Introduction

In this introduction we wish to do three things: first, to discuss the subject and its importance; second, to look at how we, as historians, approach "Americanization"; and, finally, to sketch out our scheme of presentation.

The subject

This book investigates the impact of the information revolution on the form and content of management education, first in the United States of America, where IR initially flourished, and then in Europe, to where it – in varying different degrees – spread. We call the educational innovation "the entrepreneurial shift."

The importance of the shift

In order to mark the significance of this shift, we seize on Friedrich Nietzsche's mythopoetic vision of Dionysus and Apollo because their conflicting attributes sum up, in a powerful and timeless metaphor, the states of human consciousness that produced the striking transformation the book describes. In his study of *Young Nietzsche*, Carl Pletsch observed that, for Nietzsche, the Apollonian "is the principle of clearly delineated images, permanence, optimism, individuation, and rationality. It is striving for clarity." This is the ethos of classical American corporate management. On the other hand, for Nietzsche, the Dionysian expresses "the principle of flux, impermanence, suffering, and pessimism . . . an irrational force, impulsive, wild, and instinctive." This is the creative power behind entrepreneurialism. On a philosophic plain, while Nietzsche "affiliates Schopenhauer's concept of the 'idea' or 'representation' with Apollo, he associates Dionysus with the 'will.'" Accordingly, whereas the Apollonian vision is timeless and "responsible for the constant formulation and reformulation

of the forms of knowledge and rationality that order our everyday life, [thereby] concealing the underlying Dionysian reality from ourselves," the Dionysian urge, which is "momentary, exceptional, and counter-intuitive," is "dangerous to any structure of reality." It contains "the death wish and every other destructive instinct as well as the life instinct. It is the maelstrom of every impulse caught in the flux of time." It characterizes precisely the creative/destructive behavior of the great entrepreneur. For this reason, for us as well as for Nietzsche, "the Dionysian is the more profound of the two modes; it can only be ignored at the price of cultural sterility and ultimately [economic] extinction."[1]

Such mythopoeticisms might seem far removed from corporate boardrooms, but they are not. Professor Gunnar Eliasson, of Stockholm's Royal Institute of Technology, although using economic phraseology, conjured up the same imagery of contrast when contemplating recent management change. He concluded from longitudinal surveys of management opinion in the changed economic environment of the late twentieth century that inherited systems of management behavior could no longer govern creatively. When he interviewed managers in fifty US and European firms between 1965 and 1975, he concluded that the predominant characteristics of management behavior for them were "short-term and long-range *planning* and a strong belief in repetitive environments, forecasting and centralized leadership of standardized production (Eliasson, 1976)." But when he interviewed managers in fifty firms between 1985 and 1995, fifteen of which were IT startups, he discovered that "out had gone reliance on detached analytical thinking in executive quarters, in had come experimental behavior . . . the distinction between uncertainty and risk." Eliasson called this second environment that of the "experimentally organized economy." It is experimental because entrepreneurs with several possible options never "know them all; even though they have stumbled upon the absolute best solution, they will never know it because the knowledge base is always insufficient. The business manager will never feel safe, and will have to recognize in his management practice the possibility of coming out as a loser." In this EOE, failure need not be attributed to managerial ineptitude, as it would in a "full information economy," but can come from unavoidable risk. Failure consequently has to be considered

[1] All quotes about Nietzsche are from Pletsch (1991), pp. 131–32.

a normal business experience – one from which entrepreneurs learn, as in any experiment (Eliasson, 1997).

In the EOE, then, management behavior has changed from that encountered by Eliasson in firms during his first interviews. Managers not only move from a "full information economy" to one of information "uncertainty," but the kind of knowledge used in entrepreneurial decisions is obtained differently. In the "full information economy," it is gained formally; in the EOE, it is more tacitly acquired skills and innate ability that count. Apollonian management in older firms might learn new methods of governance over time and become intrapreneurial but they would not be leaders in bringing change about. That would require Dionysian "will."

The great events that transformed the American economy in the information revolution of the late twentieth century were brought about primarily by entrepreneurs and intrapreneurs in the Dionysian mode. They sparked the imagination of those who had lived under the control of the corporate managerial hierarchies after World War II, and the management schools that had trained them to be managerial Apollos, to create an education appropriate to the entrepreneurship of the "information age." They strove, therefore, to include the entrepreneurial dimension in management education. This book examines this educational event, and covers the emergence of "entrepreneurship" in American management education and its subsequent impact on such education in three European countries in the high-tech era.

The book's scope

In the title we use the word "European." It is, of course, an exaggeration to equate Europe with France, Germany and the Czech Republic, but we think it is a permissible one. France and Germany, two major European economies, with significant and influential management education establishments, occupy a large enough place on the continent to make their combined educational experiences "European." France, moreover, represents Latin Europe, where its influence has particularly radiated, while Germany has traditionally exercised influence in Central, Northern and Eastern Europe. The Czech Republic's inclusion cannot, of course, be justified on similar grounds. But, we thought, to be European the book had to take into account the "New Europe" after 1990. We could not broaden the scope of the study to include

large numbers of countries. The research complexities evoked by linguistic, social and economic diversity in Eastern Europe made this too arduous a research task. Nor did we wish to include formerly peasant-based countries that would have shown little interest in phenomenal Silicon Valley and the American high-tech entrepreneurship that so much caught the attention of Western Europeans. We wanted to see how a mature industrial country that had been cut off from the United States and Western Europe since World War II had been able to absorb the whole range of American ideas about management education, including the latest ones on entrepreneurship studies. Within the previous Communist bloc, the Czech Republic stood out. It has been technically, industrially and educationally the most advanced of these countries for centuries and, therefore, offered the most fertile soil for an investigation. In different ways, then, these three country histories illustrate the changing practices of greater Europe in entrepreneurial education.

"Americanization"

Since it is the study's focus, something at the outset also needs to be said about US influence, or "Americanization." It is not so much an historical phenomenon as a nomenclature that historians and others have applied to the developments in Europe that have been greatly affected by events in the United States. Specifically, in the case at hand, American events are seen to have greatly influenced management and management education in Europe. Such American influence has a long history. It began before World War I, when the "scientific management" movement caught Europe's attention. Its chief exponent, the American engineer Frederick Winslow Taylor, visited and was feted in Europe; Taylorism became familiar to Europe's industrial managers and engineers. There was nothing, despite the terminology, particularly "scientific" about Taylor's methods and aims; nor was there anything exclusively American about them. France had its pioneer in scientific management in Henry Fayol, Germany in Professor Georg Schlesinger of the Technical University at Charlottenburg. But scientific management or Taylorism came to represent a certain rationalization of production particularly espoused in America, which permitted the professional manager to replace the skilled worker as the arbitrator of shop-floor procedure: standardization of work through the

implementation of time and motion studies, control through budgeting and standard costing, etc.

Taylorism continued to influence European management after World War I. To it was added the rationalized mass production methods made famous at Henry Ford's new River Rouge plant. In Germany the word "Fordismus" signified mass production. In addition, certain features of American management education attracted attention in Europe during the 1920s. The index of the Harvard Business School, developed to forecast business cycles, was one, until it failed ignominiously to predict the stock market collapse of 1929. The collections of business cases developed as teaching tools at Harvard Business School were another. In France the Paris Chamber of Commerce created a center in 1932, which housed these Harvard-developed American cases for French consultation. But the collapse of market-driven American managerial capitalism in the Great Depression largely ended American influence in inter-war Europe, where each country turned in the 1930s to protectionism, the nationalization of industries, and corporatism to find a way out of the morass.

"Americanization" at the time was not used to describe collectively the influence of American scientific management, mass production or business schools on pre-war European management. But after World War II people increasingly used the word to cover the multiple and multiplying US influences on European management. The immediate post-war period indeed is the classic age of Americanization, and it has been dealt with extensively in the historical literature.[2] But Americanization, to use a phrase of Jonathan Zeitlin in the introduction to his work with Gary Herrigel on the subject, always remains a "contested historical project" (Zeitlin, 2000, p. 18). This means that scholars disagree about the content of Americanization, on how much it has influenced management in Europe, where and when. Still, as these scholars also attest, a consensus has emerged about the content of immediate post-war Americanization; it boils down to the spread of US-propagated, multidivisional, international corporate structures and forms of governance, headed by managerial hierarchies and the managerial philosophies that went with them, and the continued Taylorization of management methods in factories and on the shop floor. This post-war Americanization also embraced a number of educational events that are of direct interest

[2] See the citations in Zeitlin (2000) for works on the subject.

to this study because they were designed to promote the creation of a management professional class and educate them to their corporate functions. This education included the fostering of a management press (*L'Expansion*, *Der Manager*, etc.) patterned on American business and management periodicals, the development of in-house corporate management training programs following American corporate examples, and the spawning of management schools with programs that leaned heavily on American institutional models.

If the post-war period can be called the classic age of Americanization, it is historically bounded because subsequently the content of Americanization changed. Some feel that this even happened in the era of "Japanization" – i.e. after what Locke has called the collapse, around 1980, of the American management mystique (Locke, 1996). Locke asserts that a Japanese management mystique replaced the American in the 1980s, but Professor Alfred Kieser of Mannheim University contends that this Japanization really amounted to a further expression of management's international Americanization (Kieser, 2002a). He argues, in effect, that because American management academics and consultants led the Japanization movement in America and in Europe, Japanization was an American version of Japan. Kieser makes a good point. Japanese management by its very nature was inward-looking, firm-centered. It, in contrast to management in the United States, had never developed the capacity to proselytize. When corporate Japan expanded dramatically in the 1960s, 1970s and 1980s, there were no graduate management schools in the country. The only academic business education that existed consisted of a few commercial courses taught by professors who were, like German BWL professors, alienated from praxis, and, unlike the Germans, without a research-driven scientific culture. Since few non-Japanese spoke their tongue, their language also hindered international interaction. American consultants and management academics got the job of spreading knowledge about Japan, then, partially by default but partially, too, by the fact that they had created a powerful teaching and research establishment in the post-war United States. Japan arrived in Europe through an American conduit and what the Americans reported was selective, and often misunderstood or even wrong.

But if Japanization was just another form of Americanization, in this form it not only differed from post-war Americanization but also directly challenged its content. This change in content was described

in books such as Kenney and Florida's *Beyond Mass Production: The Japanese System and its Transfer to the US* and Oliver and Wilkinson's *The Japanization of British Industry*,[3] and a host of other works published for American and European audiences.[4]

Still another Americanization, the most recent, arrived with the "information revolution" (*c.* 1975–2000). There is no need in these preliminary remarks to outline the content shift that this Americanization has brought since it is, with special focus on management education, the subject of the book.[5] Suffice it to say that this content shift amounted to changing the emphasis in management education from management per se to entrepreneurship – and to add that all these content shifts over the years make the study of Americanization a "contested historical project."

The historians' approach: contested historical project versus neutral analytical category

The investigation of Americanization as a "contested historical project" can be considered, one French management specialist noted, both as an expression of the historians' effort to "give birth to the forgotten past," ("faire naître l'histoire oubliée") and that of the social scientists' to use longitudinal studies in order to understand "the functions of organizations today and tomorrow" ("le fonctionnement des organizations aujourd'hui et demain"; Marmonier and Thiétart, 1988, p. 163). Because of their scientific ambition, most social scientists when they use historical examples are not content to leave them in an historical form. They abstract "neutral analytical concepts" from the historical record, proceeding from the purely historical level to higher levels of abstraction, where they slough off historical specificities and replace them with "neutral analytical concepts" unbound by time and space. Many works of this type exist. We choose one to illustrate this abstraction process, because it deals with a subject matter similar to ours – i.e. competitive advantages developed in the United States in

[3] Kenney and Florida (1993) and Oliver and Wilkinson (1992).
[4] Some examples are Abegglen and Stalk (1985), Fruin (1992), Holland (1989), Nonaka and Takeuchi (1995), Taiichi (1988), Ozaki (1992), Kagone et al. (1981) and Aoki (1990).
[5] See chapter 4 for definitions of Americanization specific to the context of this study.

the "information age." In Michael Best's study *The New Competitive Advantage*, the author selects historical production systems (at the Springfield Armory, Ford, Toyota, Canon and Intel) and designs analytically neutral production models for each of them (the Springfield Armory = interchangeability, Ford = single-product flow, Toyota = multi-product flow, Canon = new product development, and Intel = systems integration). Since he is interested in the United States' new competitive advantage, he moves outside the production system of the firm into the region – i.e. he looks at Silicon Valley, which he characterizes with the neutral analytical term "cluster dynamics." Then he combines Intel's systems integration with Silicon Valley's cluster dynamics to produce the firm-integrated regional cluster – the neutral category of an "open systems dynamic."

Social scientists argue that it is not their purpose to recreate events, but to use them to formulate the neutral categories that escape history to become general knowledge of interest to scientists and instruments for policy makers. Others, however, including dissenting social scientists, doubt the validity of the procedure and its results. David Colander, a noted economist, observed that the theory of knowledge justifying his subject was "unsound." In their work economists only have in common the methodology of modeling.[6] Gunnar Eliasson, arguing from within the economists' house, also affirms the weakness of their analytical tool kit. A Schumpeterian, he has spent the last twenty years trying to find useful concepts because "the management teacher as well as the economic theorist needs a realistic model (method) to support teaching and thinking." But he concluded in 1997: "Since no realistic theory of dynamic markets exists, no good theory of the firm had been created. The moral, hence, is that so far we have excellent firms, not thanks to, but despite management teaching" (Eliasson, 1997, p. 12). Even the usefulness of modeling has been questioned. Padraig Dixon, a student of economics at Trinity College, Dublin, has concluded that econometric modeling stands on shaky ground.[7]

[6] Colander (2002), p. 142; see also Ormerod (1994).

[7] Dixon (1998): "Econometrics . . . is plagued by problems of . . . weak data, ideology affecting the outcome of empirical tests, and misdirected effort. . . Despite all that . . . econometrics could best be considered a type of 'weak testing,' which shows, if nothing else, *some* sort of relationship exists between the variables under discussion."

This is not the place to delve deeply into the troubled epistemology of social science, but, since our methods differ and social scientists so often denigrate them, we want to explain why social science reification is of dubious value for us and for historians in general. First of all, it does violence to historical reality. Anybody who studies history quickly learns how much is lost when social scientists use "neutral analytical concepts." The shock of American corporate executives and their workers in old staple industries (rubber, steel, automobiles, household appliances, cameras, machines tools, etc.) watching their firms crumble during the 1980s, never to be resurrected again, under the onslaught of Japanese competition; the panic visits of Ford executives to Toyota in 1979 to see first-hand the new production methods; the joint venture entered into with Toyota by General Motors in California (New United Motor Manufacturing, Inc. – NUMMI), where the humbled US automobile giant learned how to make cars from the Japanese upstart; the 1980 NBC documentary "If Japan Can, Why Can't We?" – a *cri de coeur* from the Americans revealing a surprising collapse of confidence in the prowess of their corporate management and a new admiration for that of Japan. This all happened. Japanization occurred. The exciting and compelling story of Silicon Valley, where technology-spawned industries produced an information revolution that astonished the world. These events also occurred – but they are not on the radar screen of "neutral analytical concepts," although they were and are a vital part of the lives of the politicians, civil servants, legislators, managers, entrepreneurs, scientists and educators who lived through and created them. The "neutral analytical concepts" of the social sciences seem not only to ignore but even to suppress them.

The reification process also creates parameters that hinder the discussion of cause and effect in history. Some very significant events are historically unique, non-repeatable but powerful causal agents. The cold war, for example, explains the rise of Silicon Valley much more than any economic ideas about the dynamics of markets or theories of the firm. In fact, a counter-factual but logically sound argument can be made that without the cold war (a unique event) the information technology revolution would not have happened at all. It was the willingness of the American people to bear the burden of defense (after Sputnik), a non-economic motivation, that led to IT. As Howard Rheingold puts it, "If necessity is the mother of invention, it must be added that the Defense Department is the father of Technology; from

the army's first electronic digital computer in the 1940s to the Air Force research into head-mounted displays in the 1980s, the US military has always been the prime contractor for the most significant innovations in computer technology" (Rheingold, 1991, p. 18). If social science abstractions cannot explain why Silicon Valley came into existence then their value to those explaining historical process can certainly be questioned.

But the most serious charge we two historians level against the method of reification is that it eliminates the subject of Americanization. That is why, perhaps, the historians Zeitlin and Herrigel, in their study of Americanization, state that it was not a "neutral analytical concept." General analytical categories are antithetical to culture-specific nomenclature. Accordingly, Best, although motivated to carry out his study by the recent competitive advantages Americans had achieved in IT, has, in his social scientist guise, had to couch it in neutral analytical concepts so as not to restrict the modelization with regard to time or place. In the process, the late twentieth-century United States disappeared. The same observations can be made about how management scientists handled Japanization. It started out in American reports to be a discussion of Japanese practices – e.g. the Toyota production system – and ended up in neutral analytical concepts – e.g. "lean production."

This book, therefore, turns not to the neutral analytical concepts of social scientists but to the historical actors themselves in order to encounter and reconstruct the most recent phase of Americanization in its entrepreneurship education mode. In doing so, the hope of creating any neutral analytical concepts about the nature of Americanization is sacrificed – which, in any event, for the reasons just given, would have been a very faint hope. And the problematique is taken on of those who study historical personages and events. This includes the need to substantiate the historical generalizations made: the range and validity of evidence, the source critique, the usual rigors of the historian's craft.

The approach differs from that of the deductive social scientist. The historian is much more interested in the actor, in the individual, qualitative, nuanced testimony that reflects life, than in statistics and quantification. He/she relies on interviews more than questionnaires; he/she presents evidence more in the form of historical examples; and he/she arrives at generalizations inductively rather than deductively – that