In the mid-1970s an innovative social science curriculum project called *Man: A Course of Study*, or MACOS, leapt into the national spotlight. The product of seven years of planning, MACOS designers hoped that the fifth-grade students enrolled in the program would develop critical thinking skills through questioning the environmental and social pressures defining animal behavior and confronting human cultures.¹ MACOS’s detractors saw instead a curriculum designed to inculcate young children with the belief that all human cultures were morally equal and that man could be best understood as an animal.²

When the fate of federally funded MACOS was brought before the United States Congress, a tangled knot of issues rested at the core of the dispute.³ Was the role of public education to help students develop the intellectual skills to learn for themselves, or to convey to students a body of information? Was it useful to explain diverse human cultural traditions as adaptations to disparate ecological conditions, or did such an approach devalue American democracy? Should schools help students confront the sometimes harsh realities of life, or shield them? Were elementary school students even capable of wrestling with weighty issues like violence and death, or should such discussions be saved for high school? And, perhaps most importantly, should the federal government have provided funding to support the development and dissemination of a curriculum about which these questions were asked? Providing even provisional answers to these still-relevant questions is beyond the scope of this essay, yet I raise them to illustrate the values both advocates and detractors attributed to the program. One of the sources of these disagreements stemmed from the unique position of the social sciences as, on the one hand, a science, and on the other, a way of understanding what it means to be human.

Let us consider, then, the origins of MACOS. Psychologist Jerome Bruner and primatologist Irven DeVore (both at Harvard University), together with Peter Dow at Education Services, Inc. (based out of Cambridge, Massachusetts) set out to develop a program for the social sciences akin to the new science
curricula developed in the 1950s, like the wildly popular materials developed by the Physical Science Study Committee and the more controversial Biological Sciences Curriculum Study. In its earliest form, MACOS started with an ethnographic study of the Netsilik of Pelly Bay, in current day Nunavut, Canada. Curriculum designers hoped that the daily lives and cultural traditions of the Netsilik were sufficiently different from American students’ own experiences to be a useful tool for helping the students reflect on their own lives. According to Bruner, the cultural conventions of societies might differ greatly, but their structures were designed to fulfill the same functions—making and distributing food, raising children, etc. Students played an interactive seal-hunt game, read booklets that presented Netsilik stories and folktales (figure 1), and watched a series of films designed to virtually transport the students to the far reaches of the Arctic tundra where they could witness for themselves the daily routines and activities of our neighbors to the north (figure 2).

In the first trial runs of the program, booklets and films of baboon behavior, developed by DeVore, were interspersed with these ethnographic elements to act as a foil for understanding human nature. Bruner hoped to convey the idea that through spoken language and tool manufacture humans could solve problems culturally that baboons could solve only biologically (figure 3). Whereas we build houses for shelter, share the spoils of the hunt, and tell stories to each other that reinforce the importance of labor and cooperation, baboons must rely on nonverbal communication and rigid social structures to achieve the same ends. As a result of these summer tests, Bruner, DeVore, and Dow quickly discovered that the children were incapable of viewing the films with any kind of objective distance. Instead of interpreting the animals’ actions as responses to their environments, children identified with the baboons and understood their behavior in terms of personal emotions. The designers’ solution was to supplement the course with films and activities on the circle of life (figure 4) and the importance of parental care in ensuring species survival (figure 5). Additionally, by moving all the animal material to the beginning of the course, they hoped to get students to ask analytical rather than empathetic questions before turning their attention to human cultures. In its final form, then, MACOS replaced a year of the traditional social studies curriculum and offered in its place a course that asked, “What is human about human beings? How did they get that way? How can they be made more so?” Students spent the first half of the year learning how to objectively analyze animal behavior and devoted the second half to Netsilik culture.

Both the attempt to provide MACOS students with as much raw data as possible and the designers’ preference for film as a substitute for actually being
in the Arctic emerged from an educational philosophy developed within a scientific context. In the sciences, instructors emphasized hands-on laboratory experiences, using raw data to demonstrate natural laws. The new physics curriculum even incorporated films of Nobel laureates performing experiments with instruments to which grade-school children would be unlikely to have access. Film represented science in action, on a budget. Yet difficulties arose
Figure 2: Twenty-one half-hour films about the Netsilik way of life followed their yearly migration pattern through the Arctic tundra. The films emphasized the kinds of activities that characterized different seasons and places, including stalking seal, fishing for salmon, building igloos, and hunting caribou. The two men pictured here are building a kayak. Film still from Quentin Brown, Building a Kayak, Part 1; Netsilik Eskimo Series (Documentary Educational Resources, 1967), min. 11:26.

Figure 3: The baboon movies and booklets variously emphasized the growth and maturation of baboon infants, the social hierarchy within a baboon troop, the greater security afforded to members of the troop, and the gestures and vocalizations by which baboons communicated with one another. With regards to language, the course used baboons as a foil to argue that humans were unique in their capacity for spoken language. Image from MACOS, Baboon Communication (Cambridge, MA: Education Development Center, Inc., 1970): 17.
Figure 4: MACOS devoted several booklets to explaining a wide variety of animal life cycles, including the African elephants, bottlenose porpoise, brown rat, chimpanzee, gnu, grizzly bear, wolf, and salmon. Image from MACOS, Life Cycle (Cambridge, MA: Education Development Center, Inc., 1970): 4.

Figure 5: In the herring gull section of MACOS, students were encouraged to think about the differences between innate and learned behavior, and how animal behaviors can be seen as adaptations to the environment in which they lived. The unit additionally described the importance of parental care in ensuring the long-term survival of the species. Image from MACOS, Herring Gull (Cambridge, MA: Education Development Center, Inc., 1970): 3.
when MACOS developers applied this scientific framework and quest for universal laws to human nature. In a time of both domestic and international turmoil, all answers to the question “What is human about human nature?” were politically inflected. Many of MACOS’s detractors found the scientific approach to human cultures anathema because they feared these children would grow up without sufficient appreciation for their democratic freedoms; for them, a social scientific approach to humanity suggested that humans were merely another species of animal.13

The history of MACOS raises many questions. Among these are the varied ways in which we think of animals as tools to understand what it means to be human. In MACOS, animals were sometimes used as simplified models of humanity, substituting salmon, gulls, and baboons (rather than the more familiar birds and bees) for people in order to explain our all-too-human behavior. Animals also served as foils with which students explored what it is that makes humans unique in the animal kingdom, including our capacity for language, our creative solutions to complex problems, and ultimately our ability to reflect on the essence of human nature. It wasn’t the program’s use of animals in and of themselves that caught the attention of the public, however, but the moral and political implications of providing cultural relativism with a biological basis. Sometimes the questions most worth asking, in part because they raise knotty issues like these, are the least likely to provide answers that satisfy everyone.

NOTES
5. Quentin Brown, Netsilik Eskimo Series (Documentary Educational Resources, 1970); Nancy Lutkehaus, “Man, A Course of Study: Situating Tim Asch’s Pedagogy and Ethnographic


7. Most of the MACOS booklets, slide shows, and teaching guides have recently been scanned and made freely available at www.macosonline.org/course/ (last accessed March 4, 2011).


