Experimentation and Regulation

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3.1 Introduction

The idea that 'experimentation' might play a valuable role in regulation has been traditionally associated with the work of John Dewey. As with other philosophical pragmatists, Dewey thought that in industry and policy making, our basic understandings of theories, strategies, or ideals of justice "are transformed in the light of the experience of their pursuit", and that, in turn, these changes frequently redefine our views about what are the best means to achieve our objectives. In the specific context of regulation, this is an approach that would not see the unintended consequences of particular regulatory decisions as a problem, but as providing us with the opportunity of identifying the proper regulatory framework for achieving the desired goals (even if what now looks as the 'proper' set of regulations might in the future prove comparatively inadequate, and even if, in light of further experience, the goals are modified). Democracy occupies a central place in Dewey's conception, as it is seen as providing citizens with the opportunity to reflect "on the connection of means and ends in social activity". So understood, democracy is not only a form of government, but a deliberative process aimed at solving problems of public interest.³

This deliberative process involves experimentation, as it requires participants to consider "proposed solutions to problems in imagination, trying to foresee the consequences of implementing them, including our favorable or unfavorable reactions to them". 4 These solutions are then translated into policies and unfavourable results. That is, results that do not

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Michael C Dorf & Charles F Sabel "A Constitution of Democratic Experimentalism" (1998) 98 Columbia Law Review 267 at 284-285.

Michael C Dorf & Charles F Sabel "A Constitution of Democratic Experimentalism", above n 1 at 286.

Mark Bennett and Joel I Colón-Ríos "Public Participation in New Zealand's Regulatory Process" in Susy Frankel and Deborah Ryder (eds) Recalibrating Behaviour: Smarter Regulation in a Global World (LexisNexis, Wellington, 2013) 181.

⁴ Elizabeth Anderson "The Epistemology of Democracy" (2006) 3(1-2) Episteme: A Journal of Social Epistemology 13. "Policies and proposals for social action [should] be treated as working hypothesis, not as programs to be rigidly adhered to and executed. They will be experimental in the sense that they will be entertained subject to constant and well-equipped observation of the consequences they entail when acted upon, and subject to ready and flexible revision in light of observed consequences". John Dewey The Public and its Problems (Henry Holt, New York, 1927) at 202-203.

solve the problem for which the policy was adopted or that create new problems are then to be "treated in a scientific spirit as disconfirmation of our policies" and as evidence that there are reasons to reconsider them. ⁵ This approach operates under the premise, shared by many contemporary scholars, that there is "real uncertainty and contingency" in the world, that "no one person or organisation has sufficient information or resources to understand and solve" complex problems, so that policies should be subject to continuous revision (as a result of the evaluation of the evidence we obtain once they are put into practice). However, Dewey insisted that experimentation was not about blind trial and error, but that it was to be guided by what he called intentional anticipation. ⁸ He saw the 'experimental method' as a trial of ideas, such that even when unsuccessful, experimentation is seen as a fruitful process "for we learn from our failures when our endeavors are seriously thoughtful". ¹⁰

Following Dewey, Sabel and Simon have argued in favour of a 'democratic experimentalism' according to which central (e.g. national governments) and local (e.g. regions or districts) units collaborate in the setting and revision of means and goals. For these authors, this should be done through an iterative process driven by four basic elements:

- a) Framework goals and provisional measures for determining achievement are established authoritatively as a result of consultation among centre and local units (and other relevant stakeholders);
- b) local units are given broad discretion¹² to pursue these ends through the means they consider appropriate;
- c) local units report regularly on their performance and participate in processes that compare their results with those of other units employing different means; and
- d) framework goals, performance measures and decision-making procedures are subject to periodic revisions (and the above cycle repeats). 13

⁶ John Dewey "Philosophy and Democracy" in Debra Morris and Ian Shapiro (eds) *John Dewey, The Political Writings* (Hackett, Indianapolis, 1993) 44.

⁵ Elizabeth Anderson "The Epistemology of Democracy", above n 4.

⁷ Elizabeth Eppel, David Turner, and Amanda Wolf "Experimentation and Learning in Policy Implementation: Implications for Public Management" (*Institute of Policy Studies* Working Paper 11/04, 2011).

⁸ R.W Clopton and TC Ou (eds) *John Dewey Lectures in China 1919-1920* (Honolulu University Press of Hawaii, 1973) at 248.

⁹ For Dewey, an idea "is first of all an anticipation of something that may happen". John Dewey *Logic: The Theory of Inquiry* (Holt, Rinehart and Winston, New York,1938) at 109.

¹⁰ John Dewey *Democracy and Education* (Free Press, 1997) at ch 25.

¹¹ Charles F Sabel & William H Simon, "Minimalism and Experimentalism in the Administrative State" (Columbia Public Law & Legal Theory Working Papers: Paper 9187, 2010) at 27.

¹² For further discussion on discretion and regulation see, Daniel Kalderimis, Chris Nixon and Tim Smith "Certainty and Discretion in New Zealand Regulation" in this volume.

Under Sabel and Simon's approach, regulatory regimes are seen as provisional and experimental, as working hypothesis susceptible to "flexible revision in light of observed consequences". 14

In China, where Dewey's ideas have been influential¹⁵, a system of decentralised experimentation has historically played an important role in policy making. Under that system, government officials encourage local authorities to "try out new ways of problem solving and then feed the local experiences back into national policy formulation". 16 This system. identified as 'experimental point' work by Chinese policy makers in the 1940s, was seen as having the advantages of preventing the "blind' implementation of unfamiliar policies, giving cadres an opportunity to learn and overcome old habits by trying out new solutions on a small scale first", getting public support "for new policies through active participation in local experiments; and saving resources, manpower and time in carrying out new policies". The idea, as discussed above, is to engage in a continual search for generalisable solutions to issues of public interest, and to do so through local experiments with the results being communicated to national policy makers so that these solutions may eventually be integrated into national regulations.

From this brief introduction to the idea of experimentation, three main issues emerge. First, there seems to be a close relationship between experimentation and learning: the purpose of the experimental method seems to be, at least partly, to learn from past policy mistakes and to identify superior solutions to old problems. However, it is necessary to consider whether experimentation and learning should be understood as two sides of the same coin, or if there are meaningful distinctions to be made between these concepts in the context of regulation. Second, there is the question of the 'limits' of experimentation. That is to say, in a particular regulatory context, there may be strong incentives to maintain current policies, and experimentation might be seen as being accompanied by important costs, disadvantages, and risks. Nevertheless, the local and small scale character of experimentation might allow us to appreciate the potential benefits of certain policies without having to assume the actual costs of testing them at a national level, therefore facilitating change. Finally, we need to consider the desirability of an experimental approach in

¹³ Daniel Kalderimis, Chris Nixon and Tim Smith "Certainty and Discretion in New Zealand Regulation", in this volume.

¹⁴ John Dewey *The Public and its Problems* (Henry Holt, New York, 1927) at 203.

¹⁵ During 1919 and 1920, Dewey gave a set of lectures on philosophical pragmatism at major Chinese cities and universities, which influenced many political intellectuals and activists, including the young Mao Zedong. For a discussion, see Sebastian Heilmann, "From Local Experiments to National Policy: The Origins of China's Distinctive Policy Process" (2008) 59 The China Journal 1.

¹⁶ Sebastian Heilmann, "From Local Experiments to National Policy: The Origins of China's Distinctive Policy Process", above n 15 at 1.

¹⁷ Sebastian Heilmann, "From Local Experiments to National Policy: The Origins of China's Distinctive Policy Process", above n 15 at 11.

New Zealand. Accordingly, the final section of the paper will propose a framework that policy makers can use to determine whether experimentation is a viable option in the context of a particular policy initiative.

3.2 Experimentation and Learning

For Dewey and his followers, experimentation and learning are closely connected: 18

There can be no true knowledge without doing, it is only doing that enables us to revise our outlook, to organize our facts in a systematic way, and to discover new facts.

In the context of industry, the Toyota Production System is sometimes presented to exemplify the connections between experimentation and learning. Under this system, the production process is approached as an experiment providing opportunities for continuous improvements. 19 Pre-Toyota, there were two main approaches to problems in mass manufacturing processes. The first one was for workers to ignore problems in the production lines and leave their solutions to specialized rework departments. The second one was to allow workers to make small adjustments in order to ameliorate the effects of the problem without impeding production flow. These approaches were aimed at allowing the production process to work according to established rules without any interruptions. Once the relevant department learnt about the problem and understood its causes, it would revise the existing procedures in order to avoid the problem in the future. The Toyota approach, in contrast, attempts to treat every problem as an opportunity to revise the entire system:

In a classic Toyota-style plant, there are no re-work departments, and workers are told not to make ad hoc adjustments in response to the problems. Instead, workers should stop the production process and trigger a group effort to diagnose and remedy the problem. When the dirty fender or the defective part appears, the worker pulls the "andon" (lantern) cord that hangs from an overhead fixture. The line stops and a light display shows everyone in the plant where the problem is. A team of workers and supervisors who are likely to have relevant knowledge is quickly assembled, diagnoses the problem, and formulates a remedy. The rules get rewritten immediately. Problems are learning opportunities because they signal that the system is not as well designed as it could be. Waiting to let some specialized department figure out and remedy the problem means delay and risks loss of information. It also means that rank-and-file workers will not have the learning experience of participating in the solutions. A learning opportunity is at least potentially a good thing. Thus, the Toyota system is designed in some respects to increase and enlarge problems.

According to Simon, if we think about our traditional regulatory framework in light of this approach, we discover that they look very much

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¹⁸ RW Clopton and TC Ou (eds) *John Dewey Lectures in China 1919*-1920, above n 8 at 247.

¹⁹ The following account follows William H. Simon "The Institutional Configuration of Deweyan Democracy" (Colombia Law School Public Law & Legal Theory Working Paper Group: Paper 11-286, 2011) at 19.

William H Simon "The Institutional Configuration of Deweyan Democracy", above n 19 at 20-21.

like pre-Toyota manufacturing. In the traditional approach to regulation, there is no 'learning-through-monitoring' or a continuous revision of rules. We have, he writes:

hierarchical rule-bound bureaucracies that engage in routine production of, say, education, health-and-safety regulation, or crime control. Then we deal with problems either by giving officials ad hoc discretion or by allowing aggrieved citizens to go to a parallel system of error-correction and re-work –courts.²¹

Such an approach does not promote learning, as it involves late responses to problems and therefore important losses of information, and it does not allow participants to actively engage in the search of possible solutions. In that respect, learning is an important part of the reason for experimentation. Nevertheless, although closely connected, learning and experimentation can be distinguished, and this distinction is important in the context of regulation.

The main difference lies in the fact that learning can happen regardless of the intention of a regulator, while experimentation is a deliberative activity. In New Zealand's regulatory context, for example, learning might happen even in the absence of a conscious attempt to experiment: we may learn as a result of a Law Commission Report, a court's decision, a Regulatory Impact Analysis, or as a result of the very experience of government departments in dealing with a particular regulatory framework. Because the actual effectiveness or result of a particular regulatory regime cannot be known until it is put into practice, some learning is an inevitable result of regulation (albeit such learning may not be promoted by the particular regulatory regime, or be particularly effective in terms of regulatory improvement). This is why for some authors regulation is always experimentation: "It would be better to reflect the reality that for the most part regulatory regimes are experiments: in other words, when a new regime is put in place we do not know in advance precisely how it will work in practice". 22 This does not mean, however, that there exist proper mechanisms to increase learning in the face of regulation's 'experimental' character. For example, Mumford argues that once we see all regulation as experimental, "constant monitoring and evaluation over time are critical", and that an important "aim is to improve regulatory regimes through a process of continuous improvement". 23

In his paper on regulatory management in New Zealand, Derek Gill shows that, when regulation is seen as a process of experimentation and learning (as a result of the realisation that the effects of all regulation are uncertain)

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²¹ William H Simon "The Institutional Configuration of Deweyan Democracy", above n 20 at 22.

²² Peter Mumford "Best Practice Regulation: Setting Targets and Detecting Vulnerabilities" (2011) 7(3) Policy Quarterly 36. See also Elizabeth Eppel, David Turner, and Amanda Wolf "Experimentation and Learning in Policy Implementation: Implications for Public Management", above n 7.

Peter Mumford "Best Practice Regulation: Setting Targets and Detecting Vulnerabilities", above n 22 at 37.

it is necessary to develop mechanisms of reporting "to enable learning". 24 For Gill, this involves "monitoring and managing the stock of existing regulations rather than screening the flow of new regulations", the ability to learn from failures, and the flexibility to reverse bad regulations. 25 Under this approach, evaluation becomes an essential part of a successful regulatory regime. This is why Michael Greenstone, writing in a U.S. context, has made "a call to move toward a culture of persistent regulatory experimentation and evaluation", in which the "goal should be to rigorously evaluate every regulation in order to expand upon the ones that work and weed out the ones that fail to improve our well-being (or worse, harm it)". 26 The point to stress from these approaches is that, when the focus is on learning (and the experimental character attributed to regulation emerges precisely from the learning opportunities that all regulation creates), the emphasis is on evaluation, feedback mechanisms, and improved systems of regulatory management. These mechanisms are also important in the context of conscious experimentation, but they are just part of the experimental approach.

Experimentation, as noted above, is best understood as a planned activity. It does not refer only to the idea that all regulation is experimental in the sense that its results are unknown, and therefore that regulation will always involve learning and opportunities for continuous improvement. Experimentation will always result in learning, but its defining characteristic is the conscious adoption of 'provisional' regulatory regimes that will provide us with new evidence and with opportunities to reconsider and revise existing policies. In a certain way, experimentation may be seen as a subset of learning: it is a form of maximising learning opportunities through the open recognition that we lack the ability to fully predict regulatory outcomes. Even if deliberate, however, experimentation can take a number of forms. For example, most of the time it would take the form of small scale regulatory experiments in which policies are tried out in particular localities and those that prove successful are translated into regional or national initiatives.

A variant of this would be a flexible regulatory system that allows different political units to experiment with various regulatory frameworks and then engages in a comparative assessment about the advantages and disadvantages of each with the purpose of reconsidering old rules. In the

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²⁴ Derek Gill "Applying the Logic of Regulatory Management to Regulatory Management in New Zealand" in Susy Frankel and Deborah Ryder (eds) *Recalibrating Behaviour: Smarter Regulation in a Global World* (LexisNexis, 2013) 559. See also Derek Gill "Regulatory Management in New Zealand: What, Why and How?" in Susy Frankel (ed) *Learning from the Past Adapting to the Future: Regulatory Reform in New Zealand* (LexisNexis, 2011) 173.

²⁵ Derek Gill "Regulatory Management in New Zealand: What is to be Done?" in Susy Frankel and Deborah Ryder (eds) *Recalibrating Behaviour: Smarter Regulation in a Global World* (LexisNexis, 2013) 559.

²⁶ Michael Greenstone "Toward a Culture of Persistent Regulatory Experimentation and Evaluation" in David A Moss and John A Cisternino (eds) *New Perspectives on Regulation* (The Tobin Project, 2009) 111.

context of US federalism, this view is reflected in Justice Louis Brandeis' dissenting opinion in *New State Ice Co. v. Liebmann*:²⁷

It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.

Experimentation may also involve making small changes to existing regulatory regimes to assess effects, or the intentional adoption of open textured legislation, with the purpose of using judicial interpretation as a means to allow the regulation to adapt to new and unanticipated situations.²⁸

3.3 The Limits of Experimentation

Now that we have identified some differences between experimentation and learning, as well as examined how experimentation might work in the context of regulation, the question becomes whether we should move beyond the attempt to create mechanisms that increase the learning opportunities that regulation always involve, and engage in planned regulatory experiments. This question is important because experimentation might come accompanied by certain risks or limits that make may it unacceptable in particular contexts or difficult to put into practice. This is why James Zuccollo and Mike Hensen state that in the context of experimentation, one issue for the regulator is: ²⁹

... how to ensure that participants recognise the asymmetry of information between the 'control' and the 'trial' and make an informed decision about the level of uncertainty or risk they are accepting. The regulator will need to determine in advance what if any losses incurred by the trial group will be socialised and over what group these risks will be socialised.

²⁷ New State Ice Co. v Liebmann 285 U.S. 262 (1932).

²⁸ See Rayner Thwaites and Dean Knight "Administrative Law through a Regulatory Lens: Situating Judicial Adjudication within a Wider Accountability Framework" in Susy Frankel and Deborah Ryder (eds) Recalibrating Behaviour: Smarter Regulation in a Global World (LexisNexis, 2013) 529. An example of this type of experimentation is provided by U.S. competition law. Sections 1 and 2 of the Sherman Act are sparse. As the United States Supreme Court noted in National Society of Professional Engineers v United States 435 US 679 (1978) Congress "expected the courts to give shape to the statutes mandate by drawing on the common law tradition" to further the statutory goals. Some sections of the Commerce Act 1986, notably s 36, have similar broad wording. This appears to leave it to the courts to fashion tests. New Zealand's Supreme Court cited the Privy Council in Telecom Corporation of New Zealand Ltd v Clear Communications Ltd [1995] 1 NZLR 385 (PC): "In Telecom v Clear the Privy Council observed that the words of s36 provided no explanation as to the distinction between conduct which does, and conduct which does not, constitute use of a dominant position." Despite this apparent invitation to leave it to the courts to fashion tests and adapt those tests to new and unanticipated situations, Parliament has intervened to amend the statute in response to judicial interpretation.

²⁹ Mike Hensen and James Zuccollo "Weathertight Buildings: What Lessons Can Be Drawn From a Complicated and Evolving Situation?" in Susy Frankel and Deborah Ryder (eds) *Recalibrating Behaviour: Smarter Regulation in a Global World* (LexisNexis, 2013) 449.

An example of the risks of experimentation is provided by the 'randomized controlled experiment' in the United States and other countries. These experiments were driven by the 'social experimentation' approach advanced by authors such as Donald T. Campbell, according to which the 'logic of the laboratory' should be extended to society. Under Campbell's view, modern societies were to adopt "an experimental approach to social reform, an approach in which we try out new programs to cure specific social problems". An experimental approach of this type would see human beings as the actual objects of experimentation, and test their response to different rules and policies. For example, in the 1920s an experiment of this sort took place in Chicago. The experiment had the purpose of determining the effect of different attempts to increase voter participation. A representative sample of six thousand Chicago citizens was chosen from different electoral districts, and in each district random and control groups were created.

The experimental groups received information on voting procedures in their own language and written calls to vote. After the experiment, social scientists concluded that the information and calls to vote had made a difference. Similarly, in the 1960s, as part of the War on Poverty, experiments were organised to determine whether financial aid resulted in people losing motivation to work. Here, a sample of 1,500 poor families was divided into a control group that did not receive a governmental allowance, and a number of experimental groups that received different amounts of financial aid. These experiments were particularly costly (the total cost of ten experiments was \$1.1 billion). A more recent example of a randomised controlled experiment is a project in The Netherlands in which heroin addicts were supplied with free heroin and then compared with a control group that was only given methadone.

It is easy to see that some of these experiments may be considered unethical, politically unacceptable, or inconsistent with human rights. As

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³⁰ Donald T Campbell "Reforms as Experiments" (1969) 24 American Psychologist 409; Donald T Campbell "The Social Scientist as Methodological Servant of the Experimenting Society" (1973) 2 Policy Studies Journal 72. For a discussion, see Trudy Dehue "Establishing the Experimenting Society: The Historical Origin of Social Experimentation According to the Randomized Controlled Design" (2001) 114(2) American Journal of Psychology 283.

³¹ Donald T Campbell "Reforms as Experiments", above n 30.

³² Trudy Dehue "Establishing the Experimenting Society: The Historical Origin of Social Experimentation According to the Randomized Controlled Design", above n 30 at 292.

Trudy Dehue "Establishing the Experimenting Society: The Historical Origin of Social Experimentation According to the Randomized Controlled Design", above n 30 at 295.

³⁴ Trudy Dehue "Establishing the Experimenting Society: The Historical Origin of Social Experimentation According to the Randomized Controlled Design", above n 30 at 295-296. There are also recent proposals for randomised control trials in the context of the 'fight against poverty'. See for example, Abhijit Banerjee & Esther Dufflo *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty* (Public Affairs, 2012); Dean Karlan & Jacob Appel *More Than Good Intentions: How To A New Economics if Helping to Solve Global Poverty* (Dutton Adult, 2011).

early as 1852, for example, C. G. Lewis wrote that experimentation was not to be used with humans, as this would involve "destroying his life, or wounding his sensibility, or at least subjecting him to annoyance and restraint". 35 Experiments of the type described above may subject people to policies that, when looked at from a non-experimental perspective, do not seem beneficial or are seen as potentially harmful (or that deprive control groups of the benefits of policies which, when looked from a nonexperimental perspective, clearly appear to be more beneficial than the status quo). 36 This might be particularly relevant in areas such as food safety, hazardous substances, and policies involving children (such as regulations involving schools) and other vulnerable populations. In addition to this type of limit, which emerges from the nature of the regulation at issue and not from the practice of experimentation itself, there might also be limits of a 'systemic' or 'economic' character. It could be argued, for example, that even if it might be a good idea in practice, the very possibility of experimentation is compromised by path dependence.³⁷

This idea was indirectly reflected in a 2011 report by the British Institute for Government, where it was stated that: ³⁸

There are powerful forces acting in the favour of existing policies -bureaucracies have a tendency to inertia and continuity...In terms of policies, longevity breeds legitimacy; the result can be that a policy becomes 'its own cause'.

The previously mentioned report goes on to identify other factors that might privilege old policies and run counter to the possibility of an experimental approach, such as the fact that evaluations of current regulations, when commissioned, are often ignored and, as a result, an environment of innovation and experimentation is unlikely to be created. Not surprisingly, the report notes that there is "a widespread perception amongst policy makers that the policy process does not put enough

According to the Randomized Controlled Design", above n 30 at 286.

"Establishing the Experimenting Society: The Historical Origin of Social Experimentation

³⁵ CG Lewis A Treatise on the Methods of Observation and Reasoning in Politics (Arno, New York, 1974, originally published in 1852) at 161. Cited in Trudy Dehue,

³⁶ An alternative to randomised experiments are 'quasi experiments' in which "the assignment of individual subjects to the treatment or control group is determined by nature, politics, an accident, or other factor". Michael Greenstone, "Toward a Culture of Persistent Regulatory Experimentation and Evaluation", above n 26 at 117. Greenstone argues that "the most ethical assignment rule is to assign the regulations randomly, because this approach is transparent and free of political considerations. Further, in most cases a regulation's benefits are truly unknown in advance and would remain so without credible evaluation. Thus, the experiences of the few in the control and treatment groups can be used to benefit society as a whole".

³⁷ For a discussion, see Paul A David "Path Dependence, its Critics, and the Quest for 'Historical Economics" (Keynote Address to the European Association for Evolutionary Political Economy, November 1997).

Michael Hallsworth (with Simon Parker and Jill Rutter) "Policy Making in the Real World: Evidence and Analysis" (Institute for Government (UK), April 2011).

emphasis on learning lessons from experience". At the same time, even in the face of a conscious attempt to engage in experimentation, government departments might have incentives to tone down unfavourable findings, such as the political costs associated with the possibility that the media treats every error that is revealed in a negative fashion. Moreover, there is always the possibility that experimentation will be used politically, and the experimental policies (unwanted by the government of the day) are consciously designed in a way that guarantees their failure.

Nevertheless, it is interesting to note that experimentation in policy-making was seen by some of its early proponents as a solution to path dependent processes. For example, scholars writing in mid-20th century China argued that one of the main advantages of the experimental approach was that it provided an "opportunity to learn and overcome old habits by trying out new solutions on a small scale first". 41 Similarly, one of the reasons Dewey thought that democratic experimentalism was the "politics best suited to effective problem solving", was that "democracy was least tolerant of the kind of ossification of belief that he saw as the most basic problem of social order". 43 In this respect, it might be that part of the value of experimentation is that it provides a way to avoid regulatory stagnation and an opportunity to deal with some of the systemic limits to innovation in policy making. In a similar way, while the risk of 'politicisation' mentioned above will always be present (as it will be present in any approach to regulation), the experimental approach may allow governments to try out innovative policies in local settings, policies which, for political reasons, they would not be prepared to adopt nationally. The next two sections will consider examples of experimentation in New Zealand, and attempt to provide an answer to the question of which specific regulatory situations are suitable for experimentation.

3.4 Experimentation in New Zealand

What policy characteristics make an experimental approach necessary or desirable? A possible answer is that experimentation is particularly appropriate in the context of a persistent social problem in which other (not consciously experimental) approaches have failed to uncover levers that may deliver a beneficial policy result. One 'hard to get at area' is smoking (particularly maternal smoking and uptake by teenagers). As with social issues in general, in the context of the regulation of smoking, policy makers

⁴⁰ Michael Hallsworth (with Simon Parker and Jill Rutter) "Policy Making in the Real World: Evidence and Analysis", above n 38 at 53.

³⁹ Michael Hallsworth (with Simon Parker and Jill Rutter) "Policy Making in the Real World: Evidence and Analysis", above n 38 at 47.

⁴¹ Sebastian Heilmann, "From Local Experiments to National Policy: The Origins of China's Distinctive Policy Process", above n 15 at 11.

⁴² William H Simon "The Institutional Configuration of Deweyan Democracy", above n 19 at 6.

⁴³ William H Simon "The Institutional Configuration of Deweyan Democracy", above n 19 at 6.

need to understand the policy mechanisms/approaches that might be successful in working with groups that are vulnerable to smoking uptake. This lends itself to experimentation in the development of policy levers. As an example, Wolfson sets out an approach that can be adapted to examine the impact of smoking interventions. ⁴⁴ Using economic tools, effectiveness of policy interventions can be gauged for various groups within society (by levels of family income and type of family) and various approaches ranked. Of course, where experimentation ends, and learning begins, is not always clear. As Hill suggests, all scientific experimentation work is incomplete, and thus one might expect further developments of methodology. What methods are used depends on the current state of knowledge. ⁴⁵

As suggested earlier, although distinct, there is a close relationship between learning and experimentation. In particular, both learning and experimentation depend on reliable evaluation and feedback mechanisms. The distinction between experimentation and learning, however, blurs in the context of a regulatory system that has successfully established these mechanisms; a system that has put in place institutions and processes to revise regulation in light of new evidence obtained through experience. That is to say, when sufficient evaluation and feedback mechanisms are available, all regulation becomes, to a certain extent, a form of conscious experimentation, since it is assumed that it will be subject to assessment and potential revision. Instead of making experimentation less relevant, this allows us to see that, while involving risks and limits, experimentation, after all, is not a particularly drastic or radical approach to regulation. In fact, as briefly outlined below, there are several regulatory regimes in New Zealand that involve different degrees of conscious experimentation.

One example is found in the Ministry of Justice's pilot projects⁴⁶ on court procedures. These projects have been active around New Zealand for many years, and continue to be. They usually involve the implementation of a particular solution to a procedural problem in a handful of courts. The proposed solution is then evaluated in terms of its success, areas of improvement are identified and, where appropriate, the solution is implemented at a national level. An example of this is provided by *Family Court Pilot Projects*, which culminated in the formal implementation of the Early Intervention Process (EIP) in April 2010 - a case management system for more efficiently managing cases involving children. The EIP has been described by the Principal Family Court Judge, Judge Peter Boshier, as

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⁴⁴ Michael C Wolfson "On Causal Decomposition of Summary Measures of Population Health" in C Murray, J. Salomon, C. Mathers and A. Lopez (eds) *Summary Measures of Population Health: Concepts, Ethics, Measurement and Applications* (World Health Organisation, Geneva, 2002).

⁴⁵ B Hill "The Environment of Disease: Association or Causation?" (1965) 58 Proceedings of the Royal Society of Medicine 295.

⁴⁶ Other Ministry of Justice pilot projects include: the Family Safety Teams Pilot Programme, Te Hurihanga, NZ Court-Referred Restorative Justice Pilot Public Defence Service Pilot, Criminal List Pilot, Christchurch Youth Drug Court Pilot.

"one of the most significant reforms in family law since the inception of the court as a specialist jurisdiction..." ⁴⁷

All of the *Family Court Pilot Projects* shared the following notable characteristics. First, the pilots were experiments within the scope of their particular terms of reference, but also as against each other. In developing the EIP, the effectiveness (or otherwise) of one pilot in a particular respect was, where appropriate, measured against the effectiveness of another pilot in that same respect. Second, the pilots were necessarily a result of 'judicial initiative', given the failure for various statutory initiatives to be implemented. In third, extensive evaluations were undertaken of each pilot (in particular of Non-Judge Led Mediation and PHP), including interviews, surveys of key stakeholders and statistical analyses.

A different example is provided by the pilot Drug Court for adult offenders in Auckland. This pilot follows a recommendation by the Law Commission in its 2011 report, Controlling and regulating drugs: A review of the Misuse of Drugs Act 1975. The pilot Drug Court was launched in the Auckland and Waitakere District Courts in November 2012, and will be evaluated after four years to assess its impact on offenders' rates of reoffending and alcohol and other drug use. The Minister of Justice and Minister for Courts will report back to the Cabinet Social Policy Committee on the effectiveness of the pilot, and whether it should be implemented nationally, by 31 December 2016. These pilot projects provide good examples of the type of experimentation discussed in earlier sections of this paper: they are small scale, they occur in a context in which policy makers or officials have realised that the traditional policy making approach has not been able to provide a solution to the relevant problem, and they come accompanied with feedback and evaluation mechanisms directed at assessing the effectiveness of the experimental rules with the purpose of determining whether they should be more widely implemented.

The 'Rulemaking' model of regulation, adopted in the Civil Aviation sector as a result of a Select Committee inquiry into Civil Aviation regulation, may also be seen as involving a degree of experimentation. Since its adoption, this model has been deployed across all transportation sectors. This Rulemaking model categorises issues, and proffers solutions, ultimately to be adopted after, and taking into account, stakeholder input. Similar to the Rulemaking approach adopted in the transport sector is the power of Councils under the *Resource Management Act* to notify proposed

⁴⁷ Peter Boshier, Principal Family Court Judge "Why the Family Court Needs an Early Intervention Process" (Child and Youth Law Conference 2010, The Rydges, Auckland, 22 April 2010).

⁴⁸ See Catriona MacLennan "National Early Intervention Programme – Family Court" (date unknown) AMINZ (with permission from ADLS Inc) <www.aminz.org.nz>; Peter Boshier, Principal Family Court Judge "Why the Family Court Needs an Early Intervention Process", above n 47.

⁴⁹ Peter Boshier, Principal Family Court Judge "Why the Family Court Needs an Early Intervention Process", above n 47.

plans, which largely take regulatory effect from that point on. These plans are generally subject to modification resulting from subsequent public participation processes. ⁵⁰ Both the transport and resource management examples could be seen as examples of conscious experimentation in the sense that regulation is tested through the assessment of the public reaction to it, and procedures are in place to allow revisions in light of public input.

These examples show that even if, to some extent, all regulation in New Zealand may be seen as 'experimental' (given the unstated assumption that the actual effectiveness of a policy will not be known until it is implemented, at which point it might be concluded that a regulatory change is necessary), there is a certain degree of experimentation in the country's regulatory environment. At the same time, they show that there is scope for experimentation even in relatively small jurisdictions such as New Zealand. The question is whether this experimental approach -already present to a limited extent- should be seen as an exceptional way to develop policy solutions to social problems, or whether it should be used more widely. If the answer is that the use of the experimental method should be extended to other contexts, then the question is what sort of criteria policy makers should take into account when deciding whether to engage in conscious experimentation or to regulate using the traditional approach. The next and final section of the paper attempts to provide an answer to that question.

3.5 A Framework for Experimentation

For all that can be said in favour of the experimental approach to regulation, it is always a 'second-best option'. The reason why experimentation is a second-best option is that, ideally, we would be able to regulate in a situation in which we possess the necessary resources to know, in advance, that the regulation we are adopting will solve the problems for which it has been created. However, the reality is that regulation-making occurs in a context in which there is a limited amount of information and resources, in which the effects of a regulatory initiative are not certain and economic theory by itself may not indicate the optimal approach. Moreover, even if the particular area we are regulating is one about which we have access to an amount of information that would allow us to make a reasonable prediction about the potential success of different regulatory alternatives, it might be that decision-makers are not willing to take the political risk of adopting a policy that is found wanting in different respects or that may come accompanied by negative unintended consequences⁵¹. In this last section, the paper aims to provide a framework that captures the types of situations that make the experimental approach

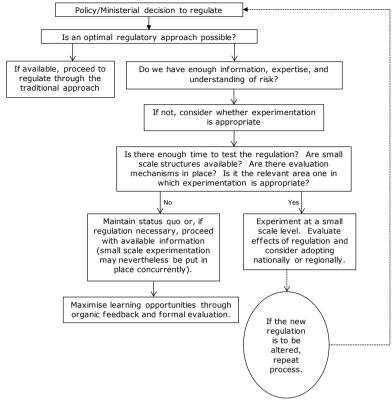
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⁵⁰ Mark Bennett and Joel Colón-Ríos "Public Participation in New Zealand's Regulatory Context" in Susy Frankel and Deborah Ryder (eds) *Recalibrating Behaviour: Smarter Regulation in a Global World* (LexisNexis, 2013) 181.

⁵¹ For further discussion on unintended consequences see Kate Tokeley's "Consumer Law and Paternalism: A Framework for Policy Decision-making" in Susy Frankel and Deborah Ryder (eds) *Recalibrating Behaviour: Smarter Regulation in a Global World* (LexisNexis, 2013) 265.

appropriate, as well as the way that approach relates to the general regulation-making process. This discussion will be guided by the following diagram, which illustrates some of the questions that the regulator should take into account when considering whether to engage in the traditional or in the experimental approach to regulation:

Questions to Consider:



Source: Author

This diagram is based on the premise that a policy or ministerial decision has been made to regulate some aspect of social life/economic activity at a national level. This could be a decision that pertains to primary or secondary legislation, and it could involve the regulation of a previously not regulated area, or an alteration of an existing regulatory framework. Once a decision to regulate or re-regulate has been made, the regulator would always confront the following dilemma: what approach to regulation-making would allow us to achieve the desired goals? There are at least two main options: the 'optimal' or the 'experimental' approach. Since the optimal approach, if available, would be the best option, the first step should be to ask whether such an approach is possible. The optimal approach is appropriate in contexts in which policy makers possess enough information (such that they are able to accurately predict the effects of the regulation), have access to the necessary expertise (such that they are able to correctly interpret that information and regulate in a way that properly takes it into account), and an understanding of the risks involved if something goes wrong in the application of the regulation (which is accompanied by a political decision to assume those risks).

It might be possible that certain regulatory contexts would have the characteristics that would make the optimal approach appropriate. If that is the case, then the next step would be to proceed to regulate under the premise that the new regulations would solve the relevant social problem. In many, if not in the great majority of cases, this will not be the case,

particularly in a dynamic setting where the attitudes of various stakeholders and economic situations are constantly changing. As noted earlier, in contemporary and complex societies like ours, characterised by high levels of uncertainty and contingency, it is unlikely that we would be in the possession of sufficient resources to be able to determine, a priori, the effects and limits of different rules. This notwithstanding, the reality is that, under the traditional model, regulations are adopted as if the optimal approach was possible: we tend to pretend that we can more or less predict the outcome of every regulatory change and that, if we are wrong, we can always alter the relevant rules. That traditional mode of regulation-making is 'experimental' in a certain manner of speaking: regulation is never seen as final, and regulatory changes are more the rule than the exception. But it certainly does not amount to the type of deliberate experimentation that might be recommended for certain cases. As discussed earlier, this would typically involve the testing of particular regulatory regimes on a small scale basis and then to assess those experiments with efficient forms of evaluation and other feedback mechanisms.

If it is determined that an optimal approach to regulation-making is not possible, that is, if the policy maker concludes that she lacks sufficient resources to adopt regulations whose effects can be known before they are put into practice, then the experimental approach should be considered. But the experimental approach would not be appropriate for all cases. It may be, for example, that the regulation is determined to be 'urgent'. In those cases, time restraints would rule out experimentation as the main regulatory approach, since by its very nature, experimentation would involve the implantation of the proposed regulatory regime in a particular region or locality (or the implantation of a number of alternative regulatory regimes in different regions or localities), the passing of a period of time that would allow one to properly assess the benefits of the relevant regulation (or to allow one to compare the different regulatory alternatives), and a time for evaluation and for the dissemination of results among the relevant actors. It might also be that the small scale political structures (e.g. local or regional governments or other types of non-national institutions) necessary to put into place an experimental policy are not present. In this case, experimentation may be too costly, as it would involve the creation of structures that do not exist (and that might cease to exist after the experiment in question takes place).

A third consideration that might lead one to conclude that experimentation is not an option is the absence of proper evaluation mechanisms that would effectively communicate the benefits of the relevant regulations. These mechanisms, however, might be put into place as part of the particular experimental regulatory regime. Finally, the particular area at issue might be one in which experimentation would not be appropriate. As noted earlier, in areas involving vulnerable populations, food safety, or hazardous substances, the risk of subjecting people to policies that are openly accepted to be provisional and experimental would likely be politically, or possibly morally, unacceptable. If, in light of any of these considerations it

is concluded that experimentation is not a viable option, then there are two alternatives. The first one would be to maintain the status quo (which might mean to leave a particular area of social life unregulated or to maintain the way in which it is currently regulated). However, in cases in which it is determined that a regulatory change is necessary, then the only option would be to proceed with the information available, as if the optimal approach was possible.

Even in these cases, an effort should be made to maximise the learning opportunities of implementing a regulation without being fully aware of its potential effects. In addition to putting into practice formal evaluation mechanisms, this should also be achieved through increased attention to the organic feedback that can be obtained from those in charge of applying the regulation. In a certain way, what one would be doing here would be a sort of large scale experiment: consciously adopting a provisional regulatory framework with the purpose of being able to improve it in the future, once the necessary evidence becomes available. In cases like these, where experimentation is not considered appropriate (for example, due to time restraints) and a regulation needs to be adopted, one might nevertheless concurrently engage in small scale experimentation (provided there was not a moral or political objection to experimentation in the area at issue). The information obtained from the evaluation of those small scale experiments could then be used to improve the new regulation.

If present conditions make the experimental approach appropriate, then one would proceed to identify those localities or regions which possess a series of characteristics (for example, a high or low incidence of the social phenomenon the particular regulation wants to decrease or increase) that would provide a suitable setting for small scale experimentation. As discussed earlier, the idea would be either to allow several localities or regions to design their own regulatory approaches, or to test the proposed regulation (or a set of pre-designed regulatory alternatives), in certain localities or regions. After a certain period of time (which will vary depending on the regulation at issue but would normally comprise a period of several years) the effects of the regulations would be evaluated. Those regulations which did not prove effective or beneficial would be discarded, and those that did could be adopted at a national or regional level. After this occurs, however, the process does not end; no regulation is likely to be problem-free, and certain unanticipated effects might appear once the regulation is adopted at a larger scale (or by the very fact that there will always be tension between the regulators and stakeholders that operate under that regulation as opinions and markets change). In such cases it might be determined that a new change in the regulation is needed, and at that point the process would begin again and one would ask whether the optimal approach is possible or if more experimentation is needed.

3.6 Conclusion

This paper looked at the complexity of the modern regulatory system from the perspective of learning and experimentation. The complexity of the subject matter and the paucity of information mean that for harder regulatory problems it is difficult to define the problem with precision, how stakeholders will behave under a preferred option, or what the optimal solution might be. This context naturally lends itself to viewing regulation as a learning process. However, it has been argued that even though all regulation involves some learning, not all regulation can be characterised as 'experimental'. Experimentation, in this paper, has been defined as a conscious activity. In seeing experimentation in that way, policy makers are attributed with the responsibility not only of adopting provisional regulatory regimes, but of creating and making use of mechanisms for assessing their effects, so that the evidence obtained from a regulatory experiment can be translated into improved regulatory frameworks. Even though there will be many cases in which experimentation is not a viable option, the basic principles of the experimental approach may nevertheless serve as a guide to regulation-making. That is, that regulation will almost always take place in a context of uncertainty and that, as a result, effective policy solutions to social/economic problems can only be designed in light of the evidence provided by major or minor regulatory failures.