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26 JUN 1995

June 16, 1995

Dear Michael,

I now have had a chance to read your book The New Production of Knowledge. I have two broad reactions. First, yes, I certainly agree that there is a lot of mode II around. Indeed, as I look over the landscape there is a lot more mode II going on than there is mode I. However, second, this is nothing new. While the book seems to advertise mode II as a relatively recent phenomena, my reading of scientific and technological history tells me that mode II has gone on for a long, long time.

Indeed, the industrial labs in the electrical products industry always have largely operated according to mode II. Look, for example, at Leonard Reich on the history of General Electric and AT&T. Mode II certainly has been the form of research of the U.S. Agricultural Research Stations, ever since they started to grow up in the late nineteenth century. Or consider the Manhattan project during World War II, or the research in the U.K. and U.S. that led to radar.

Early in the book, you mention the engineering disciplines, but then quickly turn away from them. Yet there are a large number of "applications oriented" fields of science that have been around for a long time, like chemical engineering, and metallurgy. These "disciplines" are inherently "interdisciplinary". Read Rosenberg and Landau on chemical engineering. Or look at Walter Vincent's What Do Engineers Know and How Do They Know It, which discusses aeronautical engineering. Or look at my recent paper with Nathan Rosenberg on American university research, in Research Policy.

Let me return to my opening remarks. We certainly see eye to eye as to what is going on, and I think the characterization of mode II that you and your colleagues put forth is excellent. However, I believe the phenomenon is nothing new. The problem is that the sociologists and historians of science by and large, have chosen not to look at it. I am not even sure if mode II comprises a larger share of total scientific activity than it accounted for in the 1920s, although this is arguable. Rather, I propose that our growing awareness of mode II reflects a number of scholars like you and me finally getting around to seeing something that has been there for a long time.

I am curious as to your reaction of this last proposition of mine.

Best Regards,

*Rich*

Richard R. Nelson

