

Sizing up culture: the spirit, the flesh and the Body Mass Index

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Abstract

As a concept in the human sciences, 'culture' is a many-splendored thing. This paper nevertheless argues for a broadening of the significations of the word in sociological and related discourses from the now typical focus on symbols, language, art *et cetera* to the general idea of cultivation, of directing and guiding processes of life, growth and development on whatever scale. Such usage would be consistent with both the history of the word and its contemporary uses in other disciplinary contexts. These speculations are illustrated with reference to some North American telephone survey data on people's self-reported heights and weights. Explaining in terms of culture or national cultures or cultural differences why it is that Americans, and American women in particular, report heavier body weights than their Canadian counterparts is a more interesting and potentially useful objective when we go beyond professed beliefs and values to consider the whole range of material and symbolic conditions under which humans are grown in both countries.

Keywords: Culture, Life, Growth, Height, Weight

In Salman Rushdie's *The Ground Beneath Her Feet*, the legend of Orpheus and Eurydice serves as the basis for a rock-and-roll love story set in an alternative universe in which, among many other things, the greatest popular musicians of all time were from Bombay. At one point, the narrator reflects on questions of cultural imperialism, culture traitors, low culture and related matters, helpfully providing an explanation (from the dictionary) of what a 'culture' is: 'a group of micro-organisms grown in a nutrient substance under controlled conditions' (Rushdie 2000: 95).

Within the basic opposition of the spirit and the flesh, mind and matter, around which Western thought is usually organized, it is probably fair to say that most conceptions of culture in sociology and cognate fields fall closer to the spiritual/mental end of the scale. Talcott Parsons (1951) had the 'cultural system' inculcating norms and values. Ronald Inglehart studies political culture in the form of abstract values gauged via

mass sample survey questions (e.g., Norris and Inglehart 2002). Culture is spoken of as embracing values, beliefs and attitudes, as consisting of words and symbols and forms of expression. Nothing is wrong with investigating such things, of course. Humans are meaning-making animals. Purely symbolic culture is what tells us who we are and how to make sense of the world, not to mention providing us with the linguistic tools for having the discussion in the first place. Yet the possibility remains that, by confining our attention in this fashion solely to the sphere of art, religion and ideas, we may be missing out on something important.

Certainly, the nineteenth-century elite ideal of High Culture and the twentieth-century anthropological sense of culture as everything characteristic of a particular group of people together provide a classic instance of what Norbert Elias (1978 [1970]) called *Zustandreduktion* or the reduction (of a process) to a state. The notion of culture as a condition to be attained or a society's stock of knowledge contrasts with earlier uses of the word (from the Latin *cultura* 'growing, cultivation' – *Concise Oxford*), where culture was not an object but a process, one of cultivation, of farming or growing.

Tim Ingold (2000: 77-88) has suggested that 'making things, growing plants, raising animals and bringing up children' are all ultimately variations on the same theme of humans establishing appropriate environmental conditions for some entity's growth and development. Drawing on the ethnographic examples of the Achuar of the Upper Amazon, who compare their children to the plants in their gardens, and the people of Mount Hagen in PNG, who use the same language to describe the 'planting' of their children and their pigs as they do for their crops, Ingold argues that even the idea of farming being qualitatively different from foraging (or husbandry from hunting) is a distinctly modern innovation. All are about guiding and channelling processes of life, growth and development in desired directions.

When it comes to addressing the conference theme of how sociologists might best relate to psychology, biology and economics, especially in a policy-related context, the key words here are again life, growth and development. If we are seeking a common language in which to attempt communication across the human sciences broadly conceived, then when we speak of culture, one starting point might be the growth of humans as living things that have to make a living over the course of their lives. The development of the individual, of the population, of the economy, all occur in a context of social relationships and institutions. So what happens if we think of society as being about the human-relational setting in which people are grown, and culture as about growing into a certain tool- and symbol-manipulative bodily *habitus*? Foucault, in his celebrated account of the transition to modern forms of governance (1981: 135-159 [1976: 177-211]), sees this as involving a shift from a right of death (*droit de mort*) to a power over life (*pouvoir sur la vie*), from the fear of the sword to the nurture of the living subject. Bodies are rendered docile, made amenable to the disciplines of the barracks, the factory, the clinic and the classroom, while bodies of knowledge grow up around them. Furthermore, the collection of people and activities which we term the State expands in its roles and functions: schooling, sanitation and social services shape our bodies as well as our thinking. While those of a romantic disposition may lament ‘the nanny state’, the control of human growing conditions via governmental agencies is the reality of the modern world, especially its richer parts. A present-day country’s culture is thus as much a question of its health insurance system or its childcare provisions as it is of its folksong, cuisine *et cetera*.

An example: the masses of the masses

In demonstrating the multiple significations of culture in the most mundane of social research settings, and the ways in which interacting bodies, artefacts and symbols culture and are cultured by each other, a good example is provided by what people say when you ask them about the size of their bodies, i.e., their height and weight. At once we have here the blunt reality of the physical organism as endured by itself, and various levels of signification in the symbolic construction of self and societal norm. The issue also has topical relevance, not least to the interminable arguments over obesity, health and the meaning of life (see e.g. Gard and Wright 2005; Rigby 2006).

The data in the tables below come from the Joint Canada/United States Survey of Health, a collaboration between Statistics Canada and the National Center for Health Statistics of the US CDC (2004). Over the period from November 2002 to June 2003, computer-assisted telephone interviews were conducted with 3505 Canadian and 5183 American adults in private households, with a view to generating cross-nationally comparable social survey data on a range of health-related issues. Questions were asked in English, French or Spanish to suit the respondent. The responses were weighted up on the basis of other survey and census data to provide estimates of the adult population. See the JCUSH website (<http://www.cdc.gov/nchs/nhis/jcush.htm>) for further details of the survey methodology, plus the questionnaires, user's guide, and the unit record data files themselves.

Among a good many other questions to do with health problems and service use, respondents were asked 'How tall are you without shoes?' and 'How much do you weigh?' It should be recognized from the outset that these are self-report data, and prone to all the usual problems of the same, when it comes to the distortion of one's judgement in the presentation of self. In short, we have what people say they weigh,

not their actual weight. *Pace* the logical positivists, Actor-Network Theorists and others who cannot countenance a natural reality prior to or independent of our observational operations, no high-calorie metaphysics is necessarily involved in this distinction. Let us call someone's 'real' weight or height merely what we would expect to find if measuring them with a reliable standard instrument. Research into the relationship between measured and reported weights and heights, such as that by Alison Hayes and her colleagues at Sydney University (Hayes et al. 2008), finds unsurprisingly that people say they are taller and/or thinner than they measure up to be, and suggests corrections to survey responses for public health purposes. For now though, self-reports it is.

Table 1. Self-reported Height and Weight, USA and Canada, 2002-3

	Height - inches		Weight - pounds		Body Mass Index	
	Canada	USA	Canada	USA	Canada	USA
Mean	66.8	66.9	165.0	171.1	25.7	26.5
Standard Deviation	4.0	4.2	38.0	40.7	4.7	5.5
% Variability	6.0	6.2	23.0	23.8	18.5	20.8
Weighted N ('000)	23,761	205,447	23,601	200,785	23,148	197,857
Ratio of Means (US/Can)		1.002		1.037		1.033

Note: Units are the most commonly stated. An inch is 25.4mm, a pound approximately 454g.

Source: Statistics Canada and US CDC, Joint Canada/United States Survey of Health (URF)

Table 1 summarizes the self-reported heights and weights of Canadians and Americans in 2002-3, using local units of measurement. It also includes Quetelet's famous Body Mass Index, or weight in kilograms divided by the square of height in metres, as calculated by the compilers of the original dataset. As you can see, Americans are bigger on average, and more widely varying, than their northern

neighbours on all three indicators. More interesting is the contrast between height and weight in the relative magnitude of the cross-border difference. The average US interviewee was only about one-fifth of one percent taller than the average Canadian, but the mean American weight was fully 3.7 percent greater. The contrasting BMIs are thus more a matter of numerators than denominators.

Table 2. Self-reported Height and Weight, Distribution, USA and Canada, 2002-3

Percentile	Height - inches		Weight - pounds		Body Mass Index	
	Canada	USA	Canada	USA	Canada	USA
5	61	61	110	117	19.1	19.6
10	62	62	120	125	20.2	20.6
25	64	64	136	140	22.4	22.8
50	67	67	160	166	24.9	25.6
75	70	70	188	192	28.1	29.1
90	72	72	215	225	31.6	33.4
95	73	74	235	245	34.0	36.3

Source: As for Table 1

Looking at the distributions of the three variables in the two countries (Table 2) lends further support to this idea. The overall similarity of the two distributions of reported heights is remarkable; there is little to suggest they are different populations. Contrast that with the various percentiles of body weight in pounds. Not only is the median American six pounds heavier than the corresponding Canadian, but at all points of the distribution from the fifth percentile to the ninety-fifth, there is a difference of four pounds or more in the same direction. Those in the top decile of US adults in body mass say they weigh ten pounds more than their counterparts in the national population next door, but the lightest Americans are also heavier than the lightest Canadians. The same is reflected in the Quetelet indices, Canadians yielding smaller BMIs not only on average, but across the board from highest to lowest.

Table 3. Self-reported Height and Weight, Distribution by Gender, USA and Canada, 2002-3

	Height - inches				Weight - pounds				Body Mass Index			
	Female		Male		Female		Male		Female		Male	
	Canada	USA	Canada	USA	Canada	USA	Canada	USA	Canada	USA	Canada	USA
Mean	64.1	64.3	69.5	69.8	145.5	154.7	184.7	188.2	24.8	26.1	26.6	26.9
Standard Deviation	2.9	3.0	3.1	3.3	30.5	37.6	34.5	36.6	5.0	6.3	4.3	4.5
Weighted N ('000)	12,089	106,665	11,672	98,782	11,888	102,747	11,713	98,038	11,523	100,036	11,624	97,821
Ratio of Means (US/Can)		1.003		1.003		1.063		1.019		1.056		1.012
Percentiles:												
5	60	60	64	64	105	110	135	140	18.5	19.0	20.6	20.8
10	61	61	66	66	110	118	145	148	19.3	20.0	21.6	21.9
25	62	62	67	68	125	130	160	165	21.5	21.8	23.5	24.1
50	64	64	70	70	140	147	180	182	23.9	24.7	26.3	26.3
75	66	66	72	72	160	170	205	210	27.2	29.0	28.9	29.2
90	68	68	73	74	185	200	230	235	31.1	34.0	31.9	32.6
95	69	69	74	75	200	226	245	250	34.0	37.7	34.0	35.0

Source: As for Table 1.

Table 3 repeats the analysis with the results broken down by gender. Again, the height distributions are strikingly similar, even if the tallest ten percent of American men say they are slightly taller than do the top decile of male Canadians. Women and men, big and small, the US respondents are still the more massive. The most interesting thing here, though, is the difference between the genders in the extent of cross-national divergence. While both men and women are self-reportedly bigger in the more populous country, the differences are much greater among women, with female American adults being on average over six percent heavier in their own estimation than Canadians, while the males are less than two percent so. In the upper half of the distribution in particular, while the men remain no more than five pounds different in the two populations, the gap between the Canadian and US women increases as one goes up the scale, to a striking 26 pounds or more among the heaviest five percent of each group.

So how might one explain these results? Undoubtedly, telephone survey questions about body mass are more ‘sensitive’ than questions about height, and there is a definite social desirability bias in what people state as their current weight. If one were to insist, however, that the cross-national differences in the pattern of people’s responses to the body weight question were *solely* discursive phenomena, matters of symbolic self-construction, superimposed on a material substrate which (for all we know) is in flesh and blood terms as uniform either side of the border as the height data, then the present pattern of responses becomes difficult to understand. It is hard to come up with a reason why Canadians, and Canadian women in particular, would underreport their weights so consistently. Conversely, one would need to argue that American women, and especially the very largest of them, have *less* of an incentive to err in the direction of socially approved personal thinness than women in Canada. No doubt, given sufficient time and imagination, someone could devise a suitable

just-so story wherein this necessarily follows from some characterization of the contrasting imperatives of two different national ideologies.

On the other hand, were we to approach things as a matter of matter and things, then that would mean casting the net more widely in the search for explanatory factors. If the differing estimates of their own body sizes given by American versus Canadian respondents to telephone interviews reflect – to some extent – real, material aspects (again, pardon the swearwords) to the forms of North American embodiment and enculturation, understood as patterns of bodily growth and development under particular physical as well as symbolic conditions, then potentially fruitful lines of inquiry suggest themselves. Frankly, I do not know at the moment why Americans should be more physically massive than Canadians. However, I would begin by looking at patterns of diet and lifestyle, and differential access to human services, preferably on the basis of indirect (i.e. non-self-report) indicators. For instance, how much food does each country's agricultural bureaucracy estimate that its people eat? What data are available on their respective levels of usage of indoor and outdoor recreational facilities? Does readier access to a physician or other health professional appear to make for more disciplined body management, and if so, how?

Indeed, it might still turn out that none of these factors are decisive, and that national differences are after all due to ultimately arbitrary ideological traditions, however concretely embodied or discursively disembodied. For policy purposes, however, such deeply habituated ways of thinking and doing are difficult things to revolutionize in any case. A focus instead on the conditions under which people develop, both singly and collectively, brings us down to earth in more ways than one. Studying the social organization of processes of growth on whatever level means recognizing the realities of the biological, economic and psychological phenomena involved, while bringing to bear upon them the traditional sociological tools of

comparisons across space and time, relating the various supposedly distinct aspects of life and society to each other, and asking if and how things might be different. If we wish to speak of 'culture' in such contexts as that of body size and health, then it would not hurt to expand our concept sufficiently to comprehend that we are all ever-changing living things trying to survive in a material world, only a part of which consists of our thinking, talking and writing.

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