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The Salience of Language in Probing Public Attitudes about Life Extension

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In a 2003 *Science* article, Eric Juengst and colleagues asserted, “NIH [National Institutes of Health] has a responsibility to help society respond to the implications of antiaging research for which it has been providing its cachet and public funds,” and went on to call for public deliberations on such implications (1323). Now, Partridge and his colleagues (2009) provide an exploratory study of public views of life extension in Australia, drawing on data from six focus groups as well as 57 individual interviews recruited from a registry of volunteers at the Australasian Center on Ageing in Queensland. To probe views of life extension, Partridge and his colleagues asked several interesting but general questions of their participants (e.g., “What are your initial thoughts when you hear the term ‘life extension’?” “Would you be interested in using a life extension technology?” “Should we research antiaging and life extension technologies?”) (68).

It is not surprising that these investigators find a diverse range of favorable and unfavorable opinions that echo the range of issues that previously have been raised by bioethicists and others (e.g., Post and Binstock 2004). These opinions are undoubtedly affected by differences in how participants interpret the terms “life extension,” “life extension technology,” and “antiaging”—for example, in the number of years that might constitute an extension of life, when in the lifespan these extra years get added, the upper limits they might impose on such an extension if it were acceptable, or how radical the treatments are relative to common medical treatments that also (perhaps inadvertently) extend life.

In our National Institutes of Health (NIH)-funded study of efforts to control human aging, we have interviewed biogerontologists about their research on the biology of aging (e.g., Settersten et al. 2008), providers of anti-aging medicine about their practices (e.g., Fishman et al. 2010 [in press]), and consumers of anti-aging therapies about their treatments (an ongoing research effort). Throughout these projects, our findings repeatedly speak to this very issue—the power of language to condition, confuse, and clarify what is signaled, said, and understood. This is especially so in a field as contested as anti-aging science and

medicine, in which the ‘boundary work’ of different stakeholders is strongly reflected in the descriptive terms they use to distinguish legitimate from illegitimate scientists and providers, as well as science from industry (Fishman et al. 2008). For instance, biogerontologists use strong language such as “No Truth to the Fountain of Youth” (Olshansky et al. 2002, 92) to prevent the public from associating them with profit-seeking ‘hucksters,’ ‘shysters,’ and ‘snake oil salesmen’ who prey on vulnerabilities of consumers.

Consider the term “antiaging” itself, which Partridge and colleagues (2009) employ. All of the providers in our study explicitly advertise themselves as delivering “anti-aging medicine.” Yet, most of them express some reservations about this label, saying that it has some utility for attracting patients but is not an accurate descriptor for their daily practices. In fact, they argue that “anti-aging” is largely misunderstood by the public to be about making people *look* younger, even though aesthetic services are only a small part of what they offer if they provide these services at all. Instead, they often prefer terms like “age-management medicine,” “integrative medicine,” or “longevity medicine.”

Most of the biogerontologists in our study express great distaste for the term “antiaging” and seldom apply it to their own research—even if they tacitly acknowledge that their ultimate goal is to battle aging, and that they therefore have interventional goals that are not so different from anti-aging providers. Most struggle, however, to find a more acceptable term. The dominant alternative terms with which scientists feel comfortable are also generic—“aging research” or “biology of aging” research. Other common terms include “age-related physiology,” “aging intervention,” “interventive gerontology,” and “geroscience.” Some use more specific terms like “prolongevity” and “longevity science.”

The significance of language is also reflected in the repertoire of responses that the scientists in our study use to handle social, religious, political, and other objections to their work—if they feel public opposition on these fronts. Many of the biogerontologists we interviewed indicate that they do *not* personally encounter such objections, and public controversies rarely penetrate laboratory walls. If they do, the most common reaction of these scientists is to simply ignore or dismiss these objections as unworthy of defense either because they are deemed farfetched or because scientists do not consider it their job to respond to public opposition. When scientists do respond, the language they use to describe their research to members of the public becomes critical in redirecting or minimizing objections. They argue, for example, that anti-aging science is “pro-health” not “anti-death,” or that anti-aging science is ultimately about prevention—and eliminating “age-associated diseases” (such as cancer and Alzheimer’s), both of which are palpable to lay audiences.

Language is equally important to providers of anti-aging medicine as they frame and market their work for the public. Their goal, these doctors often say in our interviews, is to help their clients create an “optimal” or “vital” self. The perception of the public may be that the practices of anti-aging providers are “high-tech” and “unconventional.” Yet these providers emphasize their wish to have more intimate knowledge of their patients, create tailored treatments, and build a collaborative pact between the provider and patient. They repeatedly use terms that signal their commitment to these things, such as “personalized,” “individualized,” “whole person,” and “collaboration.” A major problem for providers is to correct what they see as public misunderstanding of anti-aging medicine as narrowly being about cosmetic surgery and other aesthetic treatments, rather than the broad array of services and individualized care they provide.

All of these points regarding language bear on the ultimate wish of Partridge and his colleagues to assess public attitudes toward life extension. In order to get a richer understanding of such attitudes we must carefully probe how members of the public

understand its key terms and conditions. This is necessary if we hope to genuinely foster and deepen public policy debates on life extension. Public debates can also help maintain focus on scientific research for the public good rather than simply that which is most profitable. Such debates need to be sufficiently nuanced to probe *which* life extension strategies are and are not permissible and, more importantly, *when, for whom, under what conditions, and to what effects* for individuals and society.

The challenges of language and understanding trigger a larger set of questions with which we must continue to wrestle: What are the proper roles and limits of the public in deliberating and solving complex bioethics issues? How should public opinions be gathered and integrated into the policy-making process? To what degree should the public determine the funding of scientific research? Despite the call by Juengst and colleagues (2003) for public dialogue on anti-aging science, the methods for doing so have not yet been clearly explicated. But many of the key needs—to facilitate cooperation among stakeholder groups, to advance and translate scientific knowledge, to enhance public trust in science, and to engage in activity aimed at the public good—all ultimately rest on language.

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