This paper explores the translation and implementation of Smart Specialisation in Wales. It finds that rather than taking a new approach to innovation policy, Welsh policy-makers are following a largely cluster-based rationale, which omits the important entrepreneurial discovery process to identify the real strengths of the region. The fresh idea presented by this paper is that a replication of past policy approaches that have been tried and found wanting is taking place rather than a new approach to innovation policy across Europe.

Keywords: innovation policy; Smart Specialisation; clusters

Introduction

‘Smart Specialisation’ (SS) is the current key policy approach to innovation and regional economic development in Europe (Foray, David, & Hall, 2011). Indeed, member regions are required to produce Regional Innovation Strategies for Smart Specialisation (RIS3) to bring about integrated and place-based economic transformation (European Commission, 2013).

This paper unpacks the translation of policy ideas within a multilevel context, examining how SS has transferred from the European to the regional level. It explores how the concept is being understood and implemented in Wales, identifying issues that arise in the translation process. The manifestation of SS in Wales is found to differ somewhat from the concept as set out by the European Commission (EC). There are two explanations for this proposed: the first is that the concept is ‘lost in translation’ or misunderstood by regional policy-makers; the second is that SS is being employed to justify pre-existing approaches through a process of ‘post-hoc rationalisation’.

The key conclusion of this paper is that the SS approach is primarily being employed to rationalise and justify the Welsh Government’s pre-existing sector-based approach to innovation and economic development. Certain important elements of SS have been sidelined in this process, in particular the process of entrepreneurial discovery to identify the most appropriate sectors to support. Rather than taking a fresh approach to regional innovation policy, as advocated by SS, policy-makers may continue to implement approaches that have been tried and found wanting in the past. This paper recommends that further measures are taken by the EC to ensure that new policy ideas are embraced and implemented at the regional level, rather than being co-opted to support the continuation of pre-existing approaches.

*Email: r.pugh@lancaster.ac.uk

© 2014 The Author(s). Published by Routledge. This is an Open Access article distributed under the terms of the Creative Commons Attribution License http://creativecommons.org/licenses/by/3.0/, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The moral rights of the named author(s) have been asserted.
Innovation policy and the emergence of Smart Specialisation

As our understanding of innovation and its crucial role driving economic development has enhanced, it has become an increasingly important area of policy-making worldwide (McCann & Ortega-Árgiles, 2013). The EC has been especially interested in innovation policy, alongside other supra-national organizations such as the Organisation for Economic Co-operation and Development (OECD) and United Nations Conference on Trade and Development/United Nations Industrial Development Organization (UNCTAD/UNIDO), since the mid-1990s when the first Regional Technology Plans/Regional Innovation Strategies were developed (Lundvall, 2007). For the European Commission (2012): ‘Innovation policy is about helping companies to perform better and contributing to wider social objectives such as growth, jobs and sustainability.’ Innovation studies has been ‘extraordinarily successful’ in recent decades in persuading policy-makers of the importance of innovation and the need for active and ‘broad based’ innovation policies that go beyond traditional R&D-based approaches (Flanagan, Uyarra, & Laranja, 2011).

Several ideas or ‘trends’ have successfully made the transition from academic theory to innovation policy such as: systems of innovation, clusters, the learning region, and open innovation. SS draws on these as the latest in the series of policy trends attempting to provide a framework to bring together the multiple levels of policy-making across Europe.

‘Smart Specialisation is about R&D and innovation’ (Foray et al., 2011, p. 5) and its application in a regional context ‘largely reflects a regional innovation systems logic’ (McCann & Ortega-Árgiles, 2013, p. 3). The SS agenda has gained currency across Europe following Innovation Union’s publication (European Commission, 2010b), which employs SS to achieve its goals of ‘smart, sustainable and inclusive growth’. The EC has called on its regions to design SS strategies to maximize the impact of EU structural funding in the next round through ‘thematic concentration’ (European Commission, 2011, 2012).

Duplication of sectors across different regions is taking place based on a limited set of best-practice case studies and fashionable sectors (Hospers, 2006; Martin & Sunley, 2003). SS envisages agglomeration processes on a European scale, allowing different centres of gravity to emerge generating inflows of knowledge to the region (European Commission, 2011). It is a ‘simple idea’ to lead to this outcome, based on the understanding that regions need to promote what makes them ‘unique’ and ‘superior’ (Foray et al., 2011, p. 4). SS distinguishes itself from the earlier regional innovation approaches in calling for a process of ‘entrepreneurial discovery’ to identify the unique characteristics and assets of the region, in an attempt to avoid the trend of regions trying to replicate a limited set of ‘trendy’ sectors where they do not already exist. SS calls for coordination and mobilization of regional stakeholders around a shared vision based on these identified pre-existing strengths (European Commission, 2011).

This paper asks whether SS, and the entrepreneurial discovery process it entails, can stem the rise of ‘silicon somewheres’ (Hospers, 2006), and provide a framework that is tenable and applicable for regional policy-makers across Europe with very different capacities, capabilities and contexts. Specifically, it examines the translation and implementation of the SS concept in a weaker region of the European Union by presenting a case study of Wales in the UK.

Case study context

Wales is one of the four ‘home nations’ of the UK alongside England, Scotland and Northern Ireland. There are three aspects of the Welsh case that are important to
highlight as background to this study: Wales is a weaker region within the European Union (Huggins & Thompson, 2010); it has a degree of self-governance, with its own government and assembly independent from that of the UK; and it has a distinctive and relatively longstanding approach to innovation policy at the regional level (Morgan, 1997).

The findings presented in this paper are drawn from a wider case study of Welsh innovation policy since devolution in 1999, and 58 interviews with key stakeholders in the Welsh innovation system conducted as part of a completed doctoral study (Pugh, 2014). Data from the policy review and stakeholder interviews are employed in the following section to present the key findings of this paper. SS emerged as a key theme within Welsh policy, warranting further investigation of how it is being understood and implemented in this context.

This case study focuses on the most recent three years in Welsh innovation policy-making; this is the period during which a sector-based approach to economic development was introduced (Welsh Assembly Government, 2010; Welsh Government, 2012, 2013). It explores the dynamics between these two, apparently interconnected, policy events and studies the processes of policy translation and adaptation from the European to Welsh level. It questions to what extent the SS concept has shaped Welsh innovation policy, or to what extent it has been co-opted to rationalise the Welsh Government’s pre-existing approach.

**Case study findings**

There are three main findings presented in this paper. The first is the apparent influence of the SS agenda on Welsh innovation policy, which when examined in greater depth appears superficial. The second is the interpretation of SS in Wales in a manner akin to cluster policy. The third is the potential this holds for the replication of approaches that have been tried and found wanting in the past, rather than a novel approach to regional innovation policy-making as envisaged by SS’s European-level advocates.

**Influence of SS on Welsh innovation policy**

The current Welsh innovation policy is explicitly aligned to the SS approach, in preparation for the 2014 round of structural funds. Wales has a history of closely aligning its innovation policy to that of the EC, beginning in the 1990s with the Regional Technology Plan (Morgan, 1997). The incorporation of SS at the heart of the most recent innovation policy is the latest iteration of this trend; *Innovation Wales* (Welsh Government, 2013) was created in response to the Commission’s requirement that regions produce RIS3 strategies. It explicitly aligns itself with SS’s ‘methodology’ (Welsh Government, 2013, p. 8) and was submitted to the EC Smart Specialisation Platform for review. On the surface it would appear that the Welsh Government has rapidly responded to the EC’s direction, but the results of empirical investigation suggest a more complex process is taking place.

In the mid-2000s a sector-based approach to economic and innovation policy-making emerged in Wales, culminating in the *Economic Renewal Programme* (Welsh Assembly Government, 2010), which identified six sector groupings upon which to focus government support for innovation. This has since evolved and been aligned with the SS agenda in the recent science (Welsh Government, 2012) and innovation (Welsh Government, 2013) policies, which address four ‘grand challenge’ areas.
The Welsh sector approach developed prior to the SS agenda gaining currency in Europe and was later linked together, this paper argues. By aligning its existing approach with SS the Welsh Government can present a strategy that conforms to the EC’s agenda, thus ensuring it is well placed to receive the incoming round of structural funds and able to continue undertaking its innovation support activities.

According to those involved in policy-making, the SS agenda and the Welsh Government’s current approach to innovation and economic development are interlinked and aligned. This process is described as taking place in an almost serendipitous manner: ‘We need a Smart Specialisation strategy; we needed a new innovation policy anyway. So all that has sort of come together at the same time, the stars have aligned if you like’ (Government 1). However, other respondents, especially those from the academic sphere, were cynical about these apparent interlinkages between the different levels of policy-making, suggesting a process of ‘post-hoc rationalisation’ has taken place.

Interpretation and implementation of SS in a manner akin to cluster policy
The understanding of SS in Wales differs from the original conceptualisation as presented by the European Commission (2010a, 2011); in particular, it lacks the important entrepreneurial discovery process. There is little evidence of simple top-down process whereby a concept developed at the European level was adopted and implemented wholesale at the regional level. Instead, Welsh policy-makers have focused on the geographical agglomeration of selected sectors,¹ and ignored other elements of the approach.

Both policy analysis and interviews with policy-makers support the assertion that a cluster-based approach is being implemented in Wales (Welsh Assembly Government, 2010; Welsh Government, 2013). It is perhaps unsurprising that these elements have been picked up by Welsh policy-makers, who are highly familiar with the concept having commissioned Michael Porter to write a cluster strategy for Wales in 2002.²

There are two possible explanations for this (mis)translation of SS identified. One is that the Welsh Government has misunderstood the SS concept and as a result has applied it in a more simplistic manner, drawing on familiar ideas. Another is that the SS concept has been deliberately changed to fit better the Welsh Government’s needs or pre-existing agenda. Based on a combination of policy review and interviews with key stakeholders involved in the policy-making process, it is suggested that the latter is taking place: SS has been co-opted to justify the Welsh Government’s approach and to align its work with the EC’s agenda to ensure the continuation of innovation funding for its activities.

Implications for Welsh policy
A problem with the narrow cluster-based interpretation is that the nuances and complexities of the SS approach may be lost, in particular the cross-cutting enabling technologies and entrepreneurial discovery process. An example of where this is problematic is in the selection of the sectors in which to specialise. There is little evidence that the process of entrepreneurial discovery has been observed, and this has resulted in a top-down approach whereby the Welsh Government has selected the sectors it wishes to support. Several stakeholders interviewed were highly critical of this decision process and felt that the wrong sectors had been chosen, or that the sectors do not represent Wales’ pre-existing strengths: ‘It is a focussed wish list in industries we’d like to be good at, but a lack of background analysis’ (University 4); and ‘This is what everybody in the world wants to do, what makes Wales think that it can outcompete places like
Silicon Valley?” (Government 3). A tension within the SS approach is that the selection of key strengths is perceived as problematic for weaker regions, which struggle to identify or elucidate their pre-existing strengths and capabilities. SS assumes that all regions have areas of strength and potential, but Welsh stakeholders challenge this assertion, highlighting difficulties faced in trying to articulate regional economic strengths: ‘I think we struggle to necessarily understand and elucidate the areas where Wales is strong’ (University 3); and ‘In terms of where we can really be competitive, it’s the slim pickings down the bottom, I think’ (Government 3).

Conclusions and lessons
Wales has a history of conforming closely to European trends, producing ‘standard EU fare’ designed to absorb European funding (Cooke & Clifton, 2006; Morgan, 1997). In this latest instance, Welsh policy-makers have responded to the EC’s requirements by repackaging their existing sector-based economic development approach as an SS strategy (Welsh Government, 2013), in a process of post-hoc rationalisation. They are simultaneously presenting a policy that meets the EC’s objective, whilst ensuring that their existing policy priorities continue to be met.

The existing sector-based strategy being pursued in Wales is found to be more akin to a traditional cluster-based approach, omitting an important dimension of SS: the entrepreneurial discovery process (Foray et al., 2011; McCann & Ortega-Argilés, 2013). The danger is that rather than incorporating new ideas into their regional innovation toolkit, Welsh policy-makers are placing ‘old wine’ (cluster theory) in ‘new bottles’ (SS), to borrow Harrison’s (1992) metaphor. Welsh policy-makers have not heeded the advice of Martin & Sunley (2003) who believe that the cluster concept should come with a ‘public health warning’. Whilst McCann & Ortega-Argilés (2013) suggest that Europe has moved away from clusters towards a more regional innovation system influenced approach of which geographical clustering is only one dimension, the Welsh experience suggests this is not always the case.

Important elements of the SS approach have not survived the process of adoption from the European to Welsh level. Whilst this could be a case of ideas being ‘lost in translation’ or misunderstood by regional policy-makers, this paper argues that it is a more conscious and deliberate process. The selective ‘cherry-picking’ of theories (Laranja, Uyarra, & Flanagan, 2008) may not be inherently problematic; regional policy-makers are best placed to adapt ideas to meet their unique needs and contexts. European level policy-makers should be aware of these (mis)translation processes, how ideas can change and evolve on the ground, and indeed how desirable this process of policy adaptation actually is. Policies should be flexible enough to allow for application in diverse cultural, political and economic contexts, and should allow for a certain degree of interpretation and cherry-picking on behalf of regional policy-makers.

However, SS is unlikely to meet its aim of avoiding the proliferation of ‘silicon somewheres’ (Hospers, 2006) across Europe if it continues to be co-opted and mistranslated by regional policy-makers. Rather than seeing the Welsh Government’s simplification of SS as a failure to understand or grasp the full complexity of the approach, this paper suggests that SS, and indeed other economic development concepts, are vulnerable to being co-opted and captured by regions to justify their pre-existing approaches. In Wales, a post-hoc rationalisation of pre-existing sector-based policy to fit the SS agenda obscures the fact that the entrepreneurial discovery process did not take place. More effort is needed on behalf of the EC to encourage regional policy-makers to
embrace these new ideas and concepts in substance as well as rhetoric. Otherwise, there is a danger that they are bypassed and fail to have a real impact, and old approaches that have been found wanting continue to dominate.

Notes
1. The four grand challenge sectors selected are: life sciences and health; low carbon, energy, and environment; advanced engineering and materials; and information and communication technology (ICT) and the digital economy.
2. For a deeper understanding of Porter’s view on clusters, which has proved highly influential in both academic and policy spheres, see, for example, Porter (1990).

References
Cooke, P., & Clifton, N. (2006). Visionary, precautionary and constrained ‘varieties of devolution’ in the economic governance of the devolved UK territories. *Regional Studies, 39*(4), 437–451.

European Commission (2010a). *Investing in Europe: Fifth Cohesion Report on Economic, Social and Territorial Cohesion*. Brussels: European Commission.

European Commission (2010b). *Europe 2020 Flagship Initiative Innovation Union*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Council and the Committee of the Regions, SEC (2010) 1161. Brussels: European Commission.

European Commission (2011). *Research and innovation strategies for Smart Specialisation*. Brussels: European Commission.

European Commission (2012). *State of the innovation union 2012*. Brussels: European Commission.

European Commission (2013). *The goals of Smart Specialisation, S3 Policy Brief Series No. 01/2013*. Brussels: European Commission.

Flanagan, K., Uyarra, E., & Laranja, M. (2011). Reconceptualising the ‘policy mix’ for innovation. *Research Policy, 40*(5), 712–703.

Foray, D., David, P., & Hall, B. (2011). *Smart Specialisation: From academic idea to political instrument. The surprising career of a concept and the difficulties involved in its implementation*, MTI Working Paper, Management of Technology and Entrepreneurship Institute, Ecole Polytechnique Federale de Lausanne.

Harrison, B. (1992). Industrial districts: old wine in new bottles? *Regional Studies, 26*(5), 469–483.

Hospers, G.-J. (2006). Silicon somewhere? Assessing the usefulness of best practices in innovation policy. *Policy Studies, 27*(1), 1–15.

Huggins, R., & Thompson, P. (2010). *UK Competitiveness Index 2010*. Cardiff: UWIC.

Laranja, M., Uyarra, E., & Flanagan, K. (2008). Policies for science, technology, and innovation: translating rationales into regional policies in a multi level setting. *Research Policy, 37*(5), 823–835.

Lundvall, B.-Å. (2007). *Innovation system research: Where it came from and where it might go* (Globelics Working Paper No. 2007-01). Aalborg University.

Martin, R., & Sunley, P. (2003). Deconstructing clusters: chaotic concept or policy panacea? *Journal of Economic Geography, 3*(1), 5–35.

McCann, P., & Ortega-Ariglès, R. (2013). Modern regional innovation policy. *Cambridge Journal of Regions, Economy and Society, 6*(2), 182–216.

Morgan, K. (1997). The learning region: institutions, innovation, and regional renewal. *Regional Studies, 31*(5), 491–503.

Porter, M. (1990). *The competitive advantage of nations*. New York, NY: Macmillan.

Pugh, R. (2014). *Regional innovation policy and economic development: The case of Wales* (unpublished doctoral thesis). Cardiff University.

Welsh Assembly Government (2010). *Economic Renewal Programme*. Cardiff: Welsh Assembly Government.

Welsh Government (2012). *Science for Wales*. Cardiff: Welsh Government.

Welsh Government (2013). *Innovation Wales*. Cardiff: Welsh Government.