1 The Waters We Swim: Everyday Social Processes, Macrostructural Realities, and Human Aging

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HUMAN NATURE AND HUMAN AGING: SOME FOUNDATIONAL PRINCIPLES

The project of understanding human development and human aging must be founded on a clear conception of human nature. The most central elements of this foundation concern the distinctive character of the human species and of human beings as living systems. The character of *Homo sapiens* involves sustained and profound interactions between individual and context, and a strong emphasis on context has been reflected in the Social Structure and Aging series over the past 20 years. I begin by sketching some of the key features of *Homo sapiens* that account for the exceptional importance of the role of context and the features of the organism that dictate particular modes of relating to context.

The Irreducible Sociality of *Homo Sapiens*

We are, of course, concerned primarily about aging, but human aging derives from the distinctive characteristics of the human species that are

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present at the beginning and remain relevant throughout the life course. Thus, to understand the character of human aging, it will be useful also to consider how one becomes a young person. It does not just happen, and it clearly does not happen on one's own. It is trite to say the human being is a social product, yet the degree to which human individuals are shaped by experience, relationships, and cultural practices is something that is typically underestimated not only by the lay public, but also by social and behavioral scientists. We know this from many different kinds of evidence. Some of the most dramatic indicators of the depths to which human behavior relies on the internalization of social patterns come from those few and tragic cases of young human individuals who are truly on their own and deprived of human contact: feral children.

Consider Victor, the wild boy of Aveyron. More than two centuries after his capture in 1800, Victor still represents the best-documented and most influential case of a true feral child (Lane, 1976; Newton, 2003; Shattuck, 1994). Although he had a human body, Victor hardly seemed to be a human being when captured at about age 12 in the village of St. Sernin, in the French Pyrenees. Not just in manners and interests, but in perception, motor skills, and requirements for food and physical comfort, this child was extraordinary. Victor's posture and gait, his interests and daily rhythms, and his curious mix of physical abilities and limitations all made it clear that Victor had a unique perceptual apparatus and that his body had developed into a markedly different organism than that of a socialized human being. He was thought to be deaf because he paid no attention whatsoever to sounds to which humans would impute meaning, until it was discovered that he was highly attentive even to relatively faint sounds if they were relevant to his interests, such as nuts being cracked in another room. He had no interest in human comforts such as a warm bed on a cold winter night, preferring to crouch underneath in a thin nightshirt. Victor also liked to run naked in the snow, with no manifestation of being bothered by the cold. The differences extended to the musculoskeletal: his fingers would bend in every direction, providing exceptional dexterity and efficacy in such motor tasks as shucking peas and beans. On capture, Victor wanted only raw potatoes, roots, and nuts to eat, causing amazement among the doctors observing him and the capabilities of his digestive system. Victor was also observed to have an uncanny, eerily intense obsession with the moon and the wind (Lane, 1976).

Victor had apparently grown up for at least much, if not all, of his childhood in mountain forests, either all alone or with animals. This and

other similar cases of feral children (Maclean, 1978; Newton, 2003) with remarkably similar behavioral patterns, including well-documented recent ones (Perry & Svalavitz, 2006) reveal the profound extent to which being human relies on the sustained immediacy of experience in a social context, and how the particular tastes and abilities one develops are provided by experience in the context.

The Flexibility of the Human Organism

Such cases are as close as the behavioral and social sciences can come to experimental conditions demonstrating the extraordinary flexibility of the human organism. At the beginning of the life course, flexibility is augmented by *exterogestation* (Montagu, 1989), a term referring to the fact that human birth occurs decidedly early compared to other species. If human neonates were as mature at birth as other species, gestation would last 21 months (Berger & Luckmann, 1967; Gould, 1977; Portmann, 1961). However, flexibility is not limited to the early years. It continues throughout the life course and is reflected in the distinctly human possibilities of lifelong learning, playfulness, and responsiveness that are reflected in the terms *neoteny* and *juvenescence* (Bromhall, 2003; Dannefer, 1999; Gould, 1977; Montagu, 1989), which refer to the childlike physical and developmental features of human adults. Age-related change in human beings thus always occurs in a social environment, and through the processes of socialization, human beings take on the particular character of their social environment.

It is thus crucially important to begin with a recognition that human beings are not hard-wired in the kind of deterministic sense that many other species are, and that provides the paradigmatic template of the organismic theory (Lerner & Walls, 2001; Reese & Overton, 1970). Humans are, instead, *hard-wired for flexibility*; we are "biologically cultural" (Rogoff, 2002, 2003, p. 63). As Berger and Luckmann (1967) emphasized earlier, this is one of the most central and distinctive aspects of human nature, and it is why others have suggested speaking of human *natures* rather than human nature (Ehrlich, 2000).

It is understandable that we are generally unaware of the profound dependency of human nature on social context or the degree to which patterns of physical and psychological as well as social aging are shaped by context. Individual human beings typically grow up in a local setting of taken-for-granted and largely unreflective routines. Processes of individual development and aging occur gradually over long sweeps of

time and rarely are experienced directly as change. Reflecting on this circumstance brings to mind the assertion, often attributed to Marshall McLuhan, that "we don't know who discovered water, but we're certain it wasn't a fish." So it is with the force of social life in human development and aging. Everyday social relations are the invisible and unnoticed water we swim.

The water of social relationships and cultural practices that constitute our existence as human beings is not just a matter of childhood. Such practices govern most of daily life, organizing activity in the domains of work, family, and personal life; consumer and leisure activity, and so on. Indeed, these categories themselves reflect historically recent social arrangements: Work, family, and leisure were not experienced as segmented spheres of experience prior to the development of mercantilism and industrialization (Cott, 1997; Laslett, 2004). Of course, the regulation of individual activity by social expectations and practices extends to those most authentically felt by the individual, including culinary and other aesthetic preferences, sexual practices, religious beliefs and practices, and so on.

Thus human individuals continue to be shaped by social relations and by cultural practices throughout the life course, including through advanced old age. These effects clearly extend to the physical, as evidenced by cultural differences in health related to dietary and exercise practices. They also extend to age-related change in characteristics earlier assumed to be inevitable and universal concomitants of aging such as hypertension (Dressler, 1999; Fleming-Moran & Coimbra, 1990) and insulin resistance (Barzilai & Gupta, 1999; Ma et al., 2002; Rowe & Kahn, 1998).

The Force of the Individual: Organism and Actor

To emphasize the social organization of physical and mental aging does not mean that resilient features of the organism are unimportant, nor that there are no universal features of development (Dannefer & Perlmutter, 1990). For example, humans are born with a predisposition for language learning, and many researchers believe that the inability of feral children to acquire language reflects the importance of critical periods of brain growth and development for learning, and such organismically based physical changes occur throughout the life course.

Yet to focus on aspects of the universal or ontogenetic aspects of individual development as a way of preserving the individual against social

determinism is to miss altogether the distinct significance and power of the individual human person, which is as a *world-constructing actor.* In acting in the world, the individual is doing more than "producing her own development" (Lerner & Walls, 1999); she is simultaneously co-constituting her own biography and social relationships, which form a central and proximate part of her environment (Berger & Luckmann, 1967; Dannefer, 1999; Mascolo, Fischer, & Neimeyer, 1999). With the potentials for learning and imagination provided by neoteny, this reconstitutive process also contains the potential for some degree of novelty and change. Thus, to emphasize the force of experience and context in shaping individual development is not to deny the agentic force of intentional action.

In sum, individual agency and social forces continuously shape each other in a reconstitutive, dialectical process. Although both are irreducibly important, they are not equal in their effects and potency. Each individual enters the world and human community helpless, and has her entire being shaped by the language and taken-for-granted practices of everyday life. The individual's actions, like those of the actors around her, largely conform to and thus reproduce those practices. Thus individuals are constituted and co-constituted in the context of preexisting social systems.

The Persistent Tendency Toward Reductionism in the Study of Human Aging

The importance of experience and context in influencing the way individuals develop and age has long been recognized, and it is an idea that received a transformative boost with the introduction of cohort analysis and the discovery of the radically different trajectories experienced by different cohorts (Schaie, 2005; Schaie & Baltes, 1996). Yet it has now been more than four decades since cohort analysis was introduced in 1965, and in many domains—including many psychological and psychosocial ones—researchers interested in age remain intellectually inclined to look for explanatory forces within the self-contained psychological and physical characteristics of the individual human being. There are indications that interest in cohort analysis itself has diminished even as the number of high-quality longitudinal data sets is increasing (Dannefer & Patterson, 2008). The relative lack of careful attention to cohort-related and other contextual factors in many recent analyses of age and development reveals a tendency toward reductionism.

Several factors contribute to the continued robustness of reductionist thinking. One that is frequently mentioned is the strong individualism of Western society that is deeply embedded in language, values, and social practices, including those of social and behavioral scientists. Westerners, and especially Americans, are said to be disinclined to be very skeptical and critical about individual-level explanations and about the unreflective use of age as an explanatory variable (Broughton, 1987; Dannefer, 1999; Morss, 1990).

Another reason that is more specific and potent, and yet much less recognized, has to do with the relationship between developing and aging individuals and social institutions. This is especially true for institutionalized social practices designed to take into account age and age-graded institutional forms, whether schools or geriatric institutions. Such institutions are deliberately designed with age-specific needs in mind. Yet when serving members of such a generative and responsive species as *Homo sapiens,* the dynamics involved are not so unidirectional and straightforward. Indeed, the interactive, responsive character of human development and human aging means that individual aging processes (both physical and psychological) occur in interaction with, and are to some extent shaped by, the institutional structures provided for them. Thus institutions create, to some degree, the very realities of human development and aging that they are also intended to accommodate.

The basic social processes by which institutional forces shape individual opportunity, individual activity, and self-definition are similar across age and across types of institutional setting. If older individuals begin to become frail and dependent, the dependency scripts that are part of nursing home practices further that dependence (Baltes & Wahl, 1992; Barkan, 2003; Thomas, 1996). Stroke patients who are unable to feed themselves but have a chance of recovering significant function are instead fed by nurse's aides and thus deprived of the opportunity to regain some independence (Dannefer & Daub, in press). Children who go to fabulous schools and excel are sorted into further enriched and stimulating educational environments that confirm earlier prediction of their potential and poise them for further affirmation of their brilliance, while children who attend poor schools that lack the resources to prepare them for advanced educational opportunities are declared to be slow learners and are excluded from such opportunities (Beyer & Apple, 1998; Kozol, 2005). Similar dynamics exist in the workplace, as demonstrated in the work of researchers such as Kohn and associates (e.g., Kohn & Slomczymski, 1990) and Marmot (2004). There is thus

a kind of *surplus individualization* embedded in the very structure of institutions that have been designed to serve those who they actually are not just serving, but reconstituting (Baars, 1991; Dannefer, 1999). In this process, the individual is socially canalized further along trajectories either of further development and reward, or of increasing disability or disadvantage (Dannefer, 2003a). These dynamics thus may create a reification of organismic tendencies, even when they are tendencies that we would prefer to see minimized or ameliorated or that have the possibility of being reversed.

Constitutionalist Versus Accommodationist Views of Social Institutions

These considerations reveal the contrasting logics of two divergent views of institutional life, which may be called the *accommodationist* and *constitutionalist* perspectives on human institutions. The dynamics that I have just been describing relate to the constitutionalist view, which focuses on ways in which institutions, whether stratified educational systems or nursing homes, play an active role in creating the very conditions in individuals that require attention. From this perspective, institutions are viewed as actively contributing to the generation of problem conditions in the lives of the individuals they are intended to serve. Institutional processes sustain definitions of reality and legitimate differences between individuals and the distribution of opportunity among them. Thus they operate as subtle but powerful self-fulfilling prophecies, the effects of which are inscribed in the functional and performance-related outcomes of individuals.

In contrast, the accommodationist view is characterized by the assumption that the institutions we live in and are processed through—from preschools to retirement communities—are efficaciously designed to accommodate the needs and limitations of the individuals who are moving through them. School grades and tracks have been designed to accommodate differences in academic ability across age and among classmates, and vocational counseling and psychometric testing is claimed to help individuals learn where they fit in the occupational structure, like pegs in a pegboard. The progression of the nursing home career through stages of decline is justified on the basis that it provides an effective way of managing the needs of the aging residents. In sum, a presumption exists that human care organizations are functioning reasonably effectively and in line with their stated rationales, missions, and mandates.

Of course, neither of these views—accommodationist nor constitutionalist—is by itself entirely adequate. Constitutionalists can rightly say that to accommodationists, the active and constitutive force of social processes and social-structural constraints remains invisible because institutions are creating as well as responding to human needs. Accommodationists may reply that constitutionalists acknowledge neither the practical requirements of dealing with individual differences and needs, nor the value of presently existing institutions, despite their imperfections. Clearly both perspectives are heuristically valuable as ideal types that capture the essential structural features of a particular perspective and point of view. Constitutionalists rightly emphasize the often adverse consequences of deliberately designed human care institutions based on the medical model. Nevertheless, they do not generally dispute the necessity of such institutional structures, despite their destructive aspects. They are not institutional anarchists. On the other hand, few accommodationists would deny that institutions can have adverse effects with long-term adverse consequences.

To acknowledge some validity to the social constitutionalist idea that institutions exacerbate or even create problems within the individuals who are processed through them is to acknowledge that to some degree, individual problems—including age-related problems—are part of an elaborate dynamic of self-fulfilling prophecy. This applies in all kinds of settings, both formal and informal; it can often be clearly seen in the more visible and predictable organization of everyday life that is imposed by age-graded human care institutions, whether elderhostels or K–12 schooling. With regard to schooling, for example, social science and related literatures contain innumerable, well-documented cases of high school students who act smart or not so smart based on what they are told by others about their abilities (e.g., Holstein & Gubrium, 1995; Jussim & Harber, 2005; Lucas & Good, 2001; Rist, 1979; Rosenthal, 1991). Equally apt examples can be drawn from studies approaching the end of the life course. As noted previously, the remaining skills and competencies of nursing home residents are removed by the regime of total dependency and powerlessness (Baltes & Wahl, 1992).

Such processes are unnoticed, continuous, seamless elements in the everyday lived experience of late modern society. Existing institutional arrangements and the social dynamics that derive from their organization are the waters we swim—taken for granted; accorded legitimacy by their very presence and power; always moving toward invisibility. These waters are so relentless and so seductive that they are difficult to discern

even for critical observers such as behavioral and social scientists, who try to cultivate an analytical detachment and skepticism toward the social practices and institutional arrangements that organize our everyday lives and relationships.

INDIVIDUAL AGING, MACRO-LEVEL PROCESSES, AND THE MISSING MIDDLE: THE WATERS WE SWIM

This discussion has focused heavily on social structure and processes at the point of everyday life: the immediacy of microsocial interaction and the interface of experience with organizational dynamics, with little attention to the macrosocial. I begin with an emphasis on the micro- and mesolevels for two reasons: first, because it provides the basic foundation for studying distinctly human processes anchored in physical and developmental features of Homo sapiens, and second, because an understanding of the role of meso- and microdynamics that are proximate to the individual in everyday life in shaping aging is underdeveloped in the study of age. Because of this underdevelopment, the map of the social processes that shape individuals and that represent and reflect the impulses of broader social processes remains incomplete. For gerontological researchers, there has thus been a *missing middle* in the charting of social dynamics as they impact aging—a level that is critical to apprehending fully the relations between age and social structure. Examples of everyday interactional processes in which individuals' lives are constituted include a range of social relations and settings. They include the informal but habitualized patterns that characterize relationships in family life and among other consociates, and everyday experience that is organized by the reward structures and practices of formal organizational settings—in workplace, education, health care, and other contexts that involve assessment and gatekeeping of individuals. In addition to explicitly defined structures, an irreducible aspect of formal organizations is the concomitant existence of informal systems of social relations that can be centrally important to individual participants and to organizational life.

Across disciplines, the study of aging-in-context has tended to focus on understanding context through modes of social analysis several levels removed from everyday experience: through demographic analysis, through historical scholarship or cross-cultural comparisons, through examining macrostructural trends and policy initiatives, or through long-term longitudinal studies that track individual trajectories on repeated measures of

snapshot characteristics. Such data are as invaluable as they are diverse, yet they share a common limitation: With such information, it is not possible to know in any detail the actual social processes of the everyday experiences that comprise the medium in which real-life individuals are constituted as living, developing, and aging beings. With demography and macrotrends at one level, and a focus on individual characteristics at the other, analysis of how the co-constitution of both actors and social relationships is accomplished and shaped in everyday interaction is typically undeveloped. As Diewald (2001) puts it, "psychological traits and functional capacities of individuals are mostly seen as being 'not social' and thus out of the realm of sociological explanations" (p. 228). This is a frequent assumption of both psychology and macrosociology, and it entails a remarkable omission in fields such as gerontology and the life course, where a central concern is to make connections between individual and social processes. These connections are required to understand human aging, and they require development of a middle level of social processes: the micro-meso-dynamics of informal social interaction and of the institutions that regulate it.

To point to this area of theoretical underdevelopment is not to detract from the value of the numerous traditions of research that have made seminal contributions to understanding the relation between age and social structure, whether long-term longitudinal studies of stability and change under varying conditions, or research demonstrating differential patterns of physical aging across time or across societies. Such discoveries have, in fact, provided some of the most compelling evidence requiring acknowledgment that human aging is something that can only be understood in context. Without cohort analysis and cross-cultural and historical research, and without population data and large-scale, representative studies, we would know much less about the power of social context to shape human development and aging. Yet that knowledge does not, in itself, provide an explicit conception of how development and aging actually occur.

Of course, it is not the task of historians or demographers, or even anthropologists, to articulate an explicit model of the person, even the person-in-context. Although these forms of analysis provide broad and comparative perspectives of change and difference in individual lives, they reveal little about the actual mechanisms through which changes in individual health, mental and physical functioning, aspirations, and values are produced. These are changes that happen to individuals and that are mediated in the proximate immediacy of everyday living, growing, and aging.

Notions of how these macro-level differences are linked to individual and micro-level realities often seem to be mystifying and the processes involved hidden in a black box. As so often happens, in such a situation, we tend to fall back, by default, on familiar, organismic conceptions of individual growth and aging. Almost by default, then, macro-level analyses have been wedded with quite traditional models of the individual that emphasize self-contained individual characteristics (e.g., coping style, temperament) that tend to be viewed either as stable or as changing in normative, age-graded, and implicitly organismically driven ways.

This tendency is evident in the resurgence of individual-level explanations, in the increasingly peripheral attention accorded to social context, and in the frequency with which cross-sectional data are employed to make inferences about age-related change, despite the dramatic expansion of quality longitudinal data. What remains to be developed, then, is a deliberate, systematic analysis of how individuals are actually constituted and change over time, processes which require, and in many respects take their character from, the waters we swim.

As noted previously, the work of some psychologists does bring us quite close to the dynamics of everyday life, as they study the personal consequences of conversational scripts (e.g., Baltes & Wahl, 1992) or of how modifying the context of everyday life can dramatically alter individual functioning (e.g., Grow & Ryan, 1999; Langer & Rodin, 1976). But these insights about the experiential and social contingency of individual change remain to be integrated both with sociological studies of interaction and with psychological studies of aging-in-context.

To make those connections in empirical research is not easy work, and it can be expensive. It requires at least some measure of labor-intensive data collection at the micro- and mesolevels of analysis. Consider Figure 1.1, depicting the cycle of induced incompetence, from Bengtson's (1973) early work (Kuypers & Bengtson, 1984). This diagram applies the principles of labeling theory to depict the sociogenic production of age-related incompetence. Beginning with a social definition of vulnerability, it traces how that definition can become a self-fulfilling prophecy—reified by others, and then internalized by the actor himself or herself. And the same applies to gaining competence and expertise. Neither competence nor incompetence is organismic; both are induced in the course of social interaction. This not something that happens just occasionally as a curious anomaly in social life; it depicts processes that are occurring constantly, for every human actor, all the time. Because we are swimming in it, it usually continues to go altogether unnoticed.

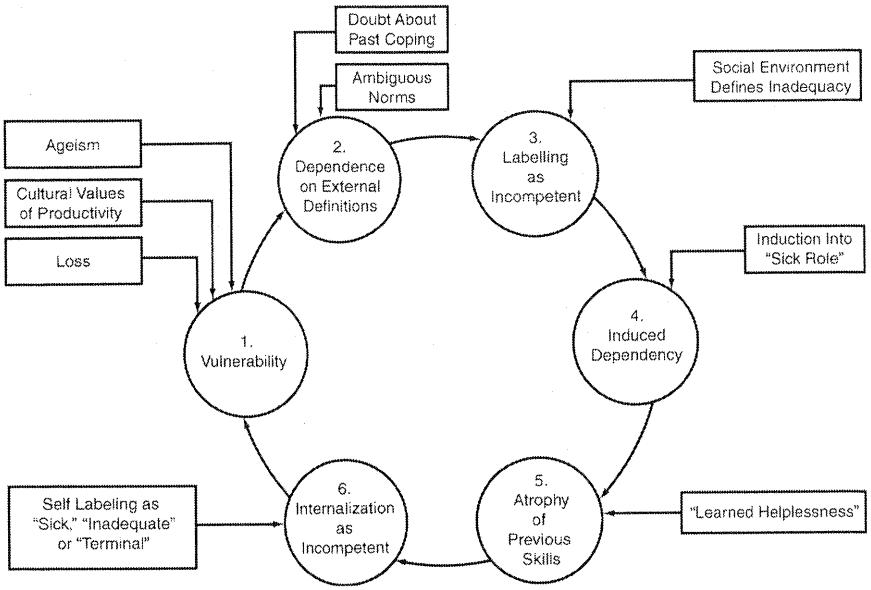

Figure 1.1 Sociogenic production of age-related incompetence.
From *The Social Psychology of Aging* by V. Bengtson, 1973, Indianapolis, IN: Bobbs-Merrill.

While this model is limited by a lack of structural connection, it is an exemplary effort to chart the interactive mechanisms of how individual identity and individual abilities are constituted in interaction.

The self-society dynamism has been a topic of this series (see, e.g., Gergen & Gergen, 1999; Gubrium, 1999), and research traditions relevant to social gerontology include some intriguing studies showing how individual abilities may be produced as outcomes of social processes (e.g., Diamond, 1995; Kanter, 1977; Holstein & Gubrium, 2000). These are relatively few in number, however, and seldom are efforts made to integrate them with systematic quantitative analyses of individual outcomes or of macro-level processes. Such studies also have the classic limitations of the ethnographic tradition, in their lack of representativeness, dearth of standardized concepts and measures, and so on. But there is much to recommend them. As symbolic interactionist pioneer Herbert Blumer (1969) challenged us, "the first task of a science is to respect its subject matter" (p. 41). If one accepts the premises of the social constitution and sustenance of the individual, and of humans being hard-wired for flexibility throughout the life course, the central necessity of detailing how the person is accomplished through the immediate processes of everyday life becomes clear.

LINKING AGE TO MACROSOCIAL FORCES: CONTINUING CHALLENGES

A widely recognized limitation of the classic interactionist tradition in sociology is its almost deliberate detachment of the processes it studies from larger structural realities and processes (e.g., Blumer, 1969). Such detachment is unnecessary and counterproductive because there are obvious connections between such levels. Consider, for example, the relation between kinds of treatment and diagnosis that occur in medical clinics and hospitals and their revenue streams. This is a relationship that is intricately informed by rules for Medicare, Medicaid, and insurance reimbursement, or by the models of human nature and human development contained in the curricula of nursing and medical schools. Yet the impact of macrostructural definitions of age is more pervasive still: Consider the images of aging that are reified by our entire culture—from social policy, to the educational system, to entertainment media, to advertising. Such macro-level forces organize and regulate the institutional practices and micro-level interactional processes that ethnographers study.

In modern bureaucratic states, the processes of everyday life and the organizational dynamics that so often define and direct the daily experiences of individuals are themselves organized, in substantial part, by macro-level processes of economic development. Since the advent of mass media, culture itself has become more centralized and homogenized, a macro-level force with great leverage over individual lives, as is evident by the resources individuals expend to achieve a properly informed and stylish presentation of self in matters ranging from music, media options, and books to designer clothing and trendy technology, whether handheld devices or SUVs.

The historian Stuart Ewen (1976) demonstrated how the force of advertising supplanted industrial development in shaping the consciousness of the population in the 20th century. More recently, the extraordinary deliberateness and effectiveness of efforts of marketers to extend the efforts that Ewen described to early childhood have been documented (e.g., Schor, 2004).

As historians of age have demonstrated, mass media (in entertainment programming, in advertising, and in authoritative public pronouncements from educational and medical experts) have played a central role in advancing particular forms of age consciousness (Chudacoff, 1989; Katz, 1994, 2006; see also Butsch, 2000). The images conveyed by media have produced an increasingly homogenized depiction of age across

society, reflecting the increasingly standardized and normal life course patterns that reflect the institutionalization of the life course (Dannefer, 2003b; Kohli, 1986). As a result, the culturally pervasive images of age are now internalized by an entire society from early childhood onward—including, of course, gerontologists of every discipline.

Macro-level forces relevant to understanding aging thus include not only policies and programs, and not only populations and the broad-scale institutional configurations in which individuals live and age, but they also include the cultural definitions of age and old age that come to have their own power.

Because so many features of everyday life have implications for aging, the relevance of culture to age-related change is not at all limited to explicit references to age. Consider, for example, what is coming to be called the *pandemic of obesity*, which reflects a health issue that has major implications for the health and longevity of individuals as they age. For this, we can thank in part the combination of sedentariness and destructive diets, the latter aided by the fast-food industries. With utter predictability, the growing preoccupation with fat is spawning a host of antiobesity drugs, which are authoritatively announced as the answer in every form of advertising, including the Web. As one example, consider Lypozene, which claims that it enables the consumer to lose weight "without working hard at it," without changing lifestyle or diet, and while "eating what you want" (http://www.lipozene.com/).

In some cases, the targeting of key subpopulations has apparently been quite direct, as documented in Maxwell and Jacobson's (1989) investigative monograph *Marketing Disease to Hispanics*. While obesity may in some cases have a heritable component, a dramatic change in incidence or prevalence occurring within the span of a few decades cannot be genetic in origin. Obesity thus illustrates a problem in which (a) the long-term, age-related implications of everyday lifestyle practices and (b) macro-level dynamics (including corporate and other institutional interests) remain invisible and unacknowledged even as they continuously operate to organize people's daily routines. Aspects of these culturally organized routines are familiar and well publicized: minimal need or incentive to exercise, instant gratification and the sensitization of taste buds to junk food, the tendency to look to pharmaceuticals as a source of solutions. Thus the entire society is bathed in recommendations for culinary, lifestyle, and medical practices that are needed for profit margins of established product lines, while the role of products and the profits they provide as social forces that operate to constitute individual patterns and population processes of individual aging is unnoticed.

Of course, the fact that there is bad news here with respect to health and aging is irrelevant to the fundamental point that cultural knowledge and practices shape individual aging. Indeed, the news is not bad for everyone. Among elite subpopulations, there has now emerged a kind of counterculture that is obsessed with antiaging nutritional and lifestyle practices, and if such practices were to become universally practiced, it likely would have quite a profound effect on individual health and patterns of age-related health (Binstock, 2004). These practices, too, are socially generated and transmitted through information networks accessible to social and cultural elites. The effects of the stratification of such nutritional practices over extended periods of time are components in the ongoing process of cumulating dis/advantage in health (Crystal, 2006; Dannefer, 2003a; Douthit & Dannefer, 2007; Ferraro & Kelley-Moore, 2003). Thus the individual's location in networks of knowledge and opportunity may determine the extent to which the individual is at risk for obesity or good health (Christakis & Fowler, 2007). In sum, cultural practices, whether salutary or not, are an irrepressible, constant, and substantial element in the constitution of patterns of age-related change.

The linking of macro-level processes to age can be extended to the definitions of reality offered by the advertising and entertainment media that are key components of mass society. Often, such definitions have no obvious or inherent connection to age but nevertheless have profound implications for health. As long as individuals take them for granted as inevitable features of everyday life, the socially specific configuration of social forces that operate at every level—micro, meso, and macro—to produce age-related outcomes, those forces will remain the unacknowledged, unexplored water in which we all swim. The application of principles and insights in the behavioral and social sciences to the study of age has contributed a great deal to debunking the myths and fallacies of cohort-centrism (Riley, 1978) and ethnocentrism in the study of aging. Yet in deconstructing the power of social forces that shapes the reality of age and aging, an abundance of work remains to be done.

CONCLUSION: DISCOVERING THE WATERS WE SWIM

Immersion in the familiar, taken-for-granted, and relatively stable routines of everyday life obscures from view the necessity of social interaction as a precondition for becoming human and as a central regulator that sustains the socially specific practices and expectations that organize developmental and life course processes as individuals age.

The all-encompassing embrace of everyday social life calls to mind McLuhan's fish, who could not discover water since she was bathed in it as a continuous reality, without which she could not imagine existing, and indeed could not exist.

In the context of individualistically oriented societies, both the *lived experience* of aging in everyday life by the individual members of a society and *scientific inquiry about the experience of aging* tend to begin with an assumption of self-contained individual processes as strong determinants of age-related outcomes. Scholarship focused at both the individual level (e.g., psychological gerontology, lifespan development) and at the collective level (e.g., demography of age) has tended to rely on such assumptions and has thus omitted the crucial processes in between the individual level and the macro- and population levels. What has been thereby neglected are specific features both of individual human beings and of their interactions with each other and with the contexts in which they live, and through which they are constituted as developing and aging individuals, and which therefore must be made explicit to explain human aging.

These features include, at the individual level, the hard-wiring for flexibility of the human organism, and at the social level, the processes of social construction and social organization that regulate development and aging in a socially specific and culturally defined system of human relations.

In late modern societies, with centralized structures of knowledge and control, professional and "expert" knowledge about well-adjusted human behavior and normal aging and development gives legitimacy to the institutionalized life course and to mechanisms of stratification among age peers. Thus it serves as a powerful and established cultural force that defines and organizes the experience of individuals. Such institutionalized and professionalized declarations of age-graded normality are intended to accommodate the changing needs of individuals as they develop and age.

As social analysts are confronted simultaneously with a steady graying of the population and with increasing social inequality within age groups, the need to distinguish authentic age-related needs from the oppressive effects of surplus individualization and the invidious effects of mechanisms of stratification remains a centrally important yet undeveloped area of scholarship. By developing our understanding of these processes, scholarship will reveal the waters we swim, and suggest how they might be altered to enhance the possibilities of positive human development.

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Continuing Challenges

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