

Third Mission of Universities and Czech Higher Education: Where Next?

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Third mission of higher education: Setting the stage

It is nowadays a truism to say that higher education institutions play an important role in modern knowledge-based societies. This role traditionally comprises educating highly skilled graduates for knowledge-intensive job positions and generating new scientific discoveries as well as different sorts of innovations. However, higher education institutions are also expected to be actively involved in the development of their geographical surroundings for the benefits of regional populace and less proximate (national) actors (Arbo, Benneworth 2007). The expectations for more intensive regional role of higher education institutions can be said to have intensified as of late (Pinheiro, Benneworth, Jones 2012b). This is due to persistency of policy (and political) agendas of developing productive university collaboration with regional industries, communities and administration. To secure their involvement in regional advancement through multi-actor cooperation, higher education institutions have been called upon to put a sufficient emphasis on aspects of valorization and commercial exploitation of knowledge (Pinheiro, Benneworth, Jones 2012a). The active pursuit of commercially profitable activities, spinning off from research and development outputs, has given rise to the term “entrepreneurial university” (Clark 1998; Pinheiro, Stensaker 2014). University engagement along the entrepreneurial lines has, however, ramifications in policy terms, becoming part of (calls for) university modernization (Maassen, Olsen 2007). Over time, terminologically, developments associated with university actions performed within the regional surroundings has been dealt with under the terms such as ‘third role’, ‘third mission’, ‘third task’, ‘third stream’ as well as ‘regional engagement/involvement’ (Kohoutek et al. 2017).

Implicit to the term ‘third mission’ is the fact that universities in principle have two other missions. As suggested, the first mission historically comprises teaching/education performance whilst the second refers to research and development activities (Pinheiro, Langa, Pausits 2015). The third mission of universities can thus be conceived as complementing the other two by explicitly targeting regional development issues, processes and actors. However, it would be a gross oversimplification to ascribe university regional role only to economy-related undertakings. Universities have traditionally also showed distinct cultural and social embeddedness in their geographical surroundings, such as by having been co-productive in social (health)care and cultural enlightenment (Olsen 2007; Stensaker 2004; Pinheiro 2011). The third mission thus encompasses activities of higher education institutions (of the university type) geared towards regional betterment in economic, social, historical and cultural terms. In this study, the term third mission will be holistically applied to signify such activities of the modern university.

The contribution of university to multifaceted regional development makes the theme of third mission legitimate in higher education policy-making and practice. Correspondingly, this study reviews the third mission problematic also with regard to Czech higher education policy developments. By doing so, the study first outlines major conceptualization bearing on

how third mission has been dealt with in higher education literature and policy-making. This is followed by the overview of policy takes on third mission and presentation of selected practices (cases) in the Czech higher education landscape. To this end, the study makes use of relevant conceptual policy documents and other sources of data (empirical research findings). The resulting evidence is subsequently summed up and discussed. The discussion is concluded by drawing few wider observations on the significance and prospects of the third mission in present-day higher education policy-making in the Czech Republic.

Third mission in time and concepts

Origins of a scholarly interest in the third mission can be traced back to the second half of the 19th century owing to the establishment of land-grant colleges (USA) and civic universities (UK) (Pinheiro, Langa, Pausits 2015). In continental Europe (Western countries), a concerted attention to the role(s) that universities perform within their spacial surroundings got traction in the 1950s with the efforts of post-war industrial reconstruction, and in the 1960s with the opening up of university education to a much wider number of participants. To cater for growing numbers of applicants, (vocationally-oriented) higher education institutions with an explicit mandate to serve and develop regional communities were newly established throughout the 1960s (Neave 1979). Roughly from the 1970s onwards, the university third mission has increasingly become subsumed under the knowledge society paradigm. This has resulted in orientation on economic innovations and socio-cultural engagement for advancing countries' international competitiveness (Perkin 2007). In formerly socialist Central and Eastern Europe, for a large part of the second half of the 20th century, the university third mission in terms of socio-cultural evolution was largely absent, confined to the underground movements and 'flat seminars'. What remained was subject to the Communist dictum, confined to the production of qualified workforce and industrial innovations crippled by the defunct centrally planned economies. The post-Communist years (1990s onwards) have been marked by catching up with the Western developments by establishing regional higher education institutions and, more recently, by concentrating on research-intensive innovations, patents and excellence for upgrading the countries' knowledge base (Pinheiro et al. 2017).

The evolvement of university within its regional surroundings has been studied, with the corresponding literature producing major perspectives of it. The perspectives can be summed up as:

- The third mission is part and parcel of what universities have always done, given the degree of local embeddedness with their surrounding localities (Bender 1991);
- The third mission represents the natural evolution of the university as an organization and the multiplicity of societal tasks it is asked/required to fulfill (Kerr 2001);
- The third mission represents a paradigm shift in the evolution of the modern university, and corresponds to a 'second academic revolution' (the first being the institutionalisation of research as a core task following the 18th century Humboldtian model) (Etzkowitz 2001);
- The third mission is an inherent part of the resilient ('entrepreneurial') university operating in a competitive market place (Pinheiro, Stensaker 2014).

These perspectives spurred evolvement of more specific conceptualizations addressing issues of the nature of university interfacing with external actors and demands within regional settings. Some such concepts address the evolution of regional innovations, arriving at the 'triple helix model' of the industry-academe-state administration relations (Etzkowitz, Leydesdorff 2000), while others explore the attributes linking universities and regions into a learning system (Chatterton, Goddard 2000). Another approach looks specifically and inwardly into the contingencies of dimensions of university third mission embodied by mass tertiary education, professional specialized education and production of new knowledge (Laredo 2007). Still other authors focus upon the importance of university internal organization, embedding the third mission as a means of institutional development (Vorley, Nelles 2008). Next, there is the argument that the third mission is part and parcel of the changing role of universities in society/economy, and should be thought of as the complex interplay between the 'local', 'national' and the 'global' (Goddard, Puuka 2008; Arbo, Benneworth 2007). Taking account of the interplay between the local and the global, Pinheiro, Jones and Benneworth (2012) accentuate four critical factors of third mission accomplishment, i.e. university primary activities, strategic objectives and aspirations, normative and cultural-cognitive dimensions as well as resources and incentive systems. Finally, aiming to synthesize somewhat disparate conceptual accounts, Krčmářová (2011) conceptualizes university third mission into a holistic framework. The framework contains three elements that are: enterprising third mission, innovative third mission and social and civic third mission, each element containing a set of corresponding indicators.

Overall, the up-to-date, international reviews of the state of art of third mission research (Pinheiro, Langa, Pausits 2015; Peer, Penker 2016; Benneworth, Pinheiro, Sánchez-Barrioluengo 2016; Kohoutek et al. 2017) identify few areas for improvement. These are:

- limited application of conceptually sound approaches for empirical investigations, also in view of highly reductionist implications of the universalistic models for actual universities' practices;
- lack of systematic comparisons of cases within or/and across countries;
- lack of longitudinal studies of relevance to the topic
- dearth of studies into the role of HEIs within regional networks and governance systems;
- insufficient attention to the role(s) of university in development of the regions considered peripheral or 'thin' in their status.

More systematic research work addressing such issues would help in developing the pool of knowledge about the university third mission. Importantly, researching third mission along the pointers given may also be instrumental in changing the oft-noted mentality of academics who tend to regard the third mission as useful but essentially dispensable, diluting and diverting institutional as well as personal foci from more substantial activities of research or teaching (Benneworth, de Boer, Jongbloed 2015). How the university third mission has been taken up specifically in Czech higher education is outlined in the next two sections.

Third mission and Czech policy-making

The 1990s as the first decade after the fall of Communism were marked with some major developments shaking down and shaping up the Czech higher education landscape. Among the major ones were the democratising (although somewhat hastily written) Higher Education Act no. 172/1990 Col., establishment of the Accreditation Commission, initiation of formula-funding or the OECD review of (still federal then) higher education in 1992. However, apart from founding six publicly funded, regional higher education institutions (HEIs) in between 1990-1992 to compensate for the concentration of higher education studies traditionally in three Czech major cities (Prague, Brno, Olomouc), very little of policy-makers' attention seems to have been paid to the problematic of third mission per se.

This had changed in the 2000s. The passing of the Higher Education Act no. 111/1998 Coll. laid ground, among others, to elaborations of strategic policy documents. Some of such documents have been produced mandatorily every five years (Long-term Plans including yearly updates), whilst others (Higher Education Reform Concept (2004), OECD Country Note (2006), White Paper on Tertiary Education (2009), Framework of Higher Education Development (2014)) were made on more specific occasions. Somewhat loose phrasing of the Long-term Plan for 2000-2005, including support to professionally oriented Bachelor's programmes and University of the third Age (U3A), was made more elaborate in the Higher Education Reform Concept. The makers of this document made an effort to clarify the key constituents of the third mission concept and identify the problems hindering its application in the Czech Republic.

The Higher Education Reform Concept presented a broad agreement between policy-makers and employers on the university third mission. It included: R&D cooperation, joint venture foundations (spin-offs), joint development of curricular designs, involvement of practice professionals in teaching (also in LLL courses), joint promotional events (job fairs, summer schools), sharing of information, and cooperation with regional administration. These agreed-upon constituents of TM could have provided a basis for solid future policy designs. It is worth adding that the Higher Education Reform Concept also advocated an evidenced-based approach to TM policy-making, stating:

At this point, it is necessary to broaden the whole agenda ... to account for a wider set of areas in humanities and development activities conducted in cooperation with entrepreneurial or public administration units ... [requiring] mid-term evaluation and information exchange with examples of good practice (MŠMT, 2004, p. 41).

Lastly, the Higher Education Reform Concept specifically addressed the issue of intensity of cooperation between Czech HEIs and businesses.

Some of the third-mission related issues (professionally-oriented Bachelor' programmes, LLL and U3A courses, job fairs) made parts of the Ministry Long-term Plan for 2006-2010. Their importance was further reiterated by the OECD Review in 2006, finding Czech higher education too inward oriented, lacking in robust contacts with practice professionals and working life more widely (File et al. 2006). The observations of the OECD Review were, to an extent, reflected in the White Paper on Tertiary Education. The White Paper, presented in

2009, set out to define university TM¹ and paid specific attention to TM problematics, noting the changing landscape of higher education with respect to new emerging entities (technology transfer centres, strategic alliances, business incubators) and the need to avoid narrow, one-off interventions. In sum, TM agendas promulgated in the 2009 White Paper were linked to the triple-helix approach, calling for legislative amendments, thorough analyses of situation in individual regions, sensitive timing of (political) decisions, investment incentives as well as changes in managerial approaches of the academe. However, due to controversies especially in the area of university management the 2009 White Paper was shelved and is largely forgotten these days.

The two Ministerial long-term plans of this decade do refer to university third-mission issues under the thematic priorities 'Openness' (Long-term plan for 2011-2015) and 'Relevance' (Long-term plan for 2016-2020). The areas for support comprise more extensive and comprehensive cooperation of HEIs with external entities and professionals, improvement of cooperation with the Ministry of Labour Affairs and other state administrations in assessing higher education outputs, collating information of good practices in educational innovations, support of lifelong learning activities and of student (career) counselling. These areas are furthered by the content of Plans' updates, adding in issues such as devising the higher education information portal/database or setting up cooperation with NGOs. The updates also declared support to *several long-standing third mission development goals*. They pertain to R&D innovations, technology transfer, commercialization, LLL, U3A, student internships or student/graduate counselling activities. Overall, that good many priorities illustrate the diversity and complexity of the university third mission, with the breath of goals/priorities covering both entrepreneurial-innovative and social-civic aspects of it.

Third mission in practical application

The theme of the university third mission has not been confined only to systemic policy documents but also found its realisation in policy practice through numerous (project-based) activities of Czech HEIs as well as regional/state administration. It goes beyond the breath of this study to enumerate such undertakings in a complete fashion². Instead, in reflection of third mission research limitations, the focus is on three large-scale, comparative research projects.

Two of the projects (HIPPO, UBC)³ deal with university cooperation with business enterprises. Their findings show that cooperation between universities and businesses (UBC) is beneficial mainly in terms of improving the economic competitiveness, increasing the relevance and innovativeness of research and teaching as well as improving the job prospects of graduates. More specifically, Czech universities engage in cooperation with businesses, particularly medium-sized (SMEs) and big ones located in their region. There is

¹ Defined as 'general services HEIs provide to society, formed differently at different institutions by concrete regional, economic and political contexts' (Matějů et al., 2009 p. 31).

² The outstanding third mission activities of the first half of the 2000s are reviewed in Urbánková (2007).

³ They are: a large-N, pan-European "Study on the cooperation between HEIs and public and private organisations in Europe (HIPPO, 6,280 respondents)" carried out in 2010-2011 and "The State of European university-business cooperation (UBC, 17,410 respondents)" executed in 2016-17. Both HIPPO and UBC did include respondents from the Czech Republic.

top-level managerial commitment helping towards a documented institutional mission for UBC. A communication approach is also perceived as well developed. The areas most frequently collaborated in are consulting, R&D activities and curriculum co-delivery. On the other hand, one half of the responding Czech academics do not (or only seldom) engage in university-business cooperation. This may be due to

- plentiful bureaucracy
- lack of support in networking and *systematic* cooperation efforts including time considerations,
- missing incentive and performance measurement systems for those engaging in UBC,
- non-provision of additional, targeted financial resources,
- differing motivations and values between academics and business people including the strong focus on producing practical results by the latter.

Overall, the Czech UBC situation shows less intensive actor engagement and development of relevant activities in comparison with universities elsewhere in Europe. As already indicated, however, it would be an oversimplification to reduce the university third mission just to cooperation with businesses, including research activities in “hard science”. Such cooperation is clearly part and parcel of the university third mission but the same holds, among others, for social care for the elderly, commemoration and revival of local traditions/customs, hosting debates on current public affairs as well as holding of cultural events (film festivals, theatre performances) that are typically undertaken by the faculties of arts, social sciences or humanities. Although not bringing profit in financial terms, such activities contribute positively to social cohesion, stability and betterment of regional populace.

Third mission activities that help reduce or remove social, economic and educational disparities among regional populace are of very special importance to the localities/regions that fall behind in terms of economic performance and quality of life in wider sense. Researching university capacities to help the peripheral regions in the Czech Republic overcome such disparities was the foci of the third of the projects (PERIF⁴). The PERIF findings show that mere routine activity of the university in a socio-economically underdeveloped region is not a sufficient condition for regional improvement. This is due to still observable university detachment from (some) ‘hot issues’ in the region, typically aside from generating highly qualified graduates. However, university graduates often tend to, sooner rather than later, migrate out of the regional periphery, which harms regional competitiveness, thus creating a vicious circle. What is especially needed there are five things:

- cooperation between the university, businesses and regional administration, taking into account and successfully coping with their different policy agendas and politics (incl. consideration of different time-horizons for actors’ action).
- cooperation along these lines should not only be effective short term but show sustainability mid/long-term by being based on institutionalised, not purely individualized, engagement links;

⁴ The bilateral Czech-Norway project, based on a qualitative methodology, explored relevant developmental capacities at six higher education institutions (three Norwegian, three Czech), each located in a peripheral/thin region. More information is available at <<http://www.perifproject.eu/>>.

- targeted incentives for especially talented university graduates to keep them in the region (could be also material such as affordable quality housing)
- active inter-sectoral engagement of the state ministries – especially Ministries of Labour, Education, Regional Development, Industry and Transport to help by providing coordination, guidance and, importantly, by ensuring sustainable funding channels
- realistic and flexible governing, free of sectoral rivalries and bureaucracy.

In sum the PERIF findings attest to the significance of strategic governance, the arena in which, however, the Czech Republic shows long-term deficits (cf. Potůček 2007; Ochrana, Plaček, Půček 2016).

Discussion

The evidence on the university third mission presented up to this point allows commenting on the Czech situation over the past three decades. At first sight, progress is evident. From the 2000s onwards, university third mission has become regularly taken up in policy-making documents. Some of them, such as the Higher Education Reform Concept or the White Paper on Tertiary Education did engage in deconstructing the complexity of the theme, with the latter also reflecting somewhat on international observations (OECD) and utilising relevant literature knowledge (triple helix). The policy documents have delineated relevant goals and many (ancillary) activities have been done, with some major ones documented on a project basis. However, if holistic (and critical) lens are put on, few caveats appear.

To begin, there is a dearth of research into higher education *and* regional development. Both strands of research—higher education and regional studies—have so far been carried out rather independently and in isolation, resulting in a limited take up and exchange of information. Pursuit of interdisciplinary-oriented regional higher education studies would likely help in generating more comprehensive accounts on the university-region interfacing. Similar detachment can, however, be found also in strategic and practical terms. Starting with strategic policy-making, we surely do have relevant policy documents – lots of them. The problem they have is twofold. First, good many of them reflect position of only one ministry/regional administration body when inter-sectoral solutions are called for. Second, the many priorities the strategies put forward do overlap or repeat in time without proper assessment, thus giving rise to ill-practices of goal-layering and muddling through it (cf. Kohoutek, Sima 2018). Correspondingly, in reality, the available evidence shows that many issues besetting regional (higher education) development, such as missing university graduates (from lower socio-economic backgrounds), outmigration of highly qualified (graduate) specialists, more effective public sector services, Industry 4.0, innovative entrepreneurs incl. also social innovations and the like, go beyond the remit of one ministry or organisation (public, private). Despite that the corresponding targeted funding interventions still do not require strategic partnerships and coordinated efforts, as also evident from an up-to-date ESF call (MŠMT, 2018, pp. 5-6). It is contended that such an approach supports strategies of what individual actors can do rather than what *is needed* to be done cooperatively. In this way, one might Re-start the regions lagging behind over and over again. Finally, it is worth mentioning that good many interventions, be they blueprint

strategies or specific projects, do end up without proper impact assessment so that little is known about the extent to which their undertaking has been effective and justified.

Conclusion: Should we nudge?

After ‘the return of Czech higher education from Babylon’ (cf. Neave 2003), extended somewhat through the 1990s, the university third mission has made it onto the policy-making agenda and into actual practice. Some progress has been made but some challenges do remain. To successfully tackle them, some rethink of the third mission problematic is in order. Strategically put, it would be desirable to learn seriously from the already accumulated evidence, avoiding pitfalls of goals repetition and layering without impact assessment. Sure, we know that the university third mission is manifold and agreement on what it constitutes is difficult amongst the Czech academe (cf. Brada, Hanzelková 2015). But do we, in 2018, still need to stress and prioritize LLL, U3A, student internships or involvement of practice professionals in higher education courses? Have these activities not already become a standard part of what Czech higher education institutions do these days? Even without relevant assessments, I would (hazard a) guess that they have. But perhaps some of them need a rethink. To give an example, the perennially problematic engagement of practice professionals likely needs modifications of professional career paths available at Czech higher education institutions. Money, even if available, may not be enough. And, from the opposite angle, is there any cogent reason why e.g. public media appearances are side-tracked in habilitations and professorial appointments? Does not thus the Czech academe, in a way, pay a disservice to society at large who hardly reads scientific publications?

More generally, the relevant question is simple in wording but difficult in answering. That is – What incentives should be put in use to lure half of Czech academics out of their ivory tower and make them engage in some third mission activities⁵? If the answer lies beyond high-profile projects or legislative proceedings producing amendments to the existing legislation, there still may be a possible solution – a nudge. Aiming at small, incremental and inexpensive changes in environment to trigger the desired outcome⁶, a nudge has pervaded the Nobel Prize lectures (Thaler 2017a) as well as popular literature translated into Czech language (Thaler 2017b). Why not to give it a go at Czech higher education policy-making then?

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⁵ See also the UBC findings in the Czech Republic country report: university perspective (Orazbayeva et al. 2017).

⁶ One of the most popular examples of a nudge is sticking the image of a housefly to the men's room urinals to reduce cleaning costs (Evans-Pritchard, 2013).

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