

Wicked work: Interdisciplinary impacts, professional projects and learning for transformation

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Abstract

This paper explores the nature of ‘Wicked Work’ in an age of interdisciplinarity. It builds on established interdisciplinary research to conceptualise what ‘Wicked Work’ might constitute in this context and how it might, and might not, be enacted under contemporary conditions of turbulence and change. In addition, by essentially asking what ‘Wicked Work’ might entail in an interdisciplinary context, the authors seek to better inform and direct academic participation in collaborative research through the account of an emerging international development research project. We highlight theoretical and practical issues associated with taming wicked problems and suggest how they go to the heart of how universities, as well as other institutions, should begin to address the complexity inherent in wicked problems.

Keywords

Wicked work; Interdisciplinarity; Professional projects; Learning

1.0 Introduction

It has long been recognised that opportunities for transformation emerge at the intersections of conflicting as well as complementary fields (Seo & Creed, 2002; Thornton, Ocasio & Lounsbury, 2012). The 2019 ANZAM Conference asks participants to consider the challenges wicked problems pose for management research and practice. Reflecting on the authors' experiences of tackling one of the United Nations Sustainable Development Goals, the paper highlights a number of theoretical and practical issues associated with taming wicked problems. The discussion goes to the heart of how universities, as well as other institutions, should begin to address the complexity inherent in wicked problems.

These types of issues create a basket of complexity for researchers involving multiple stakeholders, multiple locations, multiple domains of knowledge and multiple timeframes. Conversely, at the heart of the wicked challenge, is a deceptively simple problem: balancing between the need to encourage the development of ever-more specialist knowledge and the requirement to bring specialists together into fully integrated, interdisciplinary teams. Universities seem to be reasonably effective at encouraging deep sea diving for pearls of wisdom but generally fail the knowledge integration test. When it comes to interdisciplinary research, rather than the nirvana of equally co-labouring scholars from different institutions, traditions and perspectives working together to forge new knowledge, what tends to emerge are more restrictive and regressive scholarly spaces which thwart rather than encourage collaboration (Callard & Fitzgerald, 2015). An outcome of this situation is that instead of trying to address wicked problems the very enactment of interdisciplinarity has become a significant problem in its own right. Furthermore, universities must also move away from a restrictive conception of what interdisciplinary research entails and instead open up the academy to participation from other communities, whether professional, geographical or virtual. These other groups, in turn, need to be regarded less as research subjects and more as research partners if the complexity of wickedness is to be addressed.

To consider these challenges in more detail this paper explores the nature of 'Wicked Work' in what should be an age of interdisciplinarity. It builds on established interdisciplinary research to

conceptualise what ‘Wicked Work’ might constitute in this context and how it might, and might not, be enacted under contemporary conditions of turbulence and change. In addition, by essentially asking what ‘Wicked Work’ might entail in an interdisciplinary context, the authors (who are both based in a Business School) seek to better inform and direct academic participation in collaborative research through the account of an emerging international development research project. This interdisciplinary project is designed by the authors and uses public relations and management communication understanding, as well as anthropological design principles, to tackle engineering challenges in Africa. Through its focus the study therefore contributes to research on development communication (Paquette, Sommerfeldt & Kent, 2015), while its broader participatory sensibility supports a shift to systems of interaction (Taylor & Kent, 2014) and more co-creational approaches (Botan & Taylor, 2004). The article’s core contribution lies, however, in its engagement in a process of problematisation which contextualises the challenge of interdisciplinarity to contest some of the underlying assumptions underpinning interdisciplinary research in a wicked context (Alvesson & Söndberg, 2011).

The discussion begins by setting out the theoretical framework guiding the strategic development and delivery of the authors’ research project. This exploration considers key aspects of interdisciplinarity and explains how this understanding is used to shape the project’s purpose and orientation. The article then embarks on a discussion of how the theoretical framework influences the project’s emerging design. The authors’ reflections on their experiences in this context leads to a new conceptualisation which points researchers in their own field and elsewhere in management science towards the importance of *learning to transform* for community, environmental and social good.

2.0 Why interdisciplinarity and what kind of interdisciplinarity now?

The answer to why interdisciplinarity at this stage is addressed academically by the publication within a decade of not just one but two editions of *The Oxford Handbook of Interdisciplinarity*, the first by Frodeman, Klein and Mitchum (2010) and the second by Frodeman, Klein and Pacheco (2017). Fuller and Collier (1994) provide the more practical answer to why interdisciplinarity by presenting

“*interdisciplinarity* as both a fact and as an ideology” (p. 29, italics in original). More importantly, they point out how interdisciplinarity arose as a partial solution to certain kinds of challenges, especially those of general public concern “not adequately addressed by the resources of particular disciplines” because those challenges “require that practitioners of several such disciplines organize themselves in novel settings and adopt new ways of regarding their work and coworkers” (Fuller & Collier, 1994, p. 29). In short, they conclude: “As a simple fact, interdisciplinarity responds to the failure of expertise to live up to its own hype” (p. 29). Since 1994, the general public challenges have intensified and interdisciplinary interventions are now having to keep responding - evident in the growing calls to exhibit impact - in the face of fast-changing and testing conditions.

In attempting to address these changes, our project opposes the wicked problem with good work. In this case we draw from Gardner, Csikszentmihalyi, and Damon’s (2001) foundational research on the conceptualisation and analysis of what constitutes good work (i.e., described as work of expert quality that benefits society) in different fields and how it can be enacted. Their book *Good Work* (Gardner et al., 2001), is subtitled by an additional description of good work as “*Where Excellence and Ethics Meet*.” They further succinctly identify the necessary constructs of good work through the trinity of three “E’s”: excellence, ethics and engagement. Gardner et al. (2001) position the three E’s as establishing a common core for enacting good work and “focus on what it means to carry out good work” that is “both excellent in quality and socially responsible - at a time of constant change” (p. ix). Later their book covers similar issues to those raised in interdisciplinary studies but at a meso level rather than a meta level: “As the forms of labor change, traditional safeguards for ensuring good work - from professional codes to trade unions - are no longer adequate” (p. 53) and new questions - of particular contemporary relevance to management researchers - arise: “How should traditional professionals trained to honor ancient codes respond to the opportunities and dangers posed by seismic global challenges?” (p. 54).

Building on Gardner et al.’s (2001) three founding themes: ethics (good and purposeful interventions for social impact), engagement (within and across fields), and excellence (melding expertise with

moral distinction), we ask what good work specifically might entail at this stage of an interdisciplinary age? We set out to find practice and research informed answers for better directing academic participation in collaborative research. Instead, we found that the beginnings of collaborative research helped us to better explore what was possible. It clarified for us good collaborative research should not only have the potential to generate revenue and commercial opportunities for academic institutions, but also to create the kind of progressive impacts that are sought by mainstream academic institutions internationally. Accreditation bodies, such as the US-based Association to Advance Collegiate Schools of Business (AACSB) have, for example, been running courses and conferences on identifying and measuring the impact of Business and Management Schools. The AACSB (2012) *Impact of Research: A Guide for Business Schools* includes impact as a key component to be satisfied by institutions seeking, or seeking to retain, AACSB accreditation.

Along similar lines, research excellence exercises, such as the latest 2018 New Zealand Performance Based Research Funding (PBRF) guidelines, specifies the introduction of the Research Contribution (RC) type called “Uptake and impact” designed to encourage:

staff members to submit evidence of research application that are indicators of a vital, high-quality research environment. . . . [including] impact on policy, professional practice, or business processes, products, tools, or services as *indicators of the social, cultural, environmental and economic benefits* of the research. (p. 11, italics added by authors).

This trend toward including cultural, environmental and social impacts, post-dates the longer and substantial marketisation of research in Higher Education that faces multiple critiques for creating unproductive tensions for scholars and distorting decision making and research directions (Arvaja, 2018). Approaching these two trends in tandem, we take an appreciative and progressive perspective to “Good Work.”

Since, from the 1970s, one of the three *Good Work* authors, Mihaly Csikszentmihaly, has recognized, named, and published on what one later book called *Flow: The Classic Work on How to Achieve Happiness* (Csikszentmihaly, 2002). Not surprisingly, our team's joint research found that good work was not only producing best quality outputs, it was also about doing the right thing and feeling good about their work, even during hard times. The need for all good work, including good academic work, to have intrinsic value is a neglected research area. Personally, as we negotiated institutional imperatives, we found ourselves enjoying the process and began cultivating certain kinds of good work that could contribute to the following three specific areas of concern in our field: reducing the intellectual isolation of smaller fields - such as corporate communications and public relations (and many PR academics); increasing the quality of the conversations in the field (by talking with other different knowledge communities and widening our discursive range); and, raising the status of public relations and management communication in the wider academy and society.

Having established the theoretical architecture and aspirations for what we began to frame as 'Wicked Work', we looked to operationalise them. The paper's remaining sections consider the authors' reflections on its principles in the context of a collaboratively-designed interdisciplinary research project. This discussion is based on - and returns us to - the three core themes of ethics (good and purposeful interventions for social impact), engagement (within and across fields) and excellence (melding expertise with moral distinction).

3.0 Ethics: from engineering consent to engineering purpose

Beginning to work on this collaboration in 2018, two hundred years on from the 1848 publication of the *Communist Manifesto* of Marx and Engels, we used the coincidence to posit our attempt at "Wicked Work" as a kind of "Collaborationist Manifesto". As they traced their manifesto's origins to the spectre of communism "haunting Europe" (Marx & Engels, 1848/2017, p. 3), so the spectre haunting our project is the relative ineffectiveness of any one scholarly discipline in the face of the planet's environmental and equity challenges with the many associated wicked global and local

problems. The so-called father of PR, Edward Bernays, became infamous for an openly manipulative process that he called “the engineering of consent”. We argue that, used transparently, with a positive intent to engineer worthwhile purposes, PR has much to offer in interdisciplinary contexts.

Stakeholder engagement with the right stakeholders can be ethically good PR that resides at the core of wicked problem solving (Willis, 2016). Johnston and Pieczka’s (2019) recent global research demonstrates how communication has become the technology of public interest - a term that lies close to the core of many wicked problems - and plays a role in constituting rather than just describing the situation. Their book considers a selection of wicked problems in the negotiation of the public interest within the context of various systems of governance with local, national and global dimensions - and sometimes all three. Health, community, environmental and economic issues appear in interest conflicts with wide resonance and hold the potential to scale wicked work to wicked problems of fragmentation and inequity - arising with, and beyond - national and regional boundaries.

However, for professions, such as engineering and public relations to succeed, a good and clear purpose is as vital from the outset just as Mourkogiannis’ (2006) *Purpose: The Starting Point of Great Companies* identifies it as a key initial condition in businesses that succeed. Yet disciplines in general, and these two disciplines in particular, vary significantly in their stated purposes. As part of assembling our project we compared the declared collaborative approach, visionary outlook and global social orientation of the Royal Academy of Engineering (RAE) in Britain with the more inward-looking declaration of policy by the UK’s Chartered Institute of Public Relations (CIPR). Under the policy heading, the RAE website in early 2019 sets out two aims. The first is: “to address the world’s most pressing challenges, including climate change, energy and international security” and its associated “goal is to work alongside policy makers, industry stakeholders, government officials, and engineers from the developing world to discuss the vital importance of engineering” (RAE, n. d.). The RAE’s second set states that: “Internationally the Academy’s purpose is to develop impactful relations with other national academies; lead on debate and public policy projects; promote engineering capability and build capacity in developing countries” (RAE, n. d.).

The contrast with the more outward-looking altruism of the RAE on the policy page on the CIPR website is sharp. Opening with a rather self-congratulatory statement: “As an authoritative voice on the business and practice of public relations, the CIPR is dedicated to raising standards in public relations”, CIPR policy continues by combining the self-serving functionality with a sales pitch for their services: “Our best practice guides and toolkits, skills guides and collection of award-winning case studies are designed to [sic] public relations professionals in their continuing professional development . . . [which] complements our formal professional development offering of workshops, webinars (free to members) and qualifications”. Even the research is firmly focussed inwards with the functions intended for the membership and the impact restricted to the concerns of the PR profession. Moreover, the initial policy is restricted to national concerns - neither developing nations nor wider global issues merit a mention: “we regularly conduct research on issues impacting members and the wider profession, including our annual ‘State of the Profession’ survey - the most comprehensive analysis of public relations practitioners [sic] in the UK”. This myopic view of professional purpose is further reinforced by PR scholarship that narrows the field by focussing almost exclusively on PR’s contribution to organisational success, communication efficiency and “the overall standing of practitioners in the business arena” (Meyer & Leonard, 2014, p. 176).

This analysis complements Reed’s (2018) conclusion that as an emergent expert occupation, alongside others fields such as management consultancy and information management, PR corresponds with Ackroyd’s (2016) conceptualisation of a corporate profession. This way of thinking about their professional identity is characterised by a state of ‘in-betweeness’. This matters because corporate professions are occupations which are usually well remunerated, have a high status and an important social role, but where important aspects of prosocial professionalism are simultaneously absent. These missing links in the professional project include when individuals are “more aligned to the organization rather than the professional body” (Reed, 2018, p. 224). We would go further by suggesting that PR practitioners are further hamstrung by the orientation of professional associations which also look to organisations first rather than to society and, in doing so, fail to articulate good and purposeful interventions for social impact.

4.0 From ethics to engagement: forging a prototype professional project 1

Aligning with Pohl, Truffer and Hirsch-Hadron's (2017) conclusion that "addressing real-world problems" in general and wicked problems in particular, "is one of the purposes of integrative and collaborative research" (p. 318), we set out to illustrate one purposeful way forward for our field and so add tangible walking to our theoretical talking. Accordingly, this section reflects on our experiences in putting together an interdisciplinary team of researchers to tackle a socially complex wicked problem. From four current discipline homes of PR, leadership communication, mechanical engineering and international development, we found the key enabler for our collaboration was to design a research proposal to illustrate impact through identifying and tackling what Rittel and Webber (1973) popularised as wicked problems and that Pohl et al. (2017) clarified as:

Problems in dispute across society such as violence, hunger, poverty, disease, and environmental pollution are called wicked because those involved - academic researchers as well as non-academic actors - may not agree on either the relevance of the problem and what is at stake, or on its causes and consequences, or on the type of strategy required. (p. 323)

In our project team, in early discussions too long to repeat here, we finally settled on the It is essential preparation in seeking to tame a wicked problem to recognise that interdisciplinary interactions typically take patience and time. Indeed, many PR practitioners are already well versed in Defila and di Giulio's (2017) advice on "Managing Consensus in Inter- and Transdisciplinary Teams": "By means of suitable procedures and methods, participants have to arrive at a shared view of a problem and how to deal with it" (p. 332). specific problem of how to encourage collaboration and effective action to address the challenges associated with improving community water supply in Africa. These discussions were particularly informed by the experiences of those in the team with prior experience in the continent. They also suggested this approach would fit into their learned experiences, based on their knowledge acquired in African conditions, of an overarching need for professional engineers to

better understand local needs prior to designing engineering solutions. The decision to focus on community water supply was also shaped by the understanding that the provision of clean water and sanitation is one of the 17 Sustainable Development Goals set by the United Nations (2015).

6.0 From engagement to excellence: forging a prototype professional project 2

The authors' disciplinary contribution to the project is to help maximise the social impact of engineers working in Africa by enhancing their collaborative project management capabilities and by widening understanding, and perhaps even reconstituting, community engagement. The particular communication focus comes in assisting engineers, through the development and delivery of their professional curricula, to better understand the initial conditions required for multi-stakeholder involvement in engineering projects (Willis, 2012). The objective of this work is to encourage more collaborative, collective and social forms of design. It is important to note, however, that these interventions were, more often, framed around notions of strategic communication and leadership development; and, consistently, through the lens of communities rather than corporations or institutions.

At this point, it is also important to emphasise that our team's approach to their wicked problem is underpinned by the understanding that disciplines and interdisciplinarity are essentially co-dependent. This is obvious at the foundational level since without disciplines, there can be no interdisciplinarity, but our provisional dialogues sparked insights into how lasting practical gains for researchers emerge from the mix of ideas and the willingness to experiment. This approach further supports Zahra and Newey's (2012) situation of academic entrepreneurship at the intersection of fields. In the African project, we shaped the mix of ideas and experimentation by deploying Miller's (2018) anthropology and design intersection. We found Miller (2018) offered practical strategies for engineers in the field and, as a spin off, recognised that her chosen intersection is a converging research zone (Gunn & Otto, 2013), with value for the project not least in an evangelical encouragement to open up to other fields and to restore a sense of wonder at what emerges:

The silos of disciplinary practice have begun to give way to creating permeable boundaries that allow for cross-disciplinary encounters where speciality areas emerge and develop, for example, biochemical engineering or business and design anthropology. The dissolution of once clearly defined disciplinary boundaries has resulted in the need to explain these seemingly unlikely hybrids. It is the new exotic: strange, unorthodox, and even somehow wonderful. (Miller, 2018, p. 1).

7.0 Excellence: enacting wicked transformations

Since its coinage in 1973, the term “Wicked Problems”, has gathered increasing acceptance as a useful way of categorising many of the complex, seemingly intractable, and yet unavoidable challenges carried over from the past (e.g., gender equity, peace in the Middle East) and intensifying today (e.g., climate change; unstable economic inequalities). As the term continues to gather recognition, so too have the range of responses. Camillus (2016) has evolved *Wicked Strategies* to deal with them effectively and Weber, Lach and Steel’s (2017) *New Strategies for Wicked Problems* makes similar suggestions.

We suggest that these approaches go beyond conventional notions of competencies and fit better with more holistic and contemporary understandings of the concept. O’Hara and Leicester (2012), for example, emphasise the need for development, encouragement and support as a means of coping with rapid change, pace and complexity. In doing this, they make a critical distinction between what they call 20th century competence and 21st century competence. They identify 20th century competence by saying it:

- “is a “thing”; a quality of the individual
- can be taught or trained to different levels by following an appropriate curriculum
- can be tested, measured and graded in the abstract

- will ultimately win an economic return for both the competent individual and his or her organization or nation” (O’Hara and Leicester, 2012, p. 3). They go on to contrast it with 21st century competence using the *Delors Report’s* (Delors, 1996) pillars of learning framework as:

- “learning to be
- learning to be together
- learning to know
- learning to do” (cited on p. 8)

O’Hara and Leicester (2012) further claim that “we must understand competence not as an abstract achievement but as ‘the ability to meet important challenges in life in a complex world’” (p. 4). They conclude that:

The advances we have made and the structures of education, socialization, professional training and accreditation we have put in place to replicate them at scale have been spectacular. We are not suggesting that the 21st century surgeon, for example, or any other professional, manager or specialist can dispense with a thorough technical grounding. What we are saying is that such competencies are no longer sufficient. (pp. 5-6)

In line with our exploration of wicked work, we too have drawn from, reconfigure and then extend, Delors’ (1996) four pillars of learning to inform our understanding of excellence (expertise with a moral distinction) in this context.

The first pillar, learning to know, entails a broad general knowledge with the opportunity to work in depth on a small number of subjects. For us, this is essential practice for tackling almost any wicked problem. The second, learning to do, involves acquiring not only occupational skills but also the competence to deal with many situations and to work in teams. It, similarly, is a necessary modus operandi for any wicked problem engagement. The third pillar, learning to be, focuses on developing one’s personality and being able to act with growing autonomy, judgment and personal responsibility.

This third pillar occurs as a natural outcome of working, albeit with at least some success, on a wicked problem; and the fourth, learning to live together, involves developing an understanding of other people and an appreciation of interdependence. While endorsing all four pillars as part of the journey of this research, we add a fifth pillar, *learning to transform*, which requires both individual and project change, and we focus its learnings through reflective work on potentially transformational wicked problems.

Enough knowledge of wicked problem-friendly processes already exists to call for participants to be at least familiar with, or willing to learn from the range of appropriate methods such as: action learning and action research (Raelin, 2012), appreciative inquiry (Cooperinder & Whitney, 2001), dialogue mapping (Conklin, 2006), emotional intelligence (Goleman, 2004), humble inquiry (Schein, 2013), and reflective practice (Schon, 1983). The next stage of our project involves evaluating the respective value of the methods, and seeks to explore what might be usefully added to that list (both for specific expertise for certain kinds of specific wicked problems and for more widespread use in wicked problems in general).

While we note considerable research exists on computer-assisted approaches to wicked problems, those are not part of this research. Instead, we draw from Grounded Theorists (Charmaz, 2000) by adapting their practice of independent scalars for coding verification. In our case, we aim to deploy qualified but independent assessors to judge the selection of projects as wicked problems; the scale of success, or failure, in solving these wicked problems; and to estimate the growth of the participants (who will also complete a self-evaluation checklist with 360 degree feedback components from others participating in their projects). The design is intended to enable examination of transferable learnings and possible correlations, albeit qualitative ones, between the success of the wicked problem project and the growth of the participants. Our focus is on learning through current tough challenges and capturing learnings from those rather than looking back to past data and projecting that into the future.

8.0 Conclusion: learning to transform as excellence

Reflecting on the project's initial explorations we find that our conception of excellence within the rubric of Wicked Work points towards: *learning to transform* for community, environment and societal good rather than to develop traditional organisation-facing functionality. Our project is therefore designed for engineering progress by providing an ontology of hope for communities and society, as well as our own field/profession. This orientation is, in turn, shaped by the other tenets of good interdisciplinary work which generate a sense of ethical purpose, while also fostering experimentation and engagement within and across academic fields.

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