

Conclusion to Part Two

Scientific Folklore in “A Sea of Potential Facts”

In a 1951 article for the *Journal of Personality*, titled “Comments on Theoretical Models,” Miller responded to the criticisms of “some social scientists who are extremely suspicious of any theory.”¹ Miller, a constant producer of models, theories, and schemas, argues that scientists engage in a kind of authorship no matter what. And to make this point, he offers up an implicit rebuke of the techniques of ethnographic filmmaking:

For example, two prominent social scientists claimed that they were getting the facts without any harmful bias from theory because they were taking motion pictures of events in a primitive culture. But they did not have cameras pointing from all possible angles at all possible events, day and night, for all of the days in the year. Such a procedure would have filled all of the museums in the world with film, each foot of which would have contained enough facts—the distance between each of the fingers, the number of leaves on the tree and stones on the ground—to keep a cataloguer busy for years. The investigators had to choose where to point the camera, when to push the button that started it, and what to measure and count on the film.

Miller goes on to argue that within such “an infinite sea of facts,” scientists are always making authorial decisions, and if these decisions are not based on theory they are “made unconsciously on the basis of perceptual habits and the folklore of the culture.” Here, Miller’s skepticism of scientific practice without theoretical modeling extends to a skepticism over claims that film produces the unvarnished truth. For Miller, film is a form of scientific modeling, not an escape from it.

From his statement, we can extrapolate that Miller did not see film as a replacement of the object being filmed. It did not capture essential truths through its indexical properties or simply reveal physical dynamics that would otherwise escape the human eye. Film, for him, was an extension of scientific thought, a creative activity. He used film to hypothesize, theorize, and model, which

ultimately took on a very different form from other types of scientific filmmaking. As we have seen, Miller, and his peers, used the medium to build abstractions and speculations meant to refer to possible origins or behaviors outside of the frame. Toward these ends, there was no opposition between actively intervening into the image and simultaneously claiming to present an objective film. The point was precisely to *build* a theory of behavior, not to capture it.

This authorial impulse often led to mangled visions: grisly hybrids of rat and human, miniature lynchings in the lab, theories of the classroom as lights on a board. Theorizing such a vivid medium, populated with the behavior of real living things, often left those living things unrecognizably transformed. But there is also a frankness to this approach, an acceptance of the limitations of observation and the camera. Miller knew that his films and models were theories, expressions of his own hypotheses rather than transparent windows onto the truth. His celluloid specimens existed in a hybrid space, somewhere between props in the reasoning of the filmmaker and living beings with their own intentionality and purpose. The thoughts, motivations, and desires of his onscreen rats were all the subjects of extreme scrutiny, their agency ultimately driving the research surrounding them. But, they are also indecorously altered and transformed by this research, characters in stories that were not their own, acting out a script whose meaning lay outside the concerns of their own particular lives.

Alternately, the concatenation of animal behavior and human history in these films resonates in ways that are never fully under Miller's or his peers' control. What, indeed, might be the end result of such comparisons? In her riveting work of popular science, *The Sixth Extinction*, Elizabeth Kolbert recounts a discussion she had with the acclaimed climate geologist Jan Zalasiewicz, in which he described his belief that rats may one day evolve to fill the global niche left by humans long after climate change wipes us out, essentially taking over our place in history.² Zalasiewicz imagines a world in which rats evolve to new proportions, developing simple tools, wearing clothes, and living in shelters. Extending his speculation, one might picture future rats that are historians, engineers, or scientists. What would such rodents think if they were to uncover these rat films from the mid-twentieth century? Would they see theories of human behavior or a premonition of their own ascension? Despite themselves, these films call into question humanity's own tenuous claim on sole ownership of historical agency. If rats can simulate a class society, or race relations in the South, or urban living, or the experience of students in a classroom, what other aspects of human society might they someday appropriate? Taken literally rather than figuratively, as our science fiction rats might well do, these cinematic models take on a life of their own, suggesting non-human futures and pasts that would otherwise seem impossible.