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Dr. David Lightfoot, Assistant Director for Social, Behavioral and Economic Sciences &

Dr. James B. Collins, Assistant Director -Biological Sciences Division National Science Foundation 4201 Wilson Blvd. Arlington, VA 22230

Dear Dr. Lightfoot and Dr. Collins:

I am writing to comment upon the online Report on Grand Challenges of Mind and Brain that will inform possible NSF initiatives. Dr. Sheila Blumstein and her colleagues have produced an exciting, thoughtful, and well-written report concerning research opportunities. I hope that NSF will move quickly to support these new integrated, multi-disciplinary investigations.

Hierarchical Images and Non-Rational Behavior

I suggest that a remarkably insightful and useful line of research will be the study of hierarchical images, especially the effects of vivid and established hierarchical images on motivation and non-rational behavior.

A. Self-starting Behavior and Sustained Motivation

It is a truism of every motivational speaker that creating vivid images of the future, located spatially in front of, and above, the individual is a vital step in setting goals that can arouse and sustain personal motivation, even across many years and through many adversities. An individual's capacity to form such images may be a key to self-starting behavior, to executive behavior, and to planning and leadership in organizations.

B. Psychopathological Syndromes: Arousal and Suppression

It also appears that established hierarchical images may arouse emotions and lock-in individuals to psychopathological syndromes. Paranoia, to take one

example, may reflect a disorder of vivid hierarchical imagination and a perpetual battle against cold, omnipotent oppressors and persecutors. The invocation and manipulation of such imagery of evil can range from entertainment (in the design of video games for adolescent males) to political conflict and the propaganda and recruitment of suicide terrorism.

Vivid images may have arousing effects that are partly hard-wired in the brain to the central nervous system, bypassing the neo-cortex. There also may be unintended suppressive effects that are non-rational: for example, partly-motivated employees in large hierarchical bureaucratic organizations standing around the water cooler and complaining about their boss. Yet a physiological mechanism, a non-rational followership response that is triggered by a visually-encoded hierarchy in similar ways across many animal species, may be at work. And, as in the case of individual psychopathological syndromes (e.g., paranoia), research may find ways that are superior to language-based psychotherapies, and specific to visual encoding/information processing, that help both individuals and large organizations to achieve better results.

Sociological and cross-cultural investigations of dominated groups suggest that cognitive inhibitions also are induced by such brain mechanisms - and misinterpreted. Thus Blacks on the plantation, or women in traditional societies, or - today - minority/lower status populations in many nations of the world often are described as lacking self-starting motivation, to have limited capacities for learning and rationality, etc. [And these traits are wrongly interpreted as inherent, rather than induced.] For example, problems of labor force participation and educational participation/attainment by Blacks in the US may reflect such unrecognized psychological mechanisms that continue as an unintended residual from an earlier era of discrimination and oppression. NSF-supported understanding of the brain pathways offers the possibility for healing/empowering interventions that operate quickly.

C. Attachments

To provide a more systematic interdisciplinary discussion of syndromes of vivid and powerful hierarchical images and (induced) non-rational behavior I enclose a chapter, "Wisdom in Public Policy" with a brief summary (pp. 312-314) of newer ideas from psychoanalytic psychology. This model proposes types of established/involuntary hierarchical images of God/governments/ parents/ bosses or other authority figures (controlling & hostile v. benevolent) and different motivational syndromes that vary with the distance of the image. <1>

I also enclose a figure from Kardiner & Ovesey's classic psychiatric study of slavery and its psychological aftermath in the American South, The Mark of

Oppression. As a political psychologist, it seems to me that the syndrome is almost universal. Although a great deal of research will be required to sort-out the causal arrows and mechanisms, there may be a syndrome, induced and sustained by hierarchical images and primitive domination/submission accommodations, that can be observed across humans and many other animal species. Even if, as humans living in democracies, and with societies and market economies that require rationality and self-starting behavior, such mechanisms now introduce unwanted, and still poorly understood, problems into individual and collective lives.

Thank you for this visionary and path-breaking Report.

Please contact me if further discussion would be useful.

With all best regards,

flyd S. Etheredge (Dr.) Lloyd S. Etheredge

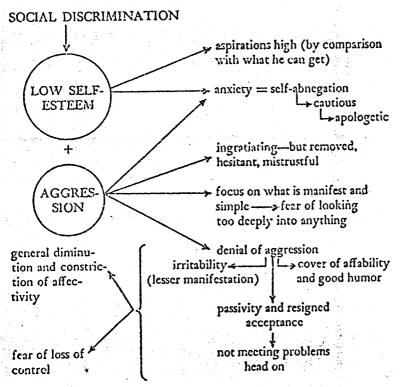
cc: Drs. Sheila Blumstein, Thomas Carew, Nancy Kanwisher, Terry Sejnowski

<1> And perhaps other variables, yet to be understood. There may be important genetic differences in imaginative capacities and suggestibility, and also the degree of voluntary control over hierarchical images.

from Abraham Kardener & Janel Overey, The Mark ! Oppression; 9.303

PSYCHODYNAMIC INVENTORY OF NEGRO PERSONALITY

because the individual, in order to maintain internal balance and to protect himself from being overwhelmed by it, must initiate restitutive maneuvers in order to keep functioning—all quite automatic and unconscious. In addition to maintaining an internal balance, the individual must continue to maintain a social façade and some kind of adaptation to the offending stimuli so that he can preserve some social effectiveness. All of this requires a constant preoccupation, notwithstanding the fact that these adaptational processes all take place on a low order of awareness. The following is a diagram of a typical parallelogram of forces:



In the center of this adaptational scheme stand the low self-esteem (the self-referential part) and the aggression (the reactive part). The rest are maneuvers with these main constellations, to prevent their manifestation, to deny them and the sources from which they

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A Handbook of Wisdom

Psychological Perspectives

Edited by
ROBERT J. STERNBERG

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Wisdom in Public Policy

Lloyd S. Etheredge

A problem that strikes one in the study of history, regardless of period, is why man makes a poorer performance of government than of almost any other human activity. In this sphere, wisdom... is less operative and more frustrated than it should be.

– Barbara W. Tuchman (Tuchman, 1980)

1. Definitions and Examples

Wisdom in public policy is good judgment about important matters, especially embodying a genuine commitment to the well-being of individuals and to society as a whole. In international politics wisdom is the core of statesmanship, extending a commitment to the well-being of peoples of other nations, and often restructuring the international system to work better for future generations.

If political wisdom can be engaged there is a growing potential to create a better world. Social science may contribute to the growth of wisdom for public policy: Most problems are similar across cultures and centuries. The advance of physical science and the levels of wealth and education in advanced countries and some underdeveloped countries provide new resources that could, for the first time, be used to meet basic needs of all people (Etheredge, 1981, 1992).

Tuchman's contrast (quoted earlier) between rates of progress in government and other fields suggests that we can learn to improve the wisdom of public policy. Yet one possible lesson of history in the Western intellectual tradition is that the attractive dream to marry political power

and wisdom should trigger a psychological alarm. In Tolkien's mythological *The Lord of the Rings* the wise answer is *not* to seek political power, even for good. Frodo and a coalition of good hobbits, men, and other creatures of Middle Earth seek to destroy the Ring that grants dominion to its possessor. On the other side (evil) are the Dark Lord and others who seek to possess the Ring of Power for themselves and to use it; and *also* from the race of men, on the side of good, are those who are drawn by the power of the Ring and too weak to do what must be done. In the classic Western spiritual tradition one of Satan's three temptations to Christ was dominion over the earth and all of its peoples; and the right answer was no.

Yet in the political life of Washington, DC, people still compete to possess the Ring (or to be the National Security Adviser). Believing *they* will use power wisely. The reader is forewarned.

The Western political tradition drew consequential lessons about wisdom before any reader of this chapter was born. The earliest choices to trust political power to (or acquiesce to dominance by) divine Kings, Sons of Heaven, and Holy Fathers were changed, along with the plausible theory (that turned out to have limited practicality) that improving the individual virtue of rulers and humankind was the most reliable path to mitigate the evils of the world. Spiritual/philosophical wisdom is no longer the only wisdom required for public policy. Political processes have created new human-designed systems of remarkable size and complexity (e.g., democracies, market economies, a nonprofit sector) and partly reassigned ultimate control to free and educated people who are – by various mechanisms – supposed to keep the world and their own lives on track.

Today, wisdom is more intellectually challenging: A wise leader must provide intellectual *and* political leadership and answer four questions: What is the Good? What works? What comes next? How do we get it (the next step) done? Yet an elected democratic leader is not a king or queen who can solve problems in his or her own head and give orders. Ultimately, progress will require that wiser policies be adopted in a democracy and this is no simple task in America (Smith, 1992, 2002).

The plan of this chapter is, first, to discuss definitions and examples of wise leaders and wise policies. Second, I will review two traditions in philosophy (supernatural guidance and secular philosophy) and then discuss the expanded repertoire of ideas contributed by social science. Next I will discuss political wisdom as an individual trait and the experiment to create professional identities; and then wisdom

Box 12.1 Examples of Wise Leaders
Pericles
Marcus Aurelius
Ashoka
Charlemagne
Founding Fathers (US)
Franklin Delano Roosevelt
Mikhail Gorbachev

about the functioning of two of the invented systems (democracy and markets) on which American society relies. I will conclude with three recommendations.

Nelson Mandela

1.1. Wise Leaders

ruled the Roman Empire at the height of its Golden Age and the cratic Athens at the height of its Golden Age; Marcus Aurelius, who notably beneficial leadership. (It is based on a list by the historian of the historian Edward Gibbon, "during which the condition of the Barbara Tuchman.)¹ The list includes Pericles, who governed demo-Box 12.1 provides examples of historical political leaders who supplied prestige supreme in the Middle Ages . . . "; and the American Founding to foster the arts of civilization no less than those of war and to earn a words) "was able to impose order upon a mass of contending elements, and governments can still be judged; Charlemagne, who (in Tuchman's (c. 250 B.C.) remain a standard against which many modern leaders the remarkable Ashoka, whose humanitarian achievements in India human race was most happy and prosperous" (Gibbon, 1946, p. 61); Roman Peace – the period, in the judgment (at the end of 18th century) ern political thought, astute and pragmatic, unafraid of experiment, Fathers ("fearless, high-principled, deeply versed in ancient and mod-

¹ I have removed Julius Caesar, included in Tuchman's list, because his rule was brief (46–44 в.с.) before his assassination: I do not believe we know how wise a ruler he would have been. Historical lists are affected by many factors, including whether the candidates were articulate communicators whose work was preserved (e.g., the funeral oration of Pericles, the writings of Marcus Aurelius and Julius Caesar, the U.S. Founding Fathers), or who had capable publicists (Charlemagne; the achievements of Ashoka were recognized in the modern world only after discoveries of large, inscribed stone monuments recording the accomplishments).

and ... convinced of man's power to improve his condition through the use of intelligence" and who, "to a degree unique in the history of revolutions, applied careful and reasonable thinking" (Tuchman, 1980). Waiting 50 years before adding names to this list may be prudent, but Mikhail Gorbachev's change of domestic and international policies in the former USSR and Nelson Mandela's leadership to end apartheid in South Africa make them likely candidates.

None of these historical leaders embodies an idealized Hollywood image of wisdom. They are not people with unassailable identities, nor were they always virtuous, right, or successful. Nor would the enemies in their political battles be likely to agree with their inclusion. However, I think that they are illustrative of the best that has been achieved, and perhaps of the best that we can expect until further problems (discussed in this chapter) can be solved.

Salisbury); (b) people whose wisdom influenced public policy without working together, produced wise policies (e.g., Elizabeth I and Lord evil and genocidal; (d) leaders who were wise about specific challenges any beneficial accomplishments or who (like Hitler or Pol Pot) were Martin Luther King Jr.); (c) leaders at the opposite extremes, without holding political power (e.g., Confucius, John Maynard Keynes, Gandhi in specific historical circumstances but appear unwise in other respects be: Alexander the Great, for example; and (f) messianic visionaries and accomplishments who were not wise, and perhaps never intended to his impeachment); (e) leaders of extraordinary political and military Nixon's openness to China contrasted with the Watergate break-in and views toward Gandhi and the end of the British Empire; or Richard (e.g., Churchill's leadership during World War II contrasted with his better world ultimately failed (e.g., Marx, Lenin, Mao). revolutionaries who thought they were wise but whose visions for a We might develop related lists of: (a) leaders and key advisers who

1.2. Wise Policies

Wisdom is an attribute of policies (although it also can be an attribute of individuals). Wise policies can be identified by a balance sheet of effects (good, nil, and evil) distributed across populations and time.

Box 12.2 Eight Values for Human Betterment
Power
Enlightenment
Wealth
Well-Being
Skill
Affection
Rectitude

Respect

For this discussion, I will use eight values (which have been useful for the study of human rights) to define wise policies (Box 12.2, from the work of Harold Lasswell) (Brewer & De Leon, 1983; Lasswell & McDougal, 1991; see also Fogel, 2000; Rokeach, 1973; Sen, 2000). Of the eight values, "enlightenment" means education, although (as we will see) it also refers to a special kind of personal growth that may be possible; "well-being" refers both to physical and mental well-being.

Box 12.3 provides examples of wise public policies, with an emphasis on the United States (see also Light, 2002; Montgomery & Rondinelli, 1995). Some recent achievements are remarkable by any historical standard (e.g., the end of the Cold War and of apartheid). Several entries are wiser policies, but I do not intend an ultimate endorsement. For example, free markets are relatively wise, especially by contrast with the failures of national socialism in the 20th century in the USSR, Eastern Europe, and China. Their balance sheet also contains many negative entries: Underregulated and amoral capitalism does great damage, and political conflict throughout the 20th century was required to mitigate the damage. (For example: unionization, worker safety, and child labor laws; product safety; truthful advertising; laws to safeguard competitive practices; financial disclosure; regulation of environmental damage.)

Wise public policies often originate outside government. They also may require social movements – organizing, participation, leadership, and election victories. Even when presidents play essential or catalytic roles, the groundwork (e.g., the end of the US-China and US-USSR Cold Wars) often has been laid across many years. The peaceful end of apartheid in South Africa required unique leadership by Nelson Mandela but also involved collaboration by leaders, and many other people, on both sides (Waldmeir, 1997).

² I also include Franklin Delano Roosevelt for his leadership to bring America into World War II and lay the groundwork for a more permanent peace than was achieved after World War I.

;

Box 12.3 *Examples of Wise Policies*Trial by jury

Democratic government
Separations of church and state

Joint-ownership stock companies (corporations)

The process and conflict of interest rules

Due process and conflict of interest rules

Elimination of slavery

Civil and human rights

Universal public education

Public libraries

Private tax-exempt foundations; nonprofit institutions

Wide availability of higher education, with access by merit

Substantial investment (public & private) in scientific research Market capitalism

Regulation of market capitalism

Settlement of WWII (incl. Marshall Plan) vs. settlement of WW I United Nations

European Common Market

Medicare

End of apartheid (South Africa)

End of the Cold War (US-China; US-Russia)

Two Traditions of Political Philosophy

Two philosophical traditions have shaped thinking about wisdom in public policy: supernatural guidance and secular philosophy.

2.1. Supernatural Guidance

Most governments, before the invention of democracy, were a story of the creation, management, and (sometimes) revolt against male-dominated hierarchies. Rulers claimed a supernatural or divine source of legitimacy. Pharaohs or emperors were gods or Sons of Heaven; kings ruled by divine right and the sanctification of priests. Further guidance, if needed, was sought by prayer, magic, divination, or the consulting of oracles; and after the invention of writing, by the written record of divine revelation and the interpretation of its true prophets (Finer, 1999, p. 316).

The early gods (including the Greek and Roman gods) did not have moral codes for their own behavior nor did they expect moral behavior of mortals. Later, with the development of large agrarian societies, new

deities and the great enduring religions with moral codes emerged – Catholicism, Judaism, Islam, Buddhism, and others (Lenski & Nolan, 1998). These began, and continue, to shape public policy with the idea that a better collective life will be achieved by greater individual virtue as defined by their codes. For example, the Catholic catechism teaches that wisdom and, by extension wise policy, will grow from the four cardinal virtues of prudence, justice, fortitude, and temperance, of which the guiding virtue is prudence (auriga virtutum, the charioteer of the virtues), which disposes "practical reason to discern our true good in every circumstance and ... choose the right means of achieving it" (United States Catholic Conference, 1995, p. 496).

In religious traditions the deepest and most unsettling question about public policy is the remarkable persistence of evil (Neiman, 2002). In *The City of God*, Saint Augustine imagined two cities: "In the one, the princes and the nations it subdues are ruled by the love of ruling; in the other, the princes and subjects serve one another in love, the latter obeying, while the former takes thought for all" (St. Augustine, 1950, p. 477). But the saints in this world are few and the fallen nature of the vast majority of the children of God, who determined the politics and moral tone of their societies, meant that only limited progress would be possible. The virtuous few in 21st-century America (and beyond) are destined to live in societal (and public policy) Babylons across the centuries until Judgment Day.

against, good. The observations that religious thinkers tried to explain of an inherent design flaw in human nature that limits, and even works assured, and noble bearing - conveying a sense of an unassailable might picture the arrival of wisdom as a political leader with a calm, by a theory of Original Sin certainly want for a good explanation. We cratic Athens; Jesus was crucified; recent examples of assassinations wisest of men by the Delphic Oracle, was condemned to death in demomarginalized, or assassinated by political enemies. (Socrates, called the policies is strenuously resisted (Box 12.3). Wise leaders can be assailed, contrast, across the centuries and today, every advance in wise public His words bring a moment of silence, and then universal assent. By identity - briefly articulating the essential issues to guide a decision. include Rev. Martin Luther King, Gandhi, President John Kennedy and whose thought and moral example shaped the governance of China for ter Rabin of Israel.) Nelson Mandela spent years in prison. Confucius, his brother Robert Kennedy, Anwar Sadat, and former Prime Minis-The Judeo-Christian legacy includes a theory of resistance to wisdom,

2,500 years, was considered too independent and ethically candid by the power holders of his day; he never had a permanent civil service position, and faced periods of loneliness, starvation, poverty, and even physical danger.

Today, looking back, it is almost impossible to imagine that wise policies were opposed. Yet it required extraordinary political work and conflict to end slavery, and to secure the right of women to vote, regulations for safe and healthy food and working conditions, and the prohibitions against child labor (Gamson, 1986). It is as though a divided human nature always was in political combat with itself when faced with any change for the good, or that the modern democratic electorate is initially divided almost evenly between progress and opposition, or good and evil.

Christian thinkers also believe that *selfishness* partly explains the evil of the world (Mansbridge, 1990). Selfishness, in a society of wolves and lambs, makes wise policies for the common good impossible: The wolves do not have any self-interest in change, even if they claim it. This simple model (assuming an analogous distribution of personality traits in political behavior) could explain much of the political history of the world.

Christian virtue and preaching, and the other great ethical religions, did produce wiser policies. One reason for their early spread, in competition with a wide range of pagan religions, was that these new religions delivered. In poor societies without welfare systems and with indifferent governments, they were not merely an opiate of the masses: The early Christians, Muslims, Jews, and Buddhists cared, and they provided charity and community (Dodds, 1991).

2.2. Secular Philosophy

A second tradition is the use of human reason and secular philosophy to provide guidance for wise public policy. The tradition begins with the birth of democracy in Greece – whose gods gave no specific guidance – and especially in Athens whose patron goddess, Athena, was the goddess of wisdom. In Ancient Greece philo + sophia, the love of and inquiry about wisdom, was coterminous with psychology. The first philosophers asked questions about every topic, and they thought the power of reason should change private lives and public policy. They wanted to teach people to grow beyond being creatures of impulse or habit or living in a passive stimulus–response relationship to circumstances – for example, to examine their unhappiness, caused by exaggerated ideas or fears, by the light of their powers of reason; and they prescribed thinking,

dialogues with philosophers, and meditative and other practices for personal growth (Hadot, 1995, 2002). They were the Abraham Maslows, Tony Robbinses, and Landmark Corporations – the theorists, clinicians, and self-help writers of Athens. And, at times, its in-your-face performance artists: When Diogenes (d. circa 320 B.C.) walked with a lighted lamp in broad daylight looking for an honest man he was making a point to his society. (Diogenes also lived without material possessions and slept in public buildings to dramatize a philosophical discovery that a happy and fulfilled life need not depend on material possessions or social conformity.) The population of free male adults in Athens in the Golden Age was only 30,000 to 45,000 (Finer, 1999, p. 341); its philosopher/psychologists, the advocates of *philosophia*, were a part of its civic life – so much so that Socrates eventually was condemned to death by a jury of 500 of his fellow citizens (for explanations, see Brickhouse & Smith, 2002; Ober, 2001, p. 167).

alogue of Socrates recorded later in Plato's Republic (Book VII) (Plato, echoes; and tells of a confusing and hard journey for the few members of a tribe that lives in an underground cave filled with shadows and 1991): It uses the picture of an ascent toward sunlight by some members passage about wisdom ever written by a philosopher – occurs in a diwho are freed to walk the upward path.3 The dialogue proposes that potential of the individual. The ideas shape Western education: Any and it can be achieved by specific methods (Socratic dialogues to stimuucating students who will become Philosopher-Guardians of the state for the better. The achievement of this enlightenment is the goal of edthere is a higher, enlightened sense of reality that can change politics unique and Western theory of civic education and wisdom articulated to "memorize and recite" a received wisdom - is participating in a rather than being given a work by a learned authority and assigned ties and asked to think for him-/herself and "contrast and compare" -modern student in the West who is assigned two contrasting authorilate independent, analytical reasoning) that awaken and encourage the An example of Greek secular philosophy - and the most influential

Plato's unitary Good – appearing as the blazing light of the sun after ascent from a cave, to all enlightened people – is a true source of ethical

Plato was a student of Socrates and founded a school to continue his methods. I follow convention by attributing the views in this section of *The Republic* to both Plato and Socrates.

illumination and knowledge of excellence in public policy, gymnastics, or drama, or architecture or teaching or friendship (etc.). This Good is not the nonviolence of Gandhi or a benign ethics in all circumstances: Plato saw the right conduct of guardians being "kind to friends and fierce to enemies" (Plato, 1961, p. 1153). When necessary (but not otherwise), the enlightened Guardians would lie to less enlightened citizens to achieve the best interests of the State: For example, the people were to be told that marriages were arranged by lot, but officials would manipulate lots to assure favorable breeding (Plato, 1961, p. 1154).

and Cambridge, who became the upper class and civil servants) to heirs of Athens and (especially the enlightened graduates of Oxford Empire. The elites of Victorian England pictured themselves as the 414-446). "Man is a creature who makes pictures of himself, then Church of England and the playing fields of Eaton (Turner, 1981, pp. 431, early pagan equivalent of the teachings of Christ and the values of the the King James Bible and who readily interpreted Plato's Good as the pire. The self-image was enhanced by the personal example and convicbe the Guardians for their country and the peoples of the British Emgovernments, educated elites, and civic culture of their subjects after p. v). The picture of Plato's Guardians continues in the democratic comes to resemble the picture," observes Iris Murdoch (Murdoch, 1999a, who translated Plato into the beloved and recognizable cadences of tion of the kind and gifted Benjamin Jowett, master of Balliol College, independence. The global political influence of Plato increased because of the British

Plato envisioned a more demanding path than did recent American psychological growth theorists such as Abraham Maslow. Plato taught that the attachments and defining illusions and behaviors that human beings conventionally rely on for security, respect, affection, social identity, and other needs must be questioned and abandoned in their original form, whereas Maslow's view apparently was that the meeting of such needs (by whatever mechanism) was sufficient (Maslow, 1987, 1998; for Jung's view of struggle and individuation, Odajnyk, 1973, p. 146).

The theory of personal growth, guided by philosophically defined virtue, as the foundation for wise public policy also developed independently in China with the leadership of Confucius (551 B.C.-479 B.C.), the most influential political philosopher and teacher in Chinese history. Confucius believed that, through education, each man could shape his destiny; he envisioned a better world built and maintained by the education, self-cultivation, and leadership of a fellowship of scholarly

tial his example. The methods for such self-cultivation were different (benevolence). The higher the rank of the official, the more consequenhumanity of their conduct, especially their i (righteousness) and jen below, primarily by moral suasion and the example of the spirit and blemen would govern wisely, with a harmonious relation of above and political institutions (beginning with the family) always required. Nothan was the renewal of spiritual energy and humanity that social and olutionary changes) in formal institutions were much less important leadership.) Confucius felt that innovations (including radical or revexcellence, not birth or current wealth or status, fitted a man for this noblemen (chün-tzu). (The abilities that he developed and his moral music, ritual, calligraphy, archery, charioteering, and arithmetic - which from Plato's (or Maslow's) and included inter alia mastery of six arts ing sensibilities required for their mastery also make them an education part, practical skills for an emperor and higher civil service, the awakenrequired many years to achieve. Although several of these arts are, in self-cultivation in China in part because they develop artistic and aesrefined Gestalt therapy. Thus, calligraphy and archery are prized for inner growth whose closest Western analogy might be an advanced and to (in the conception of Chinese culture) become human - exercises for and explain human behavior and even physical health (e.g., Kuriyama, ceptivity, inertia, aliveness, conflict, balance, and harmony) also shape relations (e.g., the creation and relaxation of tension, assertion and reuniverse (qi or ch'i and its two fundamental aspects, yin and yang). Their unifying forces and energy in the human body, society, and the physical thetic sensitivity, which permits experience of different underlying and governance of China for 2,500 years, the existence of qi (yin and yang) 2002).4 Although this sensibility shaped the political philosophy and forces and energy is not confirmed by Western physical science or social

⁴ The sense of a deep ontological unity that informs Chinese discussions of wisdom is such that, when a supernova disturbed the Heavens, or there was a period of drought, it was appropriate for an emperor to retire and reflect on the disharmonies of his own mind that might be causal (Huang, 1981, pp. 11, 119). Thus, simple translations of words can be misleading. True, in the West, the image of a collective psychology was used to legitimate hierarchical rule (thus, the assertion that the natural and wisest practice was for the king or emperor, as the "head" of the state, to do the thinking and for others to obey). However, in Western political thought the linkage of the individual human body and the body politic (as "a person writ large") was almost always only an analogy rather than an assertion about the constitutive unity of reality. It was common to the 17th century when it lost favor to a defining analogy of a social contract (Hale, 1973). For a Freudian analysis of wisdom and power in the political "head," see Brown, 1990.

science.⁵ Such cultivation of the self in a co-humanity with others was the essential policy foundation of personal health and inner harmony, of social order, of political stability, of good (righteous and benevolent) government, and of universal peace (Creel, 1960; Jaspers, 1962).

Confucian education for the civil service, widely open and based on merit and competitive examination, was compatible with many religious beliefs, and within several centuries it supplanted hereditary aristocracy and became the foundation for Chinese public administration. Like Christianity, there were gaps in implementation and selective adoption of different elements.

2.3. Limits of Religion and Moral Philosophy

The strategy of maximizing individual morality to achieve the collective Good may seem obvious. It required many centuries to recognize the limitations of the assumption.

and mankind's slowly increasing Christian virtue ("onward and upand the wrong people are thereby drawn by new temptations ("Power a better world lost credibility after 1,500 years. In a pattern that recurs in ward by 2% a century" one critic remarked) could be relied on to bring wealth from local charities in impoverished medieval Europe to build St. of the historian and Catholic intellectual, Lord Acton) (Himmelfarb, tends to corrupt and absolute power corrupts absolutely" in the phrase The potential for corruption increases as institutions become powerful interests rather than the goals and people they were created to serve. history, institutions tend to become corrupt and to serve their own selfignited horrific wars and persecutions throughout Europe. In the West, of the Church. The Protestant Reformation and Counter-Reformation the teachings of Christ, and invented the sale of indulgences to divert 1952, p. 203). Even popes became corrupt, added false interpretations of kings, and the change to democracy, was born of this violent crisis. tion of church and state, the terminated doctrine of the divine right of the improved design of a more secular modern world, with the separa-Peter's in Rome and to support a lavish worldly lifestyle for the princes - The original theory that the moral leadership of the Catholic Church

 A second attack on the strategy of increasing individual virtue came from Machiavelli, who observed the violent and treacherous Italian politics in the early 16th century. He rejected (i.e., even if it could be

achieved) the ideal of Christian piety for rulers (loving, and beloved by, their subjects) – and even the obedience to law. In *The Prince* he wrote a prescription for a realistic ruler who could survive and do good for his subjects: "learn how to do evil" – the cold realism, cunning, dissembling, and pragmatic use of spies, bribery, and violence required of a ruler in a world of hardball politics, facing unprincipled people who wished his favor or to seize his power or small kingdom by violence; and subjects who were themselves more selfish than virtuous (Machiavelli, 1977). Machiavelli invoked the Italian virtue of *virtu* – the strength, cunning, wisdom of realism, and ruthlessness of Vito and Michael Corleone in *The Godfather*. As part of his advice he dismissed the preaching that wise rulers should rely upon the love of their subjects, just as Michael Corleone explains the danger that he faces at one point: "Our people are businessmen. Their loyalty is based on that."

– A third attack on the guidance of moral philosophy to fashion a better world came from Nietzsche, who proposed a new path of liberation and truth-telling on behalf of realizing a stronger and wiser human being than any who had previously existed. He would be a man who would be master of his own destiny, a man who could give and keep his word in the face of changing circumstances: an animal who could promise. A man whose spirit and speaking could – in reality, and not just in Wagnerian opera – encompass and soar above the turbulent cacophonies of the world.

Nietzsche's "beyond good and evil" redefinition of the question held that civilization and moral philosophy were an entrapment that suppressed humanity's powers (just as animals are domesticated) inside a slave mentality (see also Freud's theory of civilization and neurosis: Freud, 1961).⁶ Nietzsche challenged do-good democratic theorists and reform movements to improve civilization: "the universal green-pasture happiness... with security, lack of danger, comfort, and an easier life for everyone; the two songs and doctrines which they repeat most often are 'equality of rights' and 'sympathy for all that suffers' – and suffering itself they take for something that must be abolished!" (Nietzsche, 1966, p. 54). In his reanalysis of Greek culture, Nietzsche identified the source of health, power, and aliveness as the Dionysian spirit (versus the Apollonian rational-talk, rational-talk, and more rational-talk spirit

⁵ The psychoanalyst Wilhelm Reich used a similar idea about a unitary life energy to shape the radical Freudian Left sexual-politics movement: (Robinson, 1990).

⁶ See also Rousseau's theory that man (innately good) is corrupted by society and civilization, which become more harmful as they become more sophisticated (Ritter & Bondanella, 1987).

of Plato) – the joyful power and the instinct for growth and durability of the choruses of amoral satyrs in Greek drama – a life force, the human unity "behind all civilization" (from *The Birth of Tragedy* Bluhm, 1971, p. 530).

Nietzsche also rejected Plato's idealistic view of a harmony of Good. He saw a world with masks and evasion, cruelty behind the highest human achievements: The competitive glory for the few in the winner's circle was the agony of defeat for losers (e.g., Conroy, 2002). Societies "feign contrition" about their problems (Safranski, 2002, p. 75). The intellectual achievements of Plato, Socrates, et al. were a lifestyle conducted atop a slave economy – slaves who (presumably) served the wine but who do not participate, and are seldom mentioned, in these dialogues.

3. Beyond Philosophy to Social Science

Next, the development of social thought and social science created a new dimension and cornucopia of new ideas for thinking about wise policy. A recognition of *social structure and structural variables* – the opportunity to design institutions and systems to produce better outcomes without greater individual human virtue – liberated policy analysis from philosophical arguments. The higher *levels of analysis* to describe and analyze the causal features of social organization and complex systems became the basis for new social sciences alongside psychology. I will discuss several examples and a modern critique of the potential limits of reason and social science to solve conflicts involving "isms."

3.1. Collective Good from Self-Interested Behavior

It is easy to illustrate the importance of structure and social design. A system with one simple rule can turn personal selfishness into a simulation of Golden Rule behavior: The first child cuts the cake, the other child gets to select the piece. (See also Axelrod, 1997; Ostrom, 1991.) Modern market economies make use of individuals who pursue selfish ends to create the moral reversal of efficient production, economic growth, and material abundance for society (beyond the dreams of utopian writers in earlier centuries, albeit unequally distributed).⁷

- Similarly, as the Federalist Papers (especially number 10) explain, the American Constitution designed a new kind of government that used

ambition to check ambition by a mechanism of checks and balances. Today ("a government of laws and not men") the social realities of laws (Friedman, 1986), roles and institutions, informal rules, and accountability processes for the executive branch, judiciary, and Congress in a federalist system are extensive and embody many theories of how to design better systems and institutions to produce better policy.

I will return to an assessment of both markets and democracy in a later section. Although they are major forward steps, neither has been completely satisfactory.

3.2. The Search for Synergistic Policies: Explaining the Rise and Fall of Civilizations

How do we improve the performance of systems? Researchers began to study the societal characteristics, policies, and causal pathways that produce desirable outcomes across many cultures (e.g., the eight values in Box 12.2). For example: Toynbee's A Study of History analyzed the rise and fall of 26 civilizations (Toynbee, 1961; Fernandez-Armesto, 2001; Montagu, 1956). The research question is compelling – and the cycles of rise and fall challenge simple evolutionary/sociobiological ideas. As he traveled the world, Toynbee saw the ruins of many past civilizations. But surely, today, there is about the same human genetic material as during the times of past glory. What went right – and wrong? Could we bring the same chemistry together, today, anywhere that we wish? Athens, with 30,000–45,000 male adults, was no larger than many small cities around the world – who may await their date with destiny....

To summarize the 12 volumes briefly: Toynbee found that civilizations rose by responding creatively to challenges, with new leadership supplied from minority groups. They exhibited an unusual energy and spiritual force as a component of a collective psychology; their religion played a sustaining role (secular philosophies did not achieve an equivalent cultural and political power [Toynbee, 1956, pp. 73–74]). Civilizations declined when new establishments (as they did usually, but not inevitably) ceased to respond creatively, became despotic tyrannies, and succumbed to sins of nationalism and militarism. (For a vision of quantitative psychohistory influenced by Toynbee, see Asimov, 1986.)

The research traditions are alive and vigorous and a great deal needs to be sorted out: (McClelland, 1961, 1971; Murray, 2003; Simonton, 1994, 1999; Huntington & Harrison, 2001; Melko & Scott, 1987; Bok, 1997; Fernandez-Armesto, 2001). And there are other data that might

Most people pursue their own good, and that of their families (etc.). The arguments about capitalism and sin require a refined moral and psychological analysis.

contribute to an answer. We know (for example) that some of the 50 states in the United States are more progressive and create policies that later become accepted as wise in other states and for national policy (Walker, 1969) – but what makes them leaders for wisdom?

– Today, most ideas about public policy have been shaped by the growth of social theory and social science since the Enlightenment (Deutsch & Markovits, 1986; Nisbet, 2003). The term "statistics" (from the Latin *statisticus* = "of politics" and the German *Statistik* = "study of political facts and figures") was created in 1770 to designate the emerging science of national social measurement (serving the policy goals of governments) that grew during the 19th century. Each of the eight values (Box 12.2) has (in the language of economists) a "production function," although only the wealth outcomes are yet measured and modeled rigorously. However, a survey of the 50 most successful innovations in American government since 1950 shows the wide use of national statistics to measure problems and progress, with benefits for government policy, administration, budgeting, and democratic accountability (Light, 2002).

3.3. The Limitations of Social Science?

But did we reach the limits of human rationality and social science in the 20th century? The fascist and communist quests for a better world (alongside other "isms" that also were visions of Good for different groups) killed hundreds of millions of people in the 20th century, equal to 10% of the world's population in 1900. At the end of the 20th century the political philosopher Isaiah Berlin expressed his despair that he could not – despite his youthful dream – see any method to dissuade such movements or solve political conflicts by reason or evidence-based argument, as he had hoped would be true after reading Plato's vision of a higher unifying Good. He quoted Immanuel Kant's view as his own: "Out of the crooked timber of humanity, no straight thing was ever made" (Berlin, 1997, p. 16).

Berlin may prove to be right, but a pessimistic conclusion is premature. The great messianic "isms" of the 20th century were tested – albeit in the real world, rather than by academic methods. They (except capitalism) became widely viewed as failures, and they were abandoned, or destroyed when, like Hitler, they became pathologies. The experiments were too costly and no historical learning process is guaranteed – but the human race did learn from these mistakes.

Close

Rebellion

Authoritarian

Quiescent, blessed

Underground

Liberal activism Anomie, despair

(Dependent)

(Paranoid)

(Clinical dimension)

Distant

Also, it is premature to draw despairing lessons from the recent political impasse and recycling ideological arguments in American domestic policy. In history simple ideological schema often have been at loggerheads. Concerning the plague, for example: Conservatives emphasized contamination from foreign sources and favored quarantine; liberals held a "miasmatic" theory of a disease bred in the foul air of low-lying and unsanitary sites, especially along the waterfronts, inhabited by the poor. Finally, when science was applied, researchers could evaluate elements of truth in the recycling arguments, determine the true causes of the plague, and eliminate it (Cooper, 1989).

There may be a similar hopeful role for social science in engaging current ideological impasses. There is a similarity between ideological systems of thought and entrapments studied by clinical psychology (Box 12.4). For example, three characteristic responses are invoked by a higher image that dramatizes actual or potential hostility and domination: (a) close identification (law-and-order authoritarians); (b) active rebellion to restrict or weaken it, or overthrow it and seize its power; and (c) withdrawal into a subjective and diffuse underground, with government a unitary and impersonal "They" or "It," up there, somewhere – hostile and to be avoided.

Three characteristic syndromes also can be observed when a vivid, higher image dramatizes actual or potential benevolence: (a) the quiescent citizens trust their benevolent welfare-state government and live in the faith that its leaders already are wise; (b) activists who experience a partially benevolent government power above, whose (welfare-state) potential *can* meet needs within its purview to be cared about, nurtured, and protected – the poor, underdeveloped countries, those without health insurance, the environment; (c) at furthest removed are citizens who have lost any hope of higher benevolence: disillusioned,

anomic, abandoned, living lives of quiet desperation here on the barren windswept landscape of modernity (Etheredge, 1982a, 1982b; 1986, 1990).8,9

A full discussion of the potential benefits of such a clinical psychological framework for evidence-based discussions of ideological assumptions is beyond the scope of this review, but it implies that Plato may have been right about conventional, inside-the-box entrapments. And there *might be* a genuine ultimate agreement about the Good that unites apparently irreconcilable political opposites – that is, emotion-charged zealotry notwithstanding, all ideological combatants actually may value and desire strong, secure, and healthy individuals. Once they step *outside* the cave of (different) conventional realities, enlightened activists may find a new basis of agreement and progress if they study the causes of this outcome scientifically.¹⁰

4. Wisdom as an Attribute of Individuals; the Political Profession

In both the Western and Eastern traditions the highest priority has been the problem of bringing the wisest people into positions of power, and, even more urgently, the associated problem of how to keep the wrong people (e.g., with sharp elbows or knives or guns) from getting into power and operating unchecked.

It is likely that people have always believed that the personal characteristics of leaders determined success (including, too, whether they were favored by the gods). The rule of primogeniture solved practical problems, but it also was a theory that the ability of a remarkable ruler could be retained by his bloodline – that is, by the heirs closest to him, the eldest son and his issue. (Modern genetics has discovered what only became apparent slowly through dynastic rule – namely that unusual inherited abilities show a regression toward the mean so that, after several generations (and especially with inbreeding among royalty), this early

theory produced a decline in the mean ability of dynastic rulers, with egregious historical results.)

"Every politician has something missing," the columnist George Will once wrote. The study of personality and leadership, and of ideal leaders and decision processes, is one of the most important topics in the study of personality and politics (Barber, 1992; Burns, 2003; Etheredge, 1976, 1979; Renshon, 2003; Janis, 1982, 1989; Post, 2003). Of the many issues that might be discussed I will focus on a requirement for political wisdom that may be *sui generis*: The job can require the use of violence, and a capacity to recognize and deal with ambitious, immoral, deceptive, and (sometimes) violent people. The resulting dilemma of selecting effective leaders on the basis of personality is illustrated by President Richard Nixon, who was admired by a majority of voters for *Realpolitik* acumen in elements of his foreign policy but who was rightly impeached for using a modest degree of this operating style against his domestic political enemies.

spent most of his reign commanding Roman legions against barbarians and successful defense against violence, were essential: Pericles spent wise rulers (Box 12.1) before democracy, the effective use of violence, cal power (even attempting to be a wise political leader) was a dangerous right to author a Constitution only by a successful, violent revolution on the northern frontiers and suppressing internal revolt. The American most of his adult life with the rank of general, living with war and the Caesar would cross the Rubicon - and, often, they did. For the list of orders that he knew would kill people. Since Franklin Roosevelt, every American president has decided to give Founding Fathers had to risk their lives, and they won freedom and the to rule an empire, who loathed war as an expression of human folly, military conquest; even Marcus Aurelius, the only serious philosopher threat of war; Ashoka gained the power to convert India to Buddhism by job. Even Roman emperors who were decreed by the Senate to be gods lived in fear that ambitious and gifted military commanders like Julius Especially before democratic mechanisms for peaceful change, politi-

William James, who saw the American Civil War, addressed the possibility of identifying one ideal type of person but thought the answer depended on the requirements of circumstances and specific roles. The issue of violence was decisive. Saints made a vital contribution as their "leaven of righteousness" could draw the world "in the direction of more prevalent habits of saintliness." Yet in a world with "beaked and taloned grasspers," the fate of these good men and women was death and

⁸ The same dramas and reparative responses can be observed when the higher image is God. See also Lakoff, 2002; Tomkins, 1963. Vivid hierarchical images may involve physiological mechanisms which can be investigated.

⁹ The first column entries are what Bion/Klein in the clinical tradition call "fight/flight" or "paranoid" relations to hostile higher objects; the second column describes "dependent" relationships. At full intensity, the fight/flight drama produces a fear-inhibited or paranoid personality; and the dependent entrapment a manic-depressive or suicidal despair response.

¹⁰ To clinical psychologists (or Plato) the answer may be "all of the above/none of the above" – that is, one must honor, but also dissolve, the entrapments.

martyrdom. They were like "herbivorous animals, tame and harmless barn-yard poultry" (James, 1997 [1902], pp. 294–297).

sional) had the lead responsibility to plan and kill many enemy soldiers early formulation by the sociologist Max Weber in Munich, in 1919 (Muir of professional identities, aided by graduate programs for professional provided by personality-based behavior in a new (invented) psychology emotion-dissociated technocrats (as Nietzsche might warn) remains educational institutions will produce a nightmare world of socialized, tified suffering, and honesty with oneself) will be achieved, or whether from personal vanity, passion, a recognition of the ubiquity of unjusideal (which included ends-means rationality, a subjective distance vocate of the Iraq War of 2003, is another example. Whether Weber's in the Persian Gulf War. British Prime Minister Tony Blair, also an adand a political professional, who (in a previous role as a military profes-Former Secretary of State Colin Powell is an example of a decent man day, most successful democratic leaders are (to a degree) professionals American experiment to improve public and other institutions. To-Jr., 1977; Weber, 1994) and professionalism has become a widespread training. The idea of a profession of politics received its most articulate The most important fresh idea has been to improve on the options

5. Wisdom about Systems

The United States already has bet its future on two systems, democracies and markets, combined with other institutions and professional identities in a free society. Wiser public policy will require improved social science to understand how these two systems work, how they impact people's lives, how they can be improved, and how all of the elements can work well together. A review of these issues is beyond the scope of this chapter, but several comments may be useful.

5.1. Democracies

- The fate of ordinary men and women is undoubtedly better in democracies than their fate under the divine kings and oligarchies of earlier periods. There is vigorous and often justified criticism about each element of American democracy. Yet how well the many recommended solutions will work is unclear. Democracy is a civil religion and there are untested beliefs about civic virtues that will, the more closely we approximate them (e.g., well-informed voters who participate actively; an improved

news media, etc.), bring utopia. These injunctions, like preaching more Christian virtue as a cure for the world (above), may not be practical, and social science may identify more powerful and realistic ways to improve performance.

– The beginning of political wisdom is to recognize that American government was *not* designed to be wise; nor to learn; nor to be efficient; nor to reform society or improve the world (Hamilton, Madison, & Jay, 1999 [1788]). It can be *used* for these purposes, but does not achieve them automatically. There also are important, higher-order issues about the wise role of government and the design of public policy: (a) in a free society with limited government, (b) with limited knowledge about consequences (Lindblom, 1965), and (c) managing the programs in a \$2.2 trillion annual budget impacting a \$10 trillion/year, complex economy and pluralist society (Smith, 1992, 2002).

– A revealing observation, whether of patients in a clinical setting or a democratic political system, is what is *not* being discussed. Politicians have two jobs: (a) to identify a wiser policy; and (b) the applied psychology of democracy: listening and eventually securing the consent of the governed. When Egyptian President Anwar Sadat said that 90% of the problem of achieving peace in the Middle East (and *his* problem) was psychological, he spoke aloud what most democratic politicians, in most circumstances, also believe. In late 2004, 40-plus million Americans were without health insurance – yet a discussion was not on the agenda: (a) the 40-plus million people had not organized themselves to give voice to this fact as a political issue; and (b) politicians who cared about this problem had not found a way to talk about the problem that connected emotionally to voters. Like clinical work, until people are *ready*, or you *bring them along*, facts will not produce a public policy (Mayhew, 2002; Searles, 1979).

Athenian democracy admired *rhetoric*, the capacity to engage fully (both reason and emotion) an audience (Ober, 1989; Worthington, 1994). If we are seeking new resources for wisdom in democracies, they may reside in a way of speaking that – by comparison with recycling ritualistic and dull political rhetoric that fills the silences when nobody is ready to act – enrolls people and begins to bring a future to life.

5.2. Markets

Modern societies are shaped by historical lessons and political battles to create partially independent realms: the separation of church and state; the separation of power among branches of government (and

federalism); removing government control of the press and from (to a substantial degree) the private lives of free individuals; and the partial removal of government from most of the daily operation of the economy (Ginzberg, 2002; Yergin & Stanislaw, 1998).

However, the moral arguments concerning market capitalism in the 17th and 18th centuries, before its triumph, were prescient (Hirschman, 1997). The use of man's rational capacities to maximize selfish benefits sanctioned (and celebrated) by the mathematical theorists of the market was, to Christian theologians, a sin of avarice. Avarice is a *capital* sin, defined as a sin that creates further sin and induces people to be accomplices with one another in sin (United States Catholic Conference, 1995, pp. 509–510). Catholic theology was right: The joint stock corporations of capitalism created great human (and environmental) damage and required many laws and regulations, passed in the 20th century, to limit their predatory amorality. Battles to achieve a better balance between benefits and costs – and for civic responsibility over selfishness – are not over, and still define important policy agendas in most countries.

Market economies also produce psychological benefits and costs, which are only partly understood. They permit people to cooperate, even on a global scale, without liking each other or agreeing on values. They free ambitious people to build global empires without violence – an outlet for ambition that, in early centuries, could have been channeled into revolt. They reward certain types of behavior and penalize others. Nearly all social problems also are affected by the behavior of markets and their psychological impacts may increase depression: (Lane, 1991, 2000; Muller, 2002, pp. 141–142). Without economic growth (driven today by scientific progress) politics will default to what it has been for most of history – distributional politics – which is more conflict-prone. Better models are needed (Easterly, 2001).

6. Conclusions

Man in his natural state, it has been said, is a bunch of chimpanzees sitting around, eating bananas, and picking lice off each other. Everything

else has to be created. I suggest three conclusions about the next steps for wise public policy.

6.1. Walk the Chosen Path

Our already chosen future is to follow Plato's path – individual freedom, education, and the growth of humankind's higher faculties. The need for Plato's enlightened Guardians is shared by both market-based (conservative) and government-based (liberal) ideological solutions. Market-based solutions depend ultimately on the motivation and wise choices of consumers. Government-based solutions depend ultimately on the motivation and wise choices of voters. The populations of consumers and voters substantially overlap: The world needs strong and enlightened individuals who, apart from any specific role, can initiate and participate in discussions and help to steer.

6.1.1 The Lower Half. As Iris Murdoch writes: "The details of what happens in the cave are to be studied seriously; and the 'lower half' of the story is not just an explanatory image of the 'upper half' but is significant in itself" (Heidegger, 2002; Murdoch, 1999b, p. 389). American society, creating freedom for individuals, *de facto* weakens authority and pressures of social conformity which social psychologists have documented as among the powerful mechanisms for conventional social control (e.g., Milgram, Asch). A relatively free and unstructured society can increase anomie, regression, and many social pathologies if people are unprepared (De Grazia, 1948; Merton, 1968) and clinical psychologists have a role in prevention and treatment. Public policy must be haunted by E. R. Dodds's study of self-dampening cosmopolitan freedom and the unexpected decline of Athens – psychological regression induced by a lack of structure and growing fear (Dodds, 1983, pp. 236–269).

path to Enlightenment? One scientific strategy is to ask: *Is there a belief-independent process of spiritual growth?* Is it possible that many theorists and observers from many traditions have, like blind men describing an elephant, been calling attention to the same phenomenon? Aldous Huxley perceived similar ideas about this human potential from widely different cultures and historical periods and called it a "perennial philosophy" (Huxley, 1990; see also Andresen & Forman, 2002; James, 1997 [1902]; Wilber, 1998, 2002; Wulff, 2000). *The Republic* makes a testable claim – that a certain set of mental exercises, conducted by a qualified teacher, will produce enlightenment. The psychologist Abraham Maslow reported that his most developed "self-actualized" subjects

The (wise) government and corporate investment in R&D have made capitalism a more benign social force than the ideas about profit, in earlier centuries, that used government armies for colonization and trade advantages and that enjoined the lowest possible wage to a workforce.

had altered ("Being cognition") perceptions or "peak" experiences that might be similar to the reports of Plato and others (Maslow, 1964, 1998; Wulff, 2000, pp. 422–424).¹²

Deciding this question solely from written texts probably is impossible. There is wide agreement that the experiences are ineffable (one reason that the term "mystical" is applied both to the states and to the writers themselves) and the subjects report a post-verbal knowledge that has a clarity (e.g., visual and auditory clarity), depth, and authority "unknown to the discursive intellect" (James, 1997 [1902], pp. 299–300; Wulff, 2000, p. 400). By contrast with elusive texts, a recent film depicting the process of attaining enlightenment and wisdom based on reliving the same day while retaining memories and *karma* of earlier lives (Harold Ramis's *Groundhog Day*), could serve as a touchstone to catalyze research.

of growth and use "pattern interrupts" directed at a student's ideneye" test that distinguishes Enlightened teachers from people at the level if rational analysis and right answers, then "What is the sound of one modations, and chastity; if verbal sociability, then the vow of silence, if attached to hedonism and sexuality, then plain food, sparse accomdrawn to material possessions may be enjoined to take a vow of poverty; tity, attachments, and stimulus-response mechanisms. A student who is of televangelists). The methods ("skillful means") recognize sequences ing process does not depend on beliefs (and includes a "twinkle in the might be produced by similar methods. For example, a Buddhist teach-2003), it does appear that similar outcomes across different traditions there to hear it, is there a sound?"; if an active life, then sitting and folhand clapping?" and "If the tree falls in the forest and there is no one are the raft to cross the river, not a raft to cling to.) themselves or the essence of higher spiritual evolution. ("Skillful means" tative exercises) are, as it might appear to an outside observer, ends in that none of these spiritual practices (silence, poverty, chastity, medilowing one's breathing for hours per day. However, it now seems clear Although not all religious practices are the same (Gross & Muck,

If there is authentic spiritual growth, it could be important for wise public policy: Genuine spiritual and moral leaders (e.g., Confucius, Buddha, Jesus, Gandhi, Nelson Mandela) have had powerful, uplifting effects on political systems (see also Burns, 2003). And because right-wing fundamentalist politics and right-wing fundamentalist religious sects are drawn to each other and energize political conflict. If the actual potential is for *belief-independent* spiritual growth, future violent political/religious battles that brought Isaiah Berlin to despair in the 20th century might be diminished in favor of a common exploration.¹³

6.2. Identify Half-Truths That Work Fairly Well

take them for whole-truths, but when we do mistake them, they raise force by half-truths and get along fairly well as long as we do not misof public policy. A new network of evidence-based policy centers could sign a good mechanism to recognize the (partially satisfying) half-truths useful step (for individuals and political institutions) would be to dean ambivalent choice between accepting the routine "things are going inside a moderately comfortable conventional reality, on the edge of (Wilson, 1966), Plato's tribe of prisoners in America always may live questions and publish the rankings on the Internet. The centers would groups; and from individual citizens (including the nation's scientists, with a plan to use the answer – from state and local officials; from civic tive grants. The centers would receive research questions from anybody be established by the National Science Foundation through competifairly well" status quo or continuing another kind of journey. Thus, a the devil with us" (Whitehead, 1954, p. 243). Unless there is a crisis government, as theories and experiments (Cook & Campbell, 1979). and his collaborators, that we treat government policies, at all levels of mechanism also could advance a wise idea by the late Donald Campbell develop the research designs and begin to answer them. Such a national in their capacity as citizens). Public advisory committees would rank the The second lesson derives from Alfred North Whitehead: "We live per-

6.3. Improve Accountability Systems

One lesson of history ("Put not your faith in Princes") is that there always will be Establishments. Juvenal's question "Sed quis custodiet

¹² This unconcealment/"unhiddenness" theory of truth contrasts with a correctness theory of truth that has characterized Western logical/analytic philosophy (Heidegger, 2002). It is unclear how much the psychological studies of moral reasoning are a part of this discussion. Plato's claim was that all Guardians will agree, having directly experienced the unifying (postlinguistic) higher light of Good. But do the subjects at Kohlberg and Gilligan's highest stages agree (Gilligan, 1993; Rest, Navaez, Bebeau, & Thomas, 1999)?

¹³ This inquiry may introduce a new level of explanation of behavior. The damage of capitalism, for example, may not be inherent in capitalism if *enlightened* business leaders behave differently.

ipsos custodes?" ("But who will guard the guardians?") is as alive to-day as when he asked it during the Roman Empire. Once any institution gains power there is a risk that the wrong people will obtain the top positions. And a wider number of the people who obtain power, money, and status – even in institutions that they operate on behalf of ordinary men and women – will become comfortable, institutionally self-absorbed, lose a sense of urgency, and forget why they are there. (Even Mao Zedong never found a solution, although he closed all of the schools in China in 1966 and unleashed the power of idealistic young people in the Great Cultural Revolution against China's new Establishment that his earlier revolutionary success had created [Lieberthal, 1997].)

To this traditional problem, the modern Western solution adds the complexity of responsibility for public policy that is limited, shared, and/or diffused across many institutions and individuals. We are just beginning to design better *accountability* systems, domestically, to measure and improve performance in public education. There are similar needs to improve the quality of health care (Etheredge, 2002; Millenson, 1997) – and in almost every other area.

The need to design accountable systems that respond to human needs is especially strong beyond the water's edge. Nation-state democracies are not designed to care about people beyond their borders or to provide wise global leadership – that is, foreigners cannot vote. The result should not surprise us. If we want statesmanship, a significant percentage of voters in many countries must serve as representatives for the interests of people in other lands. This, in turn, also may depend on the enlightenment of individuals – for example, how rapidly people are learning to develop and manage their own lives and (in Chinese terms) the supreme virtue of *ren-yi*, co-humanity with others.¹⁴

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References

Andresen, J., & Forman, R. K. C. (2002). Methodological pluralism in the study of religion: How the study of consciousness and mapping spiritual experiences can reshape religious methodology. In J. Andresen & R. K. C. Forman (Eds.), Cognitive models and spiritual maps: Interdisciplinary explorations of religious experience (pp. 7–14). Charlottesville, VA: Imprint Academic.

Asimov, I. (1986). Foundation trilogy (Reprint ed.). New York: Del Ray.

Axelrod, R. (1997). The complexity of cooperation. Princeton, NJ: Princeton University Press.

Barber, J. D. (1992). The presidential character: Predicting performance in the White House (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Berlin, I. (1997). The pursuit of the ideal. In H. Hardy & R. Hausheer (Eds.), *The proper study of mankind: An anthology of essays* (pp. 1–16). New York: Farrar, Straus and Giroux.

Bluhm, W. T. (1971). Theories of the political system: Classics of political thought and modern political analysis (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Bok, D. (1997). The state of the nation: Government and the quest for a better society,1960–1995. Cambridge, MA: Harvard University Press.

Brewer, G. D., & De Leon, P. (1983). Foundations of policy analysis. New York: International Thompson Publishing.

Brickhouse, T. C., & Smith, N. D. (Eds.). (2002). The trial and execution of Socrates: Sources and controversies. New York: Oxford University Press.

Brown, N. O. (1990). Love's body (Reprint ed.). Berkeley, CA: University of

California Press.
Burns, J. M. (2003). *Transforming leadership*. Boston, MA: Atlantic Monthly Press.

Conroy, P. (2002). My losing season. New York: Doubleday.

Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues. Boston: Houghton-Mifflin.

Cooper, R. N. (1989). International cooperation in public health as a prologue to macroeconomic cooperation. In R. N. Cooper & B. J. Eichengreen & C. R. Henning & G. Holtham & R. D. Putnam (Eds.), Can nations agree? Issues in international economic cooperation (pp. 178–254). Washington, DC: Brookings Institution.

Creel, H. G. (1960). Confucius and the Chinese way. New York: Harper Torchbooks.

Dainian, Z., & Ryden, E. (2002). Key concepts in Chinese philosophy (E. Rhyden, Trans.). New Haven, CT: Yale University Press.

De Grazia, S. (1948). *The political community: A study of anomie*. Chicago: University of Chicago Press.

Deutsch, K., & Markovits, A. S. (1986). *Advances in the social sciences 1900–1980*New York: University Press of America.

¹⁴ The Chinese character ren designates the supreme virtue and is composed of the graph for human being and for the number 2. An extension of the idea in the concept of empathy, shu, combines the graphs for the mind/heart with the meaning "to be like." See (Dainian & Ryden, 2002, p. 286; Fingarette, 1972). Although the earliest battles of Western philosophers for wisdom emphasized reason – to liberate people from being only creatures of passion or social conditioning – emotions also contribute to empathy, intelligence and wisdom (Nussbaum, 2001). Concerning empathy, see also Muir Jr. (1082).

- Dodds, E. R. (1983). The Greeks and the irrational. Berkeley: University of California Press.
- Dodds, E. R. (1991). Pagan and Christian in an age of anxiety: Some aspects of religious experience from Marcus Aurelius to Constantine (Rep. ed.). New York: Cambridge University Press.
- Easterly, W. (2001). The elusive quest for growth: Economists' adventures and misadventures in the tropics. Cambridge, MA: MIT Press.
- Etheredge, L. S. (1976). A world of men: The private sources of American foreign policy. Cambridge, MA: MIT Press.
- Etheredge, L. S. (1979). Hardball politics: A model. Political Psychology, 1(1)
- Etheredge, L. S. (1981). Government learning: An overview. In S. Long (Ed.), Handbook of political behavior (Vol. 2, pp. 73-161). New York: Plenum Press.
- Etheredge, L. S. (1982a). The liberal activist case (Xerox. Archived at http://www. policyscience.net).
- Etheredge, L. S. (1982b). Political behavior within imaginative forms (Xerox. Archived at http://www.policyscience.net).
- Etheredge, L. S. (1986). Measuring hierarchical models of political behavior: Oedipus and Reagan, Russia and America (Xerox. Archived at http://www policyscience.net).
- Etheredge, L. S. (1990). A proposal for a study of leadership, motivation, and eco-Swarthmore, PA: Swarthmore College. Research Council (Xerox. Archived at http://www.policyscience.net). Behavioral Sciences and Education, National Academy of Sciences/National nomic growth. Discussion paper prepared for the Commission on Social and
- Etheredge, L. S. (1992). Wisdom and good judgment in politics. Political Psychol-*08y, 13*(3), 497–516.
- Etheredge, L. S. (2002). A breakdown crafted by silences: Scientific mismanagement and national policy error (Xerox. Archived at http://www.policyscience.net).
- Fernandez-Armesto, F. (2001). Civilizations: Culture, ambition, and the transformation of nature. New York: Free Press.
- Finer, S. E. (1999). The history of government from the earliest times: I. Ancient monarchies and empires (Vol. 1). New York: Oxford University Press.
- Fogel, R. W. (2000). The fourth great awakening and the future of egalitarianism Fingarette, H. (1972). Confucius: The secular as sacred. New York: Harper and Row Chicago: University of Chicago Press.
- Freud, S. (1961). Civilization and its discontents (1930). In J. Strachey (Ed.), The pp. 64-145). London: Hogarth Press. standard edition of the complete psychological works of Sigmund Freud (Vol. 21,
- Friedman, L. M. (1986). A history of American law (2nd ed.). New York: Touchstone
- Gamson, W. (1986). The strategy of social protest (Rep. ed.). New York: Dorsey
- Gibbon, E. (1946). The decline and fall of the Roman Empire (Vol. 1). New York:
- Gilligan, C. (1993). In a different voice: Psychological theory and women's development Cambridge, MA: Harvard University Press

- Ginzberg, E. (2002). Adam Smith and the founding of market economics. New Brunswick, NJ: Transaction Publishers.
- Gross, R. M., & Muck, T. C. (Eds.). (2003). Christians talk about Buddhist meditation. Buddhists talk about Christian prayer. New York: Continuum International
- Hadot, P. (1995). Philosophy as a way of life: Spiritual exercises from Socrates to Foucault (M. Chase, Trans.). London: Blackwell.
- Hadot, P. (2002). What is ancient philosophy? (M. Chase, Trans.). Cambridge, MA: Harvard University/Belknap Press.
- Hale, D. G. (1973). Analogy of the body politic. In P. P. Wiener (Ed.), Dictionary of Charles Scribner's Sons. the history of ideas: Studies of selected pivotal ideas (Vol. 1, pp. 67-70). New York:
- Hamilton, A., Madison, J., & Jay, J. (Eds.). (1999 (1788)). The federalist papers. New York: Mentor.
- Heidegger, M. (2002). The essence of truth: On Plato's cave allegory and Theaetetus (T. Sadler, Trans.). New York: Athlone Press.
- Himmelfarb, G. (1952). Lord Acton: A study in conscience and politics. Chicago, IL: University of Chicago Press.
- Hirschman, A. O. (1997). The passions and the interests: Political arguments for capitalism before its triumph (20th anniversary ed.). Princeton, NJ: Princeton University Press.
- Huang, R. (1981). 1587, a year of no significance: The Ming dynasty in decline. New Haven, CT: Yale University Press.
- Huntington, S. P., & Harrison, L. E. (Eds.). (2001). Culture matters: How values shape human progress. New York: Basic Books.
- Huxley, A. (1990). The perennial philosophy (Reissue ed.). New York: James, W. (1997 (1902)). The varieties of religious experience: A study in human nature HarperCollins.
- Janis, I. L. (1982). Groupthink: Psychological studies of policy decisions and fiascoes (2nd ed.). Boston: Houghton Mifflin. New York: Simon and Schuster.
- Janis, I. L. (1989). Crucial decisions. New York: Free Press
- Jaspers, K. (1962). Socrates, Buddha, Confucius, Jesus, the paradigmatic individuals New York: Harcourt, Brace and World.
- Kuriyama, S. (2002). The expressiveness of the body and the divergence of Greek and
- Lakoff, G. (2002). Moral politics: How liberals and conservatives think (Second ed.). Chinese medicine (Rep. ed.). New York: Zone Books.
- Lane, R. E. (1991). The market experience. New York: Cambridge University Press. Chicago: University of Chicago Press.
- Lane, R. E. (2000). The loss of happiness in market democracies. New Haven, CT: Yale University Press.
- Lasswell, H. D., & McDougal, M. S. (1991). Jurisprudence for a free society. Boston. MA: M. Nijhof.
- Lenski, G., & Nolan, P. (1998). Human societies: An introduction to macrosociology (Eighth ed.). New York: McGraw Hill.
- Lieberthal, K. (1997). Governing China: From revolution through reform. New York:

Light, P. C. (2002). Government's greatest achievements: From civil rights to homeland security. Washington, DC: Brookings Institution.

Lindblom, C. E. (1965). The intelligence of democracy. New York: Free Press.

Machiavelli, N. (1977). *The prince®* (M. Adams, Trans.). Norton Critical Edition. New York: W. W. Norton.

Mansbridge, J. (1990). The rise and fall of self-interest in the explanation of political life. In J. Mansbridge (Ed.), *Beyond self-interest* (pp. 3–24). Chicago: University of Chicago Press.

Maslow, A. H. (1964). Religions, values and peak-experiences. Columbus: Ohio State University Press.

Maslow, A. H. (1987). Motivation and personality (3rd ed.). Boston, MA: Addison-Wesley.

Maslow, A. H. (1998). *Toward a psychology of Being* (3rd ed.). New York: John Wiley and Sons.

Mayhew, D. R. (2002). Electoral realignments: A critique of an American genre. New Haven, CT: Yale University Press.

McClelland, D. C. (1961). The achieving society. Princeton, NJ: Van Nostrand Reinhold.

McClelland, D. C. (1971). Motivating economic achievement. New York: Free Press.

Melko, M., & Scott, L. R. (Eds.). (1987). The boundaries of civilizations in space and time. Lanham, MD: University Press of America.

Merton, R. K. (1968). Social theory and social structure (Enlarged ed.). New York: Free Press.

Millenson, M. L. (1997). Demanding medical excellence: Doctors and accountability in the information age. Chicago: University of Chicago Press.

Montagu, A. (Ed.). (1956). Toynbee and history: Critical essays and reviews. Boston, MA: Porter Sargent.

Montgomery, J. D., & Rondinelli, D. A. (Eds.). (1995). Great policies: Strategic innovations in Asia and the Pacific basin. Westport, CT: Praeger.

Muir Jr., W. K. (1977). Police: Streetcorner politicians. Chicago: University of Chicago Press.

Muir Jr., W.K. (1982). Legislature: California's school for politics. Chicago: University of Chicago Press.

Muller, J. Z. (2002). The mind and the market: Capitalism in modern European thought.

New York: Alfred A. Knopf.

Murdoch, I. (1999a). Existentialists and mystics: Writings on philosophy and literature. New York: Penguin.

Murdoch, I. (1999b). The fire and the sun: Why Plato banned the artists. In P. Conradi (Ed.), Existentialists and mystics: Writings on philosophy and literature (pp. 386–463). New York: Penguin.

Murray, C. A. (2003). Human accomplishment: The pursuit of excellence in the arts and sciences, 800 B.C. to1950. New York: HarperCollins.

Neiman, S. (2002). Evil in modern thought: An alternative history of philosophy. Princeton, NJ: Princeton University Press.

Nietzsche, F. (1966). Beyond good and evil: Prelude to a philosophy of the future (W. Kaufman, Trans.). New York: Vintage.

Nisbet, R. A. (2003). Social science. *Encyclopædia Britannica*. Retrieved April 7, 2003, from http://www.britannica.com/eb/article?eu=117534.

Nussbaum, M. (2001). *Upheavals of thought*. New York: Cambridge University Press.

Ober, J. (1989). Mass and elite in democratic Athens: Rhetoric, ideology, and the power of the people. Princeton, NJ: Princeton University Press.

of the people. Princeton, NJ: Princeton University Press.
Ober, J. (2001). Political dissent in democratic Athens: Intellectual critics of popular rule (Reprint ed.). Princeton, NJ: Princeton University Press.

Odajnyk, W. (1973). The political ideas of C. J. Jung. American Political Science Review, 67, 142–152.

Ostrom, E. (1991). Governing the commons: The evolution of institutions for collective action. New York: Cambridge University Press.

Plato. (1961). Timaeus (B. Jowett, Trans.). In E. Hamilton & H. Caims (Eds.), *The collected dialogues of Plato including the letters* (Vol. LXXI, pp. 1153–1211). Princeton, NJ: Princeton University Press.

Plato. (1991). The republic: The complete and unedited Jowett translation (B. Jowett, Trans.). New York: Vintage.

Post, J. M. (Ed.). (2003). The psychological assessment of political leaders: With psychological profiles of Saddam Hussein and William Jefferson Clinton. Ann Arbor, MI: University of Michigan Press.

Renshon, S. (Ed.). (2003). Good judgment in foreign policy: Theory and application Lanham, MD: Rowman and Littlefield.

Rest, J. R., Navaez, D., Bebeau, M. J., & Thomas, S. J. (1999). Post-conventional moral thinking: A neo-Kohlbergian approach. New York: Lawrence Erlbaum.

Ritter, A., & Bondanella, J. C. (Eds.). (1987). Rousseau's political writings (Norton critical ed.). New York: W. W. Norton.

Robinson, P. A. (1990). The Freudian Left: Wilhelm Reich, Geza Roheim, Herbert Marcuse (Reissue ed.). Ithaca, NY: Cornell University Press.

Rokeach, M. (1973). The nature of human values. New York: Free Press.

Safranski, R. (2002). *Nietzsche: A philosophical biography* (S. Frisch, Trans.). New York: Knopf.

Searles, H. F. (1979). Unconscious processes in relation to the environmental crisis. In H. F. Searles (Ed.), Countertransference and related subjects: Selected papers (pp. 228–242). New York: International Universities Press.

Sen, A. (2000). Development as freedom. New York: Anchor Books.

Simonton, D. K. (1994). Greatness: Who makes history and why. New York: Guilford
Press

Simonton, D. K. (1999). Origins of genius: Darwinian perspectives on creativity. New York: Oxford University Press.

Smith, D. G. (1992). Paying for Medicare: The politics of reform. New York: Aldine de Gruyter.

Smith, D. G. (2002). Entitlement politics: Medicare and Medicaid 1995-2001. New York: Aldine de Gruyter.

St. Augustine. (1950). *The city of God* (M. Dods, Trans.). New York: Random House.

Tomkins, S. (1963). Left and Right: A basic dimension of ideology and personality. In R. W. White (Ed.), *The study of lives* (pp. 388–411). New York: Atherton.

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- Toynbee, A. J. (1956). An historian's approach to religion. New York: Oxford University Press.
- Toynbee, A. J. (1961). *Reconsiderations* (Vol. XII). New York: Oxford University Press.
- Tuchman, B. W. (1980, May). An inquiry into the persistence of unwisdom in government. *Esquire*, 93, 25–27,29–31.
- Turner, F. M. (1981). *The Greek heritage in Victorian Britain*. New Haven, CT: Yale University Press.
- United States Catholic Conference. (1995). Catechism of the Catholic church. New York: Doubleday.

Waldmeir, P. (1997). Anatomy of a miracle: The end of Apartheid and the birth of the

new South Africa. New York: W. W. Norton.
Walker, J. L. (1969). The diffusion of innovation among American states. American

1

- Political Science Review, 63(3), 880–899.
 Weber, M. (1994). The profession and vocation of politics. In P. Lassman & R. Speirs (Eds.), Weber: Political writings (pp. 309–369). New York: Cambridge
- University Press.
 Whitehead, A. N. (1954). Dialogues of Alfred North Whitehead as recorded by Lucien Price. New York: New American Library.
- Wilber, K. (1998). The marriage of sense and soul: Integrating science and religion. New York: Random House.
- Wilber, K. (2002). Waves, streams, states and self: Further considerations for an integral theory of consciousness. In J. Andresen & R. K. C. Forman (Eds.), Cognitive models and spiritual maps: Interdisciplinary explorations of religious experience (pp. 145–176). Charlottesville, VA: Imprint Academic.
- Wilson, J. Q. (1966). Innovation in organization: Notes toward a theory. In J. D. Thompson (Ed.), Approaches to organizational design (pp. 193–218). Pittsburgh, PA: University of Pittsburgh Press.
- Worthington, I. (Ed.). (1994). Persuasion: Greek rhetoric in action. New York: Routledge.
- Wulff, D. M. (2000). Mystical experience. In E. Cardena & S. J. Lynn & S. Krippner (Eds.), Varieties of anomalous experience: Examining the scientific evidence (pp. 397–440). Washington, DC: American Psychological Association.
- Yergin, D., & Stanislaw, J. (1998). The commanding heights: The battle between government and the marketplace that is remaking the modern world. New York: Simon & Schuster.

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