on whether or not respondents themselves play musical instruments, sing in a choir, compose, or participate in musical performances, and also a question on whether respondents study or take classes in music or musical performance. According to the 2002 survey findings, 12.6 percent of U.S. adults reported that in the period prior to the survey they themselves played musical instruments, participated in a performance, or created composed music; and 2.7 percent reported having taken instruction or lessons or a class in some facet of classical music, jazz, or opera. (National Endowment for the Arts, 2002).

Different national surveys have varied in their definitions of "participation," so that for any given period the estimated numbers may vary from one to another. Also, the different surveys are not necessarily mutually consistent with respect to trends over time in attendance or participation in musical events and activities. But, according to the summary report by McCarthy and associates (2001), the socio-demographic correlates of variation in frequencies or levels of attendance and participation have been consistently found to include age, gender, race, ethnicity, income, education, occupation, and previous arts education. Education is "by far the most closely correlated with participation in the arts, regardless of form or discipline….individuals with higher levels of education, particularly those with college and graduate degrees, have much higher participation rates than individuals with less education… a connection which appears to be stronger for those who participate through attendance rather than through the media and is least pronounced for hands-on participants." (McCarthy et al., 2001, p. 13).

Survey respondents are frequently asked to indicate their preferences among the various types of musics recognized or accessible, about half of U.S. adults in the 2002 SPPA survey indicating that they like Classic Rock or Oldies music, about 40% reporting liking Country-Western music, both Blues/R@B music and Mood/Easy music reported being liked by about 30%, and somewhat smaller fractions (about 27% for each, respectively) reporting likings for Jazz, for Classical/Chamber music, and for Rock/Heavy Metal music. When asked about which music they "like best," about the main choices were Classic Rock/Oldies (chosen by 16%) and Country (chosen by 15%). These preferences, too, are found in the survey materials to vary among the various socio-demographic groups and categories, e.g. with women reporting preference for mood/easy listening music and hymns while men preferred classic rock and rock/heavy metal music, whites tend to prefer classic rock music and country music while African-Americans more frequently prefer hymns, jazz, and rap music (NEA, 2002), and rap, reggae, and rock/heavy metal musics are more frequently reported liked or preferred by younger respondents (18-24) than by older adults.

Finally, we may note that census and CPS data have been used to describe and analyze the numbers of musicians identified and their socio-demographic attributes and geographic locations, employment characteristics and incomes. The employment

characteristics include unemployment rates, primary or secondary ("moonlighting") character of their employment, and imputed qualifications or training. Thus, for example, whereas the unemployment rate for all civilian workers aged 16+ in 2003 was 5.6%, the unemployment rate for those in "Professional Occupations was only 3.2% that year, but the unemployment rate for "musicians and singers" was 5.1% (the unemployment rate for "Actors" in the same year was 35.2%!! and for "Dancers and choreographers" was 7.6%). Among all persons reporting themselves employed in "artist occupations," 12.7% had primary employment in other occupations and their employment in the "artists occupations" was considered to be in "secondary jobs." But among those employed as "Musicians and singers," in 2003 no fewer than 39.2% were in "secondary jobs," with their primary employment in other occupations. According to the BLS *Occupational Outlook Handbook, 2004-05 Edition*, among an estimated 215,000 musicians, singers, and related workers in 2002, more than half are employed by religious organizations and one fourth by performing arts companies, such as professional orchestras, small chamber music groups, opera companies, musical theater companies, and ballet troupes. In addition, musicians and singers perform in nightclubs, restaurants, for weddings and other events, in concerts, on radio and television broadcasts, and so forth. These data and descriptions are in census- and survey-type data, based on the international occupational classifications. Unfortunately, these data do not identify and describe upper-level music *teachers,* who are conventionally included in a separate occupational classification (25-1121 Art, Drama, and Music Teachers -Post-Secondary as distinct from the 27-2021 and 27-2040, Music Directors and Composers and Musicians, Singers, and Related Workers categories), a point to which we will return later.

Thus there is a corpus of census- and survey-based data on musics, musicians, and their audiences describing their numbers, distributions, and socio-demographic features. These data have been used for the most part for purposes of public and private planning and evaluation of musical activities, events, initiatives, and participation and their budgeting. They have been used in identifying the types of participants and consumers of the different kinds of musical activity and measuring the variations in frequencies and intensities, analyzing trends and changes over time, their causes and correlates, and assessing or projecting their likely future directions and changes.

Among sociologists, it has been those who study social inequality, mobility, and class and strata formation who have used such data to examine the hypothesis relating tastes, support, patronage, and "consumption" of Western "art" and classical music initially to the Church, royal courts and aristocracy and, more recently to the emerging bourgeoisie and middle classes who, in turn, use this linkage to "highbrow" music to fortify their status, transmit it intergenerationally, and exclude and deny status others not so linked. Musicologists and social historians of music have explored a similar hypothesis from the point of view of determination of the social origins or subsequent social locations of the musics and their audiences and patrons which they investigate, the relationships of composers and performers to those social locations, and so forth. Thus concert data, gleaned from newspapers, periodicals, and license information and including venues, programs, ticket prices, social characteristics of concert subscribers for 1808-1848 seasons for the three national capitals are analyzed by William Weber to describe growth of concert life, support of "popular culture" and "high culture" events respectively by aristocracy and emerging middle classes, cultural partitioning of middle classes,

convergence of aristocratic and "high middle" classes in support of high culture concert life (with similarities in the three separate capitals), and growth of a new low-status concert world. (Weber, 1975). More recently, Weber uses concert program data, as above, to document change around 1850 from "miscellany" to "homogeneity" in concert programming and the musical experience of audience, the latter leading, in turn, to emergence of an international canon for music and distinctions between "high" or "serious" music and what was by 1900 commonly called "popular music" and entailing, ultimately, isolation of "classical-music" from contemporary music and from "earthier aspects" of musical experience. (Weber, 2001).

In a 1992 paper, Peterson and Simkus carried out a log-linear analysis of 1982 US national survey data of public participation in the arts. The procedure yields an ordering of musical taste, from classical, folk, musicals, and jazz through rock, hymns/gospel, soul/blues/R&B to country music at the bottom of the scale. Ordering occupational groups by musical taste is a) consistent with expectations derived from theory and previous investigation and b) orders the occupation groups by participation in arts activities generally. But an additional and important finding is that, aside from dominating support for classical music and opera, the middle and upper classes are also consumers of popular music. Not only are high-status U.S. adults far more likely than others to consumer highbrow music and the fine arts generally than are others, they are also more likely to be involved in lowbrow music and low-status arts activities (Peterson and Simkus, 1992).

Taking at face value the traditions of historical research demonstrating the aversion of high-status persons for cultural expression not recognized as appropriately elevated, Peterson and Simkus suggested that a historical *shift* from highbrow snob to "omnivore" is taking place. Katz-Gerro and Shavit carried out a similar study in Israel, based on a national survey of cultural participation and preferences in 1992 and have a similar finding: cultivation of highbrow music and other arts and participation and enjoyment of lowbrow music are not mutually exclusive. Middle and upper class respondents in Israel, who are patrons and participants in highbrow music are *also* patrons, participants, and consumers of popular music and lowbrow arts and culture generally. (Katz-Gerro and Shavit, 1998). Peterson and Kern, in a study using data from the 1992 SPPA, and studying comparisons with the corresponding 1982 SPPA data, confirm that such an historical *shift* is indeed captured and measured in the comparison and that increasing "omnivorousness" is apparent among the highbrows. (Peterson and Kern, 1996). Thus, drawing on the census- and survey-based data on musical preferences and participation, Peterson and his colleagues (Peterson 1992, 1997; Peterson and Simkus 1992; Peterson and Kern 1996) have reformulated the link between cultural capital and social boundaries. They have argued that members of the upper class in the United States, who used to be defined as *cultural snobs* in terms of preference for a limited range of highbrow cultural tastes, are turning into *cultural omnivores* - an upper class that experiences and appreciates a variety of cultural tastes: highbrow, middlebrow, and lowbrow.

Thus we have some solid beginnings for a social demography of musics and musicians, in the sense that there are sources of data and numerous studies addressing questions of the types (1) and (2) above, even if not yet in the detail and depth to which musicologists, music historians, and sociologists of music have aspired. Clearly not yet

available or in sight are studies and approaches addressing questions of type (3) above embedded in socio-demographic frameworks:

We have not yet inquired in what ways are the outcomes of musical conduct, behaviors, or relationships specific to or differentiated by socio-demographic locations and identities, or by population categories and subgroup; or how do the meanings, social identities, social interactions, generated or "afforded" by musical activity, events, or participation vary among the subgroups; or how do their trends and changes over time vary among the socio-demographic locations and population categories and subgroups? Probably the heart of this inquiry, recently highlighted by DeNora (1995, 1999, 2002, 2003), concerns empowerment, control, or alienation. As expressed by Froelich (2002): what we play or to what we listen either asserts or questions the power relationships in which we find ourselves, creates associations of belonging or not belonging, and leads to or takes away from feelings of alienation or affirmation." DeNora's insistence upon seeking empirical expressions of music as social agency and of outcomes of musical events and experiences is pioneering and commendable as far as it goes. But the "ethnographic" methods which she advocates leave us partially in limbo with respect to the social settings and locations discussed and largely without avenues of replication or comparison. Clearly it is our sense that the inquiries into identities, empowerment and alienation, and other outcomes of musical experiences and events -- how music works -- should be embedded in understandings of population size, composition and distribution, and dynamics and the social demography of musics and musicians. Other issues in the sociology of musics and musicians, such as issues of patronage, musical socialization and careers, structures of musical organizations, audiences and reception of musics, music and political movements and regimes, migration and integration of migrant musicians, capitalist marketing and commodification of music, women and minorities and underdog groups in music, technologies and musics, and musical establishments and patrimonies are best properly embedded in considerations of the social demography of musics and musicians. But the mechanics of making the match and the marriage do not seem entirely obvious or straightforward.

A number of approaches come to mind for marriage of sociology and social demography of musics and musicians. A first approach would explore the possibilities of developing measures and indicators of "outcomes," benefits, empowerment, or behaviors or relational spin-offs of musical activities or participation currently studied in such surveys and attempting to glean insights about the hypothesized relationships from analysis of these data files in their current, or perhaps slightly-modified, forms. A second approach would involve studying the DeNora problems on the scale of the national PSSA or GSS surveys by introducing the "ethnographic" study and inquiry questions into such surveys on a national scale or on local, socio-demographically documented and differentiated scales. A third approach would try to incorporate additional sources of data related musical behavior, participation, and events to population categories and construct significant facets of the social demography of musics and musicians from data other than national censuses or surveys.

Interrogating existing surveys containing "arts" or "cultural modules" to glean information about "benefits" or "payoffs" to musical attendance and participation, e.g. "payoffs" with respect to health, satisfaction, stability or frequency of relationships with others, etc.:

We know of a number of attempts to learn about health, interaction or behavioral outcomes of musical activity or participation from surveys incorporating "cultural modules." They range from comparative investigation of longevity among respondents with greater or lesser involvement and participation in cultural events and musical activity studied longitudinally in Sweden (Bygren, Konlaan, and Johansson, 1996; Konlaan, Bygren, and Johansson, 2000), study of connections betweens arts and music instruction in schools and performance on standardized tests, community service, television watching, boredom in school, and school dropouts (Catterall, Chaleau, and Iwanaga, 1999), to general intellectual development (U.S. Department of Education, 1999,) disruptive behavior (National Education Longitudinal Study, Second Follow-Up,1992), receipt of academic honors and awards (National Education Longitudinal Study, First Follow-Up, National Center of Education Statistics, 1992), self esteem and thinking skills (National Arts Education Research Center, New York University, 1990) . There are also numerous smaller scale surveys as well as experimental studies of outcomes of musical instruction, training, participation and performance for pupils (Hall, 1999, and references therein) which, however interesting or credible per se, have very little prospect for illuminating socio-demographic differentials in responses or outcomes of musical participation. The studies based on larger-scale survey or census arts or culture modules have typically pointed to correlations between musical activity, participation, or attendance and various types of academic success, personal behavior, or other extra-musical outcomes; but they have been found unconvincing both on grounds of obscure or inconclusive directions of causality and on grounds of questionable causality *per se* (Winner and Hetland, 2000; 2002).

To familiarize ourselves more with the opportunities and barriers to use of large-survey data for exploring socio-demographic variations in musical outcomes, we undertook to interrogate two national surveys, quite different in purpose and content but both incorporating "cultural modules" in their questionnaires. The survey data studied are from the U.S. General Social Survey, 2002 (Marsden and Swingle, 1993; Davis, Swift, and Marsden, 2004) and from the Swedish National Survey of Elders, 75+, Living in Their Own Homes, 2000 (Sundstrom, Johansson, and Hassing, 2002; Johansson, Sundstrom, and Hassing, 2003). The GSS incorporates a "Culture Module" which includes questions about recent attendance at a live ballet or dance performance, attendance at a classical music or opera performance, recent participation in a musical, dance, or theatrical performance, recent playing a musical instrument, attendance at a live performance of popular music, and other recent cultural activities. The Swedish survey incorporates a question about frequent or usual leisure activities, including attendance at theatre, concerts, museum exhibitions (a single question combining all), playing a musical instrument, singing in a choir, and other leisure pursuits such as reading, visiting, gardening, fishing, hunting, church activities, attendance at "study circles" and courses, and the like.

Using the American GSS data set (N=2765), we tried to study the effects of four variables: (i) recent attendance at a classical music or opera live performance, (ii) recent attendance at a live performance of popular music, (iii) recent participation in a musical, dance, or theatrical performance, and (iv) recent playing a musical instrument on four "satisfaction/empowerment" variables for which we were able to glean measurements based on survey responses: (a) general "happiness," (b) subjective health assessment, (c) job satisfaction, (d) satisfaction with financial situation, in each case controlling for objective variables: sex, age, marital status, school attainment, family income, physical health, mental health, color and Hispanic identity, religion and strength of religious attachment, frequency of attendance at religious services, and subjective social class identification. The OLS regression analyses are shown in Appendix Tables 1-4.

In Appendix Table 1 we may note that the variables most prominently affecting "happiness" are marital status (being married), not suffering from mental health problems (days of disability in past month due to mental illness), not being in the "lower class," and having a "Strong Protestant" religious identity. The "cultural" variables introduced in Model III) have no notable effects on reported "happiness" net of those of the other variables. In Appendix Table 2 we may note that the variables most prominently affecting "subjective health" assessments are not suffering objective physical and mental health problems (days of disability), relative youth, not being in the "lower class" or in the "working class," and "Strong Catholic" religious identity. Reported attendance at live performances of classical music or opera appears to have a small, but statistically significant, positive effect on subjective health assessment, though none other among the "cultural variables" introduced in Model III has such an effect. The other "cultural variables" have no notable effects on reported "happiness" net of those of the other variables. The "recent participation in a musical, dance, or theatrical performance" variable (denoted "perform" in the stub of the table) has similar b and beta coefficients, but they are not statistically significant, presumably because they are based on smaller numbers of respondents responding to the relevant question (in the pairwise deletion analyses). Appendix Table 3 shows that age and, less prominently, "Strong Protestant" religious identification, affect " job satisfaction" positively; while poor physical and mental health, being Black, and self-identification as "lower class" are all negatively associated with job satisfaction. Again, the coefficients associated with musical activity and other "cultural variables" are small and not statistically significant. We may note that in Model I the "marital status" and "education" variables show significant effects on the dependent variable; but these disappear when the variables of Model II are introduced. Finally, in Appendix Table 4 we show the regression coefficients for the "satisfaction with financial situation" variables. Family income, age, and marital status are the variables prominently associated positively with this "satisfaction variable while self-identification as "Lower Class" or as "Working Class" are the most prominently apparent negative correlates. In addition, poor physical health and poor mental health and, also, belonging to one of the smaller race/ethnic categories (neither White non-Hispanic nor or Black non-Hispanic nor White- or Black-Hispanic, i.e. either American Indian or Asiatic or mixed household categories) show negative and statistically significant coefficients of "Satisfaction with Financial Situation." But none of the music activity or other "Culture" variables indicates any statistically significant connection. Thus in the GSS data for 2002, only the "Attended live performance of classical music or opera" variable indicates a

small but statistically significant effect on "subjective health" assessment of respondents, and no other musical activity or other "culture" variables effects are apparent. Our "finding" is, essentially, that there are virtually no musical activity (performance or participation) effects, net of the "structural variables" we were able to identify, measure, and introduce in the equations, on the "satisfaction/empowerment" characteristics (frequencies or intensities) which we were able to impute to the GSS respondents. (Results under list-wise deletion were essentially the same. Details, frequencies and correlation tables, etc. can be obtained from the authors.)

Using the Swedish National Survey of Elders (75+) data set (N=1466), we tried to study the effects of two variables: (i) playing a musical instrument, and (ii) singing in a choir on three "satisfaction/empowerment" variables for which we were able to glean measurements based on survey responses: (a) subjective health assessment, (b) care-giving to a person outside the respondent's own household, and (c) maintaining one or more close or intimate friendships, in each case controlling for objective variables: age, sex, age, school attainment, marital status, and three separate objective health characteristics and indicators. The first health indicator is based on responses to a question concerning frequency of hospitalization in the past three months: not hospitalized, hospitalized once, or hospitalized 2+ times. The second health indicator consists of a count of physical and psychic ailments acknowledged in response to four questions listing specific pains, ailments, worries, and discomforts. The third indicator reflects a count of ADL (activities of daily life) and IADL (instrumental activities of daily life) that the respondents acknowledge being unable to carry out without help. OLS and Logistic Regression analyses are shown in Appendix Tables 5-7.

In Appendix Table 5 we note that the variables most prominently bearing on self-assessed health are the objective health variables (absence of ailments, and absence of ADL and IADL conditions, with the hospitalization factor (not being hospitalized), sex (male), and educational attainment also showing statistically significant coefficients, though much smaller. Interestingly, age has positive, near-significant, coefficients on self-assessed health, i.e. older survivors in the 75+ population tend on average to report themselves in better health than do younger respondents. Finally, and most important for us, "Playing a musical instrument" has near-significant regression coefficients on self-assessed health, though "Singing in a choir" does not. In this population, the direction of causality would be more straightforward that in a population of all ages: probably among those currently aged 75+, those playing musical instruments and reporting themselves in good health are likely to have begun their musical activity sometime in the past and not in consequence of their current positively assessed health, although not inevitably so. Respondents to both the "play musical instruments" and "sing in a choir" questioned are differentiated in accordance with whether they report playing or singing "not at all," "sometimes," or "frequently," and these distinctions are used in the analysis. In an analysis not shown, we combined those reporting "sing frequently" and those reporting "play frequently" into a "musically active" category in a dichotomous variable, with all others (responding "not at all" or "sometimes") reported as "not musically active;" and we entered the "musically active" as an single independent dummy variable in place of the two "Play an instrument" and "Sing in a choir" separate variables. In the latter analysis, there is no significant regression or beta coefficient on "self-assessed health" for this single independent "musically active" variable. In Appendix Table 6, we show the

logistic regression coefficients for our independent variables, including "play a musical instrument" and "sing in a choir," on the dichotomous "Care-giving to other person not in same household" dependent variable. In the table, we may note that marital status is the most prominent variable and it is negatively associated with care-giving: i.e. widowed or otherwise not-married elders, are most likely to be care-givers to extra-household persons. Though the coefficients are much smaller, being in poor objective health (i.e., large number of reported ailments and complaints) is positively and significantly associated with care-giving, as is educational attainment. Age and frequent hospitalization are also significantly and negatively associated with care-giving. Only the educational attainment variable is positively related to care-giving, with barely-significant regression and Wald coefficients. Neither "playing an instrument" nor "singing in a choir" indicates any effect on "care-giving" as reported by the elderly respondents. As previously, combining the two "music-making" making variables into a single "musical activity" variable does not result in any change either in the "Music" effects (miniscule and non-significant coefficients) or in the effects of the other independent variables measured and entered. Finally, in Appendix Table 7, based also on the Swedish data, we examine the logistic regression coefficients of the same independent variables on "Having a Close or Intimate Friend." The variables with statistically significant effects are age, sex (female), marital status (being married), and being in poor heath objectively (high number of ailments and complaints). Again, the "play a musical instrument" and "sing in a choir" variables prove to have low and not statistically significant coefficients, which does not change if we use the single "Musical Activity" variable instead. Thus, altogether we find in the data for Swedish elderly respondents aged 75+ no connection whatsoever between the musical activity reported in the "Leisure" module of the questionnaire and the any of the three satisfaction/empowerment variables which we were able to extract from this data set. Our "interrogation" of these two national surveys incorporating questions about musical activity or participation has not provided support for any hypothesis of music-activity-grounded satisfaction, empowerment, health, skills, or the like, much less pointed to patterns of socio-demographic variation in their frequencies, intensities, or characters.

Introducing study of musical activity and participation and "empowerment outcomes" into national censuses and sample surveys.

We have been able to distinguish two separate but related objectives of efforts to expand national studies of musical participation to encompass individual and collective outcomes of such activity, both related to policy development and implementation. The first is reflected in proposals to enhance the GSS and SPPA genre of surveys to include information on respondents' perceived past or anticipated future benefits of arts "consumption" or "participation," i.e. of attendance at musical events or of direct musical activity and participation, or direct or indirect accounts of what motivates the respondents' participation as sketched in the questionnaire designed by J.L. Novak (2004) or in the national telephone poll of choral singers carried out by Chorus America (2003). This approach would also attempt to obtain much more detailed identification and description of how such participation is related to other behavior and activity of respondents, and how it changes through the life course and in response to changing life contingencies. For the most part, these inquiries would seem to be addressed to gaining

and fortifying political and economic support for the performing arts and for agencies and institutions organized to support and patronize musical performance; but they also have the potential for offering details of socio-demographic variation in motivations and outcomes. The second objective has already been mentioned above with respect to study of connections betweens arts and music instruction in schools and performance on standardized tests, community service, television watching, boredom in school, and school dropouts, to general intellectual development, disruptive behavior, honors and awards, self-esteem and thinking skills. These studies are addressed to gaining and fortifying political and economic support for the instruction and teaching of music (and of the arts generally), especially in public education, which alongside religious institutions are probably the largest realm of musical patronage and careers in contemporary modern societies. An important stage in this kind of development would seem to be the more detailed identification and reporting of music teachers (and other arts teachers) among the occupational classifications and information available national censuses and surveys. As suggested earlier, the numerous smaller scale surveys and experimental studies of outcomes of musical instruction, training, participation and performance for pupils have very little prospect for illuminating socio-demographic differentials in responses or outcomes of musical participation; and studies based on larger-scale survey or census arts or culture modules have typically pointed to correlations between musical activity, participation, or attendance and various types of academic success, personal behavior, or other extra-musical outcomes; but they have been found less than definitive. But there has been a trend toward so-called "meta-analysis" studies, which seek to integrate numerous small- or medium-scale studies to attain both broader social and geographic coverage and quasi-replication and validation, which are likely ultimately to lead to larger-scale national or regional surveys and censuses capturing music instruction and teaching activity in increasingly standardized renditions of its variation, more standardized reporting of "outcomes," and enhanced possibilities of analyses of socio-demographic variation (Scripp, 2004; Hall, 1999; National Association for Music Education, 2004; Music Council of Australia, 2004). An especially interesting example is the study of Catterall, Chapleau, and Iwanaga, (no date) based on data from the 1988 National Educational Longitudinal Survey in which some 25,000 students in American secondary schools were followed over a ten-year period. Involvement in instrumental music in the eighth grade is associated with higher achievement, for example, in Mathematics both among the students generally and among those of low SES origins in particular; and the differentials between those with and without musical involvement increased by Grade 12. The authors are very cautious about drawing causal inferences from such findings, but are also able to point to learning theory that is supportive of causal hypotheses (pp.9-10; 16-17). We note that the authors already differentiate their respondents by SES levels of origin; and there are almost surely opportunities in this survey to examine additional socio-demographic variation. Somewhat surprisingly, we have as yet found no reference to this genre of inquiry or findings in the recent works cited by De Nora.

On Cohort Musical Life Course Analysis

We can consider cohort musical life course analysis as an avenue of research that develops a socio-demographic model of musical socialization and participation that is widely applicable across societies, time frames, and institutional settings and can identify and measure factors in variations in musical activities across populations and subgroups. Consider a birth cohort, say, **all** those born in the U.S. in 1970, whether male or female, white or black or Hispanic, born in the North or born in the South, with well-off or with poor parents, etc. Using census or survey data, we can estimate how many of these attended kindergarten, say in 1975, and we can estimate how many attended primary school, say in 1976-1984. If we know something about the kindergarten and schools curricula, we may be able to estimate the numbers in the cohort who were exposed to musical instruction at the different times. If we draw upon American General Social Surveys of the period, we may be able to glean something about the distribution of households by musical interest or activity (Marsden and Swingle, 1993) and we may be able to estimate numbers in the cohort who were exposed to musical interest or activity in their parental households. If we draw upon census, survey, and educational institution data, we can estimate how many attended secondary and post-secondary institutions, say in 1985-95; and if we can ascertain details of the high-school and college curricula, course offerings and enrollments, and/or book sales, we may be able to estimate numbers receiving musical instruction at those levels. Similarly, data on enrollment in music schools, census occupational data, church attendance data, and later survey data for persons born in 1975 can teach us about the musical life course of this cohort. And as soon as we are able to **partition** the cohort, say by gender, or by race and ethnicity, or by region of birth, or by characteristics of parents we can begin to learn about differentiation in the musical life course and some of its factors. Of course to carry out such studies it is not necessary to begin with a single birth cohort, those born in year *t*. All data which can be classified by current age provide a beginning for cohort life course studies. Thus data on current occupations for persons aged, say, 25-29, 30-34, 35-39, 40-49, and 50-59 are, in effect, data on current occupations for persons who were born in 1975-1979, 1970-1974, 1965-1969, 1955-1964, 1945-1954, and so forth, and we may actually study birth cohorts by extracting data from tables classified by current age in some given year.

We can illustrate this idea by drawing upon a published study of musical activities and achievement of eighth-grade students in the U.S. carried out in 1997, i.e. students age 13-14 years old in 1997, born 1983-84. The study was part of the National Assessment of Educational Progress 1997 Arts Assessment, sponsored and published by the US National Center for Education Statistics (1999). The study investigated in-school and out-of-school music, visual arts, theatre, and dance activities and achievements among a national sample (2275) of eight-grade students, including students who did and did not have instruction in the arts in their schools; and study also investigated attributes and characteristics of the instruction (e.g. numbers of teachers per school, their credentials, space and facilities available for arts instruction, etc.). In Appendix Tables 8 and 9 we

show the sample percentages, and we estimate the absolute numbers in the total national cohort of eighth-graders in 1997 (3,415,000), by participation in musical instruction and activities in- and out-of-school.

In Appendix Table 8 we may note that only a minority of the eighth-graders report participation in organized musical activities (band, orchestra, or chorus) in school, though a substantial majority report having listened to musical performances at school. Quite few of the students report extra-school private music lessons, concert attendance, or reading books about music; but almost all (92%) report extra-school listening to musical tapes, CDs, or records. In Appendix Table 9 we may note that, although more than 90% of schools report having some music program or instruction (U.S. Dept. of Education, NCES, 1999), more than one-third of the eighth-graders surveyed report that, at the time of the survey, they did not have any music class. Among those who did have music classes, *listening* to music is easily the most-frequently reported activity, followed by singing and instrumental playing; dictation, or "writing down music," and composition or improvisation, or "making up your own music," are relatively infrequently reported.

In addition to studying the types and frequencies of musical activities in which the students engaged in- and outside of school, the investigators devised tests and measures of students' performing, creating, and responding to music and the other arts, and each student, whether or not exposed to instruction in the schools, was measured and assigned such scores. The investigators studied relationships between performing, creating, and responding scores to the in-school and outside-school musical activities and their intensities, and they also studied relationships between these scores and selected background characteristics of the students and reported these at some length. In general, student involvement in many different musical activities is positively related higher responding, creating, and performing, although the relationships are not uniform across all activities. Female students score higher in all three measures than do male students (US Dept. of Education, NCES, 1999, Table 6-4). Students in the Northeast region of the United States have high average creating scores and intermediate average performing and average responding scores, relative to those in the Southeast, Central, and West regions; those in the Central region have higher average responding scores, and those in the Southeast have relatively lower scores on all measures (NCES, 1999, Table 6-1). White and Black non-Hispanic students have higher average creating scores compared to Hispanic and Asian students; but Black and Hispanic students have lower average responding scores than White and Asian students; and Black students have lower average performing scores than White students, while Hispanic students have are below both White and Black students with respect to average performing scores (NCES, 1999, Table 6.7). On all measures, the average scores of eight-grade students are directly related to the educational attainments of their parents, those with college-graduate parents indicating highest scores and those whose parents did not graduate high school have lowest scores (NCES, 1999, Table 6.13).

Thus we have an initial eighth-grade musical profile for the American cohort born 1983-1984, the beginnings of a description of this cohort's musical life course, including some of the gender, regional, race and ethnicity, and socio-economic status differentials. How

many of the cohort will subsequently be involved in production and distribution of music and how, and how and with what outcomes the cohort will subsequently patronize, support, receive, "consume" music remains to be determined in subsequent observations and studies on the cohort. These can be extracted by identifying the cohort or age-group in census or survey data reported by age of respondents, by identifying a sample of the cohort and following and studying their activities, relationships, values, etc. prospectively, or, most likely, by identifying a sample of the cohort and studying their activities, relationships, values, and social and musical participation retrospectively through part of their life courses. (Unfortunately the number of persons born 1983-1984 in the GSS sample which we used earlier --29 altogether-- was too small to allow this; and in the GSS sample alone there were no retrospective questions). Obviously the possibilities for study of cohort continuity and change are enormous. There is a very large and growing literature on cohort and life course analysis in the social sciences generally and in sociology in particular.

Concluding Remarks: Musics and Musicians Under Population Transformations

Although world population continues to grow at a high rate, with less developed and newly-industrializing societies still undergoing "explosive" population growth, urbanization, and increasing levels of child- and surviving elderly-dependency, the central trend of the developed and of the emerging capitalist industrial or post-industrial societies has been a leveling off of population growth, diminished --increasingly planned and controlled-- fertility and small families, and aging of the population. These societies have also been experiencing continued urbanization and population concentration, whether because of physical movement to and concentration in urban places or because of transport, communications, and technological changes integrating formerly "rural" communities into cultural and socio-economic networks of urban life and rendering them now themselves effectively "urban" places culturally and socio-economically. Most of these societies have also been experiencing very substantial migratory movements, whether internal regional and urban migration, cross-national movement of temporary workers, or cross-national immigration. There have been major effects of these recent population trends upon inequality and strata formation in the developed capitalist societies. In the first place, there has been an influx and increment of relatively "weak" (skill-and-credentials-wise and even more: local-experience-wise, "connections"-wise, and politically) entrants into the labor force which has tended to expand the "reserve army of the unemployed," to erode the bargaining power of "mainstream" and all employees, and to exacerbate wage and earnings inequality. This increment comprises (i) women entrants into the labor force, rendered possible and, by some analyses, imperative by diminishing fertility and changing family and social roles of women, and (ii) migrant entrants into local and national labor markets. In the second place, the diminished bargaining power of employees and enhanced leverage of large employers, property-owners and stockholders, and their political and public-service allies has eroded the solidarity and political potential of Working Class organizations and institutions, and in particular of trade unions and labor-oriented or –based political parties. In the third place, the changing size and structure of nuclear families and the massive entrance of women into the labor force has been associated with an historic shift in the provision of services, such as educational, health, recreational, and others outside of households and

into the private market or public sector, contributing importantly to emergence of the so-called "service economies" of "post-industrial" societies, and their accompanying changes in the occupational structure and relative sizes and composition of the social classes. Finally, population aging and the growth of the older and retired population together with the changes in family size and structure and the shift of functions and services outside of the household has engendered great growth in responsibilities, functions, employment, and power of governments, including especially expansion of "welfare state" apparatus to address income maintenance and health care requirements of the older population. At the same time, though, the enhanced leverage of large employers and property-owners has enabled them successfully to push for both downsizing of coverage and benefits of public welfare programs and for privatization of some. How, if at all, do these trends bear on musics and musicians?

Roughly: we can divide these effects into those associated with social structural changes and those associated with philosophical or ideological developments emerging from the population transformations. The social structural changes range from the increase in socio-economic inequality and increasing numbers of have-nots through the "liberation" of women from patriarchal arrangements and norms and their emergence as composers, performers, audiences, etc. in their own right, and include the relative decline in numbers of children and teen-agers and increasing numbers and higher ages of surviving elderly, increasing numbers of migrants and migrant communities, which can be imputed directly to the changing regimes of fertility, mortality, marriage and separation, and migration. That these changes may entail changes in musical activity and outcomes seems highly likely if only on the grounds of compositional changes in the populations and the distributions of traditionally-preserved or -transmitted tastes, preferences, or skills and technologies. And these can themselves change under the changed socio-demographic circumstances. Just as we can trace effects of social structural spin-offs of major socio-demographic developments in the recent past, such as rapid population growth and urbanization, the coming of age of the baby-boom generation, the universal access to electronic recording and reproduction of music, fertility reduction and diminishing family size, labor force participation of women, and expansion of formal education on musical activity, participation, and patronage, so can we anticipate albeit speculatively effects of recent and near-future socio-demographic transformations.

Specific philosophical or ideological outcomes of major socio-demographic transformations: replacement of post-modernism or post-structuralism or feminism or semiotics, creation of or return to religious fundamentalism or beliefs, or emergence of neo-humanisms, or of new political movements and ideologies would seem to defy prediction and speculation. For the most part we can try to analyze such links only retrospectively. Moreover, at first glance these would seem to bear mostly upon musical analysis, description, comparison, musicology, musical historiography, and the like (Allen, 1962; Adorno, 1998; Dalhaus, 1983, 1985, 1989; Subotnik, 1991, 1996). But in fact they bear, sometimes heavily, upon musical organization, patronage, recruitment and careers of performers, styles and rules and directions adopted by composers, and audience and critical reception (Dalhaus, 1985, 1989; Kivy, 1988, 1989;Williams, 2001; Adorno, 1976; Eyerman and Jamison, 1998). These points will await exploration in future studies.

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Appendix Table 1: Factors influencing happiness, GSS, 2002

Variables	Model I		Model II		Model III	
	b (S.E)	Beta	b (S.E)	Beta	b (S.E)	Beta
Demographic						
Sex	-0.036 (0.041)	-0.029	-0.049 (0.041)	-0.039	-0.051 (0.041)	-0.040
Age	0.001 (0.001)	0.015	-0.001 (0.001)	-0.014	-0.001 (0.001)	-0.020
Marital Status	0.240*** (0.042)	0.190***	0.215*** (0.042)	0.171***	0.218*** (0.043)	0.173***
Education	0.011 (0.007)	0.054	0.004 (0.007)	0.017	0.002 (0.008)	0.010
Family Income	0.018** (0.009)	0.069**	0.010 (0.009)	0.039	0.010 (0.009)	0.039
Physical Health (objective)	-0.006* (0.003)	-0.058*	-0.006** (0.003)	-0.055**	-0.006* (0.003)	-0.055*
Mental Health (objective)	-0.018*** (0.003)	-0.214***	-0.017*** (0.003)	-0.205***	-0.017*** (0.003)	-0.205***
Race/Ethnicity						
Black Non-Hispanic*			-0.092 (0.061)	-0.050	-0.092 (0.062)	-0.050
Hispanic, White or Black*			-0.049 (0.096)	-0.016	-0.046 (0.096)	-0.015
All Other*			-0.095 (0.076)	-0.040	-0.095 (0.076)	-0.040
Religion and Strength of Religious Attachment						
Strong Protestant**			0.126** (0.056)	0.085**	0.125** (0.056)	0.085**
Strong Catholic**			0.034 (0.075)	0.016	0.035 (0.076)	0.016
Strong Other Christian**			0.093 (0.160)	0.019	0.087 (0.161)	0.017
Strong Other Religion**			-0.038 (0.129)	-0.009	-0.039 (0.130)	-0.009
Attendance at religious Services			0.007 (0.009)	0.030	0.006 (0.009)	0.027
Subjective Social Class Identification						
Lower Class***			-0.381*** (0.090)	-0.145***	-0.376*** (0.091)	-0.143***
Working Class***			-0.045 (0.043)	-0.036	-0.043 (0.044)	-0.034
Upper Class***			0.111 (0.111)	0.032	0.102 (0.111)	0.030
Culture						
Play Music					-0.031 (0.051)	-0.020
Perform					0.033 (0.069)	0.016
Attended live performance-classical/opera					0.064 (0.055)	0.039
Attended live popular music performance					-0.010 (0.044)	-0.007
Constant	1.837		2.106		2.133	
R^2	0.126		0.159		0.160	
R^2 Change	0.032					
			0.002			
N	2765	2765	2765	2765	2765	2765

*Omitted Category: White Non-Hispanic ** Omitted Category: All Other ***Omitted Category: Middle Class
*p<0.1; **p<0.05; ***p<0.01

Appendix Table 2: Factors influencing health in general (subjective), GSS, 2002

Variables	Model I		Model II		Model III	
	b (S.E)	Beta	b (S.E)	Beta	b (S.E)	Beta
Demographic						
Sex	0.069 (0.068)	0.031	0.067 (0.068)	0.030	0.064 (0.068)	0.029
Age	-0.009*** (0.002)	-0.145***	-0.011*** (0.002)	-0.175***	-0.012*** (0.002)	-0.183***
Marital Status	-0.006 (0.071)	-0.003	-0.045 (0.071)	-0.020	-0.044 (0.071)	-0.020
Education	0.067*** (0.012)	0.179***	0.047*** (0.012)	0.125***	0.043*** (0.013)	0.115***
Family Income	0.051*** (0.015)	0.110***	0.038*** (0.015)	0.083***	0.038** (0.015)	0.082**
Physical Health (objective)	-0.053*** (0.006)	-0.290***	-0.052*** (0.006)	-0.284***	-0.052*** (0.006)	-0.284***
Mental Health (objective)	-0.022*** (0.005)	-0.150***	-0.021*** (0.005)	-0.141***	-0.020*** (0.005)	-0.141***
Race/Ethnicity						
Black Non-Hispanic*			-0.156 (0.102)	-0.048	-0.145 (0.103)	-0.045
Hispanic, White or Black*			0.004 (0.161)	0.001	0.008 (0.161)	0.002
All Other*			-0.083 (0.127)	-0.020	-0.078 (0.127)	-0.019
Religion and Strength of Religious Attachment						
Strong Protestant**			0.141 (0.094)	0.054	0.132 (0.094)	0.050
Strong Catholic**			0.230* (0.126)	0.059*	0.216* (0.126)	0.056*
Strong Other Christian**			0.019 (0.268)	0.002	0.012 (0.268)	0.001
Strong Other Religion**			0.118 (0. 215)	0.016	0.139 (0.216)	0.019
Attendance at religious Services			-0.009 (0.015)	-0.022	-0.007 (0.015)	-0.017
Subjective Social Class Identification						
Lower Class***			-0.751*** (0.151)	-0.161***	-0.740*** (0.151)	-0.158***
Working Class***			-0.240*** (0.072)	-0.107***	-0.232*** (0.073)	-0.103***
Upper Class***			0.225 (0.185)	0.037	0.204 (0.185)	0.033
Culture						
Play Music					0.105 (0.085)	0.038
Perform					-0.187 (0.115)	-0.051
Attended live performance-classical/opera					0.153* (0.092)	0.052*
Attended live popular music performance					-0.026 (0.073)	-0.011
Constant	2.697		3.359		3.412	
R^2	0.219		0.255		0.260	
R^2 Change	0.036					
			0.005			
N	2765	2765	2765	2765	2765	2765

*Omitted Category: White Non-Hispanic ** Omitted Category: All Other ***Omitted Category: Middle Class
*p<0.1; **p<0.05; ***p<0.01

Appendix Table 3: Factors influencing job satisfaction, GSS, 2002

Variables	Model I		Model II		Model III	
	b (S.E)	Beta	b (S.E)	Beta	b (S.E)	Beta
Demographic						
Sex	0.041 (0.050)	0.027	0.038 (0.051)	0.025	0.037 (0.051)	0.024
Age	0.008*** (0.001)	0.176***	0.007*** (0.001)	0.148***	0.007*** (0.002)	0.149***
Marital Status	0.092* (0.052)	0.060*	0.069 (0.053)	0.045	0.069 (0.053)	0.045
Education	0.014* (0.009)	0.056*	0.005 (0.009)	0.021	0.004 (0.009)	0.016
Family Income	0.017 (0.011)	0.054	0.010 (0.011)	0.032	0.009 (0.011)	0.029
Physical Health (objective)	-0.009** (0.004)	-0.074**	-0.009** (0.004)	-0.074**	-0.009** (0.004)	-0.073**
Mental Health (objective)	-0.017*** (0.003)	-0.169***	-0.016*** (0.003)	-0.162***	-0.016*** (0.003)	-0.162***
Race/Ethnicity						
Black Non-Hispanic*			-0.138* (0.076)	-0.062*	-0.133* (0.076)	-0.060*
Hispanic, White or Black*			0.036 (0.120)	0.010	0.036 (0.120)	0.010
All Other*			-0.118 (0.095)	-0.041	-0.112 (0.095)	-0.039
Religion and Strength of Religious Attachment						
Strong Protestant**			0.136** (0.070)	0.076**	0.136* (0.070)	0.076*
Strong Catholic**			0.141 (0.094)	0.053	0.137 (0.094)	0.052
Strong Other Christian**			0.046 (0.199)	0.008	0.060 (0.200)	0.010
Strong Other Religion**			-0.060 (0.160)	-0.012	-0.060 (0.161)	-0.012
Attendance at religious Services			-0.007 (0.011)	-0.025	-0.006 (0.011)	-0.020
Subjective Social Class Identification						
Lower Class***			-0.371*** (0.113)	-0.116***	-0.371*** (0.113)	-0.116***
Working Class***			-0.107** (0.054)	-0.069**	-0.103* (0.054)	-0.067*
Upper Class***			0.029 (0.137)	0.007	0.024 (0.138)	0.006
Culture						
Play Music					0.016 (0.063)	0.008
Perform					-0.126 (0.086)	-0.050
Attended live performance-classical/opera					0.046 (0.069)	0.023
Attended live popular music performance					0.036 (0.055)	0.024
Constant	2.595		2.936		2.944	
R^2	0.095		0.119		0.121	
R^2 Change	0.024					
			0.003			
N	2765	2765	2765	2765	2765	2765

*Omitted Category: White Non-Hispanic ** Omitted Category: All Other ***Omitted Category: Middle Class
*p<0.1; **p<0.05; ***p<0.01

Appendix Table 4: Factors influencing Satisfaction with Financial Situation, GSS, 2002

Variables	Model I		Model II		Model III	
	b (S.E)	Beta	b (S.E)	Beta	b (S.E)	Beta
Demographic						
Sex	-0.030 (0.050)	-0.020	-0.036 (0.049)	-0.024	-0.038 (0.049)	-0.025
Age	0.006*** (0.001)	0.139***	0.004*** (0.001)	0.101***	0.004*** (0.002)	0.099***
Marital Status	0.153*** (0.051)	0.100***	0.117*** (0.051)	0.076***	0.118** (0.051)	0.077**
Education	0.028*** (0.009)	0.107***	0.010 (0.009)	0.037	0.009 (0.009)	0.034
Family Income	0.049*** (0.011)	0.156***	0.039*** (0.011)	0.123***	0.038*** (0.011)	0.122***
Physical Health (objective)	-0.011*** (0.004)	-0.086***	-0.010** (0.004)	-0.077**	-0.010** (0.004)	-0.076**
Mental Health (objective)	-0.010*** (0.003)	-0.105***	-0.009*** (0.003)	-0.091***	-0.009*** (0.003)	-0.091***
Race/Ethnicity						
Black Non-Hispanic*			-0.078 (0.073)	-0.035	-0.079 (0.074)	-0.035
Hispanic, White or Black*			0.099 (0.115)	0.027	0.101 (0.115)	0.027
All Other*			-0.166* (0.091)	-0.057*	-0.163* (0.091)	-0.056*
Religion and Strength of Religious Attachment						
Strong Protestant**			0.058 (0.067)	0.032	0.059 (0.067)	0.033
Strong Catholic**			-0.149* (0.090)	-0.056*	-0.148 (0.090)	-0.055
Strong Other Christian**			-0.258 (0.191)	-0.042	-0.252 (0.192)	-0.041
Strong Other Religion**			-0.213 (0.154)	-0.043	-0.217 (0.155)	-0.044
Attendance at religious Services			0.008 (0.011)	0.028	0.008 (0.011)	0.028
Subjective Social Class Identification						
Lower Class***			-0.670*** (0.108)	-0.209***	-0.669*** (0.108)	-0.209***
Working Class***			-0.247*** (0.052)	-0.160***	-0.245*** (0.052)	-0.159***
Upper Class***			0.259** (0.132)	0.062**	0.254* (0.133)	0.060*
Culture						
Play Music					-0.043 (0.061)	-0.023
Perform					-0.007 (0.082)	-0.003
Attended live performance-classical/opera					0.043 (0.066)	0.022
Attended live popular music performance					0.014 (0.053)	0.009
Constant	0.870		1.461		1.477	
R^2	0.119		0.187		0.188	
R^2 Change	0.069					
			0.001			
N	2765	2765	2765	2765	2765	2765

*Omitted Category: White Non-Hispanic ** Omitted Category: All Other ***Omitted Category: Middle Class
*p<0.1; **p<0.05; ***p<0.01

Appendix Table 5: Factors Influencing Self Assessed Health: Swedish Respondents,75+, in 2000

Variables	Model I		Model II		Model III	
	b (S.E)	Beta	b (S.E)	Beta	b (S.E)	Beta
Sex	0.006 (0.040)	0.005	0.077** (0.035)	0.058	0.075** (0.035)	0.057
Age	-.011** (0.004)	0.080**	0.006* (0.003)	0.043*	0.006* (0.003)	0.044*
Marital Status	-.015 (0.041)	-.011	0.027 (0.035)	0.020	0.025 (0.035)	0.019
Education	0.027*** (0.008)	0.089***	0.018** (0.007)	0.060**	0.017** (0.007)	0.055**
Recent Hospitalization			-0.151** (0.050)	-0.073**	-0.148** (0.050)	-0.072**
Poor Health Indicators			-0.055*** (0.004)	-0.375***	-0.055*** (0.004)	-0.375***
Low ADL/IADL Score			0.082*** (0.009)	0.235***	-0.081*** (0.009)	0.232***
Plays Musical Instrument					0.069 (0.036)	0.047
Sings in Choir					0.041 (0.045)	-0.022
Constant	3.917		2.164		2.045	
R^2	0.015		0.269		0.271	
N	1314	1314	1314	1314	1314	1314

p<0.1; **p<0.05; ***p<0.01

Appendix Table 6: Logistic Regression: Factors Influencing Probability of Care-giving

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95,0% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	AGE	-,030	,013	5,003	1	,025	,971	,946	,996
	SEX	,241	,131	3,367	1	,067	1,272	,984	1,645
	F124	,055	,028	3,896	1	,048	1,057	1,000	1,117
	MARITAL	-1,001	,140	51,393	1	,000	,367	,279	,483
	OBJ_HEAL	,056	,014	15,171	1	,000	1,058	1,028	1,088
	HOSPITAL	-,532	,205	6,756	1	,009	,587	,393	,877
	ADL	,041	,037	1,255	1	,263	1,042	,970	1,119
	F146Q	-,002	,138	,000	1	,990	,998	,762	1,309
	F146R	,145	,169	,740	1	,390	1,156	,831	1,609
	Constant	,988	1,289	,588	1	,443	2,687		

a. Variable(s) entered on step 1: F146Q, F146R.

Appendix Table 7: Logistic Regression: Factors Influencing Probability of Close Friendship

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95,0% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	AGE	,036	,013	7,687	1	,006	1,036	1,010	1,063
	SEX	-,526	,130	16,467	1	,000	,591	,458	,762
	F124	-,050	,028	3,313	1	,069	,951	,901	1,004
	MARITAL	,522	,132	15,724	1	,000	1,685	1,302	2,181
	OBJ_HEAL	,049	,014	12,164	1	,000	1,050	1,022	1,080
	HOSPITAL	-,323	,192	2,841	1	,092	,724	,497	1,054
	ADL	-,062	,034	3,253	1	,071	,940	,880	1,005
	F146Q	-,141	,138	1,043	1	,307	,868	,662	1,139
	F146R	-,133	,177	,562	1	,453	,876	,619	1,239
	Constant	-2,213	1,248	3,141	1	,076	,109		

a. Variable(s) entered on step 1: F146Q, F146R.

F124= Educational Attainment
Obj_Heal = Poor Health Indicators
Hospital = Recent Hospitalization
ADL = Low Adl/IADL Score
F146Q = Plays A Musical Instrument
F146R = Sings in a Choir

Appendix Table 8: Students' Involvement in In-School and Out-of-School Musical Activities, 1997

Which of the following activities do you do in school?		Percentage of Students	Estimated Number
		100.0	**3,415,000**
Play in a Band			
	Yes	18	614,700
	No	82	2,800,300
Play in an Orchestra			
	Yes	3	102,450
	No	97	3,312,550
Sing in a Chorus or Choir			
	Yes	22	751,300
	No	78	2,663,700
When you are NOT in school, do you ever do the following things on your own, NOT in connection with schoolwork?			
Take Private Lessons on a Musical instrument of in Singing			
	Yes	11	375,650
	No	89	3,039,350
Listen to a Musical Tape, CD, or Record			
	Yes	92	3,141,800
	No	8	273,200
Read a Book about Music			
	Yes	12	409,800
	No	88	3,005,200
Listening or attending musical Performances			
In the last year, how many times did your class go to a concert?			
	Three or more	13	443,950
	Once or twice	26	887,900
	None	61	2,083,150
Have you ever listened to a musical performance at school?			
	Yes	77	2,629,550
	No	23	785,450

Source: U.S. Dept. of Education, National Center for Education Statistics, *NAEP FACTS*, Vol. 4 No.1, Dec.1999. Table 3.

Appendix Table 9. Students' Involvement in In-School Musical Activities, 1997

When you take music class in school, How often does your teacher do each Of the following things?	Percentage of Students	Estimated Number
	100.0	**3,415,000**
Play music for you to listen to		
Almost every day	28	956,200
Once or twice a week	13	443,950
Once or twice a month	10	341,500
Never or hardly ever	14	478,100
I don't have music	34	1,161,100
Ask you to sing		
Almost every day	13	443,950
Once or twice a week	11	375,650
Once or twice a month	6	204,900
Never or hardly ever	35	1,195,250
I don't have music	35	1,195,250
Ask you to play instruments		
Almost every day	16	546,400
Once or twice a week	6	204,900
Once or twice a month	6	204,900
Never or hardly ever	32	1,092,800
I don't have music	40	1,366,000
Ask you to write down music		
Almost every day	5	170,750
Once or twice a week	10	341,500
Once or twice a month	11	375,650
Never or hardly ever	36	1,229,400
I don't have music	38	1,297,700
Ask you to make up your own music		
Almost every day	4	136,600
Once or twice a week	5	170,750
Once or twice a month	8	273,200
Never or hardly ever	47	1,605,050
I don't have music	37	1,263,550

Source: U.S. Dept. of Education, National Center for Education Statistics, *NAEP FACTS*, Vol. 4 No.1, Dec.1999, Table 2.