5 Regulatory Failure

One of the most well-established laws in social science is that policies and initiatives are usually born in hope and optimism, but eventually decline amid sadness and disappointment.[1] Such pessimism is often encountered in the field of regulation where it is not difficult to identify examples of 'regulatory failure'.[2] The media supply relentless copy on financial regulators who fail to spot dangerous systemic risks, or on safety regulators who fail to ensure the safety of oil-platform operations, or on other industry regulators who fail to collect fines, and so on.

What constitutes a regulatory failure is, however, more debatable than these initial, and apparently uncontroversial, examples might suggest. People will disagree as to what constitutes a 'failure' and its causes.[3] Failures can be foreseen, or they can come as 'rude surprises'.[4] Why regulators and regulatory regimes are seen to fail links to the visions of 'good' regulation that were explored in Chapter 3 and to the different ways of explaining regulatory developments that were discussed in Chapter 4. This chapter, accordingly, considers what regulatory failure involves before examining how we can understand the causes of regulatory deficiency and how remedies can be devised.

[1] H. Kaufman, *The Limits of Organizational Change* (Tuscaloosa, 1971), 105; P. Grabosky, 'Counterproductive Regulation' (1995) 23 *International Journal of the Sociology of Law* 347–69; C. Hood, 'Can We? Administrative Limits revisited' (2010) 70 *Public Administration Review* 527–34.

[2] See generally: Grabosky, 'Counterproductive Regulation'; W.P. Clune, 'Implementation as Autopoietic Interaction of Autopoietic Organizations' in G. Teubner and A. Febbrajo (eds), *State, Law and Economy as Autopoietic Systems Regulation and Autonomy in New Perspective* (Milan, 1992), 485–513; C. Sunstein, 'Paradoxes of the Regulatory State' (1990) 57 *University of Chicago Law Review* 407–41; M. Lodge, 'The Wrong Type of Regulation? Regulatory Failure and the Railways in Britain and Germany' (2002) 22 *Journal of Public Policy* 271–97; C. Hood and B. Peters, 'The Middle Aging of New Public Management: Into the Age of Paradox?' (2004) 14 *Journal of Public Administration Theory and Research* 267–82; R. Merton, 'The Unintended Effects of Purposive Social Action' (1936) 1 *American Sociological Review* 894–904; C. Hood, H. Rothstein, and R. Baldwin, 'Assessing the Dangerous Dogs Act: When Does a Regulatory Law Fail?' (2000) *Public Law* 282–305.

[3] P. Dunleavy, 'Policy Disasters: Explaining the UK's Record' (1995) 10 *Public Policy and Administration* 52–70; A. Boin and P. t'Hart, 'Institutional Crisis and Reforms in Policy Sectors' in H. Wagenaar (ed.), *Government Institutions* (Boston, 2000); A. Boin, A. McConnell, and P. t'Hart (eds.), *Governing after Crisis* (Cambridge, 2008); A. Boin, 'Preparing for Future Crises' in B.M. Hutter (ed.), *Anticipating Risks and Organising Risk Regulation* (Cambridge, 2010).

[4] T. Laporte, 'Anticipating Rude Surprises' in L. Jones (ed.), *Communicable Crises* (Amsterdam, 2007).

Identifying Regulatory Failure

The discussion of 'good' regulation in Chapter 3 suggests that regulators will 'fail' when they do not produce (at reasonable cost) the outcomes that are stipulated in their mandates or when they do not serve procedural or representative values properly. Thus, regulators may be criticized, *inter alia*, because they gain results inefficiently, or produce unwanted side-effects or because they lack transparency and accountability or exhibit bias and unfairness. Here it is worth considering the respective challenges of identifying outcome and procedural failures.

It is possible to identify a number of failings that have negative *outcome* implications.[5] These failings usually involve poor performance in discharging the core tasks of regulation: detecting undesirable behaviour; developing responses and intervention tools to deal with errant behaviour; enforcing those tools on the ground, and assessing and modifying regulatory performance.[6] A first difficulty in pinpointing an *outcome failure* is that, as noted in Chapter 3, most regulatory mandates are necessarily (and advisedly) flexible and open to interpretation. Debates about failure are, as a result, usually based on different understandings regarding objectives and problem-definition. Further difficulties relate to counterfactuals and trade-offs. When a regulatory system is accused of failure it is often relevant to ask: 'Failure compared to what?' This prompts comparisons between the outcomes produced by the given regulatory system and the hypothetical outcomes that would have been produced by doing nothing or by implementing some other regime of control. In both cases, it will be difficult to obtain reliable data with which to effect comparisons. Such exercises will be based on underlying assumptions and weightings and, as a result, what constitutes a failure and how much it matters when compared with other 'failures' will turn on tastes and political preferences. The matter of trade-offs constitutes a further evaluative difficulty, since real-life comparisons will often involve looking at regulatory interventions that produce a certain trade-off between numbers of risks against possible other interventions that produce other sets of risk trade-offs.[7]

Detection problems are often involved in charges of *under-regulation*—notably where this results from a lack of information-gathering on the risks and risk creators that impact on the achieving of objectives. Such

[5] Sunstein, C. 'Paradoxes of the Regulatory State'. Also note our discussion of 'better regulation' tools in Chapters 11, 13, and 14.

[6] On the DREAM framework of regulatory tasks, see Chapter 11 below.

[7] On risks and trade-offs see J.D. Graham and J. Baert Weiner (eds), *Risk vs. Risk* (Harvard, 1995). On identifying the 'intent' of the regulation, see O. James and M. Lodge, 'The Limitations of "Policy Transfer" and "Lesson Drawing" for Public Policy Research' (2003) 1(2) *Political Studies Research* 179–93.

under-regulation will do little to alleviate the continued occurrence of the problem in question. Deficiencies in regulatory detection often relate to the *inclusivity* of the rules and standards that regulators are applying. Under-inclusiveness will mean that the conduct that should be controlled is allowed to escape constraint, whereas over-inclusive rules will involve the excessive restriction of behaviour that should not be subjected to control.

Over-regulation is often associated with 'over-stringent' and 'over-prescriptive' regulation that reduces the possibilities for innovation and research. This kind of charge has commonly been made against 'best available technology'-standards in environmental regulation. Similarly, over-stringent regulation may also produce the perverse effect that it leads to 'under-regulation'. If prescription is over-precise, then it will be difficult to apply on the ground, since few complex events will be covered by the exact wording of the provisions at issue. Similarly, over-formalism and punitive enforcement styles may reduce the possibilities for cooperative relationships and healthy regulatory communications so that this can produce self-defeating outcomes (as where interventions in the banking field are designed to increase stability levels but, in fact, lead to destabilizing runs in the sector).[8] There has, indeed, been a diagnosed tendency for regulatory activities to have countervailing effects. This may happen when regulatees are induced to move activities to less-regulated areas (or, as in the example of transparency regulation, make their activities even less transparent), or when regulators move too quickly on 'new' risks (such as pharmaceuticals) and consumers are afflicted with fears and anxieties that lead them to stick to older, and more risky, goods (such as traditional medications).

Another 'response failing' may be associated with the choice of regulatory instruments. The meltdown of a financial system, for instance, may be regarded as a failure of regulatory instrument choice and design rather than enforcement. A price-control mechanism such as RPI-X may be seen to fail by incentivizing efficiency-seeking 'asset sweating', rather than infrastructure investment.[9]

Turning to enforcement failings, a common manifestation of these may be the prevalence of *creative compliance*—the practice of side-stepping rules, and negating regulations without breaking their formal terms.[10] Rules on safety may be 'complied with' by box-ticking, rather than substantive steps and, in processes of displacement, the regulations at issue may cause risks (of pollution, for example) to be shifted from a regulated to an unregulated

[8] M. Abolafia and M. Kilduff, 'Enacting Market Crisis: The Social Construction of a Speculative Bubble' (1988) 33(2) *Administrative Science Quarterly* 177–93.

[9] On price control mechanisms, see Chapter 22 below.

[10] See more generally Chapter 11.

operation.[11] Similarly, far-reaching transparency requirements may lead to an overall reduction of information in the regulatory process as risk-averse regulators and firms minimize the potential to be exposed at a later point. Another instance of displacement would be a gun-control law that leads regulatees to resort to other kinds of weapons, such as aggressive dogs.

At the heart of enforcement failings may be a more general problem: *failure to maintain reputation*. Reputation and credibility are critical in establishing and sustaining a regulator's ability to act autonomously.[12] If regulators are not perceived as having the capacity to act effectively against errant operators then regulatees, politicians, and other actors will no longer defer to them. More widely, without a reputation for competence, regulators will be blamed, even if they have no formal authority over a given field. For example, if the failings of one inspector in one region raises key issues about the capacity of food inspections in that area, it is not guaranteed that consumers will regard inspections in other regions as capable, regardless of evidence.

As for assessment and modification failings, these affect a regulator's ability to achieve desired outcomes because a regulator that cannot evaluate its own performance and adjust its strategies will not be able to cope with new challenges. Particular problems may arise here due to absences of data gathering and feedback systems. Another special difficulty may be that the regulator is unable to meet the challenges of change because it is hamstrung by excessively tight legislation and a political unwillingness to contemplate legal adjustments to powers.

In decentred regulatory regimes[13]—and networks in which numbers of regulators act collaboratively—the issue of regulatory failure is rendered more complex because responsibilities for failures, and successes, may not be clear. Outcomes may be collectively generated, or there may be doubt as to the locus of responsibility for dealing with a problem. Regulatory failure also needs to be separated from the organizational failures of regulated parties. A late train arrival does not necessarily indicate poor railway regulation, although it may offer an indication of a wider failing in the regulatory system. The DeepWater Horizon oil spillage between April and June 2010 threatened wildlife and the economic survival of large populations along the Louisiana coastline. It might be interpreted as the product of a large-scale regulatory failure (given the extensive failings of the then Minerals Management Service). It can, however,

[11] Similarly, it is suggested that one shared assumption among investment bankers is that 'income tax is voluntary' (see, however, http://docs.law.gwu.edu/facweb/jsiegel/Personal/taxes/IncomeTax.htm; last accessed 10 December 2010).

[12] M. Maor, 'Organizational Reputation and Jurisdictional Claims' (2010) 23(1) *Governance* 133–59; D. Carpenter, *The Forging of Bureaucratic Autonomy* (Princeton, 2001).

[13] See Chapter 3 and J. Black, 'Decentring Regulation: The Role of Regulation and Self-regulation in a "Post-Regulatory World"' (2001) *Current Legal Problems* 103–46.

be seen as an industry-organizational failure in so far as critical warning signs were ignored.

It may, indeed, be argued that the boundaries between regulatory and organizational performance blur increasingly as regulatory activities are pushed inside private organizations as part of systems of enforced self-regulation. Similarly problematic is any attempt to draw a clear line between political and regulatory responsibilities. If regulators are not provided with the adequate legal powers or economic resources, it can be contended that any 'failure' is not of their own making. The Brazilian air transport system is often taken as a site of regulatory failure, since constant under-capacity brings considerable delays. Some responsibility for this state of affairs can, however, be traced to important political choices that were taken decades ago (as part of democratic transition), and these initial choices have been further accentuated by a continued unwillingness to upgrade the infrastructure. In some circumstances, moreover, regulators might defend their positions by arguing that they have been asked by their political masters to do the impossible: there may be some problems that cannot be solved.

Turning to *process failures*, regulators tend to fail procedurally when they do not develop and follow procedures that satisfy stakeholders' appetites for openness and transparency—or where the regime does not provide for accountability of an acceptably representative nature. A special problem will often be that different stakeholders have different expectations regarding processes, and they may converse differently in making 'accountability demands' and in responding to these.[14] As Julia Black has pointed out, these issues will prove especially pressing in decentred regulatory regimes where numbers of regulators operate at different levels of government and where they employ quite different assumptions about the nature of appropriate procedures. Such matters are, however, discussed more fully in Chapter 18 and will not be covered further here.

Overall, it can be concluded that, with reference to procedural and substantive outcomes, identifying regulatory failure involves journeying into inherently contested terrain. That said, it is time to look to causes and to consider *why* regulation goes wrong.

Explaining Regulatory Failure

At the broadest level, regulatory failure can be explained by insufficient resources and by epistemological limitations ('failures of imagination').

[14] See Black, ibid.

In this section we explore explanations of failure at two levels, the rhetorical and the analytical. Diagnosing why regulation fails is inherently about perceptions and (often implicit) models of the world, and therefore any reference to a theory of regulatory failure is linked to our beliefs on why and how particular regulatory interventions work.

Looking first at the rhetorical level, one high-level approach draws on the work by the economist Albert Hirschman, who notes three rhetorical strategies that are commonly employed to resist (what he calls) progressive policy interventions.[15] Equally, these rhetorical devices are widely employed to resist proposals for new types of regulations or to dispute the effectiveness of existing provisions. They are 'futility', 'jeopardy', and 'perversity'. For Hirschman, the *futility* position urges that, regardless of regulatory effort, no change to the existing problem will occur. People, for example, will not change their behaviour, regardless of regulatory intervention. Similarly, demanding prerequisites might be required for any particular intervention to have an effect. As a result, it is suggested, adopting any one particular measure will not alter the complexity of the existing problem. *Jeopardy* arguments contend that, despite the worthwhile character of a particular regulatory instrument, its deployment would risk wider achievements and/or lead to a chain of undesirable side-effects. The inherent benefits of the narrow proposal would thus tend to be outweighed by the costs of the wider loss of other achievements (a widely used variant is the so-called 'slippery slope' argument). For example, adopting particular safety standards might be a good thing in itself, but may produce wider costs by risking legal challenges, causing pressure for further restrictions or, indeed, causing a shift in 'deviance' to more dangerous kinds of activities. A further example of such an argument would hold that the adoption of a particular information requirement would open the door (the 'flood gates') to much wider and extensive requests and requirements.

Finally, arguments based on *perversity* are used to suggest that regulatory interventions achieve the exact opposite of their intended outcomes. For example, it might be argued that prohibiting particular medication on precautionary grounds will cause further deaths by denying treatment, or speed restrictions will cause more speeding because the intended stigma turns into a symbol of open rebellion against oppressive authority.[16]

[15] A. Hirschman, *The Rhetoric of Reaction* (Cambridge, 1991).

[16] Focusing on self-defeating regulatory activities, surprises, or paradoxes, the wider literature distinguishes between various terms. All of them seek to attribute particular qualities to types of failures that make them more than trivial or 'normal'. Various authors speak about 'disaster', crises and fiascos, as well as 'catastrophes'. See Dunleavy, 'Policy Disasters'; Boin and t'Hart, 'Institutional Crisis'; Boin et al. (eds), *Governing after Crisis*; Boin, 'Preparing for Future Crises'; M. Moran, 'Not Steering but Drowning' (2001) 72(4) *Political Quarterly* 414–27; M. Moran, 'Review Article: Understanding the

In Chapter 4 we noted a number of explanations that pointed to the inherent limitations of regulation. Those explanations were organized into accounts that emphasize respectively: the pursuit of the public interest; the contest between different interest groups; the power of ideas; and institutional factors. In considering the causes of regulatory failure, it follows that the four different kinds of account produce quite varying explanations of regulatory failure. Examining those types of explanation is helpful in seeking to understand how regulation might fail, or has failed, in a particular context.

In brief, *public interest accounts* centre on the idea that those seeking to institute, operate, or develop regulation do so in pursuit of some conception of the public interest. Interpretations of what the public interest might be and how it is to be achieved will, however, be contested. Different conceptions of the public interest may compete for the regulators' attentions and different elements within the regulatory organization may pursue conceptions of the public interest that compete with each other. Thus, the enforcement division of a regulatory agency may not share the same vision as the policy department and this may make for ineffective delivery of outcomes or confused procedures.[17]

A second difficulty—one that would be acknowledged by all analytical approaches under consideration here—links to the bounded rationality that affects individual and organizational decision-making. Information is costly, and the capacity of any one individual, organization, or system to process all available information within time and other constraints is inherently limited. As a result, our decision-making is inherently bounded. One reason why regulation can go wrong, therefore, is the inherent uncertainty and ambiguity of knowledge. There is ambiguity as to the cause–effect relationships of regulatory instruments. We may assume, but not fully understand, why particular regulatory interventions prove particularly effective at any one time and place. An instrument that may have proved successful in one context may not necessarily play out the same way in a different area, since legal systems differ, political systems vary, and different constituencies are mobilized.[18] Indeed, the interaction between different regulatory instruments and regimes is not necessarily one that can be predicted. Because knowledge is limited, the likelihood that regulatory strategies achieve their intended effect in all cases is very low. Significant challenges will be presented by ambiguities about cause–effect relationships, competing interpretations about the nature of the problem at issue, ways to fix that problem,

Regulatory State' (2002) 32(2) *British Journal of Political Science* 391–413; M. Moran, *The British Regulatory State* (Oxford, 2003).

[17] See, e.g., R. Baldwin, 'Why Rules Don't Work' (1990) 53 *Modern Law Review* 321.

[18] R. Merton, 'The Unintended Effects of Purposive Social Action' (1936) 1(6) *American Sociological Review* 894–904.

and potential counter-learning by the array of diverse parties that is affected by the intended regulatory intervention. The regulators, as a result, may not be able to calculate which steps they have to take in order best to serve the public interest, and this may impede their endeavours in spite of their good intentions. Given the limits of our knowledge and understanding, one key strategy therefore is not to rely on grand schemes, but rather to employ incremental 'trial-and-error' approaches towards regulatory change.[19]

Interest group theories stress the extent to which regulatory developments are driven by the particularistic concerns of interest groups. Unsurprisingly, much of the literature that has focused on regulatory failure has pointed to the self-interested behaviour of key actors engaged in the regulatory process.[20] Capture theories would highlight the attempts of organized interests to shape the regulatory process to their own ends.[21] The economic theory of regulation would point to the ability of the economically powerful and the concentrated interests to bend regulation to their will.[22] Those focusing on politicians' behaviour would point to the problem of governments changing their minds over time (the 'time inconsistency problem'), and others would note the blame- and risk-avoiding behaviour of regulatory agencies that focus on realizing popular and convenient outcomes, rather than those that are important, difficult, and potentially unpopular.[23] As a result, the literature, as noted across other chapters in this volume, has advocated addressing the limitations of central oversight by seeking some alignment of organizational self-interest with regulatory objectives.

Ideas-based approaches emphasize the ways in which ideas, beliefs, and worldviews shape regulatory approaches and delivery. As noted in Chapter 4, a particular strand of such theories stresses the inherent plurality of rationalities or worldviews that characterizes any debate regarding regulatory instruments. Failures of regulation, on such accounts, would be explained in a number of ways. First, it might be contended that failure has occurred because the underlying cause–effect assumptions are flawed and the regulatory regime is built on unsustainable ideas. It might, for instance, be argued that central assumptions regarding regulatees are misguided and that regulated firms may be more prone to non-compliance or creative compliance than the

[19] On the case for moving from *ex ante* regulatory design to review and adjustment, see R. Baldwin, 'Is Better Regulation Smarter Regulation?' (2005) *Public Law* 485 and Chapter 15 below.

[20] See Lodge, 'The Wrong Type of Regulation?'.

[21] C. Hood, *Explaining Economic Policy Reversals* (Buckingham, 1994), ch. 2.

[22] S. Peltzman, 'The Economic Theory of Regulation after a Decade of Regulation' (1989) *Brookings Papers in Macroeconomics*.

[23] M. Horn, *The Political Economy of Public Administration* (Cambridge, 1995); B. Levy and P. Spiller, 'The Institutional Foundations of Regulatory Commitment' (1994) 10(2) *Journal of Law, Economics and Organization* 201–46.

founding philosophy presupposes.[24] A second kind of account of regulatory failure might build on the 'plurality of worldviews' perspective to argue that failures tend to be the products of the confusions of approach that lead to high levels of friction in communications and to uncertainties within business sectors. A third kind of account might stress the difficulty that some sets of ideas ('mindsets') have in coping with the changing challenges that all regulators have to face.[25] The essence of such accounts is liable to be that ideological conservatism produces under-performance by failing to adapt ideas to new circumstances, or by rejecting information that challenges existing dominant understandings. Systems theories would argue that such insularity and lack of responsiveness is a product of the tendency of those who operate within systems to close themselves off from outside disturbance.[26]

Institutional theories (of different ilks) tend to agree that institutional structures and arrangements, as well as social processes, significantly shape regulation. They will suggest that there is more driving regulatory developments than mere aggregations of individuals' preferences. Failures, from such perspectives, can often be seen as the effects of inter- and intra-institutional pressures. A special problem, on this view, may be 'drift': the tendency of a regulatory system to lose focus and direction. Information asymmetries can thus be said to generate a number of kinds of drift: (i) coalitional drift (governments changing preferences over time); (ii) agency drift (agencies not following their statutory objectives); and (iii) industry drift (industry not following regulatory requirements).

Another possible cause of failure that different institutionalists might note is the overlapping of different organizational understandings and the frictions that this can cause. Institutional theories would highlight, in particular, the ways in which the modern tendency to spread regulation across layers of government and types of organization produces regulatory effects that are not consistent with the original regulatory intentions. The complexity of the regulatory space leads to uncertain effects, as do the diverse assumptions and resources associated with different actors. Cultural theory (discussed above) adds to institutional understandings by stressing the importance of appreciating the inherent side-effects of any one regulatory strategy. Interventions

[24] See e.g. Baldwin, 'Why Rules Don't Work'.

[25] This position might combine with the 'exogenous' account of regulatory failure, namely that changing 'habitats' or environments challenge regulatory strategies and undermine their earlier effectiveness. The rise of online gambling, for example, may be seen as a fundamental challenge to national betting regulation.

[26] R. Laughlin, 'Environmental Disturbance and Organizational Transitions and Transformations: Some Alternative Models' (1991) 12(2) *Organizational Studies* 209–32; G. Teubner, *Dilemmas of Law in the Welfare State* (London, 1986); G. Teubner, *Law as an Autopoietic System* (London, 1993); G. Teubner, R. Nobles and D. Schiff, 'The Autonomy of Law: An Introduction to Legal Autopoiesis' in D. Schiff and R. Nobles (eds), *Jurisprudence* (London, 2003).

based on predictable inspections, for instance, will encourage gaming; strategies based on surprise will reduce overall trust within the system; and interventions that are based on mutuality and peer review will lack outside scrutiny and will tend quickly to turn into closed (self-referential) systems. Similarly, systems relying on market-type processes of regulation are said to suffer from inherent lack of overall control and over-individualism. According to this account, any one strategy invites counter-effects as inherent weaknesses emerge as the products of social tensions and processes.

Table 5.1 provides for an overview of the distinct contribution that different approaches make.

Table 5.1. Regulatory failure

Broad approach	Theory	'Failure-mechanism'	'Remedy'
Interest-centred approaches	Public interest/ interest group/ economic theories	Collective action problem leads to regulation in favour of particular concentrated interests.	Enhance interest group participation and contestation.
Ideas-based approaches	Ideas and cultural theories	Inherent blackspots in any single or 'elegant' approach has side-effects and will be exploited by opposition.	Use 'clumsy' or 'hybrid' solutions.
Institutional approaches	Institutional design	Information asymmetries generate drift: (i) coalitional drift (governments changing preferences over time); (ii) agency drift (agencies not following their statutory objectives); and (iii) industry drift (industry not following regulatory requirements).	Need to accommodate particularities of political system to deal with 'commitment problem' through 'hardwiring' of institutional devices, such as (i) fire-alarms; (ii) deck-stacking; and (iii) police patrols (oversight).
	Layering	Side-effects of multiple regulatory regimes with different understandings and objectives operating side-by-side and overlapping.	Incremental regulatory adjustment to accommodate competing pressures and provision of conflict resolution space to accommodate competing interpretations; possibly also advocacy of comprehensive reform to bring different regimes into line.
	Unintended consequences	Intended actions cannot foresee inherent unintended consequences—because of bounded rationality, side-effects, counter-learning, and changes in the wider environment.	Reduce side-effects through incrementalism and attempts at enhancing 'rationality' in regulatory process.
	Self-referential systems	Systems close themselves off from outside disturbance.	Enhance self-reflexivity via proceduralization and self-learning.

Regulatory Remedies

What emerges from the above discussion is a differentiated picture of ways in which regulatory failure can be accounted for. It ranges from those cynical views that see regulatory failure as a mixture of sectoral lobbying, if not capture, and bureaucratic self-interest, to those views that see unintended consequences, whatever their origin, as an inherent aspect of social life. These explanations also suggest that we are faced with often contradictory advice on how to deal with regulatory failure. Space here does not allow us to offer an exhaustive review of remedies (which would restate much of the rest of this volume), but it is worth discussing three general recipes for regulatory improvement.[27]

Coordination. Problems of over- and under-regulation are often associated with failings in coordination.[28] Different regulators often focus on similar or the same activities, but do so using inconsistent methodologies and penalties, thereby imposing considerable and confusing compliance burdens on firms. In other areas, key problems remain outside any one regulator's attention as particular issues fall between the jurisdictional stools of different regulatory regimes and organizations. Indeed, when looking at the literature on failed control systems of a complex nature (such as space shuttle safety regimes), one of the most widely accepted suggestions is that such complex operations are vulnerable to the 'normalization of deviance'. In this process, small deviations from the norm prove to be acceptable at each individual stage of production but agglomerate over time and successive production stages so that they eventually lead to disastrous failure. Similarly, when fragmented regulatory regimes accept small deviations from the norm without seeing the proverbial 'whole picture', then overall regulatory failure is likely to ensue. As a result, the often-proposed remedy is that of 'more coordination' to centralize information, to maintain control, and to impose a more uniform regulatory process. Similarly, but from a very different intellectual tradition, Stephen Breyer argues for the need to bring in an 'oversight' panel to deal with problems associated with 'knee-jerk' political and regulatory responses to crises.[29]

Modes of seeking to ensure coordination are numerous and range from the merger of regulatory bodies to the imposition of common methodologies

[27] See also the discussion of the quest for better regulation in Chapter 15.

[28] See the discussion of network coordination in Chapter 8 below. Christopher Hood has called these failings in coordination 'multi-organizational sub-optimization'; C. Hood, *Limits of Administration* (London, 1974), 475.

[29] See S. Breyer, *Breaking the Vicious Circle: Towards Effective Risk Regulation* (Cambridge, MA, 1993).

(see the discussions in Chapters 8 and 18). There are, however, potential costs in attempting to advance coordination. Adjustments in terms of organizational change are linked to costs and can create uncertainties for businesses and consumers. Rationalizations can prompt the charge that over-centralized regimes do not allow for those differentiated treatments that allow responsiveness to specific contexts.[30] Any extensive attempt to coordinate, furthermore, is likely to accentuate problems with time-lags. In a world that refuses to stand still, delays are likely to make regulatory interventions ill-timed and poorly informed.

Coordination, in summary, is a notion that many parties welcome as a 'good thing'—but they may do so because it means very different things to different people. Whether 'coordination', in whatever form, will in itself avoid further regulatory failures is questionable—as discussions of 'polycentric' and decentred regulatory regimes reveal (see Chapters 8 and 18).

Organizational reform and learning. A second widely advocated—and utilized—remedy for regulatory failures is that of learning and evaluation. Much has been said about the largely symbolic nature of organizational change. Here, organizational change hardly ever follows functionally -required lines, but rather follows the so-called 'logic of appropriateness'. According to the 'logic of appropriateness', the inherent bounded rationality encountered in decision-making means that regulatory reform will not be conducted on the basis of exhaustive and comprehensive analysis that will reveal the optimal organizational and strategic arrangement for the particular issue in question. Instead, reform proposals will be based on limited searches.

Organizational learning is shaped by a number of factors. One factor is the limitations of decision-making that are inherent in any organization. Information processing, and the way in which organizations update their knowledge about their own processes and the world 'out there', is one of the crucial parts of any organization. These processes, though, are inherently biased. Dominant understandings within organizations 'filter' data, and any information that seems to contradict the dominant cause–effect understandings about regulation is likely to be filtered out of the system in order to avoid disturbing day-to-day functioning.[31] This filtering-out is dangerous for any organization, however: the processes of rejection expel not merely

[30] Some commentators, indeed, highlight the importance of redundancy, and the absence of coordination, as a means of minimizing the errors from any one strategy. See J.A. Rijpma, 'Complexity, Tight-Coupling and Reliability' (1997) 5(1) *Journal of Contingencies and Crisis Management* 15–23.

[31] If we had to question the utility and validity of all our actions all the time, we would not be able to function, but would rather spend all day and night procrastinating. Therefore, confirmation-seeking and the 'filtering-out' of information that seems to contradict our understandings is essential for our ability to make any form of decision.

information that deviates from the norm but also any potential signs of failure and keys to understanding this.[32]

A possible remedy for such narrowness is to introduce a 'challenge function' into organizational operations. This poses the question how the organization can ensure that this 'challenge function' plays a meaningful role, rather than meets rejection or produces such a fundamental questioning of approaches that any ongoing operation is gridlocked. As for the mode of setting up such a challenge function, some may bring in a special 'challenge committee', others will rely on 'peer reviews' among professionals, while another version is the so-called 'court jester' concept (an idea that was widespread in medieval courts and the Vatican).[33] Here the notion is that particular individuals are given the freedom to 'speak truth to power'. Overall, though, a process of organizational reform (often called 'root and branch' reform) that relies on organizational learning is an inherently demanding process that is very likely to reflect currently dominant worldviews and logics of appropriateness, rather than to offer genuine questioning of the challenges facing the regulatory organization or regime.

Clumsy solutions/hybrids. The case for reform is often accompanied with the charge that the existing regime constitutes the 'wrong type of regulation'. After matters have gone wrong, such arguments are often associated with demands for enhanced and intrusive systems of oversight. Some, however, may resist these proposals and argue that problems are associated with 'too much' oversight and that market-type processes should be utilized to decrease the incentives for gaming and cheating. As noted above (and in Chapter 3), a reliance on any single approach to 'solving' regulatory failure is inherently limited—it invites side-effects and exploitation by opposed interests. As a result, much emphasis has been placed, in a variety of literatures, on the importance of using redundancy and mixed strategies to deal with regulatory failure.[34] Overlap and contradictory tensions are said to offer one way to counter the inherent weaknesses of any one single regulatory approach (such as 'markets' or 'mutuality' or 'oversight') and it also introduces a certain amount of unpredictability, thereby reducing the possibilities for cheating. The general stress of cultural-theory-based approaches has therefore been to advocate so-called clumsy solutions—that is, approaches that mix elements from various 'pure' strategies in order to compensate against side-effects.[35]

[32] J.G. March, L.S. Sproull, and M. Tamuz, 'Learning from Samples of One or Fewer' (1991) 2(1) *Organization Science* 1–13; S.D. Sagan, *The Limits of Safety* (Princeton, 1993), ch. 5.

[33] C. Hood and M. Lodge, *Politics of Public Service Bargains* (Oxford, 2006), ch. 6.

[34] See, e.g., N. Gunningham and P. Grabosky, *Smart Regulation* (Oxford, 1998).

[35] M. Verweij, M. Douglas, R. Ellis, C. Engel, F. Hendricks, S. Lohmann, S. Ney, S. Rayner, and M. Thompson, 'The Case for Clumsiness' in M. Verweij and M. Thompson (eds), *Clumsy Solutions for a Complex World* (Basingstoke, 2006).

The related idea is that monocultures are more likely to suffer from disease than polycultures.

The extent to which such clumsy or hybrid solutions are able to maintain stability rather than self-destruct is a matter for debate. Similarly, it is difficult to see how clumsy solutions can easily be engineered, or whether they tend, in practice, to emerge in an accidental, 'layering' fashion. Although such an 'organic' growth of resilience through clumsiness might be regarded as bringing advantages over those approaches that believe in intelligent design, such arrangements will nevertheless be exposed to the kinds of regulatory failures that are associated with layering approaches—and which were noted above.

Conclusions

Looking across these three widely advocated 'solutions' to regulatory failure suggests that any remedy is associated with inherent trade-offs, side-effects, and limitations. It is unlikely that the adoption of any one remedy will safeguard against future regulatory failure. What do emerge, however, from the discussion offered by this and the previous sections are two key messages. One is that there may be importance in relying on redundancy in regulation—in avoiding resort to any one single instrument or organization to deliver desired regulatory outcomes and processes. The other message is that the importance of contestability should not be forgotten. If regulatory failure tends to flow, *inter alia*, from capture and 'closed' views as to the benevolence (or otherwise) of particular regulatory instruments, contestability offers a challenge to those restricted perspectives.

This chapter has cut across many of the themes of this volume. Regulatory failure occurs across all parts of regulatory activities and it raises key issues that we have noted in other chapters—notably Chapters 3 ('What is 'Good' Regulation?') and Chapter 15 ('Cost-Benefit Analysis and Regulatory Impact Assessment'). Any discussion of regulatory failure prompts consideration of the limits of intended social action. One of regulation's key attractions has been its suggestion that it offers a technocratic and 'safe' mode of control. The reality is that 'failure' is a contestable notion and that there are limits to human and organizational capacities—especially when collaborations are required in order to achieve results. As a result, it may be appropriate to regard the achieving of intended outcomes (and the acknowledgement of this) as the exception rather than the rule. Believing that 'regulation', on its

own, will safeguard against failure, or accusations of this, is arguably the best recipe for further failure. We have noted, in this chapter, how different theories account for regulatory failure. Resisting charges of failure demands that the core varieties and mechanisms of failure are borne in mind, that regulators continue to consider how the likelihood of their occurrence can be minimized, and that the contestability of failure is addressed.