

From University to Regionality? Knowledge Economy and Regional Development – The Case of Sweden

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Abstract

New public management and knowledge economy have become watchwords in the governance of higher education. The university's role has rapidly changed toward regional development. The aim of this article is critically to highlight the basic rationale of this reorganization and to examine what this can mean in a Swedish context. This rationale is described as the system of various forms of collaboration between industry, commerce, the universities and research institutes, and the political system. In Sweden, higher education is assumed to generate economic growth in different regional communities. How successful the university's contribution can be is, however, an empirical question rather than an ideological one. A paradox lies in this reorganization—the more the university adapts to regional needs, the more difficult it is to generate knowledge in a global context. If the criteria for knowledge is regional development, then the nature of truth is replaced by something completely different.

Keywords: New public management, knowledge economy, regional development, economic growth, the function of higher education, redefinition of truth

Introduction

Although Sweden has been a member of the European Union since 1995, higher education in Sweden was relatively unaffected by neoliberal changes until the last ten years, even if efforts among policymakers began in the late 1980s (Gustavsson, 2014). Instead, it was the United Kingdom that won the race in Europe and became the first country to realize Milton Friedman's vision and neoliberal ideas, which served as the foundation for societal changes and therefore also for higher education (Tapper & Salter, 1995). In the 1980s, the era of Ronald Reagan and

Margaret Thatcher, traditional professors and scholars began to clash with policymakers and politicians over the governance of higher education (Scott, 1995). Under the neoliberal agenda, *new public management* and *knowledge economy* became watchwords and a political reality in the governance of higher education both in Europe and in many other parts of the world. Higher education became of interest for regional development, especially since the policy of the knowledge economy had been introduced and was now viewed as a tool to fulfil the policy's promising visions (Rich, 2010).

Since its inception, the university has stood for society's universal knowledge (Barnett, 2005). What has been and can be counted on, however, is that the meaning of universal knowledge has changed historically. Seen from the perspective of European education policy, in terms of the development and change of the university, the contemporary focus is clear: the university will become more beneficial to society. The Humboldtian ideal is going out and the useful production of knowledge and education is coming in (c.f. Caniëls & Bosch, 2010). The tendencies of this change are not conclusive, but the university's universal, global role has rapidly shifted toward regional and locally-defined knowledge—knowledge whose meaning is becoming universally insecure (Barnett 2011). The importance of higher education to a region's growth has also attracted more and more international attention (Rodrigues, 2011), for example, in Russia (Gavrikov, 2012), the United Kingdom (Culkin & Mallick, 2011), Canada (Florida, Mellander, & Stolarick, 2010), the United States (Hursh & Wall, 2011), and Australia (Tomaney & Wray, 2011). Universities and colleges have come to be regarded as the driving engines of the so-called knowledge economy (c.f. Young, 2009), which pushed forward new joint partnerships between the universities on the one hand and industry and commerce on the other (Olsen & Peters, 2005). Higher education is undergoing a structural and strategic reorganization, which is seen as a key to innovation and therefore to economic growth (Bastalich, 2010), according to what Robertson (2010) described as three basic principles of this reorganization — corporatization, competitiveness, and commercialization: "reforms of HE [higher education] public sectors have occurred in very similar patterns worldwide" (Gomes, Robertson, & Dale, 2012, p. 224). The fundamental feature of this is the commodification of higher education; that is, capitalist logics penetrate every dimension of the social life of higher education institutions (cf. Brancaleone & O'Brien, 2011).

Accordingly, a knowledge capitalism is fully established (Olsen & Peters, 2005); that is, knowledge in itself is becoming the most important form of capital. Knowledge should be able to flow freely in the market without being limited by boundaries. Knowledge and bearers of knowledge are separated, and individuals are investing in the knowledge demanded by the market (Bernstein, 2000). This phenomenon was visible as early as the 1970s (Kvale, 1972), but its social impacts are more contemporary. What the individual learns only becomes interesting in relation to what it can be exchanged for in a knowledge market, though not because of an interest in knowledge as such. Central to this logic, however, is that it does not consider all forms of knowledge, only knowledge that leads to regional development and economic growth. The aim of this article is critically to highlight

the basic rationale of the reorganization of higher education in terms of knowledge and to examine what this can mean in a Swedish context.

The Rationale for the Reorganization of Higher Education

The above-mentioned rationale can in simple terms be described as a system of the various forms of collaboration that exist between industry, commerce, the universities and research institutes, and the political system (Delladetsima, 2011; Leydesdorff, 2006). In other words, it describes how knowledge generation and distribution collaborate with economic growth and the surrounding society. Within this system, stakeholders or groups of stakeholders are positioned in different ways in terms of preferences, and they establish different types of relationships. In this system, three dimensions can be distinguished analytically, even though they are intimately linked in practice: a *geographical* dimension, that is, how stakeholders, people, businesses, authorities, and so on are positioned; an *economic* dimension, that is, how exchange relationships take shape; and a *contextual* dimension, that is, what information and what knowledge is generated in the system.

If one transfers the above rather abstractly described rationale to regional conditions, the potential for regional development becomes dependent on how well the transfer of knowledge succeeds (Hilpert, 2006). This applies both to knowledge generated through experience and to knowledge generated through education and research (Siebert, Laschewski, & Dosch, 2008). Contextualized learning processes are seen as key elements of regional development (Lockett, Caveb, Kerrc, & Robinsond, 2009). The more the regional economy is impregnated with knowledge, so to speak, the greater the opportunities for innovation and regional development are assumed to be. Therefore, the regional public sector and regional-level policy have significance for regional development (Berglund & Johansson, 2007).

The Geographical Dimension

An often-criticized paradox is that however much the economy is globalized, geographical proximity still maintains its significance for economic growth (Vaz & Nijkamp, 2009; Zook, 2004). The simple explanation for this is that innovation and the transfer of knowledge always take place in social contexts (Bahlmann & Huysman, 2008; Rodrigues, 2011). A region is characterized by its history. Over time, a stock of knowledge and competence develop that can be described as traditional (Siebert et al., 2008; Karlsen, Isaksen, & Spilling, 2011). Therefore, regional universities are of importance for the potential access to new technology and knowledge. Regional development is thus developed by a large number of actors who generate knowledge in each respective individual activity, but who are participants in the shared regional tradition (cf. Lorentzen, 2008). Specific regional contexts of a non-economic character are underlined as fundamental for economic growth and regional development. These contexts vary between regions and they concern not only networks, nodes, and so on, but also attitudes and approaches (Liñán, Urbano, & Guerrero, 2011). In this way, contemporary socioeconomic development underlines the fact that the entirety of social life is a basis for development and growth, no matter how globalized the economy is. In light of this, the increasing demands on universities to collaborate with their surrounding communities is understandable. These demands can be more

significant for regional institutions of higher education in more sparsely populated regions where the service sector cannot expand at the same rate as in densely populated regions and cities (cf. Stolarick, Denstedt, Donald, & Spencer, 2010).

The Economic Dimension

Regional development is considered to be a matter of social change and transformation (e.g. Berglund & Johansson, 2007). The capacity for the exchange of knowledge through, for example, clusters and networks appears to be an essential element of regional development (Jones, Macpherson, & Thorpe, 2010; Lorentzen, 2008). In this sense, knowledge can also be seen as a central strategic resource. Knowledge that can affect a company's survival and growth—that is, contributes to regional development—is created through social interaction. A well-developed collaboration between the regional university and regional and local commerce thus appears to be a basic requirement for institutions of higher education to be able to contribute to regional economic growth.

In this way, knowledge transfer can take place in a manner that is adapted to regional conditions and to suitable regional receivers with the capacity to identify and absorb the injection from outside. Additionally, in this context, demands are made on the university to generate knowledge in a global context and, at the same time, to adapt and transfer it to a regional context (Rodrigues, 2011).

The Contextual Dimension

Within the system, different types of knowledge are generated, which are usually expressed as analytic/scientific, synthetic/technical, and symbolic/creative. Another common distinction is between scientific expert knowledge and local, tradition-based tacit knowledge (Siebert et al., 2008). *Scientific knowledge* refers to knowledge that is decontextualized, specialized, standardized and codified in language or symbols, and therefore easy to transfer. *Tacit knowledge* refers to knowledge that is non-universal, context-based, and therefore also context-dependent and embedded in social and regional processes (Bahlmann & Huysman, 2008). It is the fusion between scientific and tacit knowledge—in other words, between the new and the traditional—that is considered to lead to innovation, economic growth, and regional development; personal contacts, networks, and so on become essential prerequisites (Siebert et al., 2008). Knowledge thereby becomes not just an individual resource but a symbolic and normative social structure, which also means that the individual's competence is relative to what within the region is counted as valid knowledge (Siebert et al., 2008).

This is accentuated by the society being largely reconstructed in accordance with market principles. This reconstruction can be described as an ongoing hybridization; that is, various state and public operations, organizations, and businesses are increasingly becoming more similar or are merging in a fundamental way (Mayo, 2009). The distinction between public and private operations is hardly interesting any longer (Ball, 2010). Some examples of this hybridization are state and municipal companies, independent research institutes that are publicly and privately financed but managed by the universities, or private businesses running operations in healthcare, education, and nursing. In this way, a new category of

knowledge has increasingly more importance. To put it briefly, this is knowledge about how the surrounding society functions and about how to navigate it in a strategic manner (Siebert et al., 2008). For example, this type of knowledge is increasingly significant for business development, though not as a substitute for scientific knowledge; rather, it is more of a form of mediation between different stakeholders and networks that are not directly involved in business activities (Jones et al., 2010).

The Case of Sweden

The Swedish Agency for Economic and Regional Growth has supported the EU agenda since the late 1990s in terms of its expectation that higher education should adapt to society in order to contribute to economic and regional development.

In Sweden, the emergence of the young universities was preceded by regional competition and locals' efforts to have a university located in their own regions. For many of these universities, clear ties to knowledge-intensive industries have played an essential role in the advent of institutions of higher education (Berggren & Olofsson, 2011). Institutions of higher education were also created when existing post-upper-secondary school courses for nurses and teachers were included within the newly established university colleges during the late 1970s (Högskoleförordning, 1977, p. 263).

With the advent of the younger institutions of higher education, the expectations of spin-off effects on community life, like the influx of young students and the establishment of new businesses, were high, not least within the service sector (Abrahamsson, 1977). Hopes that an increasingly growing population would reverse the population trend were, and are, great. Forecasts for the universities that lie outside metropolitan centers were perceived as regionally significant (Andrén, 2013).

Proximity to a university has long been seen as an advantage with regard to regional development (Fogg, 2012). More of the newer institutions of higher education in the country have a clear commercial focus in their positioning. During the establishment of the institutions of higher education with which regional university colleges have collaborated, well-established and sometimes world-leading parts of the business sector contributed primarily to technical research, which in some parts could be said to have been shaped into world-leading research. However, other areas exist that can be considered promising in collaboration with regions and the local community. These include the establishment of research foundations to support the local university and innovation offices to help business spin-offs (press release, 23 June; the Government's bill 2008/09:50). It is too early to comment on the impacts of all these efforts, which aim to contribute to the development of new and existing companies. The expectation that the regional institutions of higher education will provide spin-offs in the form of new companies is widespread among local and regional politicians and policy brokers. What we know, however, is that university-educated people do not become entrepreneurs to the same extent as the non-university-educated population. Furthermore, it appears that it is mainly in the arts, the humanities, higher education, forestry, and

agriculture that students establish businesses (Berggren & Olofsson, 2011), a fact that challenges old, familiar beliefs about university students' entrepreneurship. However, the picture is complex. In an analysis of mobility factors, the Swedish Higher Education Authority showed that it is only in metropolitan areas that the well-educated stay, while there is a net influx of university-educated persons. All other areas thus educate for metropolitan regions as well as their own. The net deficit in more sparsely populated regions can be more than 30 percent (Högskoleverket, 2011).

A comparison between the young universities and the older universities showed that students from the older universities are much more engaged in running businesses than students from the younger ones (Berggren & Olofsson, 2011). However, the European policy for the universities and university colleges emphasizes the better labor market adaption of both courses and research. The European Commission emphasizes the need for efforts to reduce the regional differences within the European Union with regard to higher education and regional development. In particular, the relationship between higher education and economic growth is emphasized (European Commission press release, 2012–2014). What role can we then expect Swedish universities—both newly established and existing ones—to play in the future of innovation and business? Does the region create well-educated crucibles of culture and tolerance? These are, claimed the American researcher Florida, the parts of the “levers” that make some areas more or less independent of the contemporary economic cycles, while areas with relatively less interest in education in general—and higher education in particular—have problems (Florida, 2010).

The forecasts are not overwhelming for several of the cities where the new universities are located. They are all in more or less densely populated areas. But how do the forecasts for population change look for those areas with new institutions of higher education in relation to metropolitan regions?

The populations of the two fastest-growing counties in Sweden, Stockholm and Skåne, are expected to increase in the coming 35 years. The top university city in each of those counties is estimated to grow 27% and 22%, respectively. This can be compared to other county regions with low population densities that host young universities. The populations of the counties of Norrbotten, Västernorrland, Jämtland, and Kalmar are all expected to decrease. The university cities in those counties have positive forecasts, but they are markedly lower than the metropolitan ones. Looking at the more knowledge-oriented of the new universities actually gives more pessimistic prognoses for population growth over the next 35 years: 6% in Kalmar, 5% in Karlstad, 3% in Östersund, 1% in Sundsvall, and -2% in Luleå (Svenskt Näringsliv, 2011).

One could state that things are not as negative as they are in the areas where higher education is absent. How significant a university's contribution to regional and local development can be is mainly an empirical question. At the same time, this hypothesis makes the point that without a university, it seems difficult to stop relocation and economic downturns. Persistence and purposeful meetings between politicians, representatives of the public sector, and entrepreneurs appear to be

important for succeeding in areas in which a younger university is located. The establishment of institutions such as innovation offices for expanding and deepening conversations between different regional stakeholders is an example of intensified efforts that, primarily in the long term, can contribute to more promising regional development (Regeringsbeslut, 2009). At the same time, there is research today showing that the new offices were mainly established by men with old networks, which indicates that their contributions may be limited (Rönblom & Keisu, 2013).

In summary, a plausible hypothesis can be formed that the geographical dimension of the new universities tends to contribute to local benefits, but not to regional benefits. The economic dimension will therefore be limited by the geographical dimension, and the contextual dimensions are in danger of going from research based on universal knowledge to research based on restricted, locally created language and knowledge (Bernstein, 1999).

Discussion

The new demands on universities mean that steering a university in a new direction will be required, namely to focus to a much greater extent on the specific regional needs in order better to reconcile the new and the traditional (cf. Thuot, Vaugeois, & Maher, 2010). Higher education is in this way assumed to generate both human capital and social capital in different regional communities in a way that favors economic growth through the regional infrastructure and local business (Rodrigues, 2011). Through higher education, shortcomings or deficiencies in the region are considered to be compensated for and influenced in the right direction, and the new universities in Sweden have been responsive (cf. Uluorta & Quill, 2009; Andrén, 2013).

Research can be of fundamental importance for regional development, and even in this respect the universities are steered in a new direction. The integration of new scientific knowledge and traditional, tacit knowledge is considered to require research, the legitimacy of which must reach outside the scientific community (Siebert et al., 2008; Vaz & Nijkamp, 2009). In this lies the conviction that research must be adapted to other regional actors, a conviction, driven to its extreme, therefore entailing a total transformation of scientific research. This directive contains an interesting but still unresolved paradox, as it seems reasonable to assume that adapting education and research to regional needs and conditions will make it more difficult to generate knowledge in a global context. This is most important for new universities in Sweden and around the world.

The transformation that characterizes higher education involves changes in the university's social function. "In the age of knowledge capitalism the next great struggle after the 'culture wars' of the 1990s will be the 'education wars', a struggle not only over the meaning and value of knowledge both internationally and locally, but also over the public means of knowledge production" (Olsen & Peters, 2005, p. 340). If the knowledge that is produced at universities is reduced to pure capital production, then the universities' opportunities for human emancipation will be overridden (Costa & Saraiva, 2012). But the changes can be said to be more

profound than that—if the criteria for true knowledge are regional development and economic growth, then an epistemological redefinition of the concept of truth takes place and the theoretical discussions about the nature of truth that have guided so much of the university's knowledge production in the last century is replaced by something completely different.

In the university construed as the motor of an innovation system, there is constant pressure to yield research results and educational programs that can be 'packaged' as components of the system of commercialization. Whatever doesn't fit into such a package cannot be regarded as 'knowledge' in the sense in which the term is operative in innovation policy and strategy. (Rider & Waluszewski, 2015, p. 244)

This extension of what should count as knowledge endangers the link between the diminishment of universal knowledge production and the permeation of regional and local knowledge, especially in less-populated areas, as in the examples from Sweden mentioned above.

The consequences of such a change of the university's knowledge production then becomes counterproductive in relation to the new rationale for the creation of knowledge that is useful to the local community. The local is quite simply becoming harder and harder to reconcile with the increasingly more and more insecure universal.

This would suggest that university management should connect universal knowledge to local and regional knowledge as a way to avoid a drain of knowledge that can be reused and applied in different contexts and environments. The challenge is to identify universal knowledge in the sparsely populated regions and communities in Sweden and other parts of the world so that science can actively create innovation.

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