Contents

Li	st of Tables and Figures	X
Αc	knowledgements	xi
In	troduction	xiii
1	Exploring Government's Toolshed	1
	Government as a toolkit Pay-offs of the 'toolkit perspective' The focus and limits of the book Where do we go from here?	2 11 14 19
2	Nodality	21
	Detecting with nodality: nodal receivers Effecting with nodality The toolset in context Conclusion	21 28 34 48
3	Authority	50
	Detecting tools based on authority: requisitions Effecting with authority: tokens of authority The toolset in context Conclusion	51 56 68 77
4	Treasure	78
	Detecting with treasure: rewards Effecting with treasure: from customized to open	80
	payments The toolset in context	85 93

viii Contents

5	Organization	102
	Detecting with organization: ergonomic detectors	103
	Effecting with organization: direct action or treatment	106
	The toolset in context	116
6	Comparing the Tools of Government	126
	Government tools or tools of government?	126
	Tools of which government?	128
	Inside government: comparing government agencies	130
	Retooling: change over time	134
	The measurability of the toolkit approach	138
	Conclusion	143
7	Evaluating Government's Toolkit	144
	Appraising government's use of tools: intelligent	
	policy design	144
	Reviewing alternatives: a rational choice?	146
	Matching the tool to the job	149
	Economizing on bureaucracy	152
	A moral dimension?	161
	Conclusion	165
8	Alternative Approaches to the Tools of Government	167
	The institutions-as-tools approach: the tools of	
	government as forms of organization	168
	The politics-of-instrument-choice approach	169
	Generic institution-free typologies of tools	171
	The three approaches compared: a phoney war?	173
	How the tools analysis of this book relates to	1/3
	other generic institution-free analyses of public	
	policy instruments	174
	The challenge of digital-age technology for the	1/7
	analysis of public policy instruments	177
	Conclusion	183
	Conclusion	103

		Contents	ix
9	Looking Ahead: The Tools of Government in the Digital Age		184
	The future as an extrapolation of the past: a new world of cyber-detection, group-targeting and		
	variable nodality		184
	Same tools, different governments	-	192
	Sharpening government's tools?	-	196
Re	ferences	2	204
In	dex	2	215

Exploring Government's Toolshed

To ask 'What does government do?' is to state a plain man's question in plain man's language. The answer is by no means simple.

(Rose, 1976, p. 247; Rose and Peters, 1978, p. 67)

Well, what does government do, exactly?

If a young child asked you this question, what would you say? Responding to that sort of naive query isn't simple, because there are so many possible ways in which it could be answered. Consider only three, out of a myriad of possibilities.

One possible reply would be to try to describe what happens 'inside' government – how decisions are made, how orders are passed down the line, how information moves about. If we chose to answer the question in this way, we would be telling a story about government's decision processes. It is the kind of story that has become familiar through political diaries and memoirs. The story would be punctuated by telephone calls, emails and documents, interminable meetings, lights burning into the night, petty squabbles and jealousies, sex scandals, sleaze allegations, panics, heart attacks and nervous breakdowns, and actors of varying importance, competence and ambition. We would soon become immersed in all those interesting but elusive questions about power, influence, who-said-what-to-whom and when. Not a child's territory, exactly.

But that is only one way of looking at what government does. A second type of answer might focus on the *subjects* in which governments today are interested, rather than on the arcane plottings in the chancellories. That would take us on to an entirely different tack. We would find ourselves trying to list everything that government nowadays concerns itself with, for one reason or another. Very quickly that list would become bewilderingly long and heterogeneous. From government's birth-control pills for cats in Denmark to its seals on domestic gas meters in Britain: government's spoor (its cloven hoof, some would say) appears everywhere. We would soon have to simplify, reducing the mass of specific interests down to a few major and general purposes that governments have, or say they have.

Either of these approaches would make sense as a way of describing 'what government does'. A third possibility – different again – is to describe the *tools* that government uses, rather than what it uses those tools for or how it reaches its decisions. We can imagine government as a set of administrative tools – such as tools for carpentry or gardening, or any other activity. Government administration is about social control, not carpentry or gardening. But there is a toolkit for that, just like anything else. What government does to us – its subjects or citizens – is to try to shape our lives by applying a set of administrative tools, in many different combinations and contexts, to suit a variety of purposes.

These three approaches to 'what government does' are rather like the famous Indian legend of the six blind men describing an elephant. On first encountering such an animal, each gets part of the whole picture. This book, however, is about 'what government does' only in the third sense. It is about the tools or instruments that government uses at the point where it comes into contact with 'us', the world outside. It focuses on the mechanics rather than on the ends of government, and on what government does to society rather than on what happens inside government.

This chapter briefly sets the scene, in four sections. The first section lays out some of the different kinds of basic tools which government has available to it. The aim is to provide the reader with an outline plan of government's toolkit which will be explored further in later chapters. The second section, developing the brief introduction at the outset of the book, is an explanation of what can be got out of looking at government from a 'toolkit perspective': in other words, why it is worth reading the book. The third section is an explanation of the focus and limitations of the approach being taken here, in the hope of avoiding confusion as to what the book is about. The fourth is a 'road map' – a brief explanation of the structure of the book.

Government as a toolkit

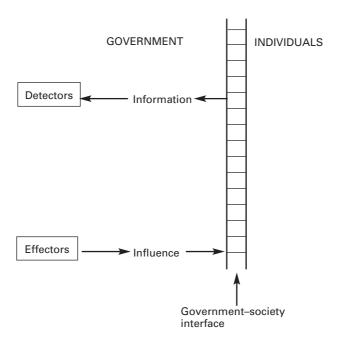
If we were looking at a physical collection of tools, we could 'take in' that collection more easily if we could separate its contents into a few broad types at the outset, distinguishing (say) hammering tools from digging tools, measuring tools and cutting tools. When it comes to government's collection of tools – which are not physically

assembled in a single place – it is all the more important to be able to identify broad classes if we are to avoid being swamped by detail and unable to distinguish theme from variations. By making two sets of simple distinctions, we can begin to make sense of the apparent complexity of the instruments which government uses on us.

Detectors and effectors

First, we can distinguish between government's tools for 'detection' and its tools for 'effecting'. This distinction is summarized in Figure 1.1. Detectors are all the instruments government uses for taking in information. Effectors are all the tools government can use to try to make an impact on the world outside.

The terms 'detector' and 'effector' will be strange to some readers. They come from cybernetics, the science of general control systems (see Ashby, 1956; Beer, 1972; Klaus, 1973; Kramer and de Smit, 1977; Dunsire, 1978, pp. 59-60). They are the two essential capabilities that any system of control must possess at the point where it comes into contact with the world outside. This applies



Government detectors and effectors FIGURE 1.1

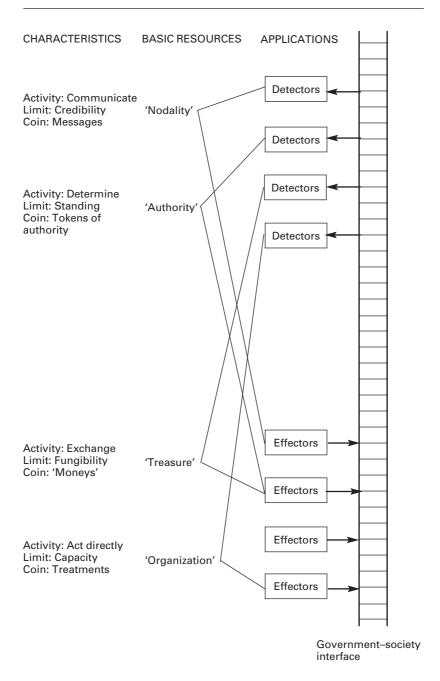


FIGURE 1.2 Eight basic types of government tool

literally to any control system in art or nature (a mousetrap, a moon rocket, the body's temperature control). For government, which is – or aims to be - pre-eminently a way of controlling society, these capabilities are basic to its existence, and certainly to its effectiveness

Plainly, then, government needs to employ a host of detecting instruments to observe or to obtain information from the outside world. It is essential for any control system to have some means of ascertaining the state of the system or of the world outside as it relates to that control system – temperature, pressure, or whatever it may be.

But it is not enough simply to know what is going on. No control system is worthy of the name unless it is capable of taking some action on the basis of that knowledge. This is the second point at which any control system comes into contact with the world outside. It must have some means of trying to adjust the state of the system to which it relates. Here we come to the 'business end' of government – a range of tools which vary from the gentlest of blandishments to extremely blunt instruments.

The 'NATO' scheme – government's basic resources

On what is government to base its detectors and effectors? This question brings us to the second set of distinctions, the so-called 'NATO' scheme. This has nothing to do with the well-known Western defence alliance. It is just a convenient acronym which sums up four basic resources that governments tend to possess by virtue of being governments, and upon which they can draw for detecting and effecting tools. These four basic resources are 'nodality', 'authority', 'treasure' and 'organization', as shown in Figure 1.2.

Nodality denotes the property of being in the middle of an information or social network (not necessarily 'dead centre'). Strictly, a 'node' is a junction of information channels. Governments are typically 'nodal' at least to some degree in one or all of three senses. They may constitute a central presence in the form of a 'figurehead'. They may constitute a central presence in a more narrowly informational sense – seeing many different cases and thus building up a store of information not available to others. Often, they sit in some central place in their domain – the Rome to which all roads lead.

Authority denotes the possession of legal or official power (Lasswell and Kaplan, 1950, p. 76, n. 2). That is the power officially to demand, forbid, guarantee, adjudicate. 'Authority' in this sense is traditionally seen as one of the defining properties of government, though its source, base and level may vary widely.

Treasure denotes the possession of a stock of moneys or 'fungible chattels'. That means not only (or necessarily) money in the common, everyday sense of banknotes or coins, but anything which has the money-like property of 'fungibility' (Rose and Peters, 1978, p. 25) – that is, the capacity to be freely exchanged. Governments in most cases possess at least some stock of 'treasure' in this sense.

Organization denotes the possession of a stock of people with whatever skills they may have (soldiers, workers, bureaucrats), land, buildings, materials, computers and equipment, somehow arranged. In many circumstances 'organization' will be linked with the other three basic resources, but it is not a simple derivative of them, in that it is logically possible to possess organization in this sense without (say) treasure or authority – as when a plundering army lives by pillaging the countryside. Governments in most cases possess at least a minimum of 'organization'.

Each of these four basic resources gives government a different capability, can be 'spent' in a different way, and is subject to a different limit. Thus:

- 1 Nodality gives government the ability to traffic in information on the basis of 'figureheadedness' or of having the 'whole picture' (Simon *et al.*, 1950, p. 191). Nodality equips government with a strategic position from which to dispense information, and likewise enables government to draw in information for no other reason than that it is a centre or clearing-house. The limiting factor is *credibility*, and the 'coin' how government spends this resource is messages sent and received.
- 2 Authority gives government the ability to 'determine' in a legal or official sense, using tokens of official authority as the coin, and subject to a limit of legal *standing*.
- 3 *Treasure* gives government the ability to exchange, using the coin of 'moneys' and subject to a limit of 'fungibility'. Government may use its treasure as a means of trying to influence outsiders or as a way of buying 'mercenaries' of various kinds, or buying information, subject to a limit of *solvency*.
- 4 *Organization* gives government the physical ability to act directly, using its own forces rather than mercenaries. The coin is 'treatments' or physical processing, and the limiting factor is *capacity*.

As can be seen from Figure 1.2, each of these four properties can be used as the basis for tools of both detecting and effecting. Thus government can obtain information simply on account of its nodality (or by making itself nodal), by buying it, by officially demanding it, or by extracting it by means of some physical device. Similarly it can try to influence the world outside by sending out messages on the basis of its nodality, by authority, by treasure and by organization.

These four resources are different in several ways, as we will show in later chapters. For example, some may be 'self-renewing', while others cannot be. And some may introduce more constraint into the environment of government's subjects than others. Very roughly, that level of constraint could be said to rise as government moves from nodality-based tools to those based on treasure, and then to authority-based and in turn to organization-based tools. In simple terms it could be said that 'nodality' works on your knowledge and attitudes, 'authority' on your rights, status and duties, 'treasure' on your bank balance, and 'organization' on your physical environment or even on your person.

By combining the two control mechanisms and the four types of resources – as in Figure 1.2 – we get eight basic kinds of tool that government can use at the point where it comes into contact with the world outside. Each of these eight types will be discussed and explored further in subsequent chapters. We use different ways to categorize effectors and detectors, as follows.

For effectors, in each chapter we investigate how the four basic kinds of effecting tool can each be used by government in a particular or general way. This is a thread that will run through the entire discussion. Particular applications are those that are directed at specific and named individuals, organizations or items: for example, when government issues permits to individuals whom it has 'vetted' for some purpose. General applications are those that are beamed at the world at large and thus apply to whomever it may concern: for example, when government issues some prohibition or order that applies to everyone or anyone. In between the particular and the general come a variety of 'group' applications.

This is only a rough distinction, and even the four basic 'NATO' types are by no means totally independent of one another, overlapping somewhat at the margin. But it gives us a workable basis from which to begin. For effectors, for example, by crossing the 'particular–group–general' distinction with the four elements of the NATO scheme, we find twelve basic kinds of effectors – three for each

NATO resource. These are shown in Table 1.1 on page 9. The chapters in this part of the book explain and discuss the twelve elements in Table 1.1 and unpack this simple toolkit further into subtypes.

Turning to **detectors**, here we are concerned with the other side of the picture: that is, how government obtains information about the world outside. As noted above, each of government's four basic resources can be used for 'detecting' as well as for 'effecting', shown in Table 1.2.

Thus nodality may cause government to receive information in the same way as it may give government a reason to be listened to. People may give government information simply because of its social centrality and visibility – 'because it's there'. Information of this kind is in a certain sense free for government, and the detectors that pick it up are here called *nodal receivers*.

Second, government can use its legal authority and demand information. This kind of detector is termed *requisitions*, to mean information that is collected in the form of an official demand (characteristically accompanied by threatened sanctions for noncompliance).

Third, government's resource of treasure can be used to buy information. This kind of detector is here termed *rewards*, but it goes a little beyond treasure in a narrow sense, denoting information which government gets in return for any kind of tangible quid pro quo.

Fourth, government can use its organization to get information, in the form of physical or mechanical contrivances for scrutiny which largely bypass human motivation. These are here called *ergonomic detectors*.

In fact, the parallel between these four types of detector and the four types of effector discussed above is by no means exact, as will be seen. But it is close enough to serve as a starting point, so that the reader can place the discussion of detectors in relation to that of effectors.

However, when it comes to government detection, it makes less sense to distinguish between particular and general applications. Instead, the emphasis here is laid on the distinction between 'active' and 'passive' modes of government information-gathering. The difference between the two lies in the degree of initiative or mobility that government requires to obtain the information in question. Thus when government observes us from a fixed watchtower, it is passive. When it knocks on our door or stops our car in the street to pursue its inquiries, government is active. Clearly, there are many

TABLE 1.1 Government effectors

Basic resource	Nodality (Chapter 2)	Authority (Chapter 3)	Treasure (Chapter 4)	Organization (Chapter 5)
Coin (how government spends or uses the resource)	Messages	Official tokens	Moneys	Treatments
Level of application				
Particular	Bespoke messages	Directed tokens	Customized payments	Individual treatments
Group		- Group targeted an	Group targeted and conduited applications	suc
General	Broadcast messages	Blanketed tokens	Open payments	At-large treatments

TABLE 1.2 Government detectors	ent detectors			
	Nodal receivers	Rewards	Requisitions	Ergonomic detectors
Passive (government at a	Unsolicited tenders (unconditional)	Unsolicited propositions	Obligations to display	Turnstiles
fixed point or not taking initiative)	Ear trumpet	Advertised rewards	Obligations to notify	Fixed scanners
•		Applications (information as a by-product)	Returns	
	Scrutiny of free media (active search within government	Information exchange (information with	Interrogation (active search, but informant required to	Mobile scanners
>	offices)	government for mutual benefit	attend on government)	
Active (government operating away from home or taking initiative)	Direct inquiry (government waits on informant)	Active propositions (made by government to prospective informant)	Inspections	Hidden scanners

intermediate points between these two extremes. For simplicity, activity and passivity will here be taken as a combination of initiative and mobility, though it would be possible to take the two sepa-

It should perhaps be stressed once more at this point that, just as applied to effectors, the interest here is exclusively on the instruments that government uses at its interface with the world outside. When it comes to detection, that means we are interested only in the tools by which government extracts information from its subjects. We do not consider how that information is used or processed (or not, as the case may be) within government's machine. There are many fascinating things to be said about that process, but they will not be said here. We are concerned with ingestion, not digestion.

Pay-offs of the 'toolkit perspective'

This book is by no means the first or only attempt to explore the tools used by government. The approach taken here was first developed over 20 years ago, in the pre-digital age, by one of us in an earlier version of this book, simply called The Tools of Government (Hood, 1983). In Chapter 8 we show how the approach taken here compares with that taken by other analysts of government instruments. Of course there are any number of alternative ways of laying out government's tools, no one of which is necessarily 'correct'. We could refine or subdivide ad infinitum, depending on whether we want a scale that is large or small, general or area-specific.

But we will not compare minor differences of classification between one author and another, at least not until Chapter 8 and not much then. This is not that kind of book. A question that does need to be pursued, however, relates to the 'pay-offs' derivable from the 'toolkit' approach to government. What advantage could there be in looking at government in this way, as opposed to our other two possible ways of describing what government does – a 'decision-making' or 'field of activity' perspective? Three main kinds of pay-off are briefly discussed below.

Making sense of complexity

First, having a sense of the basic tools available to government helps us to make sense of what seems at first sight to be the bewildering complexity of modern government's operations. Look at government activities in terms of government's many purposes or interests, as we saw earlier, and the list is endless. Look at those activities as the application of a relatively small set of basic tools, endlessly repeated in varying mixes, emphases and contexts, and the picture immediately becomes far easier to understand.

In fact (to take an analogy to which we will return later) it is like approaching each object that we encounter as some combination of a relatively small number of chemical elements rather than as a completely new physical substance. The same principle applies to the understanding of each unique piece of music as a combination of a limited number of notes or understanding each particular dance as a combination of basic physical routines as in labanotation. By looking at things this way, we can easily understand something that we have not seen before and even invent hypothetical new combinations for ourselves.

Similarly, comparisons become much easier to handle; indeed, much of the fascination of exploring government's tools is to compare the instruments brought to bear on a certain problem by different governments or by the same government at different times. The same instrument may be used for many different purposes.

This is just as well, for if government really had to design a completely new tool for each new subject in which it became interested, it would require far greater powers of innovativeness and imagination than governments can in practice be expected to possess. As it is, the same basic set of tools appears again and again as governments face up to 'new' problems, such as computer privacy or the regulation of reproductive technology. Only the mixture varies. This means that if we can grasp the basics of government's toolkit, we can have a better sense of what 'they' – government, officialdom, authority – can do in any given case and what problems they may face.

Picking the tool for the job

Thus – and this is the second main pay-off – a knowledge of government's toolset may be useful, not merely as a way of understanding government, but also for diagnostic purposes.

Government, like human beings themselves, is a tool-using animal. If it desires (say) defence, education, health – even birth control for cats – it must find and employ instruments that will actually produce such things. Otherwise its 'policies' or purposes

will be no more than fantasies. It is by applying its tools that government makes the link between wish and fulfilment.

It hardly needs to be said that this link is frequently problematic and highly politicized. Selecting the right tool for the job often turns out to be a matter of faith and politics rather than of certainty. Indeed, it is not uncommon to find that the choice of 'instruments' attracts much hotter political debate than the ends being sought. For example, aims like preventing suicide or anti-social drinking may seem unexceptionable, but how can they actually be attained? Will an extension of suicide-prevention counselling discourage suicide attempts or positively encourage people to flirt with death? Will an extension of the permitted opening hours for bars reduce or increase the incidence of anti-social drinking?

If the operation of government's tools were unproblematic, it could be left to 'technocrats', and the rest of us could concentrate on the purposes that government should pursue. Things are not like that in reality. Knowing something about what is in government's toolkit can at least help us to think about ways of doing better when – as so often happens – things go wrong. Such knowledge enables us to survey the main kinds of implements that might be used to address any given subject with which government may find itself dealing. If one tool fails to answer the purpose in any particular case, we can look systematically for others which might do the job. Thinking in these terms can provide some antidote to the all-toocommon assumption in government affairs that things could not possibly be handled in any other way than they are at present.

Picking the 'tools for the times': the digital age

The two pay-offs discussed so far could apply at any time. But it could be argued that it is especially useful to revisit government's toolkit now. Since this approach was first developed (Hood, 1983) there has been a dramatic change in societal use of digital technologies. Of course, in one sense such technologies have been around in many governments for a long time, even back to the 1980s and earlier. But in contrast to earlier technologies, from the 1990s the internet and related technologies have greatly changed the way that many individuals behave in society at large (for working, shopping and recreation, for instance), and changed the way governments do or could interact with individuals and firms. Looking at these changes now, while the digital age is still developing and the predigital era still fresh in the mind of anyone over thirty, offers a

particularly good vantage point for observing the implications for government's use of its toolkit.

Such a change does not mean that new policy problems have appeared or old ones disappeared. Rather, they present themselves in new ways. Take, for example, gambling addiction and school bullying, two social problems with which governments have long grappled. Both these activities have now moved online, with some research suggesting that internet gambling is more addictive and 'cyber-bullying' via text message more damaging to children than their offline equivalents. Cyber-crime is a new phenomenon that makes increasingly heavy demands on the resources and ingenuity of government as well as business. Moreover, at the time of writing, addiction to the internet itself is recognized as a new form of addiction, with compensation claims being raised by individuals said to have been damaged by compulsion to use the internet, raising questions for government action to deal with the consequences. Looking at how government employs its tools to deal with such problems gives us an important angle of vision on change in the digital age, as government searches for 'new' instruments – many of which can be understood as old instruments in a new technological context.

Of course, such effects will vary between countries, as we shall show later, since internet penetration varies from virtually nothing to around 90 per cent and different types of regime face different challenges in using the technologies themselves. But even in those countries where internet penetration is low the impact of the digital age is still felt. For example, variations in internet use can widen inequalities within and across countries, and internet-mediated transnational networks (for instance, for crime, terrorism or social movements) can challenge governmental authority.

We are not, of course, suggesting that other possible ways of looking at 'what government does' do not have pay-offs too. But they do not have *these* pay-offs.

The focus and limits of the book

To focus on government's toolkit, we need lenses which necessarily distort other aspects of government. This is unavoidable in any kind of inquiry; and it is important to be clear about it to prevent confusion or false expectations. Four points especially need to be stressed.

Focusing on the government–society interface

First, the book explores the tools used by government *only* at the interface between government and society, as was shown in Figure 1.1. That is the point at which 'they' (governments) meet 'us' (individuals). The book says nothing about the tools used *within* government to control and coordinate its own far-flung activities and agencies.

Exactly where the government–society interface is, of course, depends on how you choose to define the boundaries of government, and here that is deliberately left somewhat imprecise. In reality, of course, that interface is often extremely fuzzy. Much has been written in recent years about 'governance' in the sense of institutional arrangements that span levels of government and straddle the divisions between public bureaucracy, private firms and not-for-profit 'third sector' organizations. There is also a longer-standing literature about the way that government can be 'colonized' by the non-government sector and vice versa, so that the boundaries become deliberately blurred. The same thing can happen at a much more down-to-earth administrative level, too, producing well-known puzzles as to whether one locates organizations such as defence-contracting firms or 'parastatal' bodies as part of 'government' or not.

Such disputes are far from trivial, but they belong to a different kind of discussion. For the purpose of exploring government's toolkit, it does not matter much what the answers to these questions are, because where exactly you decide to draw the boundary between government and the world outside affects only the overall proportions in which government tools are used, not the basic elements themselves. For us, it is sufficient to adopt the naive perspective of the person in the street who believes that there is a clear distinction between governments and the rest of humanity, and that government is what 'they' do to 'us'.

Treating government as a totality

Second, the book looks at government in general and as a totality. This too is a simplification of something that is very complicated in reality. The approach is general in the sense that it does not necessarily refer to any particular government or level of government. The tools that are discussed are generic to government. They are used in every country; most of them are common not only in the present day, but go back far into the past.

Treating government as a totality – to begin with, at least – obviously involves a radical analytic simplification. Everyone knows that 'in reality' government consists of a host of different 'cells' or agencies, often squabbling and at cross purposes with one another. And the 'governance' perspective referred to earlier reminds us that public authorities often work in concert with other organizations as well as with each other, in ways that may involve complex patterns of conflict and cooperation. But once again it is sufficient for us to adopt as a starting point the perspective of the man in the street who does not divide government into its many component parts or agencies, but rather sees 'officialdom' as a whole – a monolith. We shall come to 'disaggregation' later on.

'Unlearning' conventional descriptions of government activity

Thinking of government as a totality and ignoring all the 'office politics' and other processes which go on inside it may well involve some degree of mental readjustment or 'unlearning' of what we already know. A third kind of 'unlearning' that is required – difficult, but equally necessary if we are to concentrate on government's toolkit – is to forget everything we know about how government *itself* describes its activities.

The reason for this is that governments tend to describe their activities officially in terms of purposes or fields of concern, not instruments, and it is very important not to confuse the two. When governments draw up budgets, the headings tend to be descriptions of their purposes, especially in modern budgeting systems. When they divide their tasks into agencies, the boundaries tend – at least at the topmost level – to reflect the purposes being pursued. It is for this reason that we can easily come to think of purposes or fields of activity (defence, health, education and so on) as the 'natural' way of describing what government does.

But if we want to think in terms of tools or instruments, we must deviate from the conventional way of thinking both negatively and positively. First, negatively, we must unlearn preconceived categories based on the purposes of government. Identifying a set of tools is quite different from listing government's interests or purposes – our second possible way of answering the conversation-stopping child's question that we started with. The same tool can often be used for many different purposes or applications. Think of the axe in the hands of the firefighter, the forester, the executioner; or the mallet in the hands of the Boy Scout, the shoemaker, the

judge. Indeed, it has already been pointed out that a tool can often be taken right out of context and used for some purpose quite other than that for which it is ostensibly designed: that is something that happens quite often in government.

Second, positively, if there is no satisfactory, ready-made official language for describing government's toolkit, we must invent our own. It goes without saying that most government officials going about their daily tasks no more 'see' those tasks in terms of detectors and effectors or of the components of the 'NATO' scheme than Molière's M. Vautrin (in Molière's famous play Le Bourgeois Gentilhomme) conceived of himself as speaking prose. And when the eight kinds of basic government tool that have already been outlined are further subdivided later in the book, other terms will have to be contrived to denote the devices involved. Some of these names may seem infelicitous, but they are only labels: the reader is welcome to substitute his or her own terms. What does need to be stressed is that the labels that are used to describe government's tools do not spring from a mere love of neologism, but from the absence of any existing coherent official usage which would serve the purpose. Since government's tools do not come with labels on them, we must work out our own language.

Finally, this book says nothing about whether government's tools *ought* to be used extensively or modestly – whether government should be interventionist or laissez-faire. An agnostic stance is deliberately taken on such matters. The book is addressed to readers of both persuasions.

Citizens, partial citizens, non-citizens, would-be citizens

In exploring the government–society interface, we also start by treating 'society' as a totality, in the sense of all individuals and organizations with whom government might interact, whoever and wherever they might be. Just as with the divisions within 'government', there are many ways of breaking down that totality. One very traditional one is to distinguish between government's dealings with individuals and organizations within its own jurisdiction or territory, and its dealings with those located elsewhere (for example, foreign aid, disaster relief, military intervention, decisions on who to admit as asylum-seekers or immigrants). That can get complicated if, for instance, the entire population of a territory is evacuated because of some disaster; and, as we shall see later, the digital age has produced new ways in which we as

individuals can interact with governments other than our own, notably in the way that we can obtain information from them.

Another very traditional distinction between the classes of individual with whom government deals involves the distinction between citizens and non-citizens. Conventionally, the former have rights (such as voting or the ability to run for public office) and responsibilities (such as military service or jury service obligations) that do not apply to the latter. But that simple dichotomy too can be further elaborated almost ad infinitum. After all, some individuals with full civic entitlements and duties by right of birth can be temporarily or permanently deprived of full citizenship (for instance, during their childhood, when they are in prison, living abroad or are categorized as mentally unfit). They might not have effective citizenship, for instance if they are not able to speak the language of the country. And those who are not full citizens can also be divided into those who are recognized by the state as on the path to such entitlements and duties (for example, by rights to reside or to reside and work) and those who are residing or working within government's territory or jurisdiction without formal entitlements to do so (such as illegal immigrants or criminals).

Table 1.3 summarizes some of these distinctions for the imaginary (and no doubt instantly forgettable) state of Amnesia. Much of the Amnesian government's dealings will be with the individuals in the top left-hand cell of the table (unless most of its citizens live outside its territory for some reason, the whole country has been evacuated, or Amnesia has a government-in-exile). But Amnesia will be a very unusual country if its government's dealings do not include significant numbers of interactions with individuals in the other three cells of the table. Moreover, digital-age and related developments may well mean that Amnesia's government finds itself dealing with an increasing proportion of individuals outside the top left-hand cell of the table – for example, migrants, students and guest workers without full citizenship rights (and in some cases consciously rejecting any 'citizenship' path and seeking to be invisible to the state), cyber-criminals and others located elsewhere but with virtual interactions with the Amnesian government. That is why in this book we do not use the conventional American usage of 'citizens' to refer to the individuals with whom government deals, but use the term 'individuals' to cover all the categories in Figure 1.1. But of course, as we shall argue later, some of those categories of individuals are likely to prove much easier for government to reach with its toolkit than others.

TABLE 1.3 Amnesia's government and some of the individuals with whom it deals

	Resident	Non-resident
Full citizens	Amnesians living in Amnesia with full citizenship rights and duties as a result of birth or naturalization	Amnesians with full citizenship rights living, working or holidaying abroad (at least on a short-term basis)
Partial citizens	Amnesians with full citizenship by birth who are children, prisoners or mentally unfit; citizens of other states with rights of residence or employment in Amnesia (and who may be recognized as on the path to full citizenship)	Amnesians who live and/or work abroad and thereby forfeit or avoid full citizenship (for example, obligations to pay Amnesian tax, do Amnesian military service or serve on Amnesian juries)
Non-citizens	Criminals and illegal immigrants temporarily or permanently living or working in Amnesia	Citizens, partial citizens and 'non-citizens' of other states with whom Amnesia has dealings abroad, those seeking rights of residence or employment in Amnesia

Where do we go from here?

So much for the whys and wherefores. You now need a quick sketch of the course that the book takes from here.

Chapters 2 to 5 lay out the toolkit for each of the four NATO tools, building on the basic components that have already been described and summarized in Figures 1.1 and 1.2. In each chapter we discuss first government's detectors and then go on to discuss its effecting tools.

Chapters 6 and 7 look at the toolbox as a whole, and in a more analytic way. Chapter 6 shows how a comparatively simple conception of government's tools can be used as an analytic device, as a means for reducing the apparent complexity of government operations to a comprehensible level. As we have already noted, government's tools or instruments – in one sense extremely diverse and 'all around us' – can be made comparatively simple by 'reading' them as permutations, refinements and variations on a listed number of basic types like musical notes or dance steps. The toolkit approach can be used to compare governmental activity across countries, over time and within governments. There is also potential, we suggest, for quantifying these comparisons, in terms of how the use of the four NATO tools changes over time or varies across organizations.

Chapter 7 takes a more normative approach, considering some of the ways we might judge government's choice and application of its tools and how the toolkit approach might aid 'intelligent' policy design. Government's tools are, of course, potentially dangerous. Like most tools, they are benign or malign according to the purpose of the user. Many tools can be used as weapons. All of government's tools, even the most innocent-seeming of them, can be and often are used as instruments of repression. Their application therefore raises hot moral issues as well as what at first sight may seem to be more neutral questions of economy and effectiveness. The chapter considers what use of tools might contribute to a government's aim to 'use bureaucracy sparingly', both in terms of economizing on bureaucracy and minimizing the extent to which a government's interventions bring 'trouble, vexation and oppression' upon its citizens.

Chapter 8 looks at other toolkit approaches to the study of government, noting that most of them more or less disregard the implications of the digital age and considering what some of those implications might be. Chapter 9 concludes in the same vein, drawing together from the rest of the book those digital changes that are in some way generalizable. We apply a broad-brush categorization of countries in terms of the effects of digital technologies on governmental interactions, to capture the variations we have observed throughout the analysis. And finally, we consider the extent to which digital technologies could lead to a 'sharpening' of government's tools in the future.

Index

3G mobile phone licences 51	Bluewater Shopping Centre 71
	bounty 91–2
Accenture 27	breathalyser test 56
accessibility, websites 141–3	broadcast messages 35-8
accidents 53	broadcasting authorities 63, 137
active proposition 83–4	BSE see cattle plague
advertised rewards 81–2	bullying (school) 14
agriculture 33, 38, 63, 130–3	business regulation 53, 62, 73
subsidies 107	53, 02, 75
AIDS 136, 170, 174	Canada 27
al-Qaida 23, 42, 48	capacity 6
Albania 120	
Albania 130	Catalonia 129
alcoholism 109, 152	cattle plague 39, 53, 148
Amin, Idi 29	BSE 134. 136
amnesty 65-6	CCTV 71, 104, 116, 119–20, 137,
Amnesty International 87, 112	186
'aneunomothetiscopic' 172	census 42, 56, 151
Anglo-American Venture Fund 90	certificates 57–9, 70
anti-social drinking 13	Chechen rebels 81–2
applications 82	child handicap (UK) 82, 90
arbitrament 63–4, 70	Child Support Agency (UK) 97
Argentina 76, 127	Chile 153, 195
at-large treatment 114–16	China 29–31, 41, 50, 61, 94, 109,
attention 47–8	111, 112, 135, 178, 180,
Australia 64, 73, 83, 110, 141–3	195–6
Australia 64, 73, 83, 110, 141–3 authority 5–6, 50–77	Chrysler loan (US) 60
	CIA 80, 87, 88, 90
Bahrain 30	cigarette packs 30, 68, 155
bankruptcy 55	citizens 18, 188
banks 43, 54, 87, 199	City academies (UK) 87
France 107	Civil Aeronautics Act 1938 (US)
accounts 97, 121, 124, 187	137
bear, brown 157	cocoa swollen shoot virus 63, 76–7
bearer-directed payments 92–3, 99	compliance costs 68
Bell, Henry 22–3	computer privacy 12
Bentham, Jeremy 22, 157, 158-9,	conditional tokens 59–60
172, 202	conduits 89–91, 99
bespoke messages 31–3	congestion charge 23
bicycles 80, 91, 97, 138–9	Congregatio de Propaganda Fidei
Big Conversation 84	37
Bin Laden, Osama 23, 84, 189	Congress of Cultural Freedom 88
biometrics 59, 73, 188, 202	consensus 45–7, 75–7, 99–101,
bird flu 111, 135	123-5, 150-1, 200-1
blanketed tokens 65, 70, 72	constitutivism 171
Diameted (ORCHS 03, 70, 72	COMBUILDING 1/1

constraints 62–4	E' award (US) 57
context 137	e-government 27, 96
contingency theory 150	ear trumpet 24–6
contracts 86–8	economic sanctions (Iran) 75
Cooper's Snoopers 27	economy (policy designs) 145,
counselling 33	152–61
credibility 6	effectors 3–5, 7–8, 9
customized payments 85-6	electoral administration 58, 107,
customs duties 56, 133 cyber-activists 191	110
cyber-activists 191	electoral register (France) 29
cyber-bullying 14 cyber-crime 14, 18, 72, 121–2,	electric power 178, 185
151, 197, 201	Elf Acquitaine 91 emissions quotas 62, 66
cyber-detection 185–7	employment, government 141
cyber detection 105 /	enablements 60–2, 70
Cyprus 63	Enron (US) 154
71	epidemic 39
Dalai Lama 31	ergonomic control 114
data 139-141	ergonomic detectors 8, 103–6
dating agency 79, 83	EURES 83
dead person's estate 69–70	euro 39
Debt Collection Improvement Act	European Commission 128
1996 (US) 96	European Growth and Stability Pact
defence ministry 130	140
defensible space 115–6 deliberative choice 145–9	European Health Insurance Card 189
Department of Justice (US) 53,	European Journal 47
191–2	European Union 140
deportation 111	Savings Directive 2005 54, 71
detectors 3–5, 8–11	extraordinary rendition 87, 128
digital technology 13, 33, 42–3,	,
119–22, 131, 137–8, 151	Falkland Islands 127
direct action see treatment	Falun Gong 31
direct information propagation	family history 33, 42
30-1	'FAQ' approach 37
direct inquiry 27	Federal Bureau of Investigation (US)
direct notification 31–2	105, 121–2, 189, 201
directed tokens 57–9, 70, 72 directness 158–9, 176, 200–1	Federal Government (US) 79–80,
Disability and Carers Service (UK)	102 Federal Office of Pipeline Safety (US)
34	42
diseases, contagious 170, 180	Federal Security Service (Russia)
disinfection 114, 123, 170	191
disinformation 29	Federal Trade Commission (US) 62
dob-a-job 25	fishing 93
dogs, dangerous 107, 186	quotas (NZ) 66
driver licences (UK) 74	fitness for purpose 145, 149–52
drug addicts 109	fluoride 114, 118, 148
drug prescribing 34–5	food labelling 30
	foreign office 130, 141–3

France 53, 79, 91, 92, 107, 111, 134, 135 freedom of information 24, 33 fuel efficiency 58 gambling 14 garbage collection 109–10 General Accounting Office (US) 25 General Strike 1926 (UK) 110 Geneva Convention (1949) 56 Germany 51, 53, 67, 73, 157 East 135 West 74 Ghana 63, 76–7 Glasgow 135 goat hair (UK) 123	information exchange 82–3 inspection 55–6 institutions-as-tools 168–9 international aid payments 94 International Red Cross 44 internet 14, 30, 37, 136, 151, 202 service providers (Russia) 191 Services Unit (Saudi Arabia) 180–1 internment camps 108 interrogation 55–6 interventionist 17 Iraq War 2003 121 IT systems 95, 178, 180, 193 Italy 90–1, 153, 157
Gold Coast <i>see</i> Ghana Google 43, 143, 190–1, 196	Japan 79 Jewish Board of Deputies (UK) 64
Earth 41 government 1–2, 15–6 government contracts (US) 79–80 government time 65, 67 Great Seal (US) 50 Grenada 194 group-targeting 187–8 messages 33–5 tokens 64–5, 70 group treatment 113–14 Guantanamo Bay 108, 112 health data 24 herring subsidies (UK) 92 HIV tests 55, 82 Aids 136, 170, 174 hollow government 199 Hong Kong 23, 110, 135 hop quotas 66 housing 135	Korea (North) 195 Kosovo War 1999 121 Kursk 95 Kyoto Protocol 62 labour exchanges 83 UK 53 laissez-faire 17 Land Acquisition Act (Zimbabwe) 62–3 leakage 30 Lenin 38 letters of marque 60 lighthouses 36, 127, 169 limited liability companies 67–8 Lockheed loan (US) 60 London Fishmongers' Company 60 Lonely Planet 44 lottery 39–40, 92
identity cards 73, 74 identity theft 188, 201–2 Illinois (US) 62 Immigration and Naturalization Service (US) 73 income tax liability 74–5 India 41, 134 British 113 Individual Learning Accounts (UK) 94, 152 individual treatment 106–13	Maradona, Diego 26 marking 106–7 Mayntz, Renate 149–50 Mexico 66 microchips 185–7, 202 military draft 52, 71 military supply 95 milk quotas (EU) 66 Minimum Use of Force Tactical Intervention Squads (UK) 124

mobile phone networks 40, 178, 181 moral acceptability 145, 161–5 motor vehicles 52, 58 Mozambique 195 National Archives of Canada 42 National Performance Review 1993 (US) 179 National Student Association 88 Nepal 76 New Labour (UK) 46, 84 New Orleans 113–14, 115, 124 New Public Management 169 New South Wales 25 Nicaraguan Contras 88, 89 Nigeria 110 Niyazov, Saparmurat 67 nodal receivers 8, 21–7	policy diffusion 137 policy succession 136 politics-of-instrument-choice 169–71, 193 pollution 137, 138 population policies 79, 89, 94 population size 44–5, 73–5, 98–9, 122–3, 150 pornography 191–2 post office (UK) 105–6, 137 precision 161–2 press conference 34 prisoners of war 56 prisons 73, 108–9, 117, 127, 169 UK 124 US 118–19 privatization 177 privished messages 35–6 processing 111–13
nodality 5, 21–49 nuclear installations 41, 53, 134 obligation to display 51–2 obligation to notify 52–4	production quotas 62, 66, 94 prompted query response 33 propaganda 28, 37–8, 69, 94, 128 black 38, 169 Director of (UK) 48
Occam's razor 176 Octopus card (Hong Kong) 23 Oman 194 ombudsman 25–6 open compacts 65–6 open payments 91 open permits 66	proportionality 151 psychological warfare 27, 38 public opinion surveys 27, 41 US 38 Public Record Office (UK) 42 public registration 53 Public Trustee Office (UK) 107
organic status 58 organization 6, 102–25 Orwell, George 29, 119 Oyster card (London) 23	quarantine animals 108, 182 humans 109, 170
packaged self-serve messages 36–7 Pakistan 134 Paperwork Reduction Act (US) 140 passports 68, 69, 200 biometric (US) 59, 73 patent applications 36, 59, 82 Pensions Service (UK) 34 People's Panel 84 pests 111 petrol pumps 58 playing cards (UK) 116 police 141	racehorses 186 railways 137, 182 timetables 45 rational choice 146–7, 163 rations 73 fuel 134 fuel (US) 52 reproductive technology 12 requisitions 8, 51–6 returns 54–5 rewards 8, 80–5, 97 road-building (Scotland) 88, 115 road pricing 23, 24, 185, 200 Singapore 71, 98

royal warrant (UK) 58	state inquisitors 25, 40
'RSS feeds' 198	State Research Bureau (Uganda)
Russia 95, 191	29
	sting operation 27
St Kilda 47,113	stirrup 177
Saqq 95	storage and custody 107–9
SARS (Severe Acute Respiratory	strikes 64, 110, 117
Syndrome) 29	coal miners (US) 70
Saudi Arabia 30, 112, 180, 196	stud farms 111
savings bank 38	substitutability 159–60, 201–2
scalability 156–7, 199–200	suicide 13, 29
scanner	suppression of information 28–30
fixed 104, 120, 131	Sweden 39, 109, 111, 129, 186
mobile 104–5, 120, 131	T : 1 1 24
hidden 105–6, 120, 131	Taiwanese independence 31
Schein 50	tax 89, 151
scrutiny of free media 26–7 Second World War 27, 29, 38, 52,	expenditures 94, 100 payment 107, 124, 159
53, 57, 63	returns 24, 26, 54–5, 153, 199
sex offenders 29	teleological–deontological dilemma
Australia 64	164–5
sex tourism 64	terrorist attack 23, 43, 154
sheltered housing 104	thalassaemia 63
Singapore 41, 64, 79, 83, 96,	Tiananmen Square 31
109–10, 115	Tibetan independence 31
smallpox 53	tobacco 68, 107
smart munitions 120–1	UK 56
soap opera 38	tokens of authority 50–1, 56–68,
social security 24, 62, 82, 92–3,	70, 149, 187
129, 150	trade unions 58, 65, 127
UK 79	Poland 48
US 93	UK 159
social sorting 187–8	transfers 88–9
social transformation 175	transponders 52, 72, 120, 200
Socialist Workers Party 105	UK 98
solvency 6	transportation and distribution
Solzhenitsyn, Alexander 112, 184	109–11 treasure 6, 78–101
Soviet Union 29, 68, 84, 108, 112,	treatment 106–16
115	tsunami (SE Asia) 44, 189
Spain 110, 129	Indonesia 90
Special Operations Executive (UK)	Turkmenistan 67, 195
38	turnstile 104, 119, 131, 185
speed bumps 118, 120, 121	,,,
speed cameras 69, 72, 185, 186	unemployed 93-4
spies 81–2, 84, 105, 130, 169	United Arab Emirates 30
spin 29, 38	UNPAN 194–5
standard approval 65, 70	unprompted query response 32
standard constraints 67–8, 70	unsolicited propositions 80–1
standing 6	unsolicited tenders 22-3

vegetarianism 161–2, 165 vehicle licences (Singapore) 61 Venice 25, 40, 95 Venezuela 103, 110 vermilion pen 50 Victoria, Queen 47 visibility, websites 141–3, 189

walls, government 115, 120 war 148 water 67, 134, 158 London 185 weapons 86, 164–5, 179, 201 weapons of mass destruction (Iraq)
27
weather forecasts 36
Web 2.0 190, 198
webmetrics 141–3
websites 27, 36–7, 40, 41, 141–3,
166, 201

Yemen 194–5 Y2K bug 181

zero touch 31, 72, 97, 187, 200 Zhao Han 178 Zimbabwe 62–3, 130, 195