THE PSYCHOLOGY OF REGIONAL DEVELOPMENT

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ABSTRACT:

Regional development policy is an enduring function of government, but it has adopted many different styles from top-down activism to, more recently, assisting local communities to take greater control of their own destinies. For example, conventional wisdom advocates empowering local leaderships, conducting SWOT surveys and identifying strategic plans to improve infrastructure and services. This article, which consummates several decades of research, focuses closely on one neglected aspect of self-help - the psychology of local development – and argues that it is a potentially critical ingredient in that task. The approach is conceptual rather than empirical and sets out a possible research agenda placing human behaviours at the fulcrum of regional economics, much as appear to be happening with economics itself. Economic systems are not mechanistic like the universe, but operate more akin to wicked problems and social messes, in which human psychology and behaviours can assume great importance.

1. INTRODUCTION

Australia's non-metropolitan (regional) economies are situated in a world of all-embracing and dramatic change at a time when national governments have declining resources, capacity and inclination to mastermind their economic health. According to Sorensen (2008):

"... public regional development is entangled in a growing culture of demonstrable value-for-money at a time when public spending is being held in check by fear of budget deficits and political unwillingness to increase governments' shares of GDP."

The current global recession is, if anything, reinforcing that perception. Increasingly cast adrift in a hostile environment, regional economies are forced to become self-reliant and hyper-adaptive to provide the well-paid and intellectually or socially satisfying employment necessary to retain population and services. And, it is also increasingly clear that a large slate of attitudes and behaviours, which presage creativity, innovation, and adaptability, is crucial to achieving that core economic task. This message applies particularly to regions' economic bases in industry, mining or agriculture, but it also frequently resonates in services where new or improved modes of delivery improve their effectiveness and efficiency. Of course, the capacity and efficiency of base industries are themselves frequently dependent on good quality and cost-competitive services.

Such behaviours are, of course a necessary, but not sufficient, basis of local development. Finance, infrastructure, economic resources, organisations, enforceable laws of contract and property, accurate information and knowledge, and environmental science are all necessary for long term sustainable economic

activity. In essence, this is a strongly libertarian agenda in which competition is the spur economic prosperity. Drawing on the work of such thinkers as Hayek (1988), Schumpeter (1942), and even Nietzsche (1883), one can argue that the market order is the fundamental lubricant of the adaptability, flexibility, and new ideas crucial to regional economic survival. They are equally important for the rapid abandonment of lost economic causes. Much of the existing literature connecting research and development, creativity and innovation to local economic development is flawed in that it:

- downplays that libertarian agenda,
- focuses almost exclusively on socio-economic conditions in large urban agglomerations (see, for example, Castells and Hall, 1994; Saxenian, 1994; Audretsch, 1998; Porter, 2001; Scott and Storper, 2003; Florida, 2004; Amin and Cohendet, 2005), and
- omits an increasingly important range psychological considerations.

Sorensen (2009a, b) enlarges on these deficiencies and explores how research and creativity are often prominent in rural regions, not just large cities, and are rapidly absorbed by rural enterprises. He also notes, but does not develop, the psychological dimensions of local development (Sorensen, 2008). This article takes up that challenge, but its approach is conceptual rather than experimental and along the lines piloted long ago by the likes of Smith (1776) and Mill (1869). From the 1960s onwards, economics returned to roots and engaged in sustained behavioural thinking through the work of people like Becker (1968), Tversky and Kahneman (1979), and Simon (1982). Similar lines of enquiry might beneficially inform regional economics.

2. PSYCHOLOGICAL DIMENSIONS OF REGION DEVELOPMENT

While Florida (2003, 2004, 2005) has published widely on the geographical correlates of creativity and, by implication, some important socio-economic conditions aiding local development, Motluk's (2009) review of recent psychological work on circumstances conducive to creativity adds a whole new slate of ideas on the subject. She summarises eight behaviours conducive to creativity (see Table 1) that are largely missing from the regional science literature. We might therefore conclude that the further analysis of human behaviours, not necessarily restricted to creativity, could open up new approaches to the development of place. Table 1 classifies this psychological research in two ways: active dissatisfaction and preparing one's mind and the entries are all supported by experimental research published in mainstream psychological journals. This material appears, at first sight, geographically neutral; and applies to city and country, large and small urban agglomerations, and everywhere from the Sahara to the Amazon rainforest. On reflection, these creative props might be more pronounced among rural residents than in the fraught daily grind of large city living, but that's a hypothesis for future testing. If Motluk can report on several new behavioural correlates of creativity, perhaps there are many more opportunities in the whole field of regional development. By the way, the studies surveyed by Motluk suggest that Florida's The Rise of the Creative Class is the consequence of the book's subtitle, not the cause. In other words, work, leisure, community and everyday life may be transforming creativity.

So, after preparing his mind as Motluk advocates, this writer reflected, in a relaxing blue environment, on a collection of other behaviours possibly contributing to contemporary local development in rural Australia. The list, which draws on over 30 years personal research in the field, rapidly became long, and Figure 1 reports on no less than 41 behaviours in some degree relevant to the task. They are classified according future orientation; action preference; knowledge base; and inter-personal relationships. Figure 1 identifies two polar cases for each: on the left, behaviours likely to be especially positive for local economic development and well-being; with negative poles on the right. Those polar cases are not absolutes because they are subject to interpretation, and it is worth noting that the polarities of some elements may flip occasionally. For example, conservative, traditional or cautious approaches may be beneficial under especially complex and turbulent conditions, so much so that we might add an additional capability: ability to disregard this table when necessary. In practice, most individual actors' revealed behaviours will lie somewhere on a continuum between the poles. We might augment this list with additional items from Table 1, especially embracing inner grouches, which might become item #42 (with its polar opposite suppressing emotions). Regional development activists might also not take themselves too seriously by letting the mind wander, travelling overseas and having fun. So, item #43 becomes ability to relax (a positive trait) with tense behaviour being the negative pole. Both these additions come under the heading of inter-personal relations.

The category of *future orientation* explains itself, and no effective leader in regional development, whether in business, government, or social work, can operate without vision, optimism and confidence, or being inventive. The sixteen action-oriented elements contribute to achieving good outcomes quickly, efficiently and effectively. The ability to drive development forward was a central theme in Poot's (2004) edited volume entitled On the Edge of the Global Economy. The various contributors clearly make the point that small businesses or countries which operate at fringes of Porter's (1990) economic heartland, comprising the great industrial regions of Europe, North America and East Asia, have to try just that bit harder and imaginatively and take greater risks to cement their niche in the world and maintain global competitiveness. In contrast, it is unlikely - for obvious reasons - that any worthwhile development will occur where the opposing negative conditions prevail. Knowledge, both factual and theoretical, is also obviously crucial to focused and appropriate action, but not just any barrel of ideas and information. Regional protagonists have to exercise their critical faculties continuously to (i) sort good knowledge from the bad, (ii) routinely add to and discard from the barrel, (iii) integrate a vast reservoir of materials, (iv) reinterpret it imaginatively, in the light of experience and opportunity, to understand current conditions and the processes shaping events, and (v) conceive likely future development trajectories. Those are no easy tasks.

Table 1: The Psychology of Creativity

Embrace your inner grouch:

Active dissatisfaction (boat rocking) **AND** its **acceptance** by employers, institutions, and social / community ties

A prepared mind:

88

- 2 Let the mind wander, with strong right hemisphere activity enabling the processing of loose associations compared with more diffuse left hemisphere visioning
- 3 Unfocus the brain to generate many slow alpha waves (associated with relaxing) and few high-frequency gamma waves linked to focused thought and reasoning
- 4 Play a musical instrument: experiments have shown that musicians use not only the left frontal cortex (used heavily by non musicians in reasoning problems) but also the righthand side too
- 5 Enjoy a blue rather than red environment: red sharpens memories; blue unlocks imagination
- 6 Work with one or two congenial and trusted colleagues, not as a solitary genius
- 7 Either (i) live overseas for a while and reminisce when home or (ii) remain there (adapting to a foreign culture gives a creative edge)
- 8 Play and have fun; horsing around appears linked directly to flexibility and creativity
- [9] [Don't resort to alcohol. It only makes one feel creative in the short term.]

Source: Motluk (2009)

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Figure 1: A typology of Behaviours

	Positive	continuum	Negative				
future orientation							
1	foreward thinking	←	trapped in the past				
2	optimistic	←	pessimistic				
3	inventive		staid				
4	confident		diffident				
action preference							
5	entrepreneurial	←	unenterprising				
6	leadership	← →	followership				
7	risk accepting	←	risk adverse, loss aversion				
8	strategic	←	piecemeal				
9	radical	←	conservative				
10	energetic	←	lazy				
11	pragmatic		dogmatic				
12	realism		wishful thinking				
13	reason		emotion				
14	efficient		wasteful				
15	disciplined	—	impetuous				
16	assertive		resigned, fatalistic				
17	competitive		passive				
18	ambitious		unmotivated				
19	creative	<u> </u>	imitative				
20	original		traditional				
knowledge base							
21	broad	—	narrow				
22	integrated	—	disconnected				
23	authoritative		banal, stupid				
24	receptive		closed				
25	reflective		hidebound				
26	resourceful		narrow-minded				
27	imaginative		dull, boring				
	inter-µ	personal relationship	5				
28	cooperative, collaborative		isolationist				
29	democratic		authoritarian				
30	gracious	←	churlish				
31	informal	←	officious				
32	approachable		inaccessible				
33	respectful		disrespectful				
34	empathic		dismissive				
35	open		deceptive				
36	confidential	<u> </u>	inclined to gossip				
37	ordered	<u> </u>	amorphous				
38	self-controlled	<u> </u>	anarchic				
39	unagressive	—	combative				
40	willingness to contest		acquiescent				
41	self-reliant		welfare-dependent				

Source: the Author

Finally, no regional development activist works in isolation. Local progress will reflect the participants' inter-personal relationships (or capacities to work together harmoniously and purposefully) over the longer term. Readers may object to some of my polarities, especially juxtaposing unaggressive behaviour and willingness to contest. However, that is deliberate because there is great merit in contesting ideas as Motluk's article demonstrates, but the contest is more likely to be productive if done civilly. Most of the positive attributes listed are indeed about generating civil discourse and steering away from Nietzsche's idea of Übermensch, who would find the going hard in a modern state with its strong democratic and discordant conditions and multilateral perspectives. While one must concede the merits of single-minded and innovative entrepreneurship, Nietzsche could not have foreseen the legal and competitive circumscriptions faced by modern entrepreneurs. The singular achievements of the Coolah District Development Group in Central West NSW were a good practical example of the benefits of civil engagement by several competent leaders and formation of a powerful growth coalition (Sorensen et al, 2002).

3. ON THE IMPORTANCE OF BEHAVIOURS

Listing those behaviours is the easy bit. In practice, we know little about how the 40 or more behavioural attributes interact with each other to shape the economic development capacity of either specific regions or regions in general. We have, for instance, little idea of:

- their overall relative importance;
- whether such relative importance varies spatially according to specific regional geographies;
- which combinations of behaviours are particularly beneficial or detrimental, especially at different stages in the business cycle or when communities face parametric shocks;
- the extent to which optimal behaviours evolve from place to place and over time.

These dot points could be important when we consider that regional development problems differ greatly in detail on the dimensions shown in Figure 2. It is not unreasonable to deduce the existence of numerous regional problem types each warranting locally bespoke strategies and programs tailored to their aspirations and opportunities.

Figure 2: Anatomy of Regional Problems

Types of Problem	Negative	continuum	Positive				
	Descriptor		Descriptor				
one or more declining base industries	major		none				
outmigration	high		low				
poor services	many		few				
fluctuating economic conditions	strong	$\overline{}$	weak				
low incomes	prominent		mild				
reaching full regional potential	failure		successful				
summary statement	major		few problems				
	problems						
circular and cumulative ways. It is likely, though not impossible, that no two regions will have identical problem profiles across the six dimensions. Problem Configuration Negative continuum Positive							
	Descriptor		Descriptor				
Resources							
built and environmental capital	poor	$\overline{}$	well developed				
social capital	weak		abundant				
human capital (skills / knowledge)	low	$ \longleftarrow $	high				
finance capital	weak		abundant				
resource summary	few		many				
Dimensions							
scale	large	$\overline{}$	small				
complexity	high	$\overline{}$	low				
duration	long		short				
cause	multiple		single				
solution options	few		many				
summary: scale and complexity	large		small				
In general, it is easier to handle problems problems are simply configured	•	•					

Source: the author

The collective importance of such behaviours is also likely to be expanding fast in rural Australia for a battery of other important and coincident events. First, Australian governments' combined financial contributions to rural regional development either through formal regional policy or agricultural support have been estimated at only 0.4 percent of gross regional product, which is tiny in comparison to Europe and even the United States (Hearfield and Sorensen, 2009, Sorensen, 2009c). Secondly, agriculture and minerals production are globally engaged, with over 85 percent of agricultural produce exported in raw or processed form. That places rural regions at some risk, especially in agriculture where global markets are badly distorted by producer subsidies, running at 28 and 32 percent respectively for the United States and the European Union. Thirdly, both mining and agriculture are severely affected by fluctuating

commodity prices – themselves sometimes compounded by gyrations in the value of the Australian dollar. In general, a low value of the A\$ relative to the US\$ benefits primary exports greatly and vice versa. In July 2008, 1A\$ = 95USc, which worked to the detriment of rural regions; by February 2009, the exchange rate reached about 55USc, but by August 2009 the rate was back to almost 85USc. Such a roller-coaster ride was reflected substantially in farm and mine incomes. Fourthly, agricultural production is itself highly unstable through the cycles of drought and flood. Finally, the technologies underpinning primary industries and even the businesses serving them from country towns are changing rapidly and uncertainly.

Uncertainty also derives from the from the enlightenment agenda western countries have pursued for the last four centuries. Today's leading components include:

- market economies:
- the rule of law and the mediation of disputes;
- separation of powers including independent judiciaries, central bankers, and other economic regulators;
- global connection;
- democratic decision-making after formal debate;
- freedom of the press and of information;
- strong social and economic institutions;
- the high status of scientific enquiry;
- strong protection of intellectual property:
- fascination with the new and rapid innovation;
- life-long education;
- individual freedom alongside personal responsibility; and
- limited social security for disadvantaged individuals in the community.

These components are strongly interconnected, and it would be very difficult to separate out the impact of any individual component from the total package. This integrated agenda, with its endless change dynamic, simultaneously appears to be part of the regional development problem and its solution in the sense that it drives adaptive behaviours if the kinds listed in Figure 1.

In summary, the combination of low government support and high uncertainty throws great weight on regional communities to help themselves adjust to changing opportunity. That, in turn, greatly increases the importance of all human behaviours capable of leveraging self-help and adaptation. These may be personal, community oriented, or private in the case of farmers, miners, and support businesses. Even local government can play a major role in these circumstances (Hearfield and Sorensen, 2009), but Australian local government has weak funding, running at about 5 percent of GDP over the long term, and a rapidly rising slate of community expectation for all manner of services. Local governments' officiality, to use Wildavsky's (1976) term, can in some circumstances galvanise communities in proactive ways to take control of their futures, not so much by cash injections for potential projects but through the inspiration and motivation provided such governments' leadership,

entrepreneurial, and other behavioural capacities.

Of the listed behaviours, we probably know most about leadership and entrepreneurship, because of the extensive business literature on those subjects and the link between them and effective regional development was pioneered in Australia by Sorensen and Epps (1996). That work was recently qualified by Hearfield and Sorensen's (2009) treatment of the way in which community leaders from government and civil society jointly meld to redefine their mutual agendas and strategies (or technologies) shaping regional development. This process has led to increasing recognition that local actors are best placed to steer their communities towards greater resilience, but not in the ecological meaning of that term. Rather, we mean resilience as the product of an accelerating pace of enforced change and adaptive response on the part of multiple and increasingly numerous actors. That 1996 article noted many behavioural correlates of effective local leadership noted in Figure 1, so perhaps leadership is the number one ranking attribute in community development, albeit tailored stylistically to communities' resources, opportunities, and various forms of social and human capital. Perhaps, then, we should also recognise that the actors' contributions are, in practice, uneven and each has their own behaviour set.

4. MEASURING A COMMUNITY'S BEHAVIOURAL CONDITION

Conceptually, if not practically, we could average actors' personal scores for each of the 40+ dimensions in turn, weighting individual scores according to their importance in the development landscape. In this way, we could profile a region's behavioural strengths and weaknesses. If we then assume that each behavioural dimension is independent and roughly equally weighted, we could arrive at a single behavioural metric for each region by averaging the scores for all actors across all dimensions. This metric would roughly reflect regional capacity to perceive alternative futures and realise them. The word *roughly* is used advisedly, because:

- the importance of each dimension will vary according to development circumstance as noted in Figure 2;
- optimal behaviours for any one problem set may lie at different points on each behavioural spectrum according to regions' circumstances: geography, resources, industries, people, history of successful adaptation to changing circumstances, and the anatomy of its current circumstances; and
- few of the individual behaviours are truly independent.

In practice, it would be virtually impossible for analysts to compute such a metric for several other important reasons. It would be extremely difficult to profile the behavioural traits of numerous persons across all 40 or more dimensions. Secondly, regional or community leadership is often a revolving door of arrivals and departures, changing appreciations or problems and opportunities, understandings of regional processes, rises and falls in the hierarchy of power, and occasional conflicts. Thirdly, times change along with appropriate behavioural characteristics to serve the community well. Finally, the impacts of all behaviours are lagged, maybe by a decade or more. Thus, places

may be living off the efforts of people no longer active or resident or, alternatively, we might underestimate the impact of current action on future developments.

There are other reasons why we do not, and possibly cannot, know how the various dimensions precisely interact with each other to deliver particular outcomes. For example, many of the *positive* attributes listed in Figure 1 can be a major source of conflict if major players pull in many different directions and attempt to force their views on others. Avoidance of such conflict is likely to be inimical to effective regional development unless averted by the cultivation of the positive behaviours leading to smooth inter-personal relations. Few regional analysts or practitioners have considered how best to do that, suggesting an important research agenda looking at the links between leaders' psychological attributes, how they relate to each other, and development outcomes. There is a second research agenda seeking to identify the behavioural attributes most likely to contribute to beneficial regional outcomes and under what circumstances.

We confront, then, the problem that the constellation of community behaviours is likely to be a crucial ingredient in local development, but difficult to describe and analyse. Add that to all the uncertainties of:

- fast moving local economies driven by the largely uncontrollable processes of the enlightenment agenda noted earlier, and
- large interregional differences in problems confronted,

and we have a truly *wicked problem* (Rittel and Webber, 1973) or even a superwicked problem Lazarus (2009). The situation may be even worse: what Horn and Weber (2007) call a *social mess*. We might even be close to the fraught world of quantum mechanics in which objects may take two forms simultaneously (as waves or particles), which cannot simultaneously be positioned in time and space (Heisenberg's uncertainties), and thereby leading to such bizarre possibilities as Schrödinger's cat which was simultaneously alive and dead. The quantum mechanics allusion is probably not far-fetched because a glimpse at Table 2 shows the fearful dimensions of (super) wicked problems and social messes. They share a lot in common.

5. TOWARDS POLICY AGENDAS?

The author is unaware of any government globally appointing a chief psychologist to advise on policy matters, but the field of regional development policy might benefit from such a move. Over the last 20 years, many Australian governments have implemented leadership programs, often designed to lift participants' levels of confidence in tackling complex and rapidly moving problems. However, their collective effectiveness is unknown. Leadership and entrepreneurship are important components of all of the four behavioural dimensions previously identified: future orientation, action preference, knowledge base (how to be a leader), and inter-personal relationships. However, they do go anywhere near far enough in shaping the optimal regional development practitioner whose CV would approximate Superman's (or Nietzsche's Übermensch). Since it is difficult enough to mould the quality of leaders through public action, it seems preposterous to tackle all the other

behaviours via public policy dedicated to the task, especially as we know little of how they operate and interact, or their relative importance.

Table 2: Composition of Wicked Problems

A R	tittel and Webber's (1973) Original Formulation	ВН	orn's Guide to Social Messes [1]
1	There is no definitive formulation of a wicked problem.	1	No unique "correct" view of the problem.
2	Wicked problems have no stopping rule.	2	Different views of the problem and contradictory solutions
3	Solutions to wicked problems are not true-or-false, but	3	Most problems are connected to other problems.
4	There is no immediate and no ultimate test of a solution to a wicked problem.	4	Data are often uncertain or missing.
5	Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly.	5	Multiple value conflicts.
6	Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.	6	Ideological and cultural constraints.
7	Every wicked problem is essentially unique.	7	Political constraints.
8	Every wicked problem can be considered to be a symptom of another problem.	8	Economic constraints.
9	The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution.	9	Often a-logical or illogical or multi-valued thinking.
10	The planner has no right to be wrong (planners are liable for the consequences of the actions they generate).	10	Numerous possible intervention points.
C Lazarus (2009) Super-Wicked Extensions		11	Consequences difficult to imagine.
11	Time is running out.	12	Considerable uncertainty; ambiguity.
12	No central authority.	13	Great resistance to change and,
13	Those seeking to solve the problem are also causing it.	14	Problem solver(s) out of contact with the problems and potential solutions.

[1] See http://en.wikipedia.org/wiki/Wicked_problem, accessed 27 August 2009

None of this argument should be taken to mean that we should eschew behavioural – laden public policy. In fact, such policy has been steadily brewing for at least the last 600 years, taking together the Renaissance and the Enlightenment. From its simultaneous emergence in 17th century London and Amsterdam, capitalism and the market economy have flourished globally, while undergoing perpetual refinement of their regulatory environment. Governments established the rule of law and the separation of powers, which became enshrined in the American Constitution of 1776 and in all developed nations thereafter. Democracy and the supremacy of Parliament was accelerated by the English Civil War of 1642-48. We have refined the technologies of government from Machiavelli (1469 – 1527), through Hobbes (1588 – 1679) and Locke (1632 – 1704), and to Smith and Foucault. Science and its methodology were likewise refined and expanded relentlessly from Leonardo da Vinci (1452 – 1519) and Galileo (1564 – 1642), through Newton and Einstein to the current day.

These strands, and many more, are complexly interwoven and mutually complementary. They were also piecemeal, in the sense of there being no grand design, and often in the hands of a few extraordinary leaders in their fields. They

were also led to accelerating circular and cumulative action in which each new idea or behaviour opened up further opportunity or created problems, both leading to further inquiry and action. In fact, much of the infrastructure of modern societies is highly tuned to foment innovation on the one hand and adaptation by affected communities on the other. Innovation begets adaptation, which in turn begets innovation in a perpetual spiral of action and response. This leads to the observation that the entire apparatus of the modern state is, in effect, an unintended regional policy designed to elicit optimal patterns of innovation and adaptation feeding off each other nationally. Diversity of regional conditions and potential resources simply ensures that spatial patterns of innovation and adaptation will themselves vary substantially. These patterns are, in turn, probably greatly influenced by regional behaviour systems, but those behaviours are beneficially shaped by all the 13 components of the enlightenment agenda.

This raises further interesting themes. The so-called wicked problems and social messes are only so if governments like to control issues that are inherently complex and fragmented and whose causal processes are significantly outside government knowledge and control. In practice, we can regard the current economic and social systems as *fit for purpose* where innovation and adaptation are the goals – as indeed they have been for the duration of the enlightenment. Thus policies and philosophies of maximum decentralisation and deregulation take central stage, with regulation primarily aimed at avoiding (a) market failure, (b) destabilising boom – bust cycles, (c) fraud, and (d) the rape of scarce resources. Regional development, it seems, is simultaneously one of the most decentralised of explicit public tasks, yet implicit in most of governments' activities focusing on innovation and adaptation. They include:

- promoting life-long education and new knowledge through research and development,
- protecting the value of intellectual property while also speeding up the diffusion of new knowledge,
- exposing most industries to the harsh discipline of unfettered global competition,
- establishing the rule of law (including greater public access to legal redress)
- nation-wide freedom of the press and information distribution,
- means-tested social security allied to a preference (on the part of both government and the governed) that most citizens should have the freedom and personal responsibility to live their lives as they wish, and
- the development of a strong array of arms length social and advisory institutions.

Australia is well-placed amidst its global competitors in these respects, coming in third behind Hong Kong and Singapore out of 179 countries in the Heritage Foundation's 2009 Index of Economic Freedom¹. In short, we have given up on the central manipulation of regional futures for the much more satisfying and productive role of facilitating regional communities to better

¹ http://www.heritage.org/index/Ranking.aspx

adapt, faster and more purposefully, to whatever opportunities are on offer, and avoid looming economic problems in the process. Such adaptability depends on many of the behaviours listed in the left column of Figure 1, each of which is likely to be enhanced by the freedoms bestowed by each of the above dot points. Beneficial behaviours are not themselves to focus of explicit policy, but they are moulded indirectly in the pursuit of other ends.

In conclusion, we have flagged elements of a research agenda linking a raft of individual behaviours to the efficiency and effectiveness of local economic development. Such work would have intrinsic interest and could possibly be useful in the sense that it would illustrate for regional development actors what behaviours appear to be linked strongly with improved local wealth and quality of life. Such information might be much less useful for central governments already working to enhance innovation and adaptation at a macro-scale. That said, regional development is still an issue of national political significance and there seems little prospect of it falling off any time soon. It has waxed and waned over the last 50 years, but never evaporated. So it is likely that parties of all political persuasions will want to shovel some funds to the regions. These have primarily psychological intentions, but mainly directed at creating the impression out in the regions that government cares about their fates and wants to help. It is possible that the very small outlays allocated for this purpose could leverage other investment and generate sentiment favouring on-going change and adaptive responses. It seems unlikely, however, that we will be able to measure such outcomes.

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