Have academics always been entrepreneurial?

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It would take almost all the space dedicated to this commentary to quote all the literature arguing that contemporary universities and academics are confronted to the marketization, commodification, or merchandizing of higher education and research and to the rise of the academic capitalism (among many others, see Slaughter and Leslie 1997, Slaughter and Rhoades 2004, Bok 2009, Berman 2011, Münch 2014). Most of this literature if not all of it, explicitly or implicitly considers this is a new – and critical – phenomenon. The special issues published in 2017 by Management and Organizational History on the one hand and History and Technology on the other, convincingly demonstrate that academic entrepreneurship was already part of the development of modern universities in the 19th and 20th centuries. This confirms that the ivory tower of science was much more a normative myth entertained by the Mertonian school than an empirical reality.

As stressed in the introduction of the two special issues, arguing that academic entrepreneurship existed before the recent decades is not new: some historians of science (among which Terry Shinn1981, Dominique Pestre 2000 or Steven Shapin 2012) already empirically and analytically fought against ahistorical perspectives ignoring entrepreneurial or commercial practices that were for long common in some scientific production regimes. From this point of view the two issues extend and continue an argument that informed readers of the STS literature already know. But the guest editors of the two issues – R. Daniel Wadhwani, Gabriel Galvez-Behar, Joris Mercelis and Anna Guagnini for Management and Organizational History and the three last ones for History and Technology – adopt two very innovative standpoints.

In Management and organizational History, the authors tackle “the collective and technological dimensions of academic entrepreneurship”, i.e. “the social processes and mechanisms through which academic entrepreneurship reshaped institutions and institutional orders” (Wadhwani, Galvez-Behar, Mercelis, Guagnini, page 176), and they explore them not today but in the 19th and 20th century. They therefore focus on cases where academics develop new institutions, new disciplines, new curricula, or fostered innovations outside academia. Ellan Spero describes how in early twentieth-century America, a chemist academic and the owner of industrial laundries created a graduate fellowship program. Thomas Brandt reconstructs the process of institutional creation, of international diffusion of ideas and of personal involvement of some academics that led to the introduction of a national research council in Norway from the end of the 19th century to the mid 20th. Gabriel Galvez-Behar describes the conflicting dynamics that opposed some French academics over the same period of time and finally came to the constitution of the CNRS (French national research institution). Giovani Favero highlights the reciprocal legitimization processes that strengthened the emergence of the statistical field and the implementation of the fascist regime in Italy in the mid-20th century. Cyrus Mody finally analyses the institutional creation of industrial
consortia and university centers in micro-electronics in the US by the 1980s and 1990s in order to resist to the competition of the Japanese firms.

Although they each write on different countries, different fields and even different periods of time, they adopt the same analytical framework and opt for an institutional approach. They define it as an historical institutional approach (page 186) but in fact are often closer to the sociological neo-institutionalism of Meyer and Rowan (1977) or Powell and Di-Maggio (1983) than to the historical neo-institutionalism of Steinmo, Thelen and Longstreth (1992). As a matter of fact, they insist more on the interactions within the academic field and among institutional actors (academics, public actors and industrial partners) and on their strategic dimensions (in line with Fligstein and McAdam 2011) than on institutional inertia and lock-in processes. It is therefore surprising that – focusing on change and institutional dynamics - they do not mobilise the more recent developments of the historical neo-institutionalism approach that gave up the path dependent perspective and instead focused on incremental institutional change (by drift, layering, conversion and displacement) as suggested by Wolfgang Streeck and Kathy Thelen (2005) or James Mahoney and Kathy Thelen (2009). This would indeed very well fit with what the authors of the two issues describe of the processes by which academic entrepreneurship drives institutional change.

Nevertheless, beyond this remark, the five papers are very powerful in showing how academics are able to circulate in different spheres and try to influence or promote the development of new institutions. “Try” is important here because one of the interests of the papers is to relate success stories but also failures (as in the Norwegian and French cases), collaborative but also turbulent relationships (as for C. Gini in the Italian case). Institutional entrepreneurship is not new among academics and some have always been active in such endeavor but it is also a complex and hazardous enterprise because of concurrent representations and ideas that may dominate among the different spheres (i.e. the academic, political, industrial, administrative spheres) but also within each sphere and especially between academics themselves.

This variety in the levels of achievement is also present and very valuable in the special issue of History and Technology that similarly questions academic entrepreneurship before the recent days. The guest-editors of this issue starts from a rather traditional definition of entrepreneurship (consulting, patenting and business entrepreneurship are under study in this issue) but again displace the perspective first by focusing on the involvement of individual academics and comparing their relative achievements, and second by showing how they answered to market opportunities and engaged in activities with monetary consequences. Although each of the papers concludes on the limits of the achieved empirical work and suggests further potential development, each time the collected material is impressive and – as far as I know – rather unprecedented. There is also a constant concern for showing that beyond the specific cases of the great names mentioned in each paper, there existed many other academics having similar activities. Joris Mercelis builds on the case of two professors of the Technische Universität Berlin and their relationships with the photograph industry over one century to illustrate the development of commercial activities and the debates they sometimes raised. Wolfgang König compares two German professors of mechanical engineering who both engaged in commercial activities at the end of the 19th century: he highlights their opposite financial achievement and also epistemic postures, but also stresses the similarity of the tensions they had to face with the state and with the industry. Anna Guagnini demonstrate that commercial activities were common practices among British
professors of engineering and physics between 1880 and 1914: although such activities could complement rather low salaries they were also a way to improve their teaching curricula and to promote the career of their graduates. Shaul Katzir focuses on German speaking physics lecturer trained as academics who later engaged in commercial entrepreneurship and concludes that if they all relied on an invention, their trajectories are also linked to the lack of academic positions or the financial attractiveness of the industry. Brian Dick and Mark Jones finally explore the Biogen case that they qualify to be an outlier because of the radical expansion of biotechnology and the specific trajectory of Wally Gilbert. But as the previous authors they conclude that a mix of logics (including having fun, inventing things, advancing the limits of science…) and not simply the market logic, explain the rise of entrepreneurship.

Rather than a common theoretical framework, these five papers share at least two important questions that they systematically address. The first one concerns the motivations of entrepreneurial academics and whether monetary aspects played an important role. There is no clear answer to this question – information about gains missing in some cases, or clear-cut answers being impossible to provide in others – but most of the time it seems that this was not the first motivation and that the benefits were often used to fund the scientific institutes of these academics. The tensions arising from the mix of “pure” academic missions and more applied when not purely commercial activities are well identified and addressed by the different papers. The second important question concerns conflicts of interests and how such commercial activities were perceived and accepted by the industry, by the employing academic institutions or by the public actors involved in the funding of scientific activities. This question might at first glance be seen as driven by current concerns but the frequency of the conflicts that the authors were able to find in the archives reveals how accurate such issues already were in the 19th and 20th century. They also led to rather diverging solutions and sometimes to public measures aimed at circumscribing such activities, but public actors and academic institutions were generally rather tolerant and supportive.

To conclude, I would like to stress how well the two special issues fit together, not only because the same co-editors – but one – are responsible for them but because they each analyze the two faces of the entrepreneurship coin: the commercial as well as the institutional ones. They complement each other and thus show that all facets of entrepreneurship were already present before the end of the 20th century and before universities were asked to develop a “third mission” of universities and to contribute to the knowledge economy.

As a result, these two issues implicitly allude that the main transformation in academic entrepreneurship might rather consists in its organizational turn. Indeed, all the papers shed light on the personal role of individuals. This somewhat accentuates the heroic character of the different stories and may be a consequence of the archival method. But it may also be because academic institutions were not entrepreneurial and could not be addressed as such by the authors. Does it mean that nowadays, rather than an increase in academic entrepreneurship, we experience an increase in organized entrepreneurship, universities becoming themselves more entrepreneurial and adopting devices and practices that increase their entrepreneurial character? Or is this hypothesis also historically wrong? In this case, I enthusiastically suggest the co-editors of these two special issues should prepare a third one focusing on the entrepreneurial character of universities in the former centuries…


