Dissertation Session Comments

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It gives me very great pleasure to be able to comment at this dissertation session. I was not at all sure, when asked, that I wanted the honor, but at this point, having read so many wonderful dissertations, I am very grateful to have been allowed the privilege of doing so. Between us, Steve and I received about 25 excellent theses and the problem became one of having to choose among them. This was a most difficult task.

Indeed, it was a task that brought me face to face with the question of what constitutes business history. The short answer is that anything to do with a business constitutes Business History. As a field, it is extremely broad and extremely diverse in its range of subject matter. This is its strength and its weakness. It is a strength because it allows us to look at a business from a myriad of different perspectives: we can look at the classic history of the firm, at the great men of the firm; we can ask what constitutes the firm, the industry, the role played by government, issues of fraud, patent protection, technological change, diffusion of technology; we can study the role played by labor, by capital, and the list continues. And for each of these questions, there is no one methodology or methodological approach. Yet this breadth is also the weakness of business history. There is a very fuzzy boundary between what constitutes good business history and what does not, and what might not constitute business history at all.

Our challenge was to choose from the large number of excellent dissertations submitted, but we think that we have here a panel which provides a wide range of different approaches and covers a wide range of subject areas and geographical locations. The dissertations also cover the nineteenth and twentieth centuries. We have some perennial questions and some new ones. Professors Leunig and Toms reexamine the supposed failure of the Lancashire cotton textile industry, while Professor Summerhill examines the impact of railroad development, but railroads in Brazil. We also hear Professor Guy discuss the construction of boundaries with the champagne industry of Champagne, Professor Kirsch on electric car technology and Professor Guthey on Ted Turner and the myth of the marketplace.

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Kolleen Guy

What do peasants do? In particular what do French peasants do? If one was to answer this question based on an older historiographic interpretation, one might think of backward, technically inefficient, stubborn rural families content with working on smaller and smaller pieces of land and not wanting to be brought into the modern advanced world. Even though much of the more recent literature has attempted to change this stereotype showing that the French peasant farmer could be and was responsive to economic opportunities, it is still the case that farmers were responding to forces coming from outside the rural community.

In this thesis, Professor Guy asks us to look at the rural community of Champagne from a different perspective. To begin with we are asked to think about the nature of industry. Industry so often means a collection of firms producing some commodity or service. But who defines what makes up an industry? Who defines the borders of the industry? When we think about the Champagne industry, we might think about the borders of the industry in terms of the firms that actually produced the champagne. This would be one definition. But we might also want to think about the firms themselves? Who were the firms? How did they produce Champagne? Who produced the grapes for the champagne? To what extent should we consider the producers of the primary product as part of the industry? Where did vine cultivation and wine production meet and how did they meet?

In this dissertation, Professor Guy examines the construction of the champagne community from the perspective of the rural vigneron — that backward, intransigent rural peasant who had to be dragged kicking and screaming into the modern era. As she demonstrates, the reality was quite different. The small vigneron was not a passive actor in the construction of the industry but rather an active participant capable of defining his and her role and ensuring, in the best tradition of the modern French agricultural community, that this role was to the vignerons' best advantage.

Starting with a discussion of the myth of Champagne, the construction of Dom Perignon, then moving on to the impact of Phylloxera, the crisis of the Mevente and the definition of fraud, Professor Guy documents very carefully the active role played by the small producers of the region and how that role in turn defined the community of vignerons and defined what is meant by the region of Champagne and the Champagne industry. But what is not so well explored is the fact that the definition of the community and the industry that emerged was a reactive one. It emerged as a result of negative exogenous shocks (blights and over production relative to demand). An interesting counterfactual question to think about is whether the rural community would have been able to think about a definition of the community if the status quo had prevailed; if it had not been so interested in protecting its own economic position. Or does the definition of community only arise through adversity and defining oneself relative to others? Perhaps these are not the issues of the thesis, but they do emerge from the work.

Professor Guy argues that we need "to take a fresh look at the ways in which rural industries contributed to the evolution of capitalist production." And indeed, I think she is correct in this observation. But here we only have part of the picture - a very important part but only part. Because the focus is on the self-definition of the small vigneron within the community of the Champagne, the thesis has very little to say about the large producers. In fact, one of the striking gaps in the thesis is the lack of any clear definition of the contribution of grape production by the small vignerons. Were they in the aggregate major players in the production of the primary resource? How much did they produce relative to the big brand-name champagnes of the Grand Maisons of the industry? How important were the negotiants (small champagne producers) in the production process? Because none of this information is given, it is very difficult to see how important the construction of the vigneron community was to the whole industry. If the vignerons were producing most of the grapes for the champagne producing firms, then their actions take on another level of importance than if they were only producing 15% or 5% of the grapes.

In line with not knowing the position of the vignerons relative to the industry more conventionally defined, we also do not know where the *Grand Maisons* stood in relation to the actions of the rural community. There is, to be fair, some discussion of the big brand-name firms' reaction to the activities of the vignerons, but there is no extensive discussion of how important the actions of the rural community were to the quality producers of the product. It would be very interesting to know to what extent the vignerons definition of the region was in fact the definition that most appealed to the brand-name producers who grew their own grapes within Champagne. Was the real conflict of interest with the smaller producers who were producing for the French market? Although answering this question would be require a whole other dissertation, it may provide some avenues for further research.

A related aspect of the thesis revolves around the issue of property rights and fraud. This is especially interesting given the current debate over intellectual property rights and brand names. The definition of who could produce champagne and what determined whether something would be called champagne is only the opposite side of the discussion on what constitutes fraudulent production. What Professor Guy documents once again most clearly is that the whole nature of fraudulent production is very much tied up with the value of one's property rights. The small vignerons wanted to define champagne not by the method of producing the sparkling wine but by the area from which the grapes were produced. The narrower the definition, the greater the value to producing grapes in that region. Fraud became the process of defining other groups as outside the community. Thus one had to define the community first, and the vignerons were active participants in doing so. Professor Guy notes that the representatives of the community looked to the government as the agent who had the power to legislate what would be taken as legal and non-fraudulent sources of grapes. What I found most interesting here is not that the vignerons went to the government (this is after all the law-making body) but that the vignerons were only going to accept one answer - their answer.

The behavior of the vignerons raises the question of the role played by the government during this period (and perhaps still the case in France today). By threatening violence and by undertaking violence, the agricultural community of the Champagne region was able to enforce its will on others. But what is never adequately explained is why the surrounding regions did not respond in kind. They, after all, were being pushed out of the community. Indeed, the issue of community definition brings one back again to the issue of the large brand-name producers - Klug, Blondeau, or Mumms, for example. What were they doing in all of this? Surely they too must have had the ear of the government? What were they saying? Did the vignerons' definition of Champagne really matter to them? If they had vineyards outside of Champagne was anyone going to say anything? It would seem that the definition of champagne was a fight between the small grape grower and the smaller producers, as Professor Guy points out. But when it came to the defining role that had to be played by the government, Professor Guy never fully articulates what might have happened if the big firms in the industry had voted against this definition. Would the government still have voted as it did? In this battle between the small farmer and the small industrialist, the farmer won. Should we be surprised? Perhaps what Professor Guy is really pointing out to us is that if in the current debate the French farmer will always win, why do we as historians assume the opposite - that the small farmer was powerless to influence the construction of the community, the region, the industry and the country?

William Summerhill

Any discussion of the impact of railroads for any country has to start with what might by now be called the standard questions – what were the social savings from the railroad; what were the private and social rates of return; what were the aided and unaided rates of return. These questions are standard and indeed need to be asked and answered before one can go on to examine other aspects of the impact of railroads on economic activity, on distribution of wealth, on political power, on property rights structures. But to ask these questions requires finding the data. Thus a major contribution of this work lies as much in the hard work of data collection and collation as it does in the analysis itself. Although, I must add that I was never exactly certain which data came from company records and which data had been manufactured via regression analysis.

As Professor Summerhill documents, the pre-railroad transportation system in Brazil was very crude. Thus it is no surprise that the direct gains from railroad freight services were high. In some sense there is a tendency in the thesis to apologize for the size of the social savings, but when the alternative is the mule or no market integration at all, then the railroad is a very important technological transformation. In great measure the need to prove why the social savings were high comes from the explicit comparison set up in the thesis. The comparison made is between the results for Brazil and those for the North Atlantic Economies. Now this caused me to stop and think. What were

the North Atlantic Economies? Clearly, for Professor Summerhill, these are the United States and England, but they could equally well be Canada, Ireland, and Spain.

In fact, if Professor Summerhill had chosen Canada rather than the United States as his comparison, he would have had a far richer environment in which to work. Canada did not begin to build its railroads until the 1850s; it too had another boom in the 1880s; it too has a major water system and it too has extensive agricultural lands not serviced by that water system; and it too grew dramatically during the first two decades of the twentieth century. Indeed, given that Professor Summerhill explicitly wants to ask what were the linkages caused by the railroads and what was the impact of the railroads on export-led growth, he would have been well served by the Canadian literature begun by W.A. Mackintosh (1923), H.A. Innis (1930), and M.H. Watkins (1963) on the Staples Thesis. Canadian economic historians have probably spent too much time writing about backward, forward, and final demand linkages, but it would have provided a stronger theoretical and historiographic framework for this work. The Canadian literature, which mainly focuses on the positive aspects of export-led growth, would have provided a direct contrast with the dependency thesis that is the central feature of much Latin American writing and against which Professor Summerhill is arguing through his results.

In the same vein, Canada is an apt comparison when discussing the financing of Brazilian railroads. Given the small size of the Brazilian financial market in the mid-nineteenth century, railroads were financed through a combination of English, Brazilian, and government finance. For a sample of six railroads, Professor Summerhill estimates the private and social, aided and unaided rates of return. Many of the railroads were, ex post, privately profitable. One of the problems that I had here was the assumption that there was no discounting of the securities. I would have felt much more comfortable with the results if Professor Summerhill had provided some information on the share prices of these companies, in particular for those that went bankrupt and were bought out by the government. He finds that even these had reasonably high rates of return, higher than I would have thought given the description of the history of the railroads. I would also like to have seen greater discussion of the terminal values set for the railroad companies in the estimation.

Having undertaken the necessary primary questions, Professor Summerhill is now in a position to look at some other (dare I say, more interesting) questions. As he points out in his summary, there are questions concerning the ownership of railroads and property rights in land and the impact of railroad development on slavery in Brazil. There are questions concerning the nature of freight rate regulation. Given that rates were regulated, who chose the rates and to what extent were these rates close to the monopoly rates or closer to the competitive rates? Regulation does not necessarily mean competitive rates. Regulation of rates is also not just a means of dividing the surplus, as Professor Summerhill notes, but it is also a mechanism for providing some time consistency for various parties. Investment in land requires some knowledge of the stability of future freight

rate structures. Thus rate regulation is an important component of development and one that can generally only be provided by the government. Comparative analysis could also be undertaken on the structure of rates, the rate setting board, the mechanisms chosen to change rates, the power of the railroad relative to the landlords and the small farmers. The first very important steps have been taken and many more can be expected.

Timothy Leunig

In a very well written and tightly argued dissertation, Timothy Leunig reexamines what we might all have thought of as the settled question of entrepreneurial failure in the Lancashire Cotton textile industry. The basic question, as it has been posed, is did the Lancashire industry fail because it did not choose rings over mules nor integrated corporate structures over specialized firms?

The answer to these questions lies in being able accurately to estimate labor cost differentials across mule and ring spinning, transportation costs between spinners and weavers, and the unit labor costs or labor productivity of spinners in both England and New England. In this thesis, Dr. Leunig has provided us with a very detailed set of new estimates based on previously unused sources which allow him to answer these questions. The result is that the market works. Lancashire cotton had not failed by 1914.

What does this dissertation tell us? I think that this thesis, and that by Dr. Toms, asks us to think carefully about our methodological biases and the dangers of reading history backwards. Both dissertations force us to recognize once again that the validity of our answers depends very much on the quality of the data we use and on a clear understanding of the technology we are examining. For instance, the UK and U.S. censuses give the number of pounds of yarn spun and the number of spinners. On the basis of these data, New England labor productivity was 20% higher (which led to statements about the benefits of integrated systems). But as Dr. Leunig points out, for cotton, weight varies systematically and inversely with the quality of yarn. So the U.S. workers look better exactly because they are producing interior quality cloth. When one corrects for the difference in quality, Lancashire workers are about 37% more productive.

This same attention to detail both in terms of the data and of the technology allows Dr. Leunig to provide us with a very comprehensive set of figures for wage differentials between rings and mules, raw cotton premia and transportation costs. Indeed, this issue of transportation costs is very important and has been the basis of much discussion. The argument is that ring-spun yarn is more expensive to transport and firms were not integrated in Lancashire, so mules remain the technology of choice despite the higher labor costs. But as Leunig documents very clearly the average spinning mill lay in close proximity to many weaving mills so that for most areas transportation cost was not an issue.

While I have little trouble believing that most firms are rational and the map showing the proximity of separate spinning and weaving firms makes the point forcibly, the argument here would be strengthened beyond question and the issue put to rest with some firm-level evidence showing that local weavers

did indeed buy from local spinners. It is also the case that when yarn had to be shipped that transportation costs are a tax. The question is who bore the tax? Most of the work has placed the whole cost of transportation on the spinners, but again, Dr. Leunig's outcome would occur if the tax was borne completely by the weavers. While I doubt this was the case, there is room to play with the allocation of transportation charges.

Ultimately, I find the thesis persuasive but it also forced me to think about how firms make decisions about the acquisition of new technology and changes in firm structure. The thesis examines the question in a partial equilibrium framework. Although the title uses the term factor costs, the thesis examines labor costs and productivity. Thus, this is really a question of all else being held constant. But is all else constant? What is happening to the role of capital? Acquisition of new machinery is a capital cost—how did this affect the results on the productivity of labor? There surely is an issue here not just of rings versus mules in place but the decision to acquire more rings or more mules. Dr. Leunig does try to answer this, and shows that at the margin, labor cost savings did lead to more new ring acquisition. But we are still talking about very few rings relative to mules by 1914 in Lancashire.

Of course the question of capital acquisition also relates to the depreciation of old machinery. What does it mean for technological advancement if the original machinery is built to last for fifty years? What then is the role of depreciation accounting, of financial decision making? And indeed, we also must be aware of the physical structures within which the industry took place. Could one easily install one type of technology in place of another? Can we put square pegs in round holes? Was this an issue at all? I don't know. I don't know if I really want to know. Yet at the same time, I think we are forced to ask.

Despite these questions, Dr. Leunig has I think now provided us with what will be the standard reference on issues of U.S./UK labor productivity in the cotton textile industry. And I must say that I now know the difference between rings and mules, twists and counts, warp and weft, and can inflict this information more thoroughly on my students.