FACT, FICTION, AND VISION

POLITICAL PHILOSOPHY

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Preface

This book is about politics, political theory, and political philosophy. Although these two disciplines are often conflated because they interact, they actually are distinct. In fact, political theory is part of political science, whereas political philosophy is a hybrid of political theory and philosophy. The former discipline is descriptive and explanatory, whereas the latter is prescriptive—to the point that it is often called 'normative theory.' Simmons (2008: 1) defines it correctly as "the evaluative study of political societies." In other words, whereas politologists describe and explain politics, political philosophers examine it critically and venture to suggest improvements and, on occasion, radically different social futures. Political philosophers propose scenarios and dreams where political scientists offer snapshots of existing polities.

For example, at this time, the right to gainful and secure employment is moral, not yet legal; hence it belongs in political philosophy and social technology rather than in political science (see ILO 2004). By contrast, the hypothesis that "Great Powers in relative decline instinctively respond by spending more on 'security' and thereby divert potential resources from 'investment' and compound their long-term dilemma" (Kennedy 1988: xxvi) belongs in political science and historiography.

Because of its normative nature, political philosophy has a moral sting that political science lacks. When the political scientist soberly reports on low voter turnout, the political philosopher deplores that this is an indicator of the decline of civic-mindedness or even democracy; political scientists call "settlement" and "strong leadership" what political philosophers condemn as colony and tyranny respectively—and so on.

However, political philosophy is not yet a well-defined field: it hovers between political theory and utopian fantasizing. It devotes too much time reanalyzing the works of Plato, Aristotle, Thomas Aquinas, Hobbes, Spinoza, Locke, Montesquieu, Kant, Rousseau, or Bentham. But none of these thinkers could have anticipated any of the most pressing political issues of our time. There is the need to stop global warming, dismantle

nuclear armament, prevent further resource wars, stop the rise of inequality between individuals and nations, and fight authoritarianism, particularly when it comes disguised as democracy or as socialism.

Not even more recent social thinkers, such as John Stuart Mill, Karl Marx, Emile Durkheim, Max Weber, Vilfredo Pareto, John Dewey, Joseph Schumpeter, Harold Laski, Karl Popper, Hannah Arendt, or John Rawls, had much to say about such topical issues as environmental degradation, gender and race discriminations, participative democracy, nationalism, imperialism, the North-South (or developed-underdeveloped) divide, resource wars, the industrial-military complex, or the connections between poverty and environmental degradation, and between inequality and bad health. (See Lesnoff 1999 for a fair discussion of twentieth-century political philosophers.)

Worse, above their ideological divergences, most political philosophers have been nearly unanimous in their indifference to the plight of the Third World. Consequently the bulk of political philosophy is irrelevant to five-sixths of humankind. The present author, a native of this world, does not share that indifference. In general, I agree with Dworkin (2000: 4) that "it [is] essential that political philosophy respond to politics" instead of dealing with fictions such as those of the state of nature, social contract, liberty without equality, and social justice dispensed from above. The very notion of an apolitical political philosophy is an oxymoron.

We are given a single world, not a free choice of worlds. Note that I just wrote *world*, not *USA*. This choice of words is deliberate, for I believe that contemporary political philosophy is still far too USAcentric and Eurocentric, while politics is being played in the world stage rather than only in the U.S. government. I also happen to think that political philosophers should pay more attention to numbers, such as the standard index of income inequality and the more comprehensive UN human development index for the various nations. It is pointless to write about redistributive policies unless we have some of idea of the current wealth distribution.

However, the irrelevance or obsolescence of many political ideas matter little to our concern, because we shall discuss topical political issues and social policies rather than authors or fanciful worlds. In fact, we shall focus on some current problems and shall seek promising leads to the future.

Acknowledgments

As usual, I owe much to a number of scholars and students who asked stimulating questions, formulated criticisms, offered advice (not always followed), gave pertinent information or encouragement, or helped to cope with calamities. This time I single out David Blitz, Ricardo Bloch, Michael Brecher, Moish Bronet, Antonio Colomer Viadel, Rafael González del Solar, Peter C. Hoffmann, the late Gino Germani, Irving Louis Horowitz, Michael Kary, Jonathan Loeb, Martin Mahner, Luis Marone, Antonio Martino, the late Robert K. Merton, Ignacio Morgado-Bernal, David Oswald, Andreas Pickel, the late Anatol Rapoport, Nicholas Rescher, Marc Silberstein, Charles Tilly, the late Bruce G. Trigger, Roberto Tuda, and Per-Olov Wikström. And, as ever, I thank Marta, my wife of half a century, and my children: Carlos, Mario, Eric, and Silvia.

I dedicate this book to the memory of my father,

Augusto Bunge (1877-1943),
physician, the first Latin American medical sociologist,
parliamentarian, and champion of social justice
and universal health care.

My father was active in politics from his student days till his last day, when harassed by the police for his anti-fascist militancy. He transmitted to me his passion for politics viewed as the civic arm of morality, as well as his conviction that social policies should be based on social science rather than improvised in the hunt for votes. I can still picture him speaking in the Argentine Congress, standing beside his armchair flanked by two tall piles of learned books and journals in four languages, which he used to justify or criticize a new bill, while most of his colleagues, attuned to fiery rhetoric rather than solid evidence, listened respectfully or dozed.

I have worked for most of my long academic life in politically neutral fields: theoretical physics and theoretical philosophy. However, in a way

I have been writing this book all my life, for I started reading political news and listening to political discussions at age seven. I have been a political-news addict ever since, and have participated in some political campaigns. Still, I never contemplated embarking on a political career, particularly not in university politics. I have always been interested in doing more constructive work: organizing and running a workers' school, a construction firm, a philosophy journal, and several learned societies. These activities have given me some experience in both contention and governance.

However, possessing a political ear though no political tongue, and having lived half of my life in a politically restive nation, I could not avoid being affected by national politics in both my native Argentina and my adoptive Canada. In fact, I have lived through half a dozen military coups and one revolution; signed or refused to sign numerous petitions and manifestoes; taken part in many boring meetings and assemblies; marched in street demonstrations for or against a variety of causes; and written for an underground paper. Like my father, I was jailed twice (my mother once), and both times my home was raided; I was dismissed from my university job, and denied proper identity documents for more than a decade.

Finally, in 1963 I reluctantly left my country for good, after a bloody confrontation between two army factions, and fearing that the next military coup would truncate my research projects if not worse. Three years later the coup actually happened, and about 1,000 academics resigned or were being dismissed. Canada has been my home since 1966. I am grateful to the politicians and civil servants who built the service state that has kept Canada at peace and placed it on the sixth rung in human development (UNDP 2006).

In short, I learned something about politics not from books but from life, if unwillingly in most cases. In particular, I learned something that spin-doctors, pundits, and disenchanted citizens do not know: that clean constructive politics is possible. I trust that those experiences have helped me sketch a political philosophy that is neither armchair-ish, nor cynical, nor utopian.

Finally, given the current state of the study of politics, I prefer "politology" to "political science," even though I share Condorcet's (1782) optimism concerning its bright future. And, unless otherwise indicated, all the foreign language translations included in this book are my own.

Introduction

The vast majority of books and courses on political theory and political philosophy examine their pasts. This is certainly a legitimate and interesting concern (see e.g., Ball and Bellamy, eds. 2003). But it is no substitute for either "living" political theory or relevant political philosophy, just as the history of mathematics is no substitute for proving theorems.

In my view political philosophy excels when combined with social, political, economic, or legal data and theory, as in the works of Gunnar Myrdal, Robert A. Dahl, Amartya Sen, Ronald Dworkin, Elinor Ostrom, and David Miller. Otherwise it risks losing contact with reality, as in the case of Leo Strauss (1959). Strauss, the influential political philosopher who recommended going back to the ancients, is an extreme example of the professor out of touch with current politics to the point of seeking political wisdom in writers, from Plato and Aristotle onwards, who opposed democracy and took slavery and war for granted. This is why he overlooked the political issues of his day.

Art must pass the test of time: science must fail it, for the world it tries to understand keeps changing. Reading old books is a pleasant pastime but no substitute for the investigation of burning political issues and the philosophical problems they raise. Plato's elitism was dismantled together with the Bastille; Augustine's just war was blasted at Hiroshima; Hobbes' war of all against war was stillborn, for in the end cooperation always trumps competition; and Marx's dictatorship of the proletariat crumbled alongside the Soviet empire.

On second reading, the said Leo Strauss was far from having stayed above the fry. In fact, taking leads from Plato's "noble lie," Nietzsche's elitism, and Heidegger's esotericism, anti-modernism and anti-humanism, Strauss taught in person or inspired some of the neoconservatives who in 1997 drafted the "Project for the New American Century," which sketched the imperial goal pursued by the government of George W. Bush (Ryn 2003; Drury 2005). Plato failed in Syracuse where Strauss succeeded in

Washington, D.C., as Nietzsche and Carl Schmitt had previously succeeded in Berlin—mercifully only for a dozen years.

It is hard for a political philosopher to be a passive bystander, the way some conservative political theorists have urged when attacking scholars who, like the great John Maynard Keynes and his disciples, criticized unfettered capitalism for being self-destructive, and proposed economic regulations and social programs to improve the lot of the common people. Unlike the historians of political thought, who should be impartial as well as objective, political scientists and political philosophers are expected to analyze and inspire social policies, which are guides to political action or inaction. If their philosophies are wrong, so will be the policies they propose. In any event, the philosopher proposes and the sovereign—whether prince or people—disposes.

Politics, the highest and the lowest form of social action, sometimes the most selfish and at other times the most selfless of activities, is the art of facing or evading social issues, that is, problems other than purely personal predicaments. Social issues arise in all social systems, from the childless couple to the world system. This is why politics permeates all social life: There are family politics and gang politics, office politics and club politics, school politics and church politics, municipal politics and international politics, and so on.

Politics can be constructive, destructive, or barren; and it can be grand, mean, or mediocre. And politics has both a contentious and an administrative side. Politics is the struggle for power as well as the exercise of power in social systems of all kinds and sizes. It is also the art of conflict resolution in both contention and administration.

It behooves political scientists and technologists to detect possible sources of conflict and devise means to resolve them, but it is up to political philosophers to offer ethical arguments for or against any proposals to resolve political conflicts. An interesting if seldom noticed political novelty that emerged in the course of the last century is that functionaries of the UN and civil society organizations have been far more active than academics in tackling international conflicts, because the UN Charter is basically an ethical document, the only one agreed upon universally, if not always respected in practice.

The exercise of power of any kind is not neutral: it benefits or harms some or all, in particular by either buttressing or undermining privilege. Consequently political philosophers and policy analysts are called upon to either improve or worsen the lot of ordinary folks, for instance by supporting or opposing programs intended to either facilitate or hinder

popular access to gainful jobs, public health care, culture, or public governance. Consequently political philosophers should be able to detect the promises and threats lurking behind the seemingly neutral scholarly literature.

Take, for example, the famous Pareto optimality principle, according to which the state of an economy (or of an entire society) is efficient just in case no one can be made better off without someone else being made worse off. In other words, society would be like a seesaw. In particular, all the social programs aiming at improving social justice and enforcing international law should be jettisoned as being Pareto inefficient; and any hope of improving the lot of humankind as a whole should be abandoned, for the size of the cake to be distributed is constant, and stasis is always preferable to change. In short, whoever accepts Pareto "optimality" must, if consistent, reject the very idea of social progress.

And yet even John Rawls (1971: 66-67), who thought of himself as progressive, embraced Pareto "optimality" because he failed to realize that it is just an application of the conservative political philosophy that enjoins us not to rock the boat, or even row it. A moral of this story is that the political philosopher should be skeptical of mainstream economic theory, if only because, as Milton Friedman (1991) boasted, for all its apparent mathematical sophistication, that theory is "old wine in new bottles"—hardly the liquid the thirsty need.

What might draw a philosopher to the study of politics is that political action is never done in a conceptual and moral vacuum. Indeed, all politicians invoke certain values and ideals, claim to act on expert advice, and devise policies and plans. It is up to the political philosopher to judge whether the values, expertise, and policies in question are authentic rather than rhetorical, and well grounded rather than improvised. In turn, our judgment will be right or wrong depending on its inputs, such as knowledge about social matters, a critical or gullible attitude, and a moral (prosocial) or immoral (antisocial) stand.

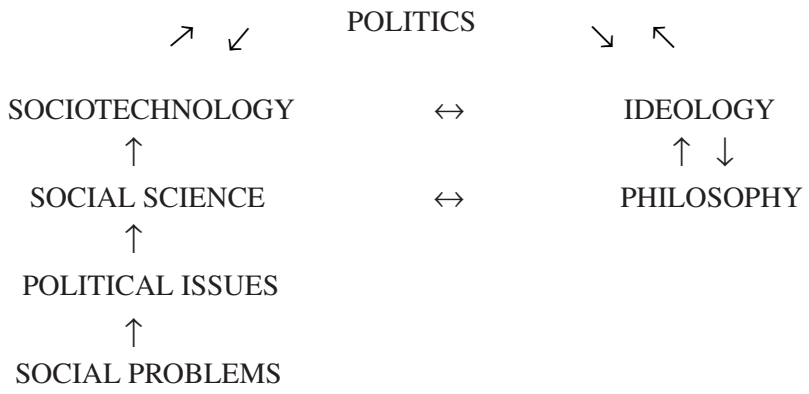
Since politics is bound to change people's lives, it has a moral component, albeit ordinarily a tacit or even carefully concealed one. (Bernard Crick [1992:141] went as far as to claim that "Political activity is a type of moral activity.") Moreover, I submit that the moral component of political action is the most important if the least visible one, simply because it involves benefits and harms. I also suggest that it is a task of the political philosopher to unveil and evaluate such component, all the more so since it is often fogged by a narrow ideology, or even by a crude philosophy,

such as contractarianism, utilitarianism, pragmatism, legal positivism, dialectical materialism, critical theory, or hermeneutics.

Undoubtedly, political science has advanced appreciably since the last world war. However, in my view it still suffers from the same moral deficit as standard economic theory. Indeed, in both fields the mainstream is utilitarian and therefore indifferent to moral sentiments and to the lot of the losers in the races to power and wealth. In fact, few contemporary professors of political science have ever condemned military aggression, state terrorism, unprovoked ("preemptive") military aggression, torturing political prisoners, censoring the news, or restricting civil liberties during emergencies (even when engineered by their government).

On the few occasions when academics have condemned such practices, ordinarily they indicted them as ineffectual rather than immoral. Worse yet, in recent times some famous professors of political science have offered or sold starkly immoral advice to their governments: Suspend this civil right, ignore that international treaty, bomb or invade that country, keep fighting this illegal war, destabilize that unfriendly government, support this friendly dictator, rip off the social fabric of those rural villages, adopt this carpet-bombing schedule, try out that toxic spray, tell the people that they are under attack even if they are not, demonize your adversaries, and so on. These betrayals have made political philosophy timely once again, for the nucleus of this discipline is, or ought to be, morals—the art of helping others enjoy life.

The central thesis of this book is that responsible politics is based not only on ideology but also on philosophy, in particular ethics, as well as on social technology, which in turn is effective only when based on sound social science. The following diagram summarizes the whole book.



1

Philosophical Background: Universal Ideas

Philosophy has a bad reputation among scientists, who regard it as being either irrelevant to science or opposed to it. In particular, political philosophy has been accused of being opportunistic rather than principled, as well as imprecise and only loosely related to the bulk of philosophy. Peter Laslett (1967: 370) noted that the said opportunism "has led to a raggedness, even an incoherence, in works devoted to it and to an emphasis on intuitive arguments which compares unfavorably with the content of other philosophical literature." Many years later the same scholar added a complaint: Political philosophers overemphasize the history of political thought at the expense of contemporary challenges (Laslett in Skinner 2002: 2).

However, nobody can avoid philosophy when discussing anything other than everyday events. If in doubt, try do politology without using the notions of thing and process, reality and appearance, cause and chance, person and society, behavior and norm, assumption and deduction, datum and theory, indicator and test, science and ideology—and then some. One can. and usually does, use them without pausing to examine them. However, tacit philosophy is sloppy and uncritical. To avoid these two flaws we must analyze and systematize universal concepts. We must build precise theories around them. This is a task for good philosophy.

The present chapter sketches what I hope to be a coherent philosophical system, and it offers suggestions on how to sharpen some key philosophical concepts relevant to the study of politics. Some of these concepts occur, albeit implicitly for the most part, in the works of the much-maligned Niccolò Machiavelli (1940). Machiavelli founded not only modern political technology, or the art of mass persuasion, but also modern political theory. Thus, he inspired not only Hitler, Stalin, and terror peddlers, but also all the serious political theorists of the modern era, from Hobbes and Locke to our day.

I submit that Machiavelli's scientific success was largely due to his modern philosophical outlook, tacit and sketchy as it was. In fact, his ontology was both secular (unlike that of his Christian predecessors) and dynamicist (unlike Plato's and Husserl's). Machiavelli viewed the polity as a concrete whole in perpetual flux whose individual components were moved primarily by worldly interests. He was confident that, by studying the mechanisms of political change, he would be able to understand and control them for the benefit of the sovereign.

Contrary to Plato and Aristotle, but foreshadowing Galileo, Machiavelli regarded change as a mark of perfection, not imperfection. He was also the first to state that politics is not just a game played by princes (rulers), but also a process involving masses of individuals who attempt to foresee the consequences of their actions. Machiavelli was also an epistemological realist. He believed in the independent existence of the external world, as well as in the possibility of getting to know it. In short, by and large, Machiavelli may be regarded as a materialist of sorts, as well as a realist, a rationalist, and an utilitarian. True, he also believed in magic, but this played no role in his theory, just as Newton's God did not occur in his equations of motion.

One may tackle a circumscribed political problem, such as whether proportional representation is fair and workable, within a single branch of a discipline. But the big issues of any kind, such as poverty, can only be tackled with the help of several disciplines and within a broad philosophical framework. This is so because political action occurs in the real world, is planned in the light of some body of knowledge and some moral code, and is likely to benefit some people while harming others.

For example, the design and implementation of any promising (or threatening) public works, health, or education program presupposes a secular worldview, a realistic epistemology, an action theory mindful of interests, and a consequentialist (though not necessarily utilitarian) moral philosophy. In short, I submit that philosophy contributes to fashioning the polity via political theory and political action as suggested by the following flow diagram:

$$\textit{Philosophy} \rightarrow \textit{Political theory} \rightarrow \textit{Policy} \rightarrow \textit{Political debate} \rightarrow \textit{Political decision} \rightarrow \textit{Planning} \rightarrow \textit{Execution} \rightarrow \textit{Evaluation} \rightarrow \textit{Eventual policy or plan redesign}$$

The naïve materialist might object that this view is idealistic, because it presents certain facts as consequences of ideas. But as it so happens

that deliberate action, by contrast to knee-jerk reaction, is carried out in the light of ideas intertwined with moral sentiments. (Any decision to take action is preceded by deliberations guided or distorted by desires rooted in interests, as well as constrained or fuelled by morals.) Admitting this is no concession to philosophical idealism, provided ideas are regarded as brain processes, not as existing by themselves. So, the entire process we have just sketched occurs in the real world inhabited by political agents.

The relevance of philosophy to political science research is obvious from the approach to the discipline chosen by the authors in the four more influential American and British journals in the field during the 1997-2002 period (Marsh and Savigny 2004). For example, 56% of the contributors to the *American Journal of Political Science* opted for "behaviouralism," or respect for empirical data, whereas rational-choice theory—characterized by its apriorism—was the choice of only 15% of the authors. The corresponding data for the *British Journal of Political Science* were 63% and 9% respectively.

In this chapter I will sketch the philosophical disciplines involved in political philosophy. In my view authentic philosophy consists of the following branches:

THEORETICAL	*Logic*: precision and deducibility
	Semantics: meaning and truth
	Ontology: being and becoming
	Epistemology: cognition and knowledge
	Philosophy of Science and Technology
PRACTICAL	*Methodology*: evidence
	Axiology: values
	Ethics: rights and duties
	Praxiology: action
	Political philosophy: politics

All of the key ideas in these philosophical disciplines will play a role in each chapter of this book. However, the reader should remember that, unlike mathematics or chemistry, philosophy is plural, in the sense that every philosophical view belongs to some school or other—rationalist or irrationalist, idealist or materialist, individualist or systemist, and so on.

I have chosen my own philosophy, which I have discussed in detail in previous works, particularly in the eight volumes of my *Treatise on*

Basic Philosophy (1974-89), as well as in three books on the philosophy of social science (Bunge 1996a, 1998a, 1999a), in my latest books on ontology and epistemology (Bunge 2003a, 2006a), and in an anthology on my scientific realism (Mahner 2001). But I claim that, though biased as all philosophies, mine is both precise and evidence-based. The evidence I offer for or against philosophical hypotheses comes from science and technology. For instance, if I regard every thing as changeable and as either a system or a component of one, it is because so does every science proper. In other words, my philosophy is unabashedly scientistic, that is, science-centered.

This philosophy may be summarized as a hexagon centered in science, and the sides of which are my own versions of *emergentist materialism* (as opposed to both idealism and radical reductionism); *systemism* (as the alternative to both individualism, or atomism, and holism, or structuralism); *dynamicism*, or the thesis that everything in the real world is changeable; *scientific realism* (as opposed to naïve realism, subjectivism and relativism); *humanism* (as opposed to supernaturalism and egoism); and *exactness*, as opposed to imprecision and obscurity. I will attempt to show the relevance of each of these philosophical views to both political science and political philosophy. I will also argue that a philosophy without logic and semantics is mushy; without ontology, spineless; without epistemology, headless; and without ethics, clawless.

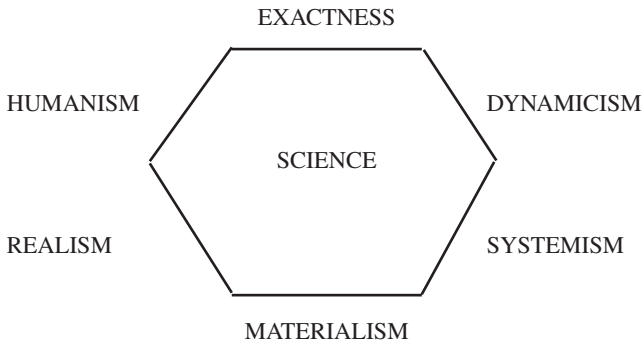


Fig. 1.1. Sketch of the philosophical system used in this work.

1. Logic: Conceptual Rationality

Let us glimpse at political reasoning. What thinks and feels about political issues and what to do about them is a brain. And brains can work either rationally and realistically or not. These two conditions, rationality

and realism, are quite distinct. One may argue rationally about ghosts, the way rational-choice theorists do when using undefined utilities and probabilities. Or one may stick to reality yet think irrationally about it, the way postmoderns have been doing—as when Derrida stated that "[w]hat is proper to a culture is to not be identical to itself" (in Coles 2002: 311).

To argue correctly about anything, whether real or imaginary, one must stick to the rules of rational argument. These rules are studied by formal (or mathematical) logic, the most abstract and therefore the most general and portable of all sciences. We need logic not to generate ideas but to check them for cogency and to spot dangerous nonsense such as "authoritarian socialism," "democratic centralism" (the internal mechanism of communist parties), "vertical labor union," and "war on terror."

Logic deals with concepts, such as the predicate "is democratic," as well as with propositions or statements, such as "Only democracy safeguards human rights." Concepts are designated by symbols, such as words, whereas propositions are designated by sentences in some language. Since there are several thousands of languages, one and the same concept can be designated by thousands of symbols; propositions are parallel. Only propositions, or statements, can be true or false to some degree. For instance, "liberty" is neither true nor false, whereas "Liberty must be either conquered or defended" is arguably true. However, logic is concerned with precision and formal validity, in particular logical consequence, not truth. Indeed, the principles and rules of logic hold regardless of content and truth-value.

Paradoxically, the logical assumptions and their consequences are empty. They state nothing in particular, which is why they are called *tautologies*. Yet, some politicians love tautologies, either out of ignorance or because they do not commit us to anything. For example, President George W. Bush once proclaimed: "Those who enter the country illegally violate the law." He also invented the slogan "War on terror," which is a contradiction in disguise, since war is the worst terror.

Logic does not handle sentences that fail to represent propositions, such as questions, requests, regrets, imperatives, and counterfactuals. But of course questions, requests, regrets, and imperatives, though devoid of truth-values, are indispensable. The same cannot be said of contrary to fact statements, even though they are rampant in political rhetoric. Remember what the same politician cited above said: "If we had not invaded Iraq, this would now be a terrorist nursery." Contrary to the widespread belief that the person in question is fond of uttering lies, that particular

sentence is neither true nor false. However, it signifies roughly the same as the declarative sentence "We attacked Iraq because it was bound to become a terrorist nursery." Contrary to the corresponding counterfactual sentence, this one does express a proposition, though one that is neither supported nor undermined by any evidence, whence it cannot be assigned a truth-value. We only know that, five years after being invaded, Iraq has become a breeding ground of "terrorists," also called "insurgents," or "patriots" by some. The moral is that counterfactuals should be handled with care, particularly in matters of life and death.

The most important of all logical rules are the law of non-contradiction and the inference rule called *modus ponens*. The former states that the joint assertion of a proposition and its denial is false: *A and not-A* is false regardless of the content of A. And the *modus ponens* is the rule: From A and "If A, then B," deduce B.

Paradoxically, contradictions are excessively fertile, as they entail any propositions whatsoever. By contrast, the conjunction of "If A, then B" with B, entails nothing. To claim that it does is to incur a classical fallacy. For instance, from the generalization "The representatives who keep their word are reelected," and the datum "He was reelected," it does not follow that he kept his word. In fact, every body of representatives is full of people who have repeatedly broken their promises.

Logic is then the torchlight that helps us spot wrong arguments. But how do we argue for the logical rules? We seldom do, because any valid argument about anything involves the rules of debate. Drop the law of non-contradiction, and you'll incur the cheapest of all falsities: contradiction, which amounts to losing the debate. And if one drops the *modus ponens*, one is unable to conclude anything from any set of premises, not even to check whether they beget contradiction. Thus logic, the least of constraints upon rational discourse besides clarity, is not only essential to all sound discourse: it also keeps us from falling into either nothingness or everything.

This is why Heidegger, Jaspers, Gadamer, Arendt, Derrida, Irigaray, Vattimo, and the other so-called postmoderns rejected logic: Irrationality allowed them to put words together without worrying about sense, let alone coherence and evidence (see Edwards 2004). And of course irrationalism helps dictators, for it disarms analysis and criticism, and replaces universal theories with tribal beliefs. This is why fascism, in all of its versions, sought "to fight the very ideas of objective truth and universal reason" (Kolnai 1938: 59).

It is nearly impossible to argue with people who excel in esoteric gibberish and ignore the rules of rational debate. For instance, how can anyone argue in favor or against Heidegger's (1954: 76) esoteric assertion that Being "is It itself"? The postmodernist Gianni Vattimo calls this kind of "thinking," which he commends, "weak thinking." I think it deserves being called *pseudothinking*. Esotericism, commended by Leo Strauss, serves to conceal vacuity or malice. However, let us go back to genuine reasoning—clear and cogent argument.

Logic is the most general (and therefore also the most abstract) of all sciences, because it is topic-neutral, hence portable from one field to the next. This is why there can be no political logic any more than chemical logic. However, logic leaves practical reasoning out: it does not cover inference patterns such as this:

If that nation is attacked, it will retaliate.
Retaliation is bad.

That nation should not be attacked.

This is an instance of practical reasoning. It relates facts rather than statements, and it involves a value judgments and an imperative. We shall return to practical reasoning in Chapter 8, Section 2. For the time being, suffice it to note that honest political discourse contains practical as well as logical arguments.

Rational debate is not privative of academic life: it is also a feature of democracy. Indeed, political strife and the administration of the commonwealth involve rational deliberations about means and ends, even for the invention and execution of dumbing political campaigns, such as the Nazi appeal to "blood and soil." But of course rational debate, though necessary, is never sufficient. Only naïve rationalists could believe that political conflicts can be resolved exclusively by rational discussion: rationality should guide political contest, if only to minimize damage, but it cannot replace struggle. Regrettably, interests backed by force can overpower the most cogent arguments: God favors the good guys when they outnumber the bad.

Rationality is so much taken for granted in all walks of life, that we find irrational behavior unsettling, and that some military strategists have recommended simulating irrationality to confuse and scare the enemy. Schelling (1960) called this policy the "rationality of irrationality"; and President Nixon, Professor Kissinger's star pupil, called it the "madman

theory." In playing with rationality, those people, along with their Soviet counterparts, were playing with the survival of the human species.

Let us deal briefly with the concept of a theory. Some political scientists equate political theory with normative politology (or political philosophy, or social engineering). This usage is idiosyncratic and misleading, for in all the mature sciences a theory is understood as a hypothetico-deductive system, by contrast to an isolated hypothesis or an unstructured set of hypotheses. In other words, what is typical of a theory is that every statement in it is an initial assumption (or postulate), a definition, or a logical consequence of one or more assumptions or definitions. However, most of what pass for theories in political science are actually "one-line theories," that is, hypotheses, such as "All wars are about economic resources."

Here is an *ad hoc* example of a minitheory, an illustration of Merton's thesis on the unintended (in particular perverse) consequences of social action:

1. Welfare legislation promotes prosperity.
2. Prosperity favors the Right.
3. Welfare legislation favors the Right.

Postulates 1 and 2 jointly entail the conclusion 3. The three propositions taken together constitute a tiny conceptual system—a consistent if somewhat paradoxical theoretical model.

Finally, a warning. Political theories are not to be confused with political doctrines, the way Lasswell and Kaplan (1950: xiii) did in their influential book. A political doctrine, such as liberalism or socialism, is an ideology; and, so far as I know, no ideology has ever been organized as a hypothetico-deductive system. In fact, ideologies are ordinarily presented as collections of slogans, such "Freedom or death!", and "Free trade or bust!" And political slogans are calls to action rather than testable hypotheses. We shall return to ideologies in Chapter 4.

2. Political Semantics: Meaning and Truth

Semantics has got a bad reputation as being an inane dispute about words, or even as verbal trickery. However, philosophical semantics is a serious discipline, for it deals with meaning and truth, each of which can either shine or be shunned in political discourse. Hence no serious philosophical system can fail to contain semantic theories. Let us glimpse at the two concepts in question.

Meaning is a property of constructs, i.e., concepts, propositions, and theories. It may be defined as reference together with sense, or denotation cum connotation. If either of these components is empty, there is no construct proper. Yet most philosophers call "non-referring" a construct with no counterpart in the real world. This use is mistaken, for all constructs referring to imaginary entities, such as "Zeus," "Hamlet," "utopia," "perfect competition," and "Iraqi weapons of mass destruction," refer to such entities and have rather clear senses. In other words, all constructs proper refer–some to real items, others to imaginary ones.

Aristotle rightly recommended that we start any discussion by making clear what it will be about. In modern terms: Start by specifying your universe of discourse, or reference class. For instance, we must distinguish political action from political science from the philosophy of political science which refers only indirectly to politics.

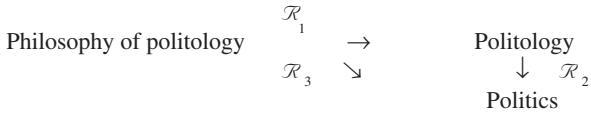


Fig.1.2 The arrow symbolizes the reference function. The arrow $\mathcal{R}_3$ from philosophy of political science to politics equals the composition of $\mathcal{R}_2$ and $\mathcal{R}_1$.

Meaning will be fuzzy if either or both of its components, reference and sense, is vague. Vagueness is a serious defect because logic only holds for exact concepts. Indeed, if construct A is fuzzy, so is not-A, whence A does not satisfy the principle of non-contradiction, that is, "The conjunction of A and not-A is false." Nor is valid inference possible with vague propositions. In particular, not-B does not invalidate "If A, then B" whenever B is hardly distinguishable from not-B. And yet the political discourse is full of vague notions, such as those of power and liberty.

Vagueness can be so extreme as to be hardly distinguishable from emptiness. Bismarck's famous formula, "Politics is the art of the possible," is a case in point. Indeed, any craft, from poetry and mathematics to engineering and medicine, deals with possibilities, which it attempts to either actualize or frustrate. A mathematical conjecture is a possible theorem, a blueprint a possible construction, a parliamentary bill a possible law, and so on. True, the concept of possibility is central to much contemporary philosophy, in particular possible-worlds ontology, which deals with fantastic "worlds." But the notion involved in these speculations is imprecise and alien to the concept of real possibility used in the

mature sciences (Bunge 2006). In these, the adverb 'possibly' applies to facts, not propositions. Moreover, the concept of real possibility depends upon that of scientific law, which is alien to formal logic. Indeed, in physics and other factual sciences one says that a fact is really possible just in case it is compatible with the relevant laws.

To put it formally: The fact described by proposition *p* is *really possible* = There is at least one law statement *L* such that the conjunction of *p* with *L* is true. This concept of real possibility is radically different from that of conceptual possibility, which may be defined as follows. The construct *p* is *conceptually possible in the body of knowledge B* if *p* does not contradict any member of *B*. Modal logic and the theories built around it conflate the two concepts of possibility that we have just distinguished (see Bunge 2006a).

So much for meaning. As for truth, let us start by noting that it comes in several kinds: formal, factual, moral, and artistic. The formal truths, such as "A or not-A" and "$1 > 0$," hold regardless of the state of the world because they do not refer to it. They belong in logic or mathematics. By contrast, the factual truths, such as "Canada is a sovereign country," are contingent, for Canada used to be a colony, and it may yet lose its independence.

Moral truths refer to moral facts, such as helping people in distress, and immoral facts, such as bombing civilian populations. The thesis that there are moral truths and falsities is peculiar to moral realism, a minority view. Finally, the artistic truths are similar to the formal ones, in that they are imaginary, but different from them because they cannot be proved.

Political science is expected to find factual truths, and political philosophy is supposed to deal with both politological and moral truths. As usual in philosophy, there are several views concerning factual truth. Here are the main ones:

Radical skepticism = There are no truths—hence no falsities either.
Relativism = Truth is local, i.e., tribe-dependent—hence multiple.
Pragmatism = Truth is the same as usefulness—hence never disinterested.
Conventionalism = Truth is disguised definition—hence insensitive to evidence.
Realism = Truth is adequacy of idea to fact.

Radical skepticism is defeatist, and relativism is self-destructive for, if true, then relativism itself cannot be universally true. Besides, relativ-

ism makes no room for the universal truths invented by mathematics and discovered by the sciences and technologies. The postmoderns are either radical skeptics or relativists. Pragmatism (or instrumentalism) attempts to replace reality checks with usefulness tests: it takes success for truth. Conventionalism ignores that factual truths are not arbitrary, since they must be supported by evidence; and that definitions may be more or less useful but are neither true nor false. And elitists "reveal what they regard as the truth to the few without endangering the unqualified commitment of the many to the opinions on which society rests" (Strauss 1988: 222).

Only realism accounts for the facts that we must explore the world to find truths about it, and that most such truths have no practical use because they refer to facts that are beyond human control—such as the past facts and the events that occur inside stars or beyond our solar system.

And yet there have recently been some discussions about the reality or unreality of nations. It has been claimed that nations are figments of the collective imagination, just because none of them would exist unless their subjects and neighbors believed in them. However, nations pass quite ordinary reality checks. They can interact with each other, either peacefully or violently, as a consequence of which their territories can either expand or shrink, and their peoples get richer or poorer. In any event, if nations were imaginary, so would be war, which would be convenient to all except the war profiteers. Besides, the same applies to all the other social constructions. For instance, we would not shop at the supermarket unless we believed in its existence.

Nations are so real, that it would be impossible to invade Thomas More's Utopia or Jonathan Swift's Lilliput, or to trade with them, for both are indeed imaginary nations. What is true is that nations are made, not found: they are social artifacts. But the imagination required to form, reform or destroy nations is of the same kind that engineers use to design, improve, maintain, or utilize machines.

The scientists who study facts, such as the politologists, are realists insofar as they seek to find out truths about the chunk of the world they study. A possible definition of factual truth is this. *A proposition p describing a fact f is true = if f happens as described by p.* This definition may be enlightening but, to be used, it must be accompanied by a truth criterion, that is, a rule for recognizing when a proposition is true. Here is one such criterion. *A proposition p referring to a fact f is true in the light of evidence e = The discrepancy between p and e is less than the tolerance or error agreed on beforehand.*

Scientism holds that social scientists should seek truths just as rigorously as their colleagues in the natural sciences. In particular, political theories should be as true (realistic) as possible. This goal is not shared by the hermeneutic (or interpretivist or "humanist") school, which ignores the scientistic injunction "Seek evidence for or against your theories." For instance, despite his admiration for Hannah Arendt, Horowitz (1999: 413) deplores "her unwillingness to support her theory with evidence"—an attitude that evidently disqualifies her as a political *scientist*.

Besides, the hermeneutic (or "humanistic") school erects a wall between the social and the natural realms, as well as between their corresponding studies. For example, Searle (1995: 27) claims that there are two categories of fact: brute, such as a landslide, and institutional, such as a conversation. But landslides can have social causes and consequences; and conversations, and all other social interactions, are biosocial rather than purely social, since they involve living persons. This is why there are biosocial sciences, such as geography, demography, psychology, and anthropology, all of which utilize the scientific method, and thus trespass the natural/social and the humanistic/scientific frontiers.

Still, hermeneuticists and other postmodernists have been moderately effective in slowing down the progress of the social sciences, as well as in reinforcing the popular prejudice against them. Even such a distinguished politologist as Bernard Crick (1992: 187) fell under the spell of hermeneutics, and seemed to echo Michel Foucault, when he declared that "[p]olitical theory is itself political." If this were true, political methodology would be unnecessary, and the worth of political theories could be assed by polling. What are political are social policies. These, like any other technological items, are to be judged by their efficacy or otherwise in advancing certain interests.

Notice that, Max Weber (1988b) notwithstanding, objective truth is not the same as either value-neutrality or impartiality. Scientific research involves value judgments, such as "Explanation trumps description." And some scientific findings serve to either support or undermine public policies. For instance, statistics suggest that generous welfare legislation is an effective fertility control. There is nothing directly political, hence relative, about this result of demographic research.

And yet, in the faculties of arts in the Northern hemisphere, anti-realism—in particular constructivism-relativism—is nowadays more popular than realism. One reason for the popularity of relativism is that it is undemanding. By denying the possibility of finding objective truths, it regards every academic discipline as one more narrative or discourse—a

variety of literature rather than science, and thus a matter of taste rather than test. Stories do not call for time-consuming search for evidence. All we want from a story is that it be entertaining. Surely, the view of social studies as narrative has nothing to do with serious scholarship. It is just trivial wordmanship—a disturbing indicator of the current decline of the humanistic culture and its further estrangement from the intellectual engines of modernity, namely science and technology.

However, it would be mistaken to regard relativism as one more harmless extravagance on par with intuitionism, phenomenology, or the philosophical extravagances about parallel worlds. Indeed, relativism elicits a cynical view of politics, in denying that there can be universal human rights, and in affirming that all moral and political rules are just as local as regional food, typical dress, and folk art. In particular, relativism justifies nationalism and it undermines all efforts to eradicate political oppression, torture, and even genocide. It is thus incompatible with the United Nations and the International Criminal Court.

That said, the scientific realist acknowledges what may be called the *Rashomon effect,* after Akira Kurosawa's classic film. This is the fact that almost any social fact is likely to be perceived differently by different actors or witnesses. This happens sometimes from malice, but more often from prejudice or lack of information. Typically, we understand far better "people like us," that is, members of the in-group, than "them," the individuals in the out-group.

In natural science truth counts supremely, whereas mere opinion does not. By contrast, opinion counts very much in social life and its sciences because beliefs, regardless of their truth-values, guide, misguide, or paralyze action. In metaphorical terms, social facts reach us refracted by our beliefs and interests. This does not entail that objective truth is unattainable in social matters, so that relativists would be right after all: it only means that there are obstacles in the search for truth about social life that are not present in the search for truth about nature. (More on constructivism-relativism in Gellner 1985; Bunge 1991-1992, 1999; Boudon and Clavelin 1994; Boudon 2004; Boghossian 2006; Jarvie 2007.)

The Rashomon effect goes a long way to explaining why the social sciences are far less advanced than the natural ones even though we all have inside information about social facts because we make them, whereas our access to natural facts, such as atomic collisions, chemical reactions, and speciation, is extremely indirect. Besides the Rashomon effect there is what may be called the *Big Brother effect*. This is the deliberate sabotage of social science research on the part of authoritarian

and conservative governments, because it may come up with truths that annoy or even endanger the powers that be. Thus, there was no political science under totalitarian rule, and the Reagan administration cut in half the federal subsidies to social research while keeping the support for the natural sciences. Ironically, Big Brother's fear was exaggerated, for no social scientists predicted, or even correctly autopsied, any of the social earthquakes of the twentieth century, such as the two world wars, the Great Depression, the American defeat at the hands of Vietnamese peasants, the crumbling of the Soviet empire, the revival of nineteenth-century economic liberalism, or the intrusion of religion into politics.

3. Political Ontology: Being and Becoming

Ontology (or metaphysics) has earned a bad reputation among scientists, because most of it is either nonsensical or false. Why then should political philosophers pay any attention to it? Because ontology deals with being and becoming in general, by contrast to the particular sciences, which deal with particular beings, such as humans, and particular changes, such as the emergence, reform, and extinction of political systems—elders' assemblies, town halls, legislative bodies, governments, political parties, and their changes. Hence to dismiss all ontology is to give up the hope of placing particulars in a general framework or worldview. Bad ontology is confusing or misleading, but a philosophy without ontology is spineless. And those without a worldview are bound to borrow bits and pieces of unexamined worldviews.

Contemporary metaphysicians are more interested in fantasy worlds than in the real world. So much so, that one will search in vain, in the standard philosophical dictionaries, for entries on system and mechanism, two key ontological concepts in science since the Scientific Revolution. Unsurprisingly, most philosophers and social scientists have either ignored these concepts or misused them. For example, Niklas Luhmann (1987: 113), Habermas' authority on social systems, conceived of them as devoid of people: "Social systems … consist of communications and nothing but communications—not of human beings." And Coleman (1992: 14) held that formal organizations, such as governments, "have positions rather than persons as elements of their structure"—which, if true, would make them immaterial objects. Hence nuclear bombs, plagues, and other calamities would not affect corporations, armies, or schools: they would "survive" them because they contain no life.

Elster (1989a) likened mechanisms to the "nuts and bolts" of a machine. But of course a broken watch is not a timepiece, an abandoned

factory is just a building, a disenfranchised citizenry is not a polity, and a country without an effective government is not a nation. As conceived in the natural sciences, from physics to biology, mechanisms are not things but processes in systems. More precisely, a mechanism is a process that constructs a system or keeps it going: a process that performs a specific function required for its persistence. Social examples: work and management. (More on mechanisms in Pickel 2004; Bunge 2006; Hedström 2006.)

In other words, mechanisms are life-or-death processes, literally in the case or organisms, and metaphorically in all other cases. For instance, all states use taxation as their main revenue-generating mechanism, and all modern states have used compulsory elementary schooling and military draft as nation-building mechanisms. Likewise, war is a large-scale theft mechanism; negotiation, a conflict-resolution mechanism; and deliberation-cum-voting, the collective decision-making mechanism characteristic of a political democracy. (Consequently the fashionable phrase "deliberative democracy" is pleonastic.)

Let us now move from ontological concepts to ontological theories. There are two major ontological (or metaphysical) families: idealism (culturalism, hermeneutics), and materialism. According to idealism, all entities are only ideas or symbols, or ruled mainly by ideas or symbols. For example, Heidegger (1954: 53) held that "[l]anguage is the house of Being." And, as Charles Taylor put it famously, social facts would be "texts or like texts." Hence sales, elections, wars, and the like should be endowed with grammar, meaning, and style. Magic-religious thinking is back.

By contrast, for materialism political entities are concrete (or material) things, from citizens to nations to the international community; facts are states or changes of state of things, whether natural, social, or biosocial (like us); and ideas are brain processes, which is why they can guide actions. Thus, a discourse about nations is relevant only if nations are viewed as concrete things rather than existing only discursively—e.g., as "imagined communities," as Benedict Anderson (1983) put it.

Idealism sounds convincing because it rightly emphasizes the critical role of ideas in political struggle as well as in governance. But idealism reifies ideas and exaggerates their impact on society; furthermore, it confuses facts with our ideas about them, and consequently it is blind to the sweat and blood of human conflicts. For example, it is at least doubtful that totalitarianism was the direct brainchild of the idealist philosophies of Plato and Hegel, as Popper (1945) claimed; or of the

French Enlightenment, as Talmon (1970) held; or of Cartesian dualism, as Arendt (1989) imagined. Surely such ideas were practically effective because they helped design and implement policies that advanced certain powerful material interests.

Wild exaggerations of the impact of philosophy on politics, as well as the confusion of facts with ideas, come naturally to intellectuals who only handle texts: They tend to confuse goals with meanings, social movements with ideologies, and *la politique* with *le discours politique*. They will also discuss political theories separately from really existing societies as well as from political movements.

For example, Martha Nussbaum (2006: 88) believes that "[t]heories of social justice should be abstract … for we cannot justify a political theory unless we can show that it can be stable over time, receiving citizen's support for more than self-protective or instrumental reasons." Surely abstraction guarantees generality, both of which are necessary in mathematics. But political theory does not belong in pure mathematics, for it deals with polities, which are eminently changeable because they are concrete, not ideal. In particular, it is pointless to list the conditions for social justice separately from the social structure of real societies as well as from the various social movements that claim to fight for or against it. Thus, the social justice attainable in a liberal democracy is significantly stingier than the one pursued by the socialist movements of various kinds (Esping-Andersen 1990). An abstract concept of social justice is apolitical and ahistorical; it is a political fiction.

Besides, idealism leads to lopsided and shallow views, for politics, though fought largely with words, is about material interests, not ideas in themselves, let alone words. For instance, the endemic conflicts in the Near East are oil, land, and water wars rather than "culture clashes," as suggested by the fact that Saudi Arabia and Pakistan, two of the closest allies of the United States, are authoritarian and Islamic rather than democratic and Christian.

In addition to the idealism/materialism split, there is the static/dynamic one. A static ontology holds that change is only a momentary departure from equilibrium or harmony, which would be the ideal state of affairs—such as the elusive market equilibrium glorified by standard economics, and the transient balance of power recommended by political theorists—a balance that, incidentally, became impossible the moment only one great power remained.

Dynamicism (or processualism) holds, to the contrary, that stasis is a particular and ephemeral case of process: that every state of a thing

is either the initial, intermediary, or final phase of a process. All of the authentic factual sciences, from physics to biology to historiography, center on change, and seek laws of change or at least trends. Hence any science-oriented ontology is bound to be dynamicist. So much so, that we may define a concrete or material object as one capable of changing. Only mathematics deals in unchanging objects.

Conflict, or ontic (as opposed to logical) contradiction, is of course a particular case of process. Dialectical ontology, whether idealist like Hegel's or materialist like Marx's, claims that all change results from conflict (or "contradiction"). The conflict theorists, from Heraclitus to Machiavelli to Hobbes, Smith, Hegel, Marx, Lenin, and Gramsci, emphasized strife to the point of underrating or even ignoring cooperation. And yet the very existence of social networks and systems of various kinds and sizes, as well as the coexistence of groups with different interests, involve a modicum of cooperation. For example, the employers and employees of a business may clash with regard to wages and benefits, but they cooperate in keeping the firm afloat. Hence it is just as wrong to ignore cooperation as to overlook conflict.

An agonistic or conflict-centered ontology, such as Hegel's or Marx's, is at best partially true. This holds not only for politics but also for business. Indeed, the economists who repeat the mantra about the virtues of competition overlook the fact that competition is stimulating among peers, but destructive among the unequal, which is why smart businessmen try to avoid it. Moreover, all of the advanced economies, from Britain's to Japan's, grew under state protection and with the help of productivity-enhancement technologies that were invented, for the most part, in state-supported universities.

A third relevant ontological distinction is that between individualism, holism, and systemism. Individualism holds that "[t]here are no societies, only individuals that interact with each other" (Elster 1989b: 248). Compare: There are no bodies, only atoms that interact with each other; hence there are no emergent properties either, such as hardness and aliveness. Presumably, this is the microbes' worldview.

When applied to politics, individualism recommends focusing on citizens. Hence it is incapable of accounting for the very existence of supra-individual entities, such as armies, governments, and nations, as well as for supra-individual processes, such as development, progress, and war. Individualism does not even account for an individual's political attitudes, since these refer to systems, such as municipalities, and collective processes, such as popular mobilizations. That said, it is obvious

that individualism is right in stressing the needs, wishes, and rights of the person—particularly the needs for liberty and human contact.

Holism—also called structuralism and organicism—focuses on wholes, such as governments, and their bulk properties, such as social order, military might, and fiscal debt. Consequently it regards individual action as either negligible or the effect of pressure from above. Moreover, in social matters holism advocates equilibrium and discourages contention and rebellion: it is basically conservative—as is particularly obvious in Hegel, Durkheim, and Parsons. This alone shows that Marx was not a full-fledged holist. Holism emphasizes duties at the expense of rights. However, it has the merit of insisting that society is not just a collection of individuals; that it has bulk (emergent) properties, such as political regime and stability or its dual; and that every person is born into a pre-existing social system.

Regrettably, holism is often confused with systemism, although there are important differences between them (Bunge 1996a). Systemism combines the virtues of individualism and holism: It holds that all things are either systems or system components—whether actual or potential. Thus, contrary to holism, systemism admits the possibility of decomposing wholes, either in thought (through conceptual analysis) or in practice. Hence, contrary to individualism, systemism suggests focusing on systems and their interacting components rather than on the latter. And, contrary to holism, systemism maintains that bulk properties, such as social cohesion, voter turnout, and public opinion, emerge from individual attitudes, actions, and interactions—all of which proceed, though, within given social contexts.

Because of the abovementioned confusion, most contemporary social scientists distrust talk of systems, although they do not object to 'organic whole,' which is metaphorical except with reference to organisms. Thus the eminent all-rounder social scientist Charles Tilly (personal communication, 1 April, 1998): "Since you recognize systems wherever you see multiple elements that influence each other, I have no difficulty accepting your baptism of my thinking as systemic. In my end of the business, however (I studied with Parsons and Sorokin, among others), the word 'system' so regularly takes on thingness independent of the elements and their relations that I boycott the word to avoid misunderstanding." Perhaps this is why Giddens (1984) prefers 'structurism' to 'systemism.' But structures are properties of systems rather than freestanding entities.

There is no substitute for 'system.' If in doubt, ask mathematicians ("system of equations"), astronomers ("planetary system"), or biologists

("cardiovascular system"). True, microeconomists claim to deal with individuals (as wholes or systems!), but the theory of general equilibrium regards the market as a whole that, unlike the households and firms that compose it, is said to be in equilibrium and to run itself. And the father of modern macroeconomics stated: "I am chiefly concerned with the behaviour of the economic system, as a whole" (Keynes 1973: xxxii).

Finally, I have argued elsewhere (Bunge 1977a, 1979a, 2003a, 2006a) that it is possible and advisable to combine the six varieties of ontology distinguished above. In particular, one should combine materialism with both dynamicism and systemism. I have also argued at length (Bunge 1979a, 1996a, 1998a, 1999a) that the best social science has always been systemist rather than either individualist or holist. One reason is that we resemble goats more than either porcupines or sheep. We have distinct personalities but act in groups, for groups, or against groups.

Moreover, the systemic approach is the one used in mathematics, physics, chemistry, biology, psychology, and other sciences. Indeed, all scientists study individuals as components of systems, and systems as composed of more or less strongly bound individuals. For example, individual numbers are defined as members of some number system, and spaces as systems of inter-related points; atoms and molecules are systems of elementary particles; cells are systems of molecules and organelles, and multi-cellular organisms are systems of cells embedded in ecosystems; persons are components of families and other social systems; nations are members of the international community—and so on (Bunge 1979a, 1996a, 1998b, 2003; Bunge and Ardila 1987; Mahner and Bunge 1997). It is systems all the way.

4. Political Epistemology: Knowing

Epistemology is the philosophical study of knowledge, which in turn is the socialized product of cognition. (Cognition, a brain process, is individual, whereas knowledge is social, and largely in the public domain.) Logicians and mathematicians have no need for epistemology, because they use purely conceptual means to invent their own objects, all of them imaginary, as well as to discover their interrelations. Not so the students of the real world, whether natural or social. Since they face real things, they have to take seriously the main problem of epistemology, which is whether anything can be known and, if so, whether through experience, cogitation, or both.

Epistemology can be either descriptive or normative. We shall peek at both branches of epistemology. The history of epistemology is littered

with the corpses of doctrines that have seldom if ever advanced the study of reality. Let us examine the most influential of them, starting with skepticism. According to radical skepticism, nothing can be known—a self-destructive thesis. Moderate skepticism, by contrast, holds that some things can be known, though seldom with accuracy, and that knowledge of matters of fact is seldom perfect, so that it advances through criticism as well as research. It is thus both fallibilist (alert to error) and meliorist (hopeful of improvement).

Just as moderate skepticism is the mark of the scientist, so dogmatism is the mark of the politician more interested in power for its own sake than as a tool for doing good. Remember Queen Victoria's advice: "Never explain, never apologize." She never apologized for any British military aggressions; Stalin never apologized for his crimes or for refusing to listen to the various authoritative warnings that Germany was about to attack the Soviet Union; and George W. Bush never apologized for the technical and moral blunders of his Administration. Obviously, "strong leadership" is the enemy of intellectual and moral probity.

So much for skepticism and dogmatism. Let us now glimpse at the most primitive and barren of all theories of knowledge: intuitionism. Intuitionists claim to know anything immediately, without resorting to either experience or reason, and with certainty. For example, Edmund Husserl, the founder of phenomenology, held that the way to grasp the essence of things is through "transcendental-phenomenological reduction," which consists in "bracketing out" the external world—that is, in pretending that it does not exist—and delving into the depths of one's own consciousness. Unsurprisingly, phenomenology has not produced a single piece of knowledge of reality. In principle it should lead to political nihilism. (Yet Husserl's three main disciples—Max Scheler, Nicolai Hartmann, and Martin Heidegger—paid close attention to politics: like Hegel one century before, they glorified country, state, and war.) Because intuitionism claims that truth can be attained effortlessly, without either hard thinking or rigorous empirical research, it comes naturally to the lazy.

Dogmatic rationalism claims to be able to know reality through speculation, without resorting to any empirical procedures. Rational choice theories, such as neoclassical microeconomics, are instances of dogmatic rationalism, for their practitioners do not bother to check their assumptions. For example, because they take selfishness for granted, rational-choice theorists conclude that collective goods are bound to be pilfered by "freeloaders." For example, if villagers have access to

a communal pasture, the more enterprising among them will take to it more cows and sheep than the others, and consequently overgrazing the common resource will soon exhaust it. This is known as "the tragedy of the commons" (Hardin 1968).

No such tragedy would occur, it is claimed, if every villager owned his own parcel, for he would take good care of it instead of behaving as a freeloader. The historical record teaches that there was, indeed, such a tragedy of the commons, namely when British landowners took over the communal pastures and put more sheep to graze. But rational-choice theorists are not interested in adverse empirical evidence: They feel certain that folk psychology and economic "rationality" (selfishness) suffice to understand the social world. But it is not. All deep science is counterintuitive, and most people are not the way economists paint them.

Thus, experimental economists have shown that most people are reciprocators rather than selfish (see, e.g., Gintis et al. 2005; Henrich et al. 2006; Rockenbach and Milinski 2006). And history shows that some common-pool resources, such as irrigation canals, fisheries, communal woods, and pastures, have been collectively managed for millennia (see, e.g., Esman and Uphoff 1984; Ostrom 1990; Kadekodi 2004). Finally, in politics Hume's dictum holds: Reason is the slave of passion.

The opposite of dogmatic rationalism is empiricism (or positivism). Indeed, empiricists—like Bacon, Locke, Hume, Comte, Mill, Mach, and the logical positivists—hold that only experience can deliver knowledge, though never beyond phenomena, that is, appearances. (Caution: Positivism is often confused with scientism, the thesis that the scientific method is the best strategy for exploring reality.)

Empiricism certainly holds for trivial truths, such as that you, the reader, are now reading this page. But it fails miserably for everything else, particularly for imperceptible facts, such as atomic collisions and political events. And it so happens that the vast majority of facts are imperceptible; and that, as the Greek and Indian atomists suspected 2,500 years ago, the ultimate components to the perceptible world are unobservable. Which, incidentally, is a reminder that epistemology without ontology is shallow.

To grasp social reality we must rise above everyday experience, because we interact mostly with people in our limited social circles, with whom we share interests, beliefs, and attitudes. For example, political activists discuss political issues mainly with fellow party members and sympathizers, so that they tend to exaggerate political polarizations: they are victims of the "gap between experience and reality" (Baldassarri and

Bearman 2007). In most cases the best we can get are observable indicators of unobservable facts—for example, street demonstrations indicating political unrest. Since most of reality is hidden to the senses, to get to know anything worth knowing we must imagine conjectures in addition to making observations. For example, historical anecdotes teach us that triumvirates are unstable, but not why. Sociopolitical analysis reveals the mechanism underlying that generalization. In any triad, any two of its components can join to oust the third.

Empiricism's next of kin is pragmatism, or the philosophy of blind action. According to it, practice is at once the ultimate source and the test of all reliable knowledge; and whatever is not anchored to practice is vain speculation. Pragmatism thus recommends dispensing with theory and replacing the scientific method with blind trial and error. This philosophy comes naturally to men of action, particularly businessmen and politicians, and in fact it usually suffices for small scale and short term endeavors. But pragmatism is woefully inadequate for ambitious projects, as these require plans informed by theories and data. Still, Goethe's pragmatist thesis, "In the beginning was action," can occasionally serve as an antidote to John's idealist dogma "In the beginning was the Word."

Moreover, pragmatism is irrelevant to mathematics and natural science, neither of which involves theories referring to human actions; it is misleading in social science, which seeks truths; and it is dangerous in social technology, which endeavors to use such truths to solve social problems. To advance by trial and error on a large scale is to court disaster. Still, pragmatism performs a useful function when criticizing "grand theories," that is, speculative ideas, and when it demands that the possible consequences of actions be taken into account—regardless of the means, though, which is why Mussolini (1932) declared himself a pragmatist.

Let us finally say something about two lesser epistemologies that have attained some notoriety in recent years: social constructivism and feminist epistemology. The social constructivists claim that all entities and all truths about them are local social constructions—inventions of certain communities. Consequently they disallow the existence of universal or cross-cultural truths, such as "Bigots hinder rational political debate." Hence at best they may qualify as journalists or storytellers but not as scientists—for, as Aristotle taught, science seeks generalities. And at worst social constructivism invites subjectivism and relativism, enemies of scientific research.

That said, it is obvious that there are social constructions galore. In fact, everything in society is man-made and it is either functional ("meaning-

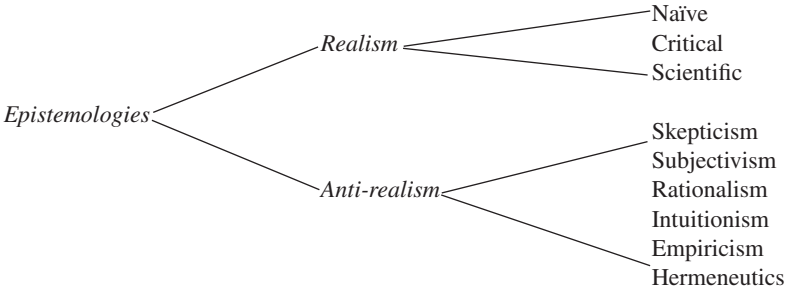
ful") or dysfunctional to some extent. For example, schools are invented and organized, not discovered, and they are expected to perform two important functions: instruction and socialization. But, once constructed, a social artifact is just as real as a rock. Consequently it deserves being studied with the help of the scientific method.

Finally, the feminist epistemologists hold that what is usually called knowledge—with the attendant rationality and objectivity—is just a tool of male domination to be eventually replaced with feminine knowledge, which allegedly emphasizes intuition and care. Don't ask for evidence: it would indicate membership in the "phallocracy."

Contrary to the radical versions of all of the abovementioned doctrines, scientific realists argue that objective truths can best be gotten through research both empirical and theoretical. Scientific realists hold that (a) the external world exists independently of the knower, and (b) it can be known, though approximately and gradually, through research conducted in accordance to the scientific method (see Mahner 2001). This method involves intersubjective tests. However, contrary to popular opinion, intersubjectivity (consensus) is an objectivity indicator, not a definer of it (Bunge 2003b). So much so, that propaganda can elicit consensus about lies.

However, here is a word of warning. Philosophical realism has only a tenuous relation with political realism and neo-realism, according to which international relations are basically antagonistic and revolve exclusively around political power, in particular military might. Political realists and neorealists are epistemological realist and moral utilitarians. In particular, the self-styled political realists advocate the absolute primacy of national interests, regardless of morals and international law. For example, they may recommend bombing civilian populations and cultivating friendly dictators.

Leaving nuances aside, the main contemporary epistemological doctrines may be classed thus:



Some of the above epistemological doctrines have counterparts in political theory and practice. For instance, all the influential idealists, from Plato to Hegel, Fichte, Husserl, and Heidegger, were reactionaries, perhaps because idealism favors religion and the contemplative life made possible by inherited wealth. An additional advantage of idealism is that, as Veblen (1899) would say, it confers social prestige, for only the idle can afford useless learning, whereas "crass" materialism and empiricism are plebeian. However, there were exceptions. Thus, some of the left-wing Hegelians regarded Hegel's dialectics as "the algebra of revolution" (Lenin); and the French liberals of the 1850s adopted Kantianism because of its espousal of free will (Ingenieros 1923). Empiricism is equally ambivalent. Russell (1947) claimed that it matches liberalism because both reject arbitrary authority and facilitate business. But Aristotle, Hume, Burke, and the second Comte were conservatives as well as empiricists; and Mill, Engels, and most of the logical positivists were socialists. Besides, empiricism has been reactionary in natural science because of its phenomenalism: Hume rejected Newton's mechanics, and Comte and Mach dismissed atomistics (Bunge 2006c). See Table 1.1, keeping in mind that the philosophy-politics correlation is weak.

Epistemology	*Politics*
Skepticism	Liberalism or abstentionism
Constructivism-relativism	Parochialism
Intuitionism	Impulsiveness
Apriorism	Conservatism
Empiricism	Progressivism
Pragmatism	Opportunism
Realism	Any

Table 1.1. Political correlates of the major epistemologies. Marxism is not listed because its epistemology is empiricist and social-constructivist. See Barber 1984 for alternative correlations. Collins (1998) overlooks the philosophy-politics connection altogether in his bulky ***Sociology of Philosophies*** **(see Bunge 2000b).**

Scientists have no use for antirealism, in particular apriorism, because they study documents about facts out there, not intimate mental events or freely floating ideas. In particular, they cannot embrace strict positivism, because they seldom if ever observe political facts other than face-to-face squabbles or ceremonies that only legalize decisions made earlier behind doors.

Nor can serious students of politics embrace pragmatism, because scientists seek truths, not just success—other than success in finding new

truths. The political counterpart of pragmatism, a variety of empiricism, is opportunism. The so-called realists in international politics, such as Henry Kissinger, are actually pragmatists, for they rate success higher than principles—which is just as bad as proclaiming high-sounding principles while betraying them.

Feminist epistemology (e.g., Harding 1991; Kourany 2002) is a particular kind of pragmatism. Indeed, it holds that all the sciences, even formal logic, mathematics, and theoretical physics, have only a practical goal: They would be tools of male domination. It also claims that women are uniquely situated to explore the world. But of course the feminist epistemologists do not bother to offer any evidence for these views. They do not show, for instance, that Newton's laws of motion are gendered, or that there is actually such thing as feminist chemistry. All they do is to write and utter false and silly slogans that discredit genuine feminism, which is not an academic industry but a serious social movement.

Only certain politicians find antirealism useful—though just to delude the masses. Indeed, all the totalitarian rulers have tried to persuade their subjects that the hardship and oppression they were experiencing were only a down payment for the promised earthly delights. As the torturer explained to his victim in George Orwell's *1984*, reality exists in the human mind, and nowhere else; consequently there is no point in trying to change it. The Administration of George W. Bush succeeded in persuading most Americans that the 9/11 terrorist attack was only the start of a long war, and that the goals of the invasion of Afghanistan and Iraq were to bring to their peoples the gifts of freedom and democracy, as well as to ferret out the 9/11 terrorists. A senior adviser to the President told a veteran journalist that guys like him are "in what we call the reality-based community…. We are an empire now, and when we act, we create our own reality" (Suskind 2004).

The students of reality constitute then, as that President's spokesman put it, the "reality-based community." But of course they are not naïve realists, because they know that all is not what it seems. Nor do critical realism or Popper's critical rationalism suffice, because they only require the weeding out of false hypotheses in addition to the "deconstruction" (unmasking) of political rhetoric.

Politologists need hard data and sophisticated methods besides true and deep hypotheses. For instance, they need to know whether a given region, such as the Basque Country, Corsica, or the Tamil part of Sri Lanka, is economically viable and thus a serious candidate to independence. Politologists also need to know whether or not the so-called verification

techniques are reliable enough to detect nuclear explosions, and thus guarantee the compliance of nuclear disarmament treatises.

But of course data and techniques, though necessary, are insufficient to build a science. One also needs generalizations (broad hypotheses). Hypotheses can shallow (purely descriptive) or deep (explanatory). Understanding is only attained by first imagining and then checking hypotheses involving deep-seated mechanisms, such as the incentives and disincentives for union and party membership, voting, voluntary work, or social protest. Such hypotheses cannot be inferred from data because they contain concepts absent from empirical information: they have got to be invented (see, e.g., Bunge 2006c). And the empirical checking of mechanismic hypotheses calls for constructing political indicators, such as voter turnout, percentage of government budget allotted to repression, frequency and size of street demonstrations, and number and treatment of political prisoners.

Finally, let us warn against a widespread confusion. Many political scientists, and even some philosophers, equate positivism with realism, scientism, or naturalism. Actually these four *isms* are quite different from one another; moreover, some of them are pairwise incompatible. Indeed, these epistemological theses can be characterized schematically as follows:

Realism = The external world is real and it can be known to some extent.
Scientism = Anything knowable is best investigated using the scientific method.
Naturalism = All the social sciences are ultimately reducible to the natural ones.
Positivism = Observation only counts in science, whence scientific theories are data summaries.

I advocate realism and scientism because factual science, unlike fantastic literature and mathematics, deals only with putatively real entities, and because factual science starts where ordinary knowledge stops. The politician who refuses to face reality is bound to be its victim. And the antirealist politologist, whether hermeneuticist or rational-choice theorist, cannot possibly understand political reality because he refuses to subject his guesses to reality checks, that is, confrontations with facts. For example, anyone who attempts to understand the Middle East crisis must start by learning that there is a lot of petroleum in that region.

Now, if we wish to face reality, realists and positivists agree that the most stringent and rewarding strategy is the scientific method, to be described in the following section. Scientism holds that this strategy pays not only for finding truths in all fields, but also for designing policies and plans of action. Incidentally, Condorcet, the father of modern politology, may also have been the earliest champion of scientism (Condorcet 1976). And the word *scientisme* had joined the French vocabulary long before Hayek (1955) misrepresented and attacked it.

As for naturalism and positivism, they are unacceptable for the following reason. Naturalism is false outside the natural sciences because social facts, though just as real as physical facts—as Durkheim rightly insisted—are made, not found. Moreover, social facts involve artifacts such as companies and schools, as well as the norms and conventions invented to govern them. And positivism is false because good scientists, far from sticking to data, attempt to explain them with the help of theories that refer to unobservable entities and traits, such as legitimacy and peace.

5. Methodology: Researching

We take it for granted that studying politics does not consist in watching newscasts, reading political gossip, or "reading old books" (as Leo Strauss claimed), but in conducting research on political processes in a methodical fashion. Let us start by warning against a popular terminological mistake. This is the confusion between *method*, or standardized procedure, and *methodology*, the study of special methods (techniques), such as census taking, opinion-polling, or the general scientific method. The latter can be summarized by the following sequence:

> *Background knowledge* → *Problem* → *Solution candidate (hypothesis, experimental design, or technique)* → *Test* → *Evaluation of candidate* → *Eventual revision of either solution candidate,* checking the procedure, background knowledge, or even the initial problem.

Contrary to what Bacon and Husserl imagined, one cannot start from scratch, but must always build upon previous findings, for the simple reason that the very statement of a problem involves some background knowledge. What is known suggests what is still unknown but should be investigated to satisfy curiosity or meet a need or a mere desire. Thus, every research project is triggered by some problem. But whereas some

research projects are empirical, others are theoretical, and still others methodological. That is, one may desire to build, expand, or correct a theory; collect or interpret some data; or invent or perfect a method. And, unlike technologists, basic scientists are driven by disinterested curiosity, the search for peer recognition, or both (Merton 1973). If the goal is to attain power of some kind, one engages in politics or business, not in scientific research. Hence it is wrong to oppose problem-driven to theory-driven, data-driven or method-driven. Never mind the drive or motivation, as long as the aim is to solve an interesting and reasonably well-posed problem in a rigorous way.

Scientific rigor involves conceptual precision, testability, and the search for evidence. To show how *not* to satisfy these requirements, let us concoct a theory of the "political organ," a parody of Chomsky's celebrated theory of the language organ, which supposedly encodes the (unknown) universal grammar. We assume that all humans are born with a political organ, located either in the mind or in the brain. This organ would contain a universal political "grammar," similar to Chomsky's. This "grammar" includes the basic (universal) rules of political behavior together with "parameters" attuned to the subject's particular political environment.

Following Chomsky's example in linguistics, we shall neither state the rules of the political "grammar" nor specify the accompanying "parameters." In this manner, any common pattern of political behavior, such as seeking or spoiling alliances against a common enemy, will count as confirming the existence of the said "grammar," whereas any large differences, such as those between Byzantine and modern American politics, may be interpreted as differences in the values of the "parameters." Physicists know that, by increasing the number of adjustable parameters in a black-box theory, any set of empirical data may be accounted for, yet none explained. Thus our theory will stand regardless of what happens in real politics: it is irrefutable. Hence it is unscientific, because the mark of science is sensitivity to evidence on top of precision and compatibility with the bulk of knowledge.

Evidence can be empirical or theoretical: comparison with either relevant data or close-by theories—such as sociology and economics in the case of politological theories. For a piece of research to be scientific, empirical testability is necessary but insufficient. For example, the prophecy that all forthcoming international conflicts will be basically "clashes of civilizations" (Huntington 1996) is testable to the extent that the concept of civilization is well defined. But the hypothesis is extravagant, because

an international conflict may involve alliances whose members belong to either the same or different "civilizations." For example, the current strategic allies of the United States include such strange bedfellows as the United Kingdom and El Salvador, South Korea and Poland, Israel and Saudi Arabia, Colombia and the Philippines. By the way, where is the political clash? And is the Iraq War, started seven years after the prophecy was cast, a clash of civilizations or rather an oil war?

Data are valuable in themselves or as pieces of evidence for or against some hypothesis. But data can be hard, like those of demographic and economic statistics, or soft like the self-reports obtained from social surveys. Furthermore, if a hypothesis contains high-level concepts, such as those of social class, inequality, and democracy, then it won't be directly testable, because they denote unobservable traits. To test such a hypothesis one must introduce a bridge between it and the relevant data. Such a bridge is of course an indicator.

For example, occupation is an indicator of (or surrogate for) social class; GDP indicates the intensity of economic activity; the logarithm of GDP per capita is an indicator of economic development; the Gini index is an indicator of income inequality; percentage of voter turnout is an indicator of political participation; and the percentage of the national budget devoted to security forces indicates the level of political repression.

Notice the insufficiency of such empirical indicators. The Gini index measures income inequality but not asset inequality, which can be just as important, as in the case of the African Americans, whose "net worth" is one-twelfth of that of their White countrymen. Other social indicators are ambiguous. For instance, a low rate of political unrest, as measured by the frequency of street demonstrations, may indicate either political apathy or strong repression.

At the heyday of logical positivism, indicators used to be called "operational definitions," and they were supposed to define theoretical concepts. This semantic thesis is known as *operationism*. For instance, it was said that time is what clocks measure. The Taliban fundamentalists know better: They say that "they" [meaning us] have watches, whereas "we" [meaning them] have time. As it happens, the concept of time, like that of matter, is so general, that physicists do not define it even though they can measure and calculate times with amazing accuracy.

Political scientists use two main data-gathering techniques: surveys and statistics. These are very different procedures. Surveys gather opinions, which are more or less subjective and therefore unreliable, whereas

statistics report on objective facts; hence, whereas the former furnish soft data, the latter supply hard data.

Suppose the Americans, French, Russians or Chinese had been asked, on the eve of their world-shaking revolutions, what they thought about the likelihood or desirability of a revolt against their governments. Since the overwhelming majority of those people were farmers without any political experience, most likely they would not have expressed any seditious opinions, so that the survey would have had no predictive value. Even nowadays, asking people whether they support a social revolution is doubly naïve. First, because we already know that revolutionaries everywhere are in a minority. Second, because revolutionaries would be afraid to tell the truth. And yet this question was asked in many nations by serious statistics bureaus in recent years (see MacCulloch 2004). Moral 1: Keep on performing surveys (opinion polls), but do not rely on them to uncover any real facts other than the opinions themselves. Moral 2: Keep on using statistics, but only to check hypotheses, not to build them.

Once a solution candidate has been evaluated in the light of the relevant evidence, one may have to bend or even remove some of the previous links in the chain. But never all of them: Contrary to what Kuhn and Feyerabend claimed, there are never total scientific revolutions. This is because every innovation builds on some piece of extant knowledge and is evaluated in the light of it. For instance, the greatest scientific revolution after the invention of science in antiquity, namely the one that occurred in the seventeenth century, hardly touched Greek mathematics. And the major upheavals in biology, namely the theory of evolution and molecular biology, have yet to affect politology. True, there has been some talk of biopolitics, but only the Nazi *Rassenkunde*, a criminal pseudoscience, has been born so far. Nor is scientific biopolitics likely to ever emerge, because politics is not in our genes. We shall return to this question in Chapter 7.

The concept of scientific method allows us to split knowledge into scientific and non-scientific. In turn, non-science can be partitioned into ordinary knowledge, technology, ideology, and pseudoscience. Modern medicine and engineering do not seek knowledge for its own sake. But they are scientific because they use not only the scientific method but also considerable chunks of basic science. This is not the case of psychoanalysis, crowd psychology, or memetics. They are all self-contained disciplines, estranged from genuine science, and impregnable to data.