

Nesta and the Evolving Creative Industries

Policy Agenda in the UK and Australia

Hasan Bakhshi¹ with Terry Flew², Greg Hearn³ and Cori Stewart^{4,5}

This is the edited transcript of a public interview that took place between Dr. Hasan Bakhshi, Executive Director, Creative Economy and Data Analytics at Nesta, and Terry Flew, with questions from Greg Hearn, Cori Stewart and other participants. The interview took place at the Creative Industries Precinct, Queensland University of Technology, Brisbane, Australia, on 13 September 2017. The interview covers the history of Nesta, its role in shaping UK creative industries policies, and lessons for other countries around arts funding, education and skills, and the relationship to research policy.

Terry Flew: Hasan, first, could you provide an overview of Nesta. What is it, how is it funded, and how did it come to be playing such a key role in policies towards the creative industries?

Hasan Bakhshi: Nesta was set up in the late 1990s by New Labour as the National Endowment for Science, Technology, and the Arts. That acronym has now been dropped to just Nesta. But that title was significant because it was set up as an agency which would support talent working at the nexus of science, technology, and the arts. The idea was that there was a need for multidisciplinary and interdisciplinary research and creativity, which was, if you like, being undersupplied in the national innovation system. It morphed over time into an innovation agency, and 5 or so years ago it was made independent from government. We're now an independent charity, and we have a charitable trust in which the endowment is held. It's an endowment first funded by the National Lottery. We had some very good news over the summer that Nesta was made an Independent Research Organisation (IRO), which means that we can bid on the same basis for research grants in the UK as universities, and Nesta researchers can now be named as principal investigators on large-scale research grants.

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We have a research unit, where we do basic and applied research, which is trying to support the overall objective of promoting innovation in the UK. We also do a lot of policy development, and a fair bit of our research, at least in the creative economy area, is aimed ultimately at informing public policy. This is based on the assumption that one of the ways to achieve scalable impact if you're a smaller organisation is through affecting policy change. So we do a lot of policy development. But also, importantly, we run practical innovation programmes, where we often combine the funds from the endowment with co-funding raised from other organisations to run experimental programs, to test out new ways of supporting innovation. In some cases, this is done with an eye to designing policy interventions that the government can take up if those interventions are successful. In other cases, we're directly trying to affect change by working with stakeholders in the third sector and business, and arts and cultural institutions. Where Nesta is at its best is when the research and its programme arms come together, and its sweet spot, in my view, is as a research-led experimental development agency, which is very plugged into government, private and third sector practice. We can take, for example, the insights from research-led experiments into public policies and then hopefully achieve impact at scale.

We're embedded with policymakers in some ways, and one of the challenges any institution has in this position is not to get captured by the interests of the government of the day. But, by having that close relationship with the government, we have some privileged opportunities to affect change through our research ideas. As a result of which I have built up a lot of tacit knowledge over the years. Through sitting on various bodies, like the government's Creative Industries Council, co-chaired by two cabinet ministers – the Culture Secretary and the Business Secretary – as well as an industry leader, and the Department for Digital, Culture, Media & Sport's (DCMS) Science Advisory Council, where the Department taps into academic research expertise in order to inform its policy work. Membership of these bodies gives quite a nice opportunity to bring research insights very quickly into public policy.



Terry Flew: Your own background is in economics, and going back at least as far as John Ruskin and Oscar Wilde, and probably earlier, there's a perception of a binary between economics and the arts, data and culture, the quantitative and the qualitative, the social sciences and the humanities, and so forth. How do you think your own work has been of benefit to arts and culture in the UK? And what are some of the observations you bring from an economics background to working with these sectors?

Hasan Bakhshi: When artists and arts and cultural institutions operate in an environment of economic constraints, just like as everyone else, economics as a theory of resource allocation is clearly going to have something important to say about the arts and cultural sector. In a deeper sense, economics is really a theory of value, and what that allows economists to do is make normative judgements about the way that resources are allocated in society. However, economics is a particular perspective on value, a utilitarian perspective, which means that it has relevance to some aspects of arts and culture, but in other areas it doesn't.

On a personal level, one of the motivations I have as an economist for working in this area is the desire to understand where the boundaries are between what economics can tell you about culture and what it can't. And this is really important in the world we live in where economics is such a dominant paradigm for thinking about, and for informing, the way in which decisions are made. We need to understand the limitations of economics as well as its power. And so I think there's a critical but constructive relationship between economics and art and culture.

Terry Flew: You mentioned that Nesta has become an Independent Research Organisation. And this comes at a time where there's a growing expectation that universities will be involved in work that has impact as well as excellence, and that universities and cultural institutions will contribute to innovation agendas. Based on the UK experience, are there observations you would have on where there have been successes in these sort of engagements, and any lessons to be learnt?

Hasan Bakhshi: Given that there has now been this 'creative industries project' for 20 years, there's been quite a long time for universities that are providing creative education, or research universities that do research in this area, to make the case to government alongside other disciplines for funding. And so we have seen over the years some significant, albeit quite fragmented, public investments in research about the creative industries. I believe one reason these has been small scale and fragmented is because there hasn't been sufficient engagement with the mainstream concepts of innovation and research as understood by governments. It's one of the reasons why I think it's so important to use a vocabulary of research and development in a lot of the experimental work that we do in the arts and creative area. If we can, through the experience of the creative industries, revise the way that the government thinks about what R&D is, then that will put public funding for research in the creative industries and arts on a much stronger basis.

I think alongside that, the other area where there's been really very little compelling research is on evaluating the performance of these types of activities in the arts and creative areas. If you think about why R&D as a concept has dominated science and innovation policies for decades it is partly because its definition has been codified in a manual – the OECD Frascati manual – and analysts have therefore been able to develop measures of the return on investment in R&D. It has enabled economists over decades to write papers exploring the relationship between R&D and the social and economic return on investment. We don't have anything like that for the creative industries, and so we have a situation where a government is very open to the idea of supporting R&D in the creative industries, but when they come back to you and say, "Well, how much R&D is there in the creative industries and how much does the UK benefit from it?" we can't say. We don't have methodologies for evaluating the return on investment, nor can we therefore establish the existence of market failures. And unless we start engaging with the mainstream science and innovation framework in the UK, we're going to continue to hit this barrier of fragmented research projects in the creative industries rather than anything of bigger scale.

Terry Flew: In your presentation you talked about the relationship of the creative economy to the digital economy, and the digital economy attracts a lot of attention in Australia. Probably more so than the creative economy, and we may want to talk about that, but there have been government departments devoted to the digital economy for at least a decade. If you say you're going to talk about robots, artificial intelligence, driverless cars, what does the rise of Uber and AirBnB mean, etc., you get a constituency that readily engages with that. Do you want to comment on how Nesta has navigated those relationships, and what sort of lessons there might be for creative industries faculty in terms of how it engages with digital agendas?

Hasan Bakhshi: Governments get the economic and social significance of new technologies. And so this is why the perceived close relationship between the creative industries and digital technology has been so significant in the UK in terms of government taking the creative industries seriously. If we were making the case for creative industries R&D independently of technology, we would have much less traction with government. So I think it's actually very important that we understand this integral relationship between the creative industries and digital technology if we want to influence policy.

The creative economy and the arts is actually only one of five priority areas in Nesta's new three-year strategy: education; health; innovation policy, by which we largely mean business innovation policy, and government innovation make up the rest. And so all five of those areas, if you look at what we're actually doing – whether it's research, policy development or practical experiments – are motivated by the opportunities and challenges arising from disruptive technology. In all those areas, some might argue that we are being technologically reductionist, but it's a conscious decision to look at technology-related issues as that's where we see a lot of potential for innovation. A good example is our R&D funds with Arts Council England, which had a digital technology focus. Through that we hope we can create an interest in government which will allow us to get into more fundamental issues about the role that creative industries, and the humanities, arts, and social sciences can play.

Greg Hearn: Thank you very much, Hasan and Terry. A lot of the work that you have been doing using online jobs data has relevance to most people because they think of occupation as an output in an economic system, and everyone wants to know where the jobs are. So, for many politicians the question is, “So creative industries are good because there are jobs there, and they’re growing”. In fact, I think most labour market economists think of occupations predominantly as an output of an economic system, and they ask questions such as “Is this area or is this class or is this gender adequately represented with outputs in these occupations?”. Do you see a role for thinking of occupations and skills as an input into an economic system, and if so, how would you sketch out that kind of analytical agenda?

Hasan Bakhshi: Economists would naturally be drawn to thinking of skills and occupations as inputs to production, right? It’s the concept of human capital, in so far as you’re interested in productivity growth. In the UK, for example, it turns out that skills, in so far as we can measure skills accurately, account for only about 1/5 of the UK’s productivity gap with our main competitors. But I view occupations really as an institutional wrapper for a combination of capabilities, skills, knowledge, which come together for productive use. And markets do a rather good job, actually, of identifying what those occupations should be. But they are institutions, so they don’t just have an economic dimension to them. Issues to do with gender, diversity, lack of ethnic diversity, these are critical. These underpin some of the drivers which motivate, which determine what the boundaries of those occupations actually are, and they’re fluid.

Another way of putting this is to consider the statistic that the World Economic Forum has cited, that 65% of young people entering into education today will go into jobs that don’t yet exist. I find that quite difficult to get my head around. Because that assumes that there is this given thing called a job, and are you going to move into it or not. Well, humans have a huge degree of agency, as do businesses. Individuals and businesses will create an occupation, they will reconfigure an occupation if it’s in their economic interest to do so, and likewise we should, as educators, feel that we have the chance to reconfigure occupations too.

Going back to my point about economics and culture. There is a tendency within economics to think that the whole thing is all about economic growth and economic objectives, and economists would tend to underplay the importance of some of the more political and sociological considerations. I can’t profess to be an expert on those, but I’m very aware from working in policy of their significance. I don’t know if that fully answered your question.

Cori Stewart: The Digital, Media Culture and Sport Department, was that where you were saying that the culture and heritage has been split off? Can you talk about that a bit more?

Hasan Bakhshi: A couple of months ago there was a restructure of Ministerial portfolios within the DCMS in the UK, and the Creative Industries Minister who previously used to have responsibility for culture and heritage and creative industries, his role became like a super digital creative role, and culture and heritage was shifted to another Minister's portfolio. The gut reaction from a number of creative industry organisations was, "This is really terrible, because it's downgrading culture, and it's neglecting the economic contributions, and the contribution to technology, that these sectors make".

Personally speaking, I think it's a more coherent way of organising these sectors from the viewpoint of economic and cultural policy more generally.

For all the successes of the creative industries as an economic concept, and how important I think this is for the UK going forward, I think that the conflation of cultural industries and creative industries has led to a relegation of cultural policy in the UK. If you ask some in government, "What is cultural policy?" they might respond with things like the Cultural Olympiad and the BBC. But that doesn't amount to a cultural policy in my eyes. A cultural policy would really tackle issues to do with inequality of access and the lack of gender and ethnic diversity in the arts, for example, and issues of engagement with publicly funded arts and culture. There hasn't really been energetic engagement by government with those issues in my eyes, and I feel that's not been helped by the conflation of cultural and creative industries, and therefore the separation of these two Ministerial briefs, I think, could in principle be a good thing. Actually, having a Minister who's supporting the cultural sector primarily on cultural grounds would be an improvement on supporting the cultural sector primarily on economic grounds., and those arguments have tended to be lost because they've been sort of pitched against economic arguments, and given that the world we live in, they've been destined to lose out.

Cori Stewart: Here in Queensland we really haven't had an arts and cultural policy for many years either. We have a very large investment by the state government in a program called Advance Queensland. Arts and culture doesn't have access to that investment, and so we have sort of relegated to investing in traditional arts, and then we have innovation, and the twain aren't meeting at all. We have that history of having a creative industries policy in Queensland and it came and went, and now we don't even have that crossover conversation at the state level. I'd argue that we don't have it at the Federal level either.

Hasan Bakhshi: I do see where the risks lie with that. To give an example, the current Creative Industries and Digital Minister in the UK, when he was Cultural Minister too, kicked off something called the Culture is Digital Review, and that's in its tail end of deliberation, and will be publishing a report with some policy recommendations in a few months' time. The question is, would that Review have been initiated with the current ministerial structure? I think one of the reasons it might still do so is that in the UK there are strong organisations such as Arts Council England and Nesta. There are organisations like us who are outside government, but who believe in the importance of the digital technology and culture agenda, to keep promoting that agenda.

The other thing I would say in the UK that's been really important is that the creative industries themselves have really co-opted in to this whole agenda. I spent large amounts of my time as a researcher and as a policy analyst with industry people. So with R&D as a good example, we have for the last 6 or 7 years been running digital R&D funds, and they're leading to research outputs as well as digital innovations in the arts. But, alongside this, we've been looking at what the OECD's deliberations are on R&D definitions and have proposed a definition of R&D, which we're looking to discussing with the tax authorities through the UK's Industrial Strategy. We're consciously working with industry leaders to push for changes in government policy. I don't know if the equivalent is happening here.

Terry Flew: I was asked in Portugal recently to comment on the creative industries in Australia, and “What’s Australia good at?” was their interest. So I had a look at the Austrade site and saw what do we project to the rest of the world that Australia’s good at. It does have a category for creative industries, and the three areas it showcases are digital games, screen production (including screen locations), and cultural precincts. They’re actually the three things we identify as being good at, and they’re very boundary spanning categories. They’re tied up with the digital, they’re industries in their own right, they’re connected with design and the built environment, and so forth. I’m also aware, as we’ve had recently as a guest here, Patricia Aufderheide as a Fulbright Fellow who studies copyright law, that one of the things she was very intrigued about in Australia was the hostility of the arts sector to companies such as Google, and their view that copyright reform threatens the arts because the Googles and Facebooks of the world will suck up all the money and send all the artists broke. To her, that seemed a very different debate to what it is in the US. She just hadn’t seen that the arts community is invested in the status quo on copyright and intellectual property to the degree it appears to be in Australia.

Hasan Bakhshi: That’s interesting. In the UK, there’s a general feeling that the subsidised arts and cultural sector have fairly low levels of IP awareness. So, alongside the Google enthusiasts, there has been a concern from some cultural institutions about whether they can secure favourable IP terms when it comes to initiatives like Google Arts & Culture. But the copyright lobby is still very much led by the music and publishing industry in the UK, and the arts and cultural sector hasn’t really been particularly vocal in those discussions, it has to be said.

Certainly the big national cultural institutions in the UK are very active and engaged with digital technology. In fact, one of the really welcome developments in the last 3 or 4 years is that you’re getting these interesting partnerships between cultural institutions and tech companies where the tech companies are basically funding the R&D for the cultural institutions. And some of the biggest digital cultural innovations in Europe like the Berlin Philharmonic’s Digital Concert Hall and the Tate Gallery’s recent experiments with Virtual Reality, have been funded by very significant R&D activities by tech partners, and I think that, given the deep affinities between tech and creativity and culture we discussed earlier, there’s more that can be done here. And then the big attraction of that type of activity for Ministers is that Ministers can nudge people into partnering without government having to spend money. So I think we are going to see more of that type of intervention going ahead.

Question from the floor: I'm interested in how representative bodies for the creative industries are created. The national federation that could pull disparate areas of creative industries to a common program. Who drove that and how was that wrangled?

Hasan Bakhshi: I think one of the reasons why the Creative Industries Council was successful was that government initiated it, right? So if two Secretaries of State ask you to join a group, a club, even, you know, the elite, the Chief Executives of the leading UK creative businesses will say yes. So that's one thing.

The second thing is that there were some organisations represented at the table, like Nesta and Creative Skillset – organisations, you know, not quite industry, not quite government, in the middle – that had a bit of budget and could do work in this area, in terms of policy development and research. What that meant was that the Council did not have to immediately start working out who's going to fund activities. Because having discussions about raising funds in advance of actually doing anything runs into real problems.

And then thirdly, and this is really important, is that the Council quickly identified which areas there was alignment around. Skills issues were an example: all the creative industries could rally against the government because of concerns with the education reforms the government was introducing in England 2010 which promoted STEM over the arts. Whereas in areas like IP there were too many disparate interests around the room. So it's very political but that's how it's worked, and I haven't seen many of these councils in other countries. The Netherlands have attempted to create one, the UK's does work very well, it's an interesting model for people to look at.

Greg Hearn: EMI is a really interesting case study of mine because it was a hard core electronics and R&D company as much as it was a record label, and it seemed to be able to bridge the culture between the scientific or these days what would be the digital. So let's say the technical expertise spectrum as well as the artistic and aesthetic and expressive skills. Sony is a company who's been able to make that transition as well. So it is clearly, it's clearly possible, and yet I think for many of us here working in the creative industries, we find in terms of our curriculum and our skill development that the digital and the aesthetic expressive can be kind of a little bit like oil and water in the heads of students. So when you were looking at your bundles of skills that made up particular occupations, did you get any insights into particular aggregations of bundles of skills that particularly suited this crossover between digital and aesthetic skills and capabilities?

Hasan Bakhshi: There's one piece of work we have published at Nesta called "A closer look at the creatives":⁶ an interactive data visualisation that uses online job ads. So imagine you've got all these millions of online job ads, each coded to four-digit standard occupational classification codes. In that exercise, we looked at the creative occupations as determined by the DCMS's definitions of creative occupations and then did some clustering of all the tags associated with those job ads. By which I mean, we identified which groups of skills tended to co-occur in job ads. We published an interactive data map which allows you to interrogate this data, and we identified five clusters, and of these five clusters, one of them we called 'tech', based on what those tags were that appeared. And they're very granular; because they're job ads, these are employers in their asking what they want in their own terms. So, they don't translate into these high level skills concepts that as analysts we like, right? Like problem solving, cognitive skills, social perceptiveness, they go much more granular than that. The disadvantage of that is that there are myriad ways that employers can describe their needs and just trying to make it work is hard. We label another cluster 'making skills', and another 'marketing', and we look to see how prominent are these different clusters for different sub-occupational groups. So you can look into architecture, for example, architectural occupations, and get a real sense of which combination of tech skills, at a very granular level, are required in combination with creative skills. It's really interesting because what you find is not just that you've got the tech cluster, tech skills appear strongly in other clusters as well. Which is really definitive evidence that employers, rightly or wrongly, don't just want to bring people with creative and tech skills together in teams, they want individuals who can do both.

6 - <https://www.nesta.org.uk/blog/closer-look-creatives>

Greg Hearn: We've got a local creative tech company, Cutting Edge, and a conversation with them that that was exactly what they were saying. They are actually looking for high end creative aesthetic narrative skills and high end digital skills in the same head.

Hasan Bakhshi: Yeah, and a surprisingly large number of the jobs ads have salaries included in them, and we know many of these creative tech roles are high paying. Its quite a powerful data set for young people considering what do they actually want to do next and where they should invest in skills.

Question from the floor: Hasan, based on your experience in the UK, do you have any suggestions for how the government in countries like Indonesia, the country where I come from, should deal with the evolving creative industries in terms of the policy making process. Because this disruptive technology is a new thing for both government and also it's people, so we are dealing with this kind of technology.

Hasan Bakhshi: I must say that I don't know about the Indonesian economy myself, and obviously one has to be very humble in terms of what I can suggest. The one thing I can say is that when we typically think about policy interventions, we think of the economic paradigm of identifying market failures and working out which instruments can be used to address those market failures. But this tends to underestimate the role of measurement and labelling in legitimising sectors.

When it comes to measuring, one thing I know is the proliferation of creative industry measures in developing countries⁸ is a very bad thing. We've got potential standards out there now, Nesta's Dynamic Mapping method⁷ – which has been adopted by the DCMS for official sector estimates – was developed as one such standard, so we've now implemented that methodology in the EU28 countries, and in the US and Canada.⁹ For me, in the UK at least, getting the metrics right has been a far more powerful way of supporting the creative industries than, say, piloting a new business support scheme. Partly because even if you can demonstrate that the latter has worked, it's highly unlikely to be picked up by other bodies because of the "not invented here" syndrome. We piloted a SME innovation support programme called Creative Credits a few years ago, which connected creative businesses with businesses in traditional non-creative sectors. And we did a really nice evaluation, we configured it as a randomised control trial.¹⁰ It was not picked up by anyone in the UK, but it was picked up outside in countries like Austria and Ireland, perhaps because it's politically easier to adopt 'good practice' from overseas.

7 - <https://www.nesta.org.uk/publications/dynamic-mapping-uks-creative-industries>

8 - <https://www.nesta.org.uk/blog/creative-europe-measuring-creative-industries-eu>

9 - <https://www.nesta.org.uk/publications/creative-economy-employment-us-canada-and-uk>

10 - <http://www.sciencedirect.com/science/article/pii/S0048733315000645>

Cori Stewart: Talking about measurement, you talked about the limits of the economy and talking about the value of arts and culture, and I'm interested in that. I'm interested in the context too, of continuing routine debate between economic versus social impact and the value of the arts, which we really still haven't tackled. So just going back to my other example, in a Queensland context, it's jobs and productivity. If you can demonstrate those outcomes, you can have access to those funds. If arts and culture can't demonstrate those outcomes it can't have access to those funds. But at the same time arts and culture cannot make a social impact argument either. So it's kind of a no man's land and I just wondered what your thoughts are.

Hasan Bakhshi: The Arts Council England has developed cultural impact metrics.

I think such metrics can become a powerful management resource. If you're running an arts organisation, and you want to have a more explicit understanding and enable a more explicit discussion with fellow executives about what your organisation should be doing, in terms of audience engagement and programming. That makes sense to me.

I think when it comes to informing public investment decisions across organisations, my view is that work has not got to the stage where I'd be comfortable with that. So, the metrics are a valuable management resource, but should they help in securing public funding? No.

I can't help but think that the arts and cultural sector can be more articulate still in making the case for public investment. Now I'm not making a point about methodology and measures, but just saying we can be more rigorous, a bit less presumptive. A bit more accepting of the fact that when you're making a case for public funds, you have to make the case on terms that the public funder wants. And because there are other areas which also feel they have a right to funding, you know? So I think making intrinsic value arguments to a public funder... you can make them, but it doesn't necessarily convince them. If we go to a private investor or foundation and make a case for funding, the first place we start is their objectives. Why don't we do the same with government? I think we could be a lot more sophisticated but I think how far we can push measurement is still not clear.

Terry Flew: Because the difficulty with a performance metric is that we know behaviour therefore gravitates towards the performance metric itself.

Hasan Bakhshi: If we treat measurement as a constructed institution, just like the Creative Industries Council, then when we think about measurement and the way that performance metrics are interpreted, we should be thinking more laterally about what processes need to be in place for those metrics to be used correctly. So, I'm a great believer in being explicit and trying to quantify and develop metrics to evaluate your performance against those. But I want to have processes of transparency, accountability and everything else in place so that you're continually re-optimising, and if something's not working, you can change it. We tend to think of our metrics in complete isolation from these processes, and there's a lot of institutional reform that could be done to improve things. There's a lot more that funders could do to communicate how metrics are being used, for example.

Terry Flew: If your visit to Australia was a success to the point where an incoming government said, "Right, what we need is an Australian Nesta" what would you advise the developers of an Australian Nesta to focus upon?

Hasan Bakhshi: The first thing I'd say is that, in principle, Nesta is a very natural institution for a country which is experiencing flagging productivity growth, and recognises that it needs some big change in terms of industrial structures going ahead, and recognises the political difficulties in actually achieving that change. Because obviously there are strong vested interests, and an institution like Nesta is a very powerful part of the mix to have, because it's structured to look at the long term. I believe that since we've become an independent charity, Nesta has become much better at doing that. We are incentivised to play the long game, and that has such a big implication for the nature of the research we do, and the nature of our relationships with government. Governments come to us for that, and I think having an institution in the mix which is incentivised to think in the long term is very, very powerful.

The other thing I would reiterate is that where I think Nesta has been at its best is in research-led experimentation. Take a project like the National Theatre's NT Live broadcasts of plays which initiated our work on Digital R&D funding many years ago. To really get a handle on audience impacts you need to run an experiment, and there aren't really many institutions in the UK that are well set up to do it because you need research capacity, knowledge of theatre, good contacts with the institution and the pragmatism needed to work with real businesses. When Nesta was set up we didn't really have the research capacity. But, over the years our research capacity has built up, which is why our new Independent Research Organisation status is such good news. I think if someone was starting a Nesta from scratch now, I would very much embed that research led element into its practical work at the outset.

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Greg Hearn is Director of Research Development in the Creative Industries Faculty and Interim Director of the QUT Creative Lab. His research has examined new media innovation and creative work and careers. His co-authored books include *Creative graduate pathways within and beyond the creative industries* (2017: Routledge); *Creative work beyond the creative industries* (2014: Edward Elgar); *Eat Cook Grow: Mixing human-computer interactions with human-food Interactions* (2013: MIT Press); *The knowledge economy handbook* (2005 and 2012: Edward Elgar); *Knowledge policy: Challenges for the 21st century* (2008: Edward Elgar); and *Action research and new media* (2008: Hampton Press).

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