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# **Working well with Wickedness**

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# Working well with Wickedness<sup>1</sup>

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## Abstract

In 1973 Horst Rittel and Melvin Webber wrote a seminal paper, 'Dilemmas in a General Theory of Planning' in which they distinguished between benign and wicked problems. Of the former they wrote that 'the mission is clear [and] ... It is clear, in turn, whether or not the problems have been solved.' By contrast, wicked problems are vicious, tricky and aggressive, filled with political and material ambivalences, uncertainties and unpredictable feedback loops. In short, for wicked problems neither mission nor what counts as a successful solution is clear. We now live, they said, in an era of wicked problems. A general theory of planning (and we might add policy) is impossible.

This working paper revisits this argument. It argues: first that all problems are wicked; and second, that the only way of handling wicked problems is to render them temporarily benign. It then explores the tactics for achieving this both in policy and academic contexts, and argues that this implies the need to hold together series of opposites. In particular it is necessary to:

- *homogenise* problems whilst recognising that these are essentially *heterogeneous*;
- simultaneously *centre* and *decentre* problem solving;
- *close off* alternative ways of simplifying contexts whilst also being *open to* alternatives; and
- assume that particular problem framings are *generally applicable* whilst *recognising that they are not*.

The paper concludes, following Rittel and Webber, that though small narratives and metrics are necessary, grand narratives and general forms of metrication are unhelpful in a world of wicked problems. Instead it suggests that politics and knowing are better understood as situated forms of interference. Finally it submits that the best strategies are likely to be tactical and responsive rather than fixed or large scale in character, and suggests that policy-making and politics might be treated as forms of care or tinkering.

## Miracles

Start with the sentiment that if it works at all then it is some kind of miracle. Your daily bread. Your children's vaccinations. The daily disposal of your waste. Then layer in two further thoughts. First, if you are not routinely at the receiving end of miracles then you are probably underprivileged. There are street people and food banks even in my rich part of the world, and that is leaving aside the global south. Then, second, bear in mind that miracles aren't necessarily, or at least solely, the consequence of divine intervention. Somehow things are being patched together behind our backs. Think of London's sewers. Built by the Victorians in a city of two million for four million people, these now annually spill 39 million tonnes of more or less diluted sewage into the Thames each year in a city of nearly eight million.<sup>2</sup> The miracle is that they still work at all, more or less. Yet until something goes wrong *fragility* is mostly unnoticed and unregarded by the privileged: indeed disaster theorists talk of the levée effect<sup>3</sup>. At the same time there are many students of fragility – and non-fragility. There are engineers, managers and care workers. Others work in public health, in accident investigations, for insurance companies, or more or less menacingly out of sight in the bunkers of the NSA or GCHQ. Yet others frisk us at airports. And then a few are called ethnographers. I belong to this latter group. I grub around in workplaces working with people, asking them questions, and wondering how on earth things hold together. Most recently I've been doing this on fish farms.

## The Farm

Fish farming is its own major miracle. Forty years ago there *was* no industrialised fish farming. Now over sixty million tonnes a year or around 40% of the fish eaten by people in the world comes from aquaculture.<sup>4</sup> In Norway (where I turned myself into a fish-farming ethnographer) there are 360 million fish in sea cages, and each year the aquaculture industry sells around £3bn

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<sup>2</sup> Thames Tideway Tunnel (2012)

<sup>3</sup> Law (2006, 231).

<sup>4</sup> Food and Agriculture Organization Fisheries and Aquaculture Department (2014). The figures are for 2011.

worth of salmon.<sup>5</sup> It's easy to write an optimistic entrepreneurial progress narrative about this, but how does it actually get done? Ethnographically or historically it is helpful to think of it as a daily, weekly and monthly struggle with many forms of entropy. Here are a few. One: fish may escape, swim off, and start breeding with wild salmon. This is bad economic news for the farmers, but bad political news too, because environmentalists don't want the wild salmon gene pool being swamped by domesticated genes. Two: fish can catch diseases, stop growing, or die. Three: they can pollute the fjord. Four: they can attract parasites. In large numbers this is bad both for the fish and their wild neighbours. Five: they can waste feed, a very expensive pastime, which means that farmers watch what their salmon are eating like a hawk. Six: prices in fish markets can go up (in 2010 the Chilean farms were decimated by disease<sup>6</sup>), but they may go down too. Seven: whole markets may suddenly disappear. (It's not a good idea for Norway to award the Nobel Peace Prize to the wrong person.<sup>7</sup>) Eight: the state veterinarians worry about fish welfare. And these are just some of the overlapping ways that entropy gets to work in this messy combination of nature and culture.

I didn't see all of these horrors. The nets held (they mostly do), no fish escaped, and the vets were happy about the welfare. Even so, a farm – or a firm – becomes a fragile miracle that works to resist entropy in a whole range of forms. But what happens is also entirely down to earth. Nets get mended or replaced. Fish are vaccinated and fed medicated pellets. Farms lie fallow to reduce local pollution, or relocated so currents wash sewage away. Fish get inspected for parasites and treated with insecticides if necessary. Feeding is monitored by eye, with underwater cameras, and by computer programmes.<sup>8</sup> Sales agents play the markets, selling more to Japan or the Middle East if the Chinese market disappears. And finally, in the context of welfare, the fish are stunned before they are killed.

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<sup>5</sup> Norwegian Ministry of Trade Industry and Fisheries (2014). The figures are for 2014.

<sup>6</sup> Raval (2010).

<sup>7</sup> Milne (2013).

<sup>8</sup> Lien (2007).

The specificities are particular: such is the art of aquaculture. But generically none of this is surprising. These are the kinds of work that ethnographers watch people doing. The argument is that arrangements are lashups tugged at by entropy in a variety of versions. They need constant maintenance. So working people, managers, traders and vets are all in the business of keeping fragile miracles together. Though to put it in this way is to centre what's happening too much on the human since we really need to add technologies (people without technologies wouldn't be able to farm fish), paperwork, electronic and otherwise, not to mention the environment. We will need to add in commodities, and then think about intangibles too, including institutions (though these are also collages of documents, devices and people.<sup>9</sup>) So there's the law (everything from farm size and biomass through health and safety, to animal welfare), the economic (all that buying and selling), politics (debates about regulation), not to mention the people who work there. The list is limitless. Importantly, it isn't neat and tidy either. Entropy doesn't come carefully packaged, and indeed what counts as entropy relates in part to what you're interested in. The local community?<sup>10</sup> The industrial supply chain? The breeding programmes? Genetic diversity? The environment? Or some kind of a mix? And, sometimes at least, divine intervention is important too.<sup>11</sup>

Here are some provisional conclusions about fragile miracles including those of farming. One, it takes *effort* to undo entropy. If that effort stops something will go wrong very quickly. We're looking, then, at *processes*. Indeed, anything that appears in the process only holds its shape in relation to other things.<sup>12</sup> Two, the materials held together are *heterogeneous*: people, documents, animals, technologies, environments and institutions – all of these and more are implicated, though the form they take, their materiality, is also a function of those relations. Three, the *concerns* embedded in farming are similarly diverse: social, technical, economic, political, legal, and 'natural'. But this means, fourth, that the *goods* and the *bads* embedded in the process are

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<sup>9</sup> Law (1986).

<sup>10</sup> Barnes (1954).

<sup>11</sup> Bloomfield and Vurdubakis (1999, 630-631).

<sup>12</sup> Law and Lien (2013).

heterogeneous too. And then, fifth, if the system metaphor works (I'd prefer to avoid it) then we're looking at an *unbounded system*. So, for instance, I've watched the lorries loading at the slaughterhouse in West Norway. I was told that in twenty-four hours the fish they were carrying would be at Schiphol airport in Amsterdam. In thirty-six hours they would be in Abu Dhabi or Tokyo. But it's the same story upstream too. The feed sprinkled onto the heads of the fish comes from firms that make their pellets using closely guarded recipes that include soy beans, maize, fish meal and fish oil.<sup>13</sup> And much if not all of the latter come from feedstocks in the south Pacific<sup>14</sup> which may or may not be an inexhaustible supply – the answer entirely depends whom you ask.<sup>15</sup>

## Wicked Problems

Students of the contemporary are familiar with these kinds of globally entangled stories about fragile techno-natural miracles. Popular accounts oscillate between Pollyannaish progress narratives and eschatological stories of apocalypse, while the students of fragility pick away at the workings of resilience and fragility and ask: How does it hold together? Where are its weak points? And what is to be done about patching the latter up? All this explains why I admire Horst Rittel and Melvin Webber's 1973 paper, 'Dilemmas in a General Theory of Planning' but also despair when I read it.<sup>16</sup> Writing a generation or more ago, these authors brilliantly diagnosed the mucky fragilities of heterogeneous ordering. Rebelling against the utopianism of cybernetic logics and their holistic God's eye view rationalisms, they foresaw the boundless systems, complex and unpredictable feedbacks and muddy confusions that are now the commonplace currency of those who worry about planning, expertise, or how to know and intervene in the world. This is a world in which goals are unclear and problem definitions are opaque, contested, essentially political, and an irreducible matter of judgement. Crucially, these authors distinguish between *benign problems* on the one hand and *wicked*

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<sup>13</sup> Lien (2007).

<sup>14</sup> Mapstone and Blas (2010).

<sup>15</sup> Smith et. al. (2011)

<sup>16</sup> Rittel and Webber (1973).

*problems* on the other. For the former ‘the mission is clear [and] ... It is clear, in turn, whether or not the problems have been solved.’<sup>17</sup> But this doesn’t hold for wicked problems which are:

“malignant” (in contrast to “benign”) or “vicious” (like a circle) or “tricky” (like a leprechaun) or “aggressive” (like a lion, in contrast to the docility of a lamb).<sup>18</sup>

Rittel and Webber were worrying about planning and policy but their argument can be read as a diagnosis of the multiplicity, heterogeneity and politically-contestable character of contemporary attempts at ordering fragilities of all kinds. As we wade in the mud of the anthropocene we are journeying in the realm of wicked problems in which everything half connects with everything else, values are unclear, solutions are contested, and we are caught up in the middle of it all. And this is why I feel despair as well as admiration.

Comments on this. First, they are strong on diagnosis but, a few thoughts about the need for argument or debate aside, they are weak on cure. This is hardly surprising. Wicked problems can’t be cured: this is precisely what makes them so intractable. But then again, forty years on we’re pretty short of palliatives too. Second, the march of political time hasn’t helped either. As they observe, in post-1968 USA the revolt against planning was partly a rebellion against the professions, in turn itself partly fuelled by the rise of radical politics.<sup>19</sup> But the radicalism has disappeared. ‘Every profession is a conspiracy against the laity’ says George Bernard Shaw (whom they cite). But this slogan now belongs to the political right. National contexts differ and no doubt some professions have escaped the fire-storm, but in much of the Western world their power has been eroded. But this in turn hooks into another part of their argument, because planning has given way in many

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<sup>17</sup> Rittel and Webber (1973, 160).

<sup>18</sup> Rittel and Webber (1973, 160).

<sup>19</sup> They mention student activism, alternative religion, Black politics, new consumerism and environmentalism though the women’s movement does not seem to be on their radar.



contexts to market transactions. Wicked fragilities have been rendered benign in a very particular way by market forces. So how does this work?

If benign problems are those in which mission and successful solution are both clear, then how has this been achieved historically? Rittel and Webber's account about science is too simple<sup>20</sup> but their larger historical intuition is persuasive. In the 100 years after 1850 many in the developed world could get behind a single collective single good, that of *efficiency*. A coalition between ruling elites, professionals and (often) electorates worked to extract benign problems from malignant complexities. Sewerage, clean water, public health concerns, national workplace insurance, and free universal healthcare – these are just some examples. But this public coalition has now substantially dissolved. There are many reasons for this. *Inter alia* the workings of wickedness have become rather visible in the context of the anthropocene.<sup>21</sup> But, and just as important, the state has also withdrawn in favour of less collective versions of the benign, and it is 'the market'<sup>22</sup> and its own kinds of 'efficiencies' that has come to take its place in many areas of public policy. In short, the struggle with the fragilities of heterogeneous entropy has been substantially privatised.

## Taming wicked problems

How to think about the politics and practices of wickedness and fragility in this new conjuncture? I am happy to join in the general hand-wringing about destructive market hegemonies, but here I want to make a sideways analytical move and think more generally about how wicked problems get handled. My argument rests on two assumptions.

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<sup>20</sup> They cite Popper, but Kuhn's (1970) pragmatic non-foundational community-based account of science has fared a lot better in the last forty years. Indeed science problems are also more or less wicked.

<sup>21</sup> As a not-so-small example of the appearance of new forms of wickedness, compare and contrast the public health concerns that underpinned the 19<sup>th</sup> century commitment to sewage systems with the unsustainable loss of phosphorus from the biosphere that is also embedded in this solution. Ashley, Cordell and Mavinic (2011).

<sup>22</sup> I put the term in citations because there are many kinds of markets and many kinds of market transactions. Braudel (1982); Callon (1998). For a recent and political version of this argument Bowman (2014, forthcoming).

The first is that the problems of the world are *always* wicked. The implication is that *anything* we put together is profoundly fragile. This, I suggest, is true at every level of scale from the individual on the one hand to the largest form of collectivity on the other. We are all and irreducibly in the business of handling wicked problems. So, for instance, the fish farm works in a wicked world of messy and heterogeneous problems. But then (a scale change) the people working on the fish farm are working in their own equally wicked worlds too.<sup>23</sup> There is, as it were, wickedness all the way down. And, if we make a further scale change towards the ‘macro’, the global industry of fish farming is wrestling with wicked problems too. So my argument about wickedness is scale-independent, but (another proposition) it is also history-independent. It’s tempting to say that the world’s problems used to be benign and they have become wicked. However this is surely wrong. If there are secular shifts then I suggest, on the contrary, that these are movements in how we go about *knowing and handling* wicked problems rather than changes in wickedness *per se*. So, first point, the optimism of nineteenth century scientism has been replaced, at least in Europe and North America, by relative pessimism, in part as a result of the moves towards fragmented definitions of public goods identified by Rittel and Webber. Then, second point, the *techniques* for handling wicked problems have been reshaped, or perhaps I should say rescoped, for instance by scaling down ambitions. And, third point, some kinds of wicked problems are simply more *visible* than they were. (Compare and contrast the Black Death, surely a case of globalisation in action, with the newsworthiness of potential pandemics such as SARS).

So what can we say about the techniques for handling wicked problems? My second proposition (I extract it from Rittel and Webber) is that *the only way of handling wicked problems is to treat them as if they were benign*. So my argument is that this is what *always* happens in planning, in politics and indeed in personal life. Faced with the heterogeneous wickedness of a multiply-entropic world, we mobilise techniques for slicing and dicing these, turning them into bite-sized chunks, and *pro tem* rendering them benign. It is simply

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<sup>23</sup> Lien and Law (2014, forthcoming)

not possible to handle the indefinite extension of value clashes, political controversies, problems embedded in other problems, material heterogeneities, fluidities, and the endless and unpredictable feedback loops that constitute problem malignancy. Somehow we have to make things simple.<sup>24</sup> As Rittel and Webber say, there is ‘no stopping rule’ for wicked problems.<sup>25</sup> Instead:

‘... The planner terminates work on a wicked problem, not for reasons inherent in the “logic” of the problem. He stops for considerations that are external to the problem: he runs out of time, or money, or patience. He finally says, “That’s good enough,” or “This is the best I can do within the limitations of the project,” or “I like this solution,” etc.’<sup>26</sup>

So in practice, and no cynicism implied, those who work on, manage or own fish farms (like everyone else) can only do so much. Wickednesses are sliced up into more or less benign and tractable problems. And the same applies to individuals and large scale collective actors such as multinationals or governments – or to the knowledge producers in the academy.<sup>27</sup> ‘Sufficient understanding’, to use Rittel and Webber’s felicitous phrase, is a matter of the limits set by time, money, patience and convention. And this is how wicked problems are handled, always.

## **The Tactics of Benign Problems**

A corollary follows. If the world is generally wicked, then it becomes less important to focus on that wickedness than to attend to the imperfect techniques for rendering its problems practically benign. Here the pressing questions include: *What* are those techniques? Are some *better* than others and if so when, where and why? And (Rittel and Webber ask this) what, in any case, do we *mean* by ‘better’?

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<sup>24</sup> Callon and Latour (1981).

<sup>25</sup> Rittel and Webber (1973, 162).

<sup>26</sup> Rittel and Webber (1973, 162).

<sup>27</sup> I am sometimes asked by people who want to use actor network theory when they should quit working and cut the network. My answer is (and could be) no different to that offered by Rittel and Webber. See Law and Singleton (2013). The phrase ‘cutting the network’ comes from Marilyn Strathern. See her (1996)

Any inquiry into the taming of wicked problems leads to a dozen different disciplines. So, for instance, epistemology is about proper ways of knowing the intractability of messy realities. It explores how to set horizons – empiricist, logical positivist, falsificationist or pragmatic – about what to exclude in order to know well. But the story of epistemology is cautionary. First epistemologists differ: there are lots of ‘basic rules’ and they are contested. This tells us that we’re not going to find any agreement out there. Second, what counts as a proper domestication depends on context. The proprieties for setting benign problems have shifted historically,<sup>28</sup> epistemically,<sup>29</sup> and paradigmatically.<sup>30</sup> Again Rittel and Webber have been there,<sup>31</sup> but the lesson is that the ways in which benign problems are created are always on the move. Alongside epistemology, there is a quite different set of tools for creating benign problems in economics. Here these are treated as externalities – that is, as costs or benefits of transactions that do not accrue to those directly involved.<sup>32</sup> This means that market tactics for creating benign problems work fine for the principals if wicked externalities can be offshored. But this is a useful cautionary tale too because it reminds us that how benign problems get carved out may be inequitable. The Stern report observes that anthropogenic climate change ‘presents a unique challenge for economics: it is the greatest and widest-ranging market failure ever seen.’<sup>33</sup> No doubt, but clearly the present system of externalities serves the carbon producers much better than the inhabitants of Vanuatu.

These small detours into epistemology and economics remind us that the tactics for rendering wickedness benign are moveable, contexted, contested and likely to have effects that are inequitable and/or saturated by power. But what more can we say about these tactics? Answers will be contingent, but I

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<sup>28</sup> Shapin and Schaffer (1985).

<sup>29</sup> Foucault (1979).

<sup>30</sup> Kuhn (1970).

<sup>31</sup> Rittel and Webber (1973, 167).

<sup>32</sup> Positive externalities of a programme of vaccination may, for instance, extend to the unvaccinated, while the negative externalities of industrial production notoriously include environmental effects including anthropogenic climate change. On the latter see Stern (2006).

<sup>33</sup> Stern (2006). These words come from page i of the Executive Summary. See [http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/Executive\\_Summary.pdf](http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/Executive_Summary.pdf).

suggest that to think well about making benign we need minimally to attend to the following.

- **Homogeneity and heterogeneity.** Some ways of taming wickedness treat the world as a calculable or narratable whole while others don't. So the first issue is: *how far can or should the world be reduced to a single mode of representation or reasoning?* Rittel and Webber describe the cybernetic PPBS (Planning, Programming and Budgeting System), a teleological world in which goals and means were defined holistically. But it failed, and it was always going to fail because you can't tame wicked problems that way.<sup>34</sup> One size cannot fit all in a wicked world, in management, policy, or science.<sup>35</sup> But does this mean that homogenisation is never appropriate? Perhaps irritatingly, the answer is: no. Miracles mostly depend on patches of homogenisation. Think of any economic form of accounting. For instance GDP is more or less arbitrary (all such homogenising economic constructs are), and it is embedded in structures of power so it effaces alternatives (such as unequal income distributions). But it nevertheless tames parts of economic wickedness in ways that are useful in some contexts.<sup>36</sup> And, back to ethnography, salmon farmers handle the wickedness of the world with homogenising tools (management accounts, metrics for efficiently converting feed into flesh.) But, here's the crucial difference with PPBS, they use *lots of different tools*. They seek to render the wicked problems of fish farming benign by homogenising in patches. The proposition is thus not that homogenisation is a bad. Rather it is that *it needs to be kept in balance with heterogeneity*. As James C. Scott noted in a quite different agricultural context, totalising homogenisation is catastrophic.<sup>37</sup>
- **Centring and decentring.** The second question is: *how far can we tame wicked problems by drawing everything that is relevant together?*<sup>38</sup> Is it

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<sup>34</sup> For the argument developed in a British case see Law (2002).

<sup>35</sup> This is a further argument, but it's pretty clear that British industrial policy is much too committed to a single generic version of 'the market' that tames the world by damaging lo-tech production. Bowman et al. (2013).

<sup>36</sup> Mitchell (2002).

<sup>37</sup> Scott (1998).

<sup>38</sup> The term is Bruno Latour's. See his (1990).

possible to render them benign by creating a single point of observation, command and control? Pressed to its limits, this is a Western dream that comes variously in scientific, managerial, aesthetic and political forms. In science it is sometimes called the ‘God trick’ – the idea that everything can be seen and known from one (unsituated) location.<sup>39</sup> It is implied in the repetitive stories about political leaders and entrepreneurs supposedly endowed with special economic, organisational or political visions, powers and responsibilities.<sup>40</sup> It is differently embedded in Romantic visions of the artist as a preternaturally gifted individual.<sup>41</sup> But it also extends into the promises of technologies. Something like this centring vision informs PPBS, not to mention the scarier activities of the NSA. Such is the dream or the aspiration of centring (which is related to but is not the same as the hope of homogenisation.) It may work up to a point, and fortunately so in domains such as air traffic control. In a less scientific version, in emergencies those who govern Britain gather in the Cabinet Office Briefing Room and try to draw everything together. So there are appropriate moments and locations of (attempted) centring in the domestication of wicked problems. But in practice *handling wickednesses is also distributed across time and space*. So, for instance, the salmon farming firm has a management board, but it’s also a structure of delegation hierarchally (production manager versus boat skipper), informally (rotating nets versus loading feed silos), and temporally (this week we check for lice and next week the vet is coming). So the tactics for domesticating wicked problems are partly about centring, but they are partly, too, about decentring. Wickednesses also demand a decentred patchwork of responses, mobile, adaptive, shifting, and context-specific.

- **Closing and opening.** The third question is: How open are we to the unexpected? How much confidence do we have that the benign problems that we have created for handling wickedness will hold? Or (the same question posed differently) how dogmatic should we be in

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<sup>39</sup> The phrase and the argument come from Donna Haraway. See her (1991),

<sup>40</sup> For a fine historical account of Edison that works in this mode see Hughes (1983)

<sup>41</sup> For a sympathetic account of Rembrandt’s studio which works against this vision see Alpers (1988).

claiming that we have the tools we need to tame the wicked? In response it's tempting to say that dogmatism is a bad, but this is only half of the argument because simplification – the creation of benign problems – is also necessary. Left to its own devices wickedness is messily intractable. On this the epistemologists agree. To know the world we *have* to filter it one way or another. So what's at stake is *how* to close off, *how deeply* to do so, *how long* to stick with a particular simplificatory but somewhat failing benignity, and *how to know when* a benign problem is transmuted into one that is irretrievably wicked. There is not a lot that can be said about this in the abstract, though one observation suggests itself. This is that it will be helpful if simplificatory dogmatisms are simultaneously accompanied by a lively sense that they cannot solve everything. This will reduce the danger of being blind-sided. It also suggests that there are good reasons for working with an array of simplificatory gadgets rather than just one. This will help us to see the creeping entropies.

- **Hegemony and modesty.** The final issue closely ties to this. The question is in *what measure benign problems and the tools, stories and orderings that go with them have, or should have, imperialist ambitions.* How far do or should they seek to extend their scope? Once again there is no right answer. Some degree of extension is needed. Heraclitus may be right. Perhaps no man steps in the same river twice. But in practice 'men' and 'rivers' are tamed, *pro tem*, into tractability. Unless similarity is imputed to difference then every encounter becomes a surprise. At the same time, however, imperialist ambitions are insensitive to the wickednesses of specificities, handling these poorly – there's the fragility again – or damaging them. Unsurprisingly, then, on the farm the problem sets and tools for making benign are neither hegemonic nor Heraclitean. They extend some way, taming wildnesses, but at the same time their ambitions are also limited. So, for instance, while quantification and metrication are very important they only reach so far. And a case of over-extension? Surely this is the real problem with 'the market'. The issue is not that it is a set of devices for taming wickednesses. The fish farm uses market devices to buy feed and sell fish

in ways that are not obviously problematic. The problem with the market is rather that it has been pressed into inappropriate locations and damages alternative ways of handling intractability. The issue is its imperialist pretensions. And it is no surprise to find that on the farm there are locations – for instance caring for the fish – where wickedness is tamed in quite different ways.<sup>42</sup>

## **Conclusion: Interfering and Tinkering**

The fragile miracles of ordering the wickednesses of the world rest on the creation of problems that are temporarily benign. That is the basic argument I have made in this paper. Then I have argued that they rest, too on multiple ways of creating tractability because (and by definition) the wicked world is excessive to problems that are benign. It does and it will undo any attempt to tame it. Here, then, the political and the analytical lessons line up. The miracles of ordering rest on multiple modes of creating tractability. Though there is space – and indeed a necessity – for pushes towards homogeneity, centring, closing or dogmatism and even perhaps imperialism, these are ambitions that need to be tempered with sensitivity to heterogeneity, decentring, openness or lack of dogmatism, and the realisation that any particular way of creating benign problems can only reach so far. The lesson is that the desire for perfection – for a world without mess or mud – needs to be held in check.<sup>43</sup> The most obvious political lesson to be drawn from this is specific rather than general. Thus I have made some effort to show that in a wicked world general formulae will come unstuck and/or generate injustices. Instead it becomes necessary to deal with *political and analytical specificities*. Everything is somewhat contextual. Grand stories only reach so far. But this in turn suggests two political and analytical consequences.

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<sup>42</sup> Political and social theorists struggle with the implications of the consequent need for multiplicity. For different ways of imagining this see Walzer (1983), Law (1994), Mol (2002), Boltanski and Thévenot (2006), Haraway (2008) and Latour (2013).

<sup>43</sup> On the topic of mess, see Law (2004). On its political implications see Law et al. (2014). On purity and impurity, see Latour (1988).



The first is that in a wicked world politics – and knowing – may be usefully understood as *situated forms of interference*. The issue is always: From the place where I happen to be, what is happening here? From the place where I happen to be, what are the goods and the bads about what is happening here? And how, if I were to make an intervention, could I do so in a way that would make a worthwhile difference? The language here comes from Donna Haraway<sup>44</sup>, but the sentiment is consistent with the diagnosis offered by Ritter and Webber. The issue is always how to create an analytical and political problem that is benign; one that is sufficiently focussed. And this is a matter of attending on the one hand to what these authors dub the ‘mission’ – the particular problem needs to be solved – and on the other hand of specifying what would count as a successful problem solution. The implication is that whatever our political and analytical concerns it is also important to be cautious about large stories and large schemes.

The second follows from this. If we live in a world where benign problems and the arrangements that generate them are both multiple and on the move (think again of the farm) then it becomes important to think and work flexibly. This suggests that the best strategies are likely, and oxymoronically, to be tactical and responsive rather than fixed or large scale in character. Again there can be no rules. But in a wicked world which also recognises that it is wicked (and perhaps this is the great achievement of the late twentieth century non-foundational movement indexed by Ritter and Webber but explored by many others), it is likely that though concerns may hold substantially stable, forms of taming and interference will change shape from context to context, or even from moment to moment. And then, a second corollary, it would also seem wise to work on metaphors that allow us to think well about that malleability. Perhaps, then, in a world in which benign problems in the form of grand narratives and the large scale homogeneities are wearing thin, it might be better to think of politics and knowing and benignities as forms of *care* or *tinkering*.<sup>45</sup> Yes, the orderings of the world are a miracle. Yes, they are fragile. Yet at least for the privileged they work surprisingly well. But they rest, too, on

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<sup>44</sup> Haraway (1992).

<sup>45</sup> I draw these terms from Annemarie Mol. See her (2008).

the capacity to imagine and work adaptably with processes that are heterogeneous, multiple, partially decentred, and embed the recognition that there are different kinds of goods and bads.

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