

DIFFERENT WORLDS? FINDING CONSTRUCTIVE COMPLEMENTARITY BETWEEN ACADEMIC RESEARCH AND SOCIETAL IMPACT ACTIVITIES



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SUMMARY. There is growing policy interest in stimulating academic researchers to increase their engagement with societal partners. Understanding of research impact is typically framed by conceptions derived from natural and technological fields. In this article, we scrutinize how prior studies discuss the societal impact of social sciences and humanities (SSH) research. To address the dynamics of academic researchers' engagement with societal partners, we conducted a literature review, asking three questions about (a) motives and ways of engagement, (b) dilemmas and struggles experienced, and (c) strategies to deal with these struggles. Our study reveals that many SSH researchers tend to engage with various societal partners in extra-academic fields, but they experience tensions both on the practical level of limited resources and time and because of idealistic orientations of scientific work that sometimes are incommensurable with societal needs. While researchers might be motivated to engage with societal partners, it is usually means-driven rationality, but ends-driven rationality is for research in itself. Solution is to create conditions where researchers would have intrinsic motivation for engagement when complementarity between research and societal impact activities would be established. On that basis we propose that engagement should be treated as a quality of good research and that creating new academic identities should reflect the values of research communities where engagement is essential.

KEYWORDS: social sciences and humanities research, societal impact of research, knowledge transfer, academic motivations, research evaluation, academic identity.

INTRODUCTION

There is a growing realization that universities face increasing pressures to create societal impact (Bornmann 2013; Hessels 2010; De Jong et al. 2016; Morris, Rip 2006; Blume, Spaapen 1988). Demands for a direct demonstration of usefulness have challenged universities' accepted societal roles as introverted, self-accountable institutions (Olssen, Peters 2005). These new demands necessitate that

universities work to meet societal needs, either directly via economic growth or indirectly via societal well-being (Olssen, Peters 2005; Blume, Spaapen 1988; Gibbons 1998). This change brings new tensions and problems for universities and academic researchers (the so called ‘dark side’ of societal impact, Bozeman et al. 2013).

The absence of clear definitions of ‘good’ societal impact creates uncertainty for researchers regarding expectations (De Jong et al. 2016). In the social sciences and humanities (SSH), many researchers fear this new demand is detrimental to their overall research quality (Cherney 2015; Cherney et al. 2011; Haynes et al. 2011; Chaharbaghi, Barry 2010; Collini 2009). Donovan argues that impact primarily uses policy-makers’ conceptualizations (2017, also Watermeyer, Lewis 2016), often defaulting to direct economic contributions (Alastalo et al. 2014). SSH researchers are dissatisfied with this framing (Sivertsen 2017) which judges them using criteria developed from more technical disciplines (Maxwell, Benneworth 2018). This paper develops a framework for understanding impact’s effects on academic researchers (hereafter referred to as ‘researchers’). We start from the dynamics of SSH researchers’ societal engagements, asking three questions:

- (a) Why and how do researchers choose to generate societal impact?
- (b) What dilemmas and struggles do they experience within these requirements of societal impact, and
- (c) What strategies do they use to deal with, accommodate, or circumvent these struggles?

Our literature review reveals that many researchers regard societal impact as *exogenous* to their ways of doing scientific research, even where impact is a legitimate goal. Societal partners are seen as ‘outside audiences’ whose values and needs differ from those of academic audiences; problems with societal engagement are framed as difficulties in ‘reaching out’, ‘transferring’, or ‘translating’ research results to the ‘outside world’, demanding additional time, efforts, and skills from researchers. One determinant of why some researchers and fields engage more than others is their capacity to establish ‘constructive complementarity’ between good research and societal impact, where impact creation fits within academic identities and definitions of valid research. We conclude by reflecting on our study’s limitations, proposing some ways to build constructive complementarity between researchers and potential societal users, and suggesting future lines of research.

APPROACH TO THE LITERATURE REVIEW

We addressed our three research questions via a two-phase literature review: (1) a review of literature on the societal impact of research and (2) a search and analysis

of literature specifically on an individual researcher's (dis)engagement with the notion of creating societal impact.

The first phase search was conducted using the Web of Science database with the keyword 'societal impact', revealing 576 items. In this phase we included all the articles without regard to the fields they represented. After screening and removing unrelated publications (mostly on the societal impact not of research, but of a research object, for example, a disease's 'societal impact'), 100 papers remained. Abstracts of these 100 items were reviewed revealing several key facts regarding the importance of individual orientation towards societal impact activities. First, there is much literature on measuring and evaluating SSH's wider societal impact (Reale et al. 2017; Bornmann 2013). Second, some studies identify the specific challenges and solutions societal impact evaluation require (De Jong et al. 2014; Benneworth, Jongbloed 2010; Olmos-Peñuela et al. 2014; Benneworth et al. 2016). Third, very few studies consider the individual researcher's orientation towards impact, particularly in SSH research and non-commercial settings. Much research on SSH's impact covered particular impact repertoires: popularization (Peters 2013, Kreimer et al. 2011), business engagement (D'Este et al. 2013), popularization, teaching, and collaborations (Jensen et al. 2008), collaborations (Cherney et al. 2011), influence in politics (Capano, Verzichelli 2016). Conversely, relatively little research touches on how impact production relates to different phases of knowledge production processes (Muhonen et al. 2020).

Phase two addressed gaps in the first phase, focusing upon individual researcher orientation towards societal impact, introducing more keywords¹: 'social relevance' (427 results), 'societal relevance' (141 results), 'research valorisation/valorization' (3 results), and 'science-society interface' (19 results). From these, 30 additional publications were selected and added to the 100 first-phase publications. These 130 publications were then subjected to a close reading to identify their main themes relating to researchers' societal engagement experiences. Studies of non-individual factors, societal impact measurement and evaluation, and other aspects of societal impact were excluded, except where they provided a social or institutional context for understanding individual behavior. Twenty publications were selected as directly relating to the individual level. Relatively few studies covered individual societal impact particularly in SSH, therefore for a deeper understanding and broader comparisons among fields, studies not specific for SSH and about non-SSH fields were also included. Nine publications covered SSH, three were on non-SSH fields, while the remainder were either of many fields or without a field indication.

¹ Societal impact is a relatively new term within the literature, and the choice of keywords was one of the big issues of the review. Additional keywords were included, but it still provides a lot of irrelevant results and possibly omits some relevant ones. It is especially an issue when cooperation with professional practitioners or civic society is described in terms that are not in the discourse of societal impact within evaluation.

Step two of phase two identified first researchers' engagement patterns, hurdles, and motivations. The 'exogeneity of impact' idea clearly emerged as a feature of the experience of impact generation: individuals associate impact with non-academic values and practices. What determined societal impact being regarded as endogenous to good research practice was personal circumstance, informal links, and the wider institutional setting. Step three involved further focusing on motivations associated with improving the impact's endogeneity, outside and within academic communities. These three drivers structure our discussion regarding the processes of creating complementarities between the academic and societal worlds.

THE EXOGENEITY OF SOCIETAL IMPACT TO RESEARCH COMMUNITIES

The first theme was the substantive hurdles individual researchers face in delivering research impact that leads to societal impact being regarded as 'exogenous' to their research (even if integrated into research practices, Sivertsen 2017). We distinguish here two tensions: (1) *idealistic* opposition to restrictions that 'societal impact' brings for academic freedom and (2) *practical* choices to prioritize other research practices due to limitations of time and resources, therefore failing to engage with societal partners in research.

IDEALISTIC TENSIONS – PROBLEMS OF WORKING WITH 'OTHER WORLDS'

Academic research is often seen as a separate world from the worlds of societal partners, their goals and values, and principles of work (Haynes et al. 2011: 1050; Ylijoki et al. 2011; Williams, Pierce 2016; Cherney et al. 2011: 10). This separateness is what we call 'idealistic tensions'. It involves researchers feeling intrinsic resistance to engagement because it might represent a threat, challenge, or barrier to 'good' academic research. We identify five types of partners, with whom collaboration creates specific idealistic tensions: business and industry, professional practitioners, policy-makers, media, and civic society (Ylijoki et al. 2011).

Working with business and industry (e.g., solving problems of technological applications in private industry or commercializing academic research results) brought firstly tensions regarding differing speeds between researchers' and users' demands and different orientations between fast-practical-applied and slow-basic-fundamental research (Hakala, Ylijoki 2001: 377; Cherney et al. 2011: 10). Secondly, tensions emerged around knowledge ownership: restrictions on researchers' control of their results (D'Este et al. 2013), delay, or prevention of, publishing

results in scientific journals, because of commercial secrecy (Hakala, Ylijoki 2001; D'Este et al. 2013: 482) or legal issues of contractual arrangements (Cherney et al. 2011: 10). Thirdly, working with business raises concerns of reduced freedom to choose particular topics or research questions (Bozeman et al. 2013: 5) or of pressure to create economic value (Chaharbaghi, Barry 2010: 92–93). Fourthly, engagement of academic research teams and students into business problem-solving, especially through informal and collaborative relationships, might be more exploitative (labor intensive, poorly paid, or not paid) than beneficial for academia (Bozeman et al. 2013: 34–36). A final fear was a certain stereotype of entrepreneurial researchers doing low-quality research, because of 'selling-out' for money (Bozeman et al. 2013: 31; Lam 2011: 1354).

Governmental institutions and professional practitioners are important societal partners, especially for researchers in the social sciences (Ylijoki et al. 2011). It is common that they propose topics for research and are interested in results. Some issues of engagement with them are similar to business engagement, for example, speed and applicability of research (Cherney et al. 2011, 10) or limitations of choices in research topics. Other concerns included that practitioners tend to use knowledge either instrumentally or symbolically rather than conceptually (Chaharbaghi, Barry 2010: 81–82), risking over-simplification, hasty or rushed research and even “[p]olicy led evidence making as opposed to evidence led policy making” (Chaharbaghi, Barry 2010: 82).

Three main concerns emerged regarding contributing to politics (Haynes et al. 2011: 1050; Chapman et al. 2014: 264; Capano, Verzichelli 2016; Williams, Pierce 2016). First was what Williams and Pierce (2016: 223) called the “intrinsic incommensurability of scholarly and everyday political discourses”, scholarly discourse relying on precision and clarity, political discourse making use of ambiguity of meanings (see also Haynes et al. 2011: 1051; Capano, Verzichelli 2016: 214). Second, because of this, researchers are reluctant to engage for fear of being used in political debates as supporting a certain side and losing their academic neutrality (Capano, Verzichelli 2016: 214; Chaharbaghi, Barry 2010: 83–85). Last, political advocacy threatens scientific integrity because of rhetoric that is simplifying and exaggerating and possibly creating bias or supporting the political status quo (Capano, Verzichelli 2016: 229; Haynes et al. 2011: 1050; Williams, Pierce 2016: 224).

Media engagement brings trade-offs and conflicts, similar to those mentioned in the sphere of politics which may generate distrust (Chapman et al. 2014: 262; Haynes et al. 2011: 1050). First, media messages are often simplified, framed, biased, potentially misinterpreting or misrepresenting research (Chapman et al. 2014; Haynes et al. 2011: 1052; Capano, Verzichelli 2016: 229). Second, media active researchers may be perceived as using media engagement to compensate for

academic inadequacies (Chapman et al. 2014: 262; Haynes et al. 2011: 1052; Jensen et al. 2008). Third, researchers may lack the experience and connections to undertake media communications or skills of selecting appropriate channels and creating a coherent pithy message (Chapman et al. 2014: 262; Haynes et al. 2011: 1050).

Civic society organizations and the general public attract least attention related to issues found elsewhere (notably impartiality and simplification), but also because publics have fewer resources to spend on research (Ylijoki et al. 2011: 735). Public engagement activities rarely cover their costs and risk presenting the research as locally-relevant rather than generally-excellent, particularly if it is done in local languages (Hakala, Ylijoki 2001: 367, 378). Impact mechanisms around public engagement may be dispersed across different sources and stages, lacking formal structures or even clearly originating from scientific research (Muhonen et al. 2020).

PRACTICAL TENSIONS ARISING WITHIN THE 'ACADEMIC WORLD'

The differences of ideals and principles of work within the 'academic world' versus 'worlds of societal partners' are difficult for a researcher to combine, especially in the situation of limited resources to handle what we call 'practical tensions'. These are related to the choice of priorities by researchers given the academic world within which they operate. Time limitations are an especially important issue – it is difficult to find time for societal engagement next to more academically oriented activities. For some kinds of research, creating impact may involve considerable additional work unrelated to research goals (Landry et al. 2010: 1390; Cherney 2015: 1014; De Jong et al. 2016: 9). Engagement activities may require establishing relationships, coordinating work, research translation, dissemination, and communications with media or the public (Cherney 2015: 1014; Cherney et al. 2011).

Researchers working on internationally significant topics may not fit with local partners' interests, and not publishing results in local languages may create engagement barriers (Hakala, Ylijoki 2001: 367). Career prospects underlie individuals' decisions: academic reward systems are oriented towards scientific publications, not other dissemination activities or practical outputs (Cherney et al. 2011: 8; Cherney 2015: 1013; Morris, Rip 2006; Haynes et al. 2011: 1054; Hessels 2010: 7; De Jong et al. 2016: 8). Researchers seeking scientific careers must spend time on scientific outputs, particularly junior researchers (Ylijoki et al. 2011: 723).

The two categories are related: idealistic tensions hinder researchers undertaking engaged research, so they do not learn about it, so it later becomes harder relative to

introspective academic activities, raising practical level barriers. Constructing complementarity between academic research and societal impact activities therefore requires addressing these idealistic barriers, thereby encouraging more engagement practices. Therefore, we now consider *how does engagement become intrinsically important to researchers' activities?*

ENGAGEMENT AS INTRINSICALLY IMPORTANT TO RESEARCHERS' ACTIVITIES

PATTERNS OF ENGAGING IN SOCIETAL IMPACT ACTIVITIES

Although popular perceptions are that researchers are disdainful of real-world engagement, this may be argued to be a myth (Shapin 2012). Many researchers do actively care about the relevance of their research; they engage in external dissemination activities, knowledge transfer, and collaboration (Jensen et al. 2008; Ylijoki et al. 2011: 730; Capano, Verzichelli 2016: 225; Haynes et al. 2011). Jensen et al. (2008) report from France: “even in the institution hosting the most fundamental sciences, roughly half of the researchers are in close contact with society, i.e., they popularize or look for funding outside the academic sphere” (Jensen et al. 2008: 16).

Engagement practices do vary, reflecting differences between fields, between SSH and non-SSH, and also within SSH, for example in arts research where artistic work and research are often indistinguishable (Hazelkorn 2014). Societal relevance is usually more important in the social sciences and humanities than in the natural and technological sciences. Ylijoki et al. (2011: 728) report that Finnish research department heads regard societal relevance as important when choosing topics for 37% in natural sciences compared to 72% in social sciences. SSH scholars are more involved in popularization activities than non-SSH. In SSH almost half of researchers consider practical professionals an important audience, but SSH are less involved in industrial collaboration (Ylijoki et al. 2011: 730–731; Jensen et al. 2008: 4).

Institutional settings matter, particularly formal institutional support and informal engagement cultures (Olmos-Peñuela et al. 2016; Bozeman et al. 2013). Research unit structures affect collaboration quantity (Boardman, Corley 2008; Bozeman et al. 2013: 24) and institution size matters – smaller units tend to collaborate more than larger units (Bozeman et al. 2013: 22). Certain departments may stress collaboration or popularization activities more than others (Haynes et al. 2011: 1051; Morris 2003: 367; Hessels 2010: 186), whilst local industry demand drives local industry collaborate (Bozeman et al. 2013: 21).

Finally, there are individual differences, personal (age, gender) and professional (seniority, position) (Jensen et al. 2008; Bozeman et al. 2013). Senior researchers participate more than junior researchers in dissemination, entrepreneurship, and collaboration activities (Jensen et al. 2008: 13; Ylijoki et al. 2011: 723; Bozeman et al. 2013: 27). There are social and cognitive hierarchies in impact (Jensen et al. 2008: 13) around:

- work divisions – junior staff do mundane work while professors disseminate (Jensen et al. 2008: 13),
- career path – younger researchers strive to be active in academic research and publishing (Ylijoki et al. 2011: 723),
- self-confidence and symbolic capital – senior researchers are more known to media and have more contacts for various activities (Jensen et al. 2008: 13), and
- prior experience with favourable attitudes to collaboration (Bozeman et al. 2013: 27).

MOTIVES AND STIMULI FOR ENGAGEMENT

Given these tensions and barriers to engagement, why do researchers choose to engage with societal partners? Many explanations offered tend to talk about researcher communities, institutions, and policies in general terms, without reflecting upon individual differences, in terms of individual motivations and individual positions within wider academic structures. Individual motivations can be divided into four main areas:

- 1) personal satisfaction (intrinsic) – curiosity-driven problem-solving (Hessels 2010: 12; what Lam (2011) calls ‘puzzle’), a desire to contribute to society (‘informing the public’, Jensen et al. 2008: 16; Hessels 2010: 12; Cherney et al. 2011: 25), or enjoying external interactions (Jensen et al. 2008: 16).
- 2) financial incentives and rewards (extrinsic compensation) – (a) external research funding (Ylijoki et al 2011; Hakala, Ylijoki 2001) where societal impact is a funding criterion (Hessels 2010: 12); (b) personal profit via commercialization (Lam 2011) or (c) securing funds underwriting research facilities for graduate students (Bozeman et al. 2013: 26);
- 3) access to resources and benefits (extrinsic instrumental) – new research insights, data access, contact networks, visibility, and enhanced career prospects (Jensen et al. 2008: 13; Bozeman et al. 2013: 23; Cherney et al. 2011: 25);
- 4) scientific recognition (extrinsic outward) – research with societal impact might be evaluated scientifically as important thereby enhancing scientific reputation (Lam’s ‘ribbon’ property) (Hessels 2010: 185–186; Lam 2011).

These different categories are internally interrelated, because researchers' primary desires are (a) being recognized for (b) doing good work in their field, but not a financial reward in itself (Lam 2011; Hessels 2010: 71). In practice, their strongest motivation is interesting research, with secondary motivations securing the necessary resources to do that research (Hessels 2010: 167). If 'impact' is seen only as the criterion for funding or access to resources, it is positioned as conceptually exogenous to research activities, as a 'means' that may ultimately enable good research. However, for many researchers engagement is driven by endogenous considerations of doing good research and they engage with various societal stakeholders routinely within their research (Hessels 2010; Sivertsen 2017).

Thus there are two conditions for engagement being an integral part of academic research. Firstly, scientific communities may regard engagement as important for or indicative of good research. Secondly, it might be a necessary material condition for undertaking scientific work, securing access to contexts of application where knowledge is created. Tensions identified when researchers encounter these *exogenous* 'other worlds' may be resolved when engagement *becomes endogenous* to scientific effort.

ENDOGENOUS INTEGRAL ACADEMIC IMPACT BY BUILDING CONSTRUCTIVE COMPLEMENTARITY

If societal engagement by researchers were structurally *a priori* problematic, then researchers would not engage in societal impact activities and engaged researchers would be less academically successful. But there are many societally engaged scholars, and there is a positive connection between being active in academic publishing and engaging into popularisation, industrial collaboration and teaching (Jensen et al. 2008; Bozeman et al. 2013: 31). Therefore, bridging academic and societal worlds does not a priori demand the sacrifice of academic success: academia and society can, following Landry et al. (2010), be considered as complementary worlds. Societal engagement may under the right circumstances enrich and increase the scientific endeavour's scope (Landry et al. 2010: 1389). The mechanisms for this include providing research opportunities around topics and data, enabling scientific findings (Hessels 2010: 172), inspiring new engagement activities (and incidentally also teaching) (Landry et al. 2010). Success depends on constructively coupling these complementary worlds, governed by three factors: (a) personal identity and efforts, (b) informal links and networks, and (c) institutional settings (Landry et al. 2010: 1397; Hessels 2010; Jensen et al. 2008: 13).

First, there are certain kinds of academics – engaged researchers, who work to transcend barriers to engage with non-academic audiences (Jensen et al. 2008: 13), framing engagement as positive, as the duty to society, and the individual as a problem solver. Some studies identify an additional role, a ‘translator’ from an ‘academic world’ to society, or ‘entrepreneur’ (Haynes et al. 2011: 1049; Lam 2011). More traditional researchers, what Lam terms a ‘mixed identity’, may opportunistically use engagement to secure resources (Lam 2011; Morris 2003). ‘Pure’ disciplinary identities may underlie choices to not engage externally (Capano, Verzichelli 2016), and this may be solved by individuals having multiple professional identities related to positions within and beyond the academy, combining scientific research with practical outcomes. These intermediary positions may be even established institutionally, e.g. as knowledge transfer partners, (Gertner et al. 2011), knowledge brokers (Pennell et al. 2013) or knowledge and innovation transfer agents (Bullock et al. 2016).

Second, participation within informal networks may assist developing complementarities between academic communities and societal partners (De Jong et al. 2014; Spaapen, van Droge 2011; Olmos-Peñuela et al. 2014; Cherney 2015: 1007). Complementary networks may exist with policy-makers (Haynes et al. 2011: 1052), journalists (Chapman et al. 2014: 268), industry partners (Cherney 2015: 1007) and civil society organisations. Informal networks create trust around key collaboration questions, that contractual arrangements will be honoured, results will be used in a consistent manner, certain tasks can be delegated; such networks may appear as long-lasting, friendship-based relationships. Participating in these networks may also increase researchers’ academic reputation amongst other researchers in these networks (Cherney et al. 2011: 25).

Third, certain institutional settings may help researchers with societal engagement, for example, research centres combining researchers from different institutions and disciplines (Boardman, Corley 2008). Interdisciplinary collaborations are more open to external participation, helping individuals secure network positioning and engagement experiences (Boardman, Corley 2008; Klein 2010). Some departments or research organisations purposively maintain collaborations with government, NGOs, industrial partners or other stakeholders and orient their strategies towards users’ policy objectives or needs, encouraging researchers to pursue relevant research (Haynes et al. 2011: 1051; Morris 2003: 367; Hessels 2010: 186), potentially mixing traditional researchers with ‘translators’ (Haynes et al. 2011: 1050). Some studies also highlight the importance of supportive institutional settings, such as reasonable workloads of researchers and practices which recognise pursuing societal impact as the essential dimension of academic work (Cherney 2015: 1014; Castro-Martinez et al. 2010: 24; Kelly et al. 2018).

ACADEMIC COMMUNITY AND CONSTRUCTIVE COMPLEMENTARITY IN PRACTICE

The above-mentioned factors encouraging complementarity between academic aims and societal interests allow considerations of how research engagement might become *endogenous-integral* to scientific work rather than *exogenous-external*. Researchers' primary motivations involve a mix of scientific recognition and interesting work, attributes bestowed at least partly from within the scientific community. Researcher *intrinsic* motivation for societal engagement depends on scientific communities signalling approval via recognition for or possibilities to do engaged scientific work.

SOCIETAL IMPACT AS AN EXTERNAL REQUIREMENT

Studies on research's societal impact often present researchers as forced into engagement and facing a 'struggle' (Hessels 2010), responding with 'coping', 'managing' or 'compromising' strategies (Morris 2003; Morris, Rip 2006). Such strategies might threaten researchers' credibility unless field-specific internal conditions facilitate that (Hessels 2010). If societal impact is required e.g. for funding, and funding is the main requirement for research, there will be a funding effect in that successful researchers will become those that have been engaged. De Jong et al. (2016) note that researchers are willing to engage into societal impact activities, but either do not recognise their work's impact or cannot demonstrate it convincingly within research evaluation frameworks. Scientific resistance is against top-down requirements for particular kinds of impact, suggesting psychological 'policy alienation' from external constraints, because they may be negatively associated with powerlessness (not being in control of one's own work conditions and principles) and meaninglessness (not believing one's own work goals) (Tummers 2012). In this way engagement and external requirement of societal impact may be perceived as potentially challenging the academic autonomy (Morris 2003).

SOCIETAL ENGAGEMENT AS ENDOGENOUS TO ACADEMIC COMMUNITY

Nevertheless, societal engagement is not always seen as an external requirement. In some cases, like in the case of applied oriented fields, scientific research might be so integrated with practice that engagement generates rewards both in scientific and external communities, and for some researchers, societal impact activities

by definition contribute to their scientific performance (Ylijoki et al. 2011). Applied research orientation does not mean automatically impact generation. Alike, Bozeman (2013: 26) has aptly argued that the division between fundamental and applied research is not always clear as “[a]ppplied studies can contribute to fundamental knowledge and that fundamental studies can be somewhat applied in nature.” Stokes (1997) described this basic research in service of specific and immediate problems as *use-inspired basic research*, the classical example of research *addressing both basic and applied questions* being Pasteur’s study on the question of stopping milk and wine from going sour. Respectively, Hessels cites the example of catalytic chemistry researchers in the Netherlands deriving topics and data from industrial collaborations with scientific publications based on this ‘applied’ research (Hessels 2010: 172).

In other cases, engagement may not generate scientific recognition but nevertheless the scientific community do appreciate engagement activities (Jensen et al. 2008; Ylijoki et al. 2011: 730; Capano, Verzichelli 2016: 225; Haynes et al. 2011). This is a usual case in *divergent fields*, like in social sciences (De Jong et al. 2014: 10). Where in *convergent fields* there are uniform standards and procedures, divergent fields are, on the contrary, ideologically more fragmented (Becher, cit. Puuska 2014: 28). In divergent fields, academic communities are relatively small, with divergence in topics, few researchers engaged with each topic, less competition and low citation density (De Jong et al. 2014: 10). Under such conditions, where uniform understanding on research excellence indicators do not exist in same ways like in convergent fields, e.g. use of H-index in natural sciences, societal engagement may signal a general condition of research excellence in both formal and informal evaluations (Hessels 2010: 185–186).

CONCLUDING DISCUSSION

Our analysis makes two main points. First, creating societal impact is an intractable problem and raises both idealistic tensions around constraints on academic freedom, and practical tensions around priorities and time limitations. This discourages academic researchers from learning to engage and building networks which allow those researchers to later benefit from engagement. Second, solving those tensions requires addressing primarily the idealistic image of academic and societal worlds as separate, and allowing impact to be recognized as a feature of good research, something which in turn has to be delivered by researchers themselves. Researchers can be steered towards impactful research as a condition of research funding, but if researchers do not recognise impactful research as valid, then impact will remain

exogenous as a researcher's value. Impact becomes an endogenous part of research only if researchers are able to retain control over the goals of their research and have trust on that academic community and research evaluation practices recognise impact activities as one dimension of research quality. Improving engagement by making it a potential characteristic of good research requires also ensuring that academic identities are equipped to perceive constructive complementarity between 'good' research practices and 'impactful' research practices, especially paying attention to this in Ph.D. training processes.

There are two main limitations, which necessitate some caution regarding the further use of the conclusions. First, restricting to English texts overlooked certain national contexts, whilst using the Web of Science reduced the coverage of books which remain an admittedly falling but still significant outlet for SSH research. Second, our analysis remains framed by perspectives originally derived from natural and technological fields with a relatively limited understanding of how SSH creates societal impact in its own terms. This discursive framing overemphasises business collaboration, encouraging economic / quantitative definitions of societal value, ignoring how SSH research changes the way policy-makers and societies see the world (Castro-Martinez et al. 2010: 23).

Our analysis raises a number of future research avenues, most urgently to grasp how far understandings of SSH impact remain excessively framed by STEM-derived conceptions. There is a lack of (especially more qualitative) studies, on individual SSH fields, distinguished by their divergent nature, soft knowledge, communication with civic society and care for societal relevance in general. Particularly, two areas require further empirical studies, (a) the meaning of different disciplinary cultures and field-specific conditions encouraging / challenging impact as an endogenous value for research, and (b) the ways that engagement is judged as a characteristic of good research in different fields.

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SKIRTINGI PASAULIAI? KAIP RASTI ABIPUSĘ NAUDĄ TARP MOKSLINIŲ TYRIMŲ IR SOCIALINIAM POVEIKIUI SKIRTOS VEIKLOS?

SANTRAUKA. Mokslo politikai skatina HSM akademinę bendruomenę kuo labiau bendradarbiauti su socialiniais partneriais. Visgi manoma, kad socialinio poveikio samprata suformuota mokslo politikų, o ne tyrėjų, tai kelia neaiškumą, kaip kasdieniame gyvenime turėtų būti daromas socialinis poveikis. Norėdami ištirti HSM mokslininkų bendradarbiavimo su socialiniais partneriais dinamiką atlikome literatūros apžvalgą, kurios tikslas – atsakyti į tris klausimus: a) bendradarbiavimo motyvai ir būdai, b) kylančios dilemos ir iššūkiai, c) būdai šiems iššūkiams spręsti. Mūsų tyrimas atskleidė, jog daugelis HSM tyrėjų yra linkę susisieti su įvairiais socialiniais neakademiškos sričių partneriais už akademijos ribų, bet tai jiems sukelia praktinių nepatogumų dėl ribotų išteklių ir mokslinės veiklos idealų, dažnai nesuderinamų su kai kurių kitų sričių poreikiais. Tyrėjai gali būti motyvuoti bendradarbiauti su socialiniais partneriais, tačiau ne dėl to, kad tai būtų tikslas pats savaime, o kad tai priemonė pagrindiniam tikslui – atlikti mokslinius tyrimus. Tam reikėtų sukurti tokias sąlygas, jog tyrėjai turėtų vidinę motyvaciją įsitraukti tiek dėl tyrimų, tiek dėl poveikio visuomenei. Tad mes siūlome, kad įsitraukimas į visuomenės reikalus būtų traktuojamas kaip gero mokslo savybė ir kad naujų mokslininkų tapatybė atspindėtų mokslo bendruomenės vertybes, kurioms nesvetimas ir įsitraukimas į visuomenę svarbius tyrimus.

RAKTAŽODŽIAI: humanitarinių ir socialinių mokslų tyrimai, mokslinių tyrimų poveikis visuomenei, mokslinių tyrimų vertinimas, akademinė tapatybė, akademinė motyvacija, žinių perdavimas.