

It was recently drawn to my attention (via an opinion piece by Andrew Cohen in the *Ottawa Citizen* on 26 September) that sociologist Joel Smith of Duke University raised some critiques of my book *Fire and Ice* in an article in *The American Review of Canadian Studies* (Spring, 2005). I wish to respond to the methodological objections Dr. Smith raises in this piece. Smith points to some other concerns about *Fire and Ice*—my failure, for example, to offer extensive critiques of those whose findings differ from my own. It is not my intention here to deal with every argument Smith raises about my writing or argumentation, but rather to address his concerns about my data and methodology. I can live with the critique that my book is imperfectly written, but I certainly contest the claim Andrew Cohen has made in the *Ottawa Citizen* that Dr. Smith’s analysis has “debunked” my data and methodology.

Smith’s first and most serious objection is that our social values map, which shows graphic divergence in the social evolutions of Canada and the United States, is constructed in a misleading fashion. He writes:

“In chapter two, the comparison of populations is between American trajectories plotted on an American-defined value-space and Canadian trajectories plotted on a Canadian-defined value-space but depicted as if it were the same as the American space. Unless the words chosen to describe the continua and the quadrants are meaningless—and we don’t have the data to make this judgment—this tactic is confusing, at best, and misleading, at worst” (158).

The process by which we plot Canada and the United States on the same map is explained on pages 71 and 72 of *Fire and Ice*. I reproduce part of this explanation below:

“[D]ifferent societies produce, and are in turn plotted onto, socio-cultural maps that differ in their axes and the positioning on the map of the values tracked.

...

“In order to compare the two countries’ trajectories of social change, we need to place them in a common landscape. As my colleagues and I sought to produce this common landscape, there were three choices available to us: plot both countries on the Canadian map, plot both countries on the U.S. map, or generate a single North American map whose axes and layout would be determined by the data gathered from *all* respondents, both Canadian and American.”

It is worth noting at this point that the solution Smith claims I use—slapping one map on top of the other and pretending they are the same map—is not even among the possibilities I name. The book goes on to explain why we chose to use the U.S. map instead of an integrated North American map. It also explains that we plot Canada *passively* onto the U.S. map:

“When I say ‘passively,’ I mean that Canadians’ responses to our questions were not used in the calculations that bring about the construction of the map itself. They are just used to situate Canada within the American socio-cultural landscape.... So, in

plotting Canada passively on to the U.S. map, we are essentially treating Canadians as a subset of the U.S. population: we plot Canadians just as we might plot American married men, Asian Americans, American women with post-secondary education, or any other group. The only difference is that the survey responses of members of the three [American] demographic groups just named would have been part of the original stew of data that gave rise to the U.S. map, whereas Canadians were not part of that original stew.”

As the book explains, there was more than one solution to the problem of comparing on a single map two societies whose populations give rise to two different sociocultural maps. One may take issue with the particular solution we chose, but we were quite transparent about how the two societies were being plotted. There was certainly no attempt to mislead the reader or manufacture a picture of divergence that was not evident in our data. Above all, we simply did not do what Smith claims.

Smith’s second objection is that my methodology is insufficiently transparent. As he acknowledges in his article, it is a challenge to know how much methodological information to include in a book meant for a general readership. I would not dispute the claim that our methods are not exhaustively reported. I *would* dispute the claim, however, that *Fire and Ice* is, as Smith claims, akin to “a well-decorated store window in front of an empty store.” I am glad to offer further information about our store’s stock: our sampling and methodology.

Sampling

Our U.S. sampling work was carried out by the Roper Group, a highly reputable firm that has been in operation since the middle of the last century. Our surveys use stratified cluster samples based on region and community size. Approximately 175 sampling points were used to build the clusters.

Respondents were randomly selected within households until interlocking age and gender quotas were filled. Door-to-door interviewers obtained commitment and provided instructions to individual respondents before leaving questionnaire booklets for self-completion.

This approach to cluster sampling is well established in public opinion research, and follows general strategies established by the work of the Gallup organization in the 1940s.

Professor Smith enquires about response rates. Response rates are a limited measure of error, and most useful in sampling approaches used in telephone surveys. Response rates offer little help in establishing error in a stratified cluster sample that uses quotas. One measure of the quality of our stratified cluster sample is, of course, to compare our sample parameters with known parameters from an external gold standard: the Census. In the case of our social values surveys, standard demographic variables were compared

with those published in the U.S. Census; the parameters of our sample and that of the U.S. census were found to be immaterially different.

Methods

Our questionnaire includes over 300 items. Many of the items we field are borrowed from well-validated measurement scales in the social sciences that are in the public domain. Others are of our own making.

We do not include our values questionnaires in our books because of constraints relating to space and production costs, and because some of our items are proprietary. We are not academics; our research is a commercial enterprise. While this commercial grounding means we are less at liberty than academics to reveal every scrap of our work to the general public, it also means that we have a keen interest in conducting sound analysis. When *Fire and Ice* was being considered for the Donner Prize, we were asked to share our data and methodology with a panel of social scientists; they judged it to be entirely sound (as *Fire and Ice's* having won the Donner attests).

Our question response categories were simple Likert rating scales of extremity (for example, 4-point scales of agreement) or frequency (of behavior or ideation). After the data were collected, stringent tests of the adequacy of the response distributions (scatter) were conducted, missing data (limited by strict rules of inclusiveness) were imputed, and each social values concept was created by averaging several thematically related questions. This latter activity, which has evolved over years in our research, was based both on theoretical and empirical analysis. The empirical analysis included principal components analysis and Cronbach alpha internal consistency reliability analysis. Where expert judgments came into play, they were those of the team of sociologists and psychologists Environics has employed in its social values practice for two decades.

Once we had thus identified and defined the over one hundred motivational constructs, we used a variety of multivariate techniques to abstract larger, underlying (latent) dimensions. In the end, the data were depicted on two axes of differentiation per country. The axes of the American map are highly descriptive of the U.S. population and were selected from among more than 10 such axes emerging from factor analysis of the data. These axes are entirely convergent with the dimensions described and published by academics who study values (Shalom Schwartz, for example). Appropriate inferential statistical tests were conducted on between-groups and across-time differences along both the constructs and the axes to ensure the reliability of the findings reported.

We must all be prepared to defend our evidence. *Fire and Ice* draws on a database of over 14,000 questionnaires and employs reputable and rigorous methods of analysis. I do not dispute that I offer interpretations of and arguments about our findings; any reader of my books should be able to easily disentangle my cartoons, anecdotes, and attempted jokes

from my reporting on our data. I do not expect my arguments or interpretations (or cartoons) be treated as gospel. Nor do I find it especially rigorous or defensible, however, that those who disagree with my findings—and some appear to do so on ideological grounds—should dismiss the whole of my data as vacuous or illegitimate. Dr. Smith has approached *Fire and Ice* in a spirit of curiosity and serious critique; I regret that some continentalist pundits are so eager to dismiss unwelcome information that they do not so much as formulate such honest questions, let alone bother to seek complete answers.