

DESIGNING INTELLIGENCE AND CIVIC POWER: MARITIME POLITICAL ECONOMY FROM ATHENS TO AUSTRALIA

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The Peripatetic Species and the Patrimonial State

Whenever mothers chide their children to sit up straight, they are repeating something very basic to the human species. For homo sapiens, upright posture was the criterion that defined being human. Darwin thought so. Uprightness meant walking upright on two legs. The bipedal nature of the human species gave it great locomotive abilities. It would literally walk itself across the face of the earth. Because it only used two legs for locomotion, it was left with two hands free—all the better to grip things with. The counterpoint of the thumb and index finger of the hand gave homo sapiens a highly dexterous grip. Alone, either locomotion or grip would have been interesting species abilities but not necessarily brilliant ones. In combination, though, they were astounding. The locomotive creature looked forward, behind, and upwards to the heavens. Crossing distance encouraged visual capacities of foresight, insight, and hindsight. Intensified through use and need, these became imagination, reason, and memory—the basis for cognition. Cognition in turn became the basis for creating objects that did not exist previously in the world. Imaging, reasoning about, and

remembering the shape of objects emerged from the forward, behind, and upwards movement of the peripatetic creature. The human grip allied with this object-orientated mind proved a powerful force for object creation. The combination of objectivating mind and objectivating hand allowed the human species not only to make their own objects, and to create an artificial environment in which the human species could live.

Homo sapiens survived and prospered because it was a tool-creating species. It not merely used tools skillfully but fashioned them and created them. As important as tools were, and still are, their appearance in the world relied on something even more fundamental. At the core of humanity's species being was a designing intelligence. This intelligence was born of the human species' original peripatetic condition. It had a marvelous capacity to model, replicate by analogy, and abstract from the dimensions of the world through which homo sapiens passed, en-route to somewhere else. From the moment that the locomotive creature stood upright and took its first steps forward, it began to re-cognize and to replicate the object-like character of the world. This ended in it creating its own world. This capacity for design was not always benign. Early homo sapiens distinguished themselves by eliminating their hominid rivals. From the slingshot to the atom bomb human beings have been artful creators of the tools of devastation. But whether it was for lethal or productive purposes—or for art or for science—the ability to order the world through design has been fundamental to humanity.

We have good reason to suppose that this designing intelligence grew hand-in-hand with the peripatetic nature of homo sapiens. A peripatetic species by definition is constantly subject to new conditions and circumstances. It must adapt. The most powerful means of adaptation to new environments is design. Design is the ability to create objects, tools, shapes, forms, and ultimately systems that are effective for the survival and the flourishing of the species. Design creates the artificial environments in which the human species houses itself and surrounds itself.

One of the greatest transitions undertaken by humankind was the transition from a peripatetic to a sedentary existence. The consequences of this shift—from Paleolithic hunter gather mobility and Neolithic horticultural transience to centralized

urban settlement—were deeply ambivalent.¹ One of the greatest sources of ambivalence was the thick-textured type of society that arose out of the imperatives of settlement. Early peripatetic human groups were not manifestly social. They were small in size, and readily split up when faced with stressful conflict. Their component members ‘went their own way’. This was an elementary kind of liberty. Emphasis was placed on skill with tools, rather than on elaborate forms of social organization. This had its intrinsic limits. These groups could not develop much in the way of tool specialties, nor could they create complex objects like cities that required multigenerational and multidisciplinary design and work in one place.

Sedentary forms of life were achieved through coercion. They were made possible because of the emergence of states. States replaced the thin social lineaments of peripatetic groups with thick-textured social organization. States used techniques of slavery, status hierarchy, serfdom, patron-client relations, and command-and-obedience relations to enforce or compel sedentary life. The state in effect asserted ownership over human beings. Human beings became the patrimony of superiors, just as these superiors became the patrimony of their superiors. Those who ruled through the media of these cascading hierarchies justified their position by the need to control nature. Flood, famine, and fire were the enemies of humankind. The members of sedentary societies could not easily flee such ravages. The patrimonial states that instituted immobile societies with thick-textured social relations claimed to be able to appease nature. They could do this by appeasing the gods of nature. Appeasement though came at a terrible price. In a religious sense, it came at the price of human sacrifice to the gods. In an everyday sense, it came at the price of involuntary social organization.

Compulsory social organization was marked by the arbitrary demands of rulers and their punitive tribute-style exactions. This occurred not just because the rulers were cruel. Rather tyranny was the necessary product of social bonds. Society is a cruel master. William Golding was right. Put a bunch of twelve year-old boys on

¹ The Paleolithic period was approximately 700,000 BCE to 8,000 BCE. The Neolithic ranged from approximately 7,000 BCE to 3,000 BCE. The Neolithic was characterized by horticultural farming along with plant and animal domestication.

an island, and they will create a tyranny.² This is not a comfortable truth, but it is a truth all the same. Societies based on dense personal connections produce despotic behaviors. It is doubtful whether the peripatetic species was made to live closely together in society. Indeed both Plato and Aristotle noted that this species was made to live in cities. Living in the city is not the same as living in close-knit societies. Based as they are on face-to-face interaction, such societies always produce smaller and greater despotisms. Social feelings—from shame to sympathy—would at first sight appear to confound such a dreadful causality. Yet on closer inspection we see that almost any social gathering is a tableau of nuances of social gradation. These grades are produced by the rankings that social feelings spontaneously create. Almost without prompting, sympathy becomes the weapon of helping elites, and shame becomes the feeling of inadequacy that paralyses the powerless. On the island of stranded boys, help quickly mutates into command, and embarrassment into obedience. Thus begins the long, painful march to the society in which masters own not just land and offices but persons as well.

The invention of the state provided a general medium for this kind of social power. Such power was born of the confluence of the sentiments of obligation, gratitude, and shame. The character of this social power evolved strictly in step with the development of the state from household staff and retainers to offices and agents. No matter how expansive that it grew, state power was built up out of social units that retained a private nature. Offices, decisions, agencies, and information were for sale and purchase. Yet those who occupied such offices, made such decisions, performed such tasks, or knew such things were themselves, ironically and miserably, the inalienable property of the state. This most paradoxical situation meant that even small misdemeanors of even the highest and mightiest could end in their being executed.

Patrimonial states took shape sometime in the fourth millennium BCE, and attained a mature form with the Sumerians, Hittites, and Egyptians. These states replaced technological adaptation to nature—prized by nomadic societies—with the social organization of labor. Peripatetic societies were much more technologically

² William Golding, *Lord of the Flies: A Novel* (London: Faber, 1954).

inventive than patrimonial states. What patrimonial states advanced instead was the range and type of face-to-face social relationships. The prosecution of human activity through social interaction was far from an idyll. Sedentary face-to-face social relations proved more often than not to be sadistic, punitive, and terrifying. Cruelty was the norm of thick social relationships.

Patrimonial state building is not a matter of historical or anthropological curiosity. Indeed, for all of human history since their emergence, thick patrimonial social structures have dominated human thinking and doing. Patrimonial techniques may have changed with time, but patrimonial-type relations still remain the commonest of human bonds. Whether it is Russia, China, Iraq, Iran, Columbia, or Indonesia—the list is huge—the claustrophobic nature of patrimonial-type relations dominates contemporary social transactions. Deified emperors and human-sacrificing priestly castes may have been relegated to history, but many different kinds of neo-patrimonial regimes have mutated in their place. Contemporary neo-patrimonialism presents a rich array of military regimes and clientelistic democracies, genocidal dictatorships and corrupt bureaucracies, single party states and murderous theocracies, relationship-driven electoral parties and criminal-run oligarchies.

Thin peripatetic societies had a built-in release value. As social pressures accumulated, defiant bands and contrary individuals simply ‘went their own way’. Patrimonies closed down this kind of exit strategy. Often vicious forms of social bondage were created to confine the transients. Locality and village became the norm of human spatial experience in place of distance. Distance was transformed into territory. Rule over territory was organized by bolting local social units into feudal, imperial, theocratic, and bureaucratic hierarchies. This type of power first emerged on the alluvial plains of the Nile, Sumer, and Indus Basins, and eventually was replicated across virtually the whole of the Eurasian landmass, and in various pre-Columbian imperial states in the Americas. Patrimonial social power showed little capacity for the kind of technological innovation that humanizes nature, but enormous capacity for the organization of social labor.³ It is understandable then that amongst its few great

³ ‘Before the [agrarian] revolution comparatively poor and illiterate communities had made an impressive series of contributions to man’s progress. The two millennia immediately preceding 3,000 B.C. had witnessed discoveries in applied science that directly or indirectly affected the prosperity of

innovations were the techniques of writing and numerical notation. Writing and adding up are the basic technologies of hierarchic social organization. Such organization proved expedient for large labor-intensive schemes, like draining marshes, irrigating land, clearing forests, or building ziggurats and pyramids.

This model of social organization has been astonishingly persistent in history. The Russian Empire exhibited many of its features. The Soviet Empire that replaced the Russian Empire promoted the organization of labor as its chief ideology. Admittedly, though, the slaves who built the Egyptian pyramids were probably better looked after than the prison labor in the Gulag Archipelago. The necrophilic genius of the twentieth century was to kill the state's slaves because the slaves were educated—they were from the classes that wrote and were numerate. The epitome of the self-devouring state was Pol Pot's Cambodia and Hitler's Germany. While these states were extreme cases, their extremity was the product of a norm. The historical norm was patrimony. The extremities were caused by failed transitions from this norm. Germany and Russia and China in the early decades of the twentieth century attempted the shift from patrimonial empire to modern republic. But these transitions were disastrous, and new empires quickly arose in their place. The transitions failed not least because patrimonial social power has been the norm of the Eurasian landmass for most of its recorded history. If you doubt the role of persistence in history, then consider the scene today. In Democratic Russia, the successor of Communist Russia, oil-rich oligarchs and ex-secret police bureaucrats vie for power. Markets and elections not seen since the late Tsarist days have been restored, and the ideology of labor glorification sidelined. Yet, despite this, a potent neo-patrimonial capitalist economy has emerged in place of the retrograde Communist command economy. Take away electoral competition for party supremacy, and China looks

millions of men and demonstrably furthered the biological welfare of our species by facilitating its multiplication. We have mentioned the following applications of science: artificial irrigation using canals and ditches; the plow; the harnessing of animal motive-power; the sail-boat; wheeled vehicles; orchard husbandry; fermentation; the production and use of copper; bricks, the arch, glazing, the seal; and—in the earliest stages of the revolution—a solar calendar, writing, numerical notation, and bronze. The two thousand years after the revolution—say from 2,600 to 600 B.C.—produced few contributions of anything like comparable importance to human progress. Perhaps only four achievements deserve to be put in the same category as the fifteen just enumerated. They are: the “decimal notation” of Babylonia (about 2,000 B.C.); an economical method for smelting iron on an industrial scale (1,400 B.C.); a truly alphabetic script (1,300 B.C.); aqueducts for supplying water to cities (700 B.C.).’ V. Gordon Childe, *Man Makes Himself* (New York: Mentor, 1951), p. 180.

much the same. In the post-totalitarian era, consumer markets and stock markets have been unleashed, but China's party state still controls the allocation of key social goods—offices, employment, residence, travel, contracts, and information.⁴

We ought not to be surprised by this. Only those petulantly blind refused to see the continuities between Tsarist Russia and the Soviet Union. Still, in terms of world history, this pair was nothing more than variants of an age-old theme. Marx called this refrain of history 'Oriental despotism'. More accurately, it should be called 'Eurasian despotism'. It has always been the center of gravity of the great Eurasian landmass. Admittedly, European feudalism was a case of failed patrimonial power. The confluence of the Roman idea of civic liberty and the gothic liberty of the German and Nordic nomad invaders kept Europe from feeling the full weight of social power. Still land, soil, service and obedience dominated many, if not most, European states. Prussia in the nineteenth century was typical. There was not much gothic liberty or Roman liberty to be found east of the river Elbe.

If we were to hold gothic liberty and Roman liberty up in the air, which of the two would we conclude had been most effective in taming the savage beast of social power? It is certainly true that nomad-like societies from time-to-time posed impressive challenges to sedentary social power. Their fate, though, was to be repelled, extinguished, defeated, or assimilated. In some cases, such as the Turks of Central Asia, nomads were the trigger for the creation of a new empire (the Ottoman Empire). In other cases, such as the Chinese Empire, nomads (the Mongols) revitalized the state. Where patrimonial states collapsed, micro patrimonies—clan or tribal societies—invariably filled the vacuum. Social hierarchies—based on the household and beholden to ancestor culture heroes—exacted labor and cooperation in return for protection and preference in the distribution of goods. These moral

⁴ To step outside the state's realm of bureaucratic law, except in carefully demarcated arenas like stock markets and retail shopping, means going into the zone of illegality. For example, large numbers of contemporary Chinese defy internal residence laws to go to dynamic cities. But, because they are illegals, these migrants can't turn whatever micro-resources they might accumulate into legal capital. They represent an exaggerated case of what everyone in a neo-patrimonial society suffers: viz., exclusion from the abstract system of legal title in property and qualifications. This means that they can't get insurance, register what they own, form business partnerships, bargain on the basis of certified skills, and enter large-scale markets driven by abstract skill-sets and title-based transactions. The Greeks, Romans, Dutch and British evolved this system of abstract law to enable long-distance transactions between strangers.

economies were diminutive versions of patrimonial sacrificial pyramids, small-scale patriarchal anticipations of the patrimonial super-states.

Maritime Power and the Administration of Things

What's the alternative? The single, only, truly effective alternative to patrimonies and neo-patrimonies have come from the maritime circumference of Eurasia. A hint of this occurs around the thirteenth century BCE. We possess sketchy evidence of sea peoples who overwhelmed the Hittite Empire and who threatened the Egyptian Empire.⁵ This is the first suggestion we have of the kind of maritime power that would eventually provide the key historical counter to the territorial power of patrimonial states. The decisive appearance of sea power in world history occurred at the battle of Salamis in 480 BCE. This was the event in which Greek warships routed the invading Persians, and defeated the attempt by the Persian Empire to conquer the Eastern Mediterranean. The city-state of Athens and her allies defeated a much larger Persian fleet. This was the first great set piece confrontation between a territorial state and a maritime society.

Persia was a classic patrimony. It was the acme of some 2,500 years of evolution of such states in the Middle East. The Greek cities on the other hand were a product of the Eurasian maritime circumference, and acquired traits from earlier circumferential maritime societies—the Minoans and the Phoenicians especially. These circumferential societies—variously island, peninsula, and archipelago city-states—had certain shared characteristics. They had limited land and natural resources. Large-scale mobilization of labor—using slavery and other coercive techniques to orchestrate tens of thousands of bodies for the purposes of extracting or controlling natural resources—was pointless in circumferential societies. Even the sea, on which they spent a considerable part of their time, was not a resource in the sense that a fishing society treats the sea as a resource for exploitation. The sea was a place of carriage.

⁵ These may possibly have included the Anatolian coast dwelling ancestors of the Etruscans, Sardinian and Sicilian tribes, and the Cretan Philistines.

In the ancient world, sea carriage was much more economic than land transport. Maritime societies became adepts at foreign commerce. These elementary facts determined their character. The power of these states was neither proprietary nor was it territorial. They did not have state patrimony in land, office or persons. They did not pursue large landed empires. Their farms were not extravagant landed estates. They used neither slave nor mercenary armies. Their military forte was not on land but on the sea. Their edge was naval rather than territorial. These states were self organized rather than hierarchically organized. Yes, they had status divisions, even slavery. But the essence of the state was not an elaborate hierarchy of land, office and persons. Land was predominately in the hands of citizens. Citizens did whatever fighting was required. Government was in the hands of citizen councils and assemblies, not bureaucracies supported by a patrimonial surplus. Citizenship in maritime societies began as the collective rule of aristocratic or oligarchic peers who knew one another. Citizenship initially allowed forms of acting together that did not rely on directions or threats, intimidations or deprivations by hierarchical superiors. But, significantly, citizenship also evolved beyond the rule of peers. It gradually acquired the characteristics of persons meeting anonymously and acting according to impersonal abstractions. Abstraction became a general medium in circumferential societies. From local exchanges developed markets, from councils developed assemblies, from aristocratic symposiums and contests developed artistic and scientific publics. The rule of artificial persons gradually replaced the rule of natural persons.⁶

⁶ Thus in state-mediated societies, if a manufacturer wants a contract, or an administrator wants a promotion, or a student wants a scholarship, they present as natural persons petitioning other natural persons. In one manner or another, they have to get the backing of the agents of the imperial-state or party-state. This may be done within the framework of bureaucratic law, but the pseudo-legality of bureaucratic permissions is quite different from the abstract rule of law. Abstract law is economical and impersonal. It involves relatively few permissions or procedures, and these are governed by abstract criteria. Bureaucratic permission seeking in contrast is personalized, multi-stepped, delay-ridden, and tortuous. It typically has ten times as many steps per transaction as abstract law. Each steps costs money. To cut 'red tape' involves illegal payments. In purely legal-rational terms this system is corrupt. In its own terms, it is unexceptional. The agents of the state provide benefits in return for support, money, legitimacy, votes, or even sexual favors. Access to virtually any social good—from export licenses, loans, and contracts to offices, stipends, and tax waivers—can depend on meeting the private terms of the state and its agents. The workings of patrimonial reciprocity are nicely depicted in Harold Crouch's description of the Malaysian ruling party UMNO—United Malays National Organization. UMNO's dominance of Malaysian politics in the second half of the twentieth century is attributable to its ability to get and keep the support of the Malay community: 'This has been partly due

It was Thomas Hobbes who drew the distinction between the artificial and the natural state.⁷ The natural state is modeled on the relations between father and son, or patron and servant. It is either paternal or despotic.⁸ The artificial state sets aside the interactions of natural persons in favor of artificial persons. Interestingly, Hobbes pointed out that, in the civil state, an inanimate thing can be a person. As he put it: a temple or a bridge, indeed any thing requiring money for its upkeep, can act in law. Artificial persons act for and speak for these things.⁹ In this sense, a thing can be a ruler. This is intrinsic to the nature of civic power. Remember that Henri Saint-Simon spoke of the political ideal of socialism as the administration of things. I know this notion is disparaged today. But that's just because it is not understood—or perhaps it is understood all too well by those who regard socialism simply as a superior form of patrimonial reciprocity, rather than its radical opposite.

The idea of government as the administration of things is a way of drawing a clear-cut distinction between the natural state and the civic state. The civic state is an order of things. It is an artifice. If we think of all the great maritime powers, what we find is that they are all artificial states. We see this first of all in the fact that they are not states at all in the ordinary sense of the word. Rather they are constitutional combinations, federations, and unions of states. In one form or other, they are all 'united states'. Such unions of states are quasi-geometric or device-like artifices—what the eighteenth century liked to call 'clock-work mechanisms'. Such mechanisms are meant to reduce the personal element in politics. Indeed these commonwealths, republics, and unions are densely populated with artificial persons. This means not just Alexis de Tocqueville's voluntary associations, but bridges, churches, laboratories and libraries acting in law. Artificial persons like universities and

to its control over patronage distribution at all levels. Business people wanting contracts, bureaucrats wanting promotion, peasants wanting land and parents wanting scholarships for their children have all found it helpful to be recognized as UMNO supporters.' Harold Crouch, 'Malaysia: Neither authoritarian nor democratic' in Kevin Hewison, Richard Robison, and Garry Rodan (eds) *Southeast Asia in the 1960s: Authoritarianism, Democracy and Capitalism* (Sydney: Allen and Unwin, 1993).

⁷ Thomas Hobbes, *Man and Citizen (Thomas Hobbes' De Homine and De Cive)* Ed. Bernard Gert (New York: Humanities Press, 1972), pp. 82-85 [cf. 'On Artificial Man' from *De Homine*]; Hobbes, *Leviathan* Ed. John Plamenatz (Collins: Fontana, 1962), pp. 168-172 [cf. 'Of Persons, Authors and Things Personated'].

⁸ Thomas Hobbes, *Man and Citizen (Thomas Hobbes' De Homine and De Cive)* Ed. Bernard Gert (New York: Humanities Press, 1972), p. 85 [cf. 'On Artificial Man' from *De Homine*].

⁹ Thomas Hobbes, *Man and Citizen (Thomas Hobbes' De Homine and De Cive)* Ed. Bernard Gert (New York: Humanities Press, 1972), p. 171 [cf. 'On Dominion' from *De Cive*].

business corporations have real effects in the world. Without question, artificial bodies subsume and contain natural persons and social hierarchies. But these are over-determined by the human capacity for artifice and design. Successful institutions have a marvelous capacity to over-ride social imperatives for much higher, more abstract civic designs. Artificial persons, and the collective actors who constitute those persons, adopt the mask of impersonality to do so. Likewise, even when natural persons are involved, the transactions of markets, publics, and law courts have powerful impersonal, often anonymous, dimensions. They are subject to powerful abstractions like economy, democracy, scientific truth and justice.

The ability to abstract is a remarkable thing. It is also one of humanity's species-essential capacities. It certainly doesn't just belong to the humanity of modern times. During its long gestation in pre-state societies, the human species distinguished itself as a consummate artificer of tools. Tool making, and making things with tools, requires great designing intelligence. It is important not to romanticize this. Early tool making concerned primarily the relationship between humanity and nature. Pre-state societies show little evidence of making civic artifices. However, the Greeks, who knew a lot about creating civic artifices, repeatedly used the artisan as an image of how civilization, indeed the cosmos, was made. Whenever this is mentioned, anxious hands rise up to tell us that Greek citizens loathed labor and that they used slaves to avoid labor. Indeed they did. Greek citizens even loathed the manual aspects of artisanship. Even the skilled use of hand tools presented them with problems. While handicraft was not labor, repetitive production without imagination was illiberal. It lacked the full creative weight of humanity's designing intelligence.

The Greek attitudes were not contradictory, though. They were absolutely consistent. They were a radical antithesis of the cult of labor of state societies, i.e. of patrimonial societies. Low levels of labor-replacing technological innovation and application have characterized all state societies. This was true, not least of all, of twentieth-century state socialist societies. State societies invariably preferred to rely on the social organization of labor for their enrichment. Circumferential societies in contrast invariably have had a low opinion of labor. This is a fundamental reason why they used slaves—for the very opposite reason that the Egyptians or Persians used

slaves, or the Russians and Germans turned their prison camps into slave labor black holes. Maritime societies used slaves to do the labor they could not replace with tools or with the cunning of reason. Aristotle, fourteen centuries before Adam Smith and Karl Marx, even speculated about tools that operated independently of the human hand—i.e. machines.¹⁰ The Greek cities invented the idea of economy—literally the ‘law of the household’. The first and fundamental economy always was the economical use of labor. Economy, or efficiency, was the principle of *doing the most with the least*. The Greeks observed that nature was economical. It was so arranged or ordered as to avoid waste or (as the Greeks put it) excess. This order was achieved through various geometrical principles—such as symmetry, branching, gnomonic addition, golden ratio spiraling, and rhythmical structuring. The abstract principles that the Greeks observed in nature were applied to social organization. These abstract principles made possible the auto-poietics, the self-making, of the human artifice in place of hierarchic social organization. Markets, assemblies, military drills, and publics were built on abstract principles rather than on face-to-face social interaction. From the deep geometries of the Greek imagination grew market pricing, the rule of law, close-order warfare, and science.

In order to build their pyramids of sacrifice and water their fields, patrimonial states employed computation and writing. With writing they recorded the state’s appropriation of the surpluses that were produced on irrigated fields. Rituals (some of them very cruel and very bloody) carried on in the houses built for their gods legitimated this tribute economy. With numbers, they calculated the boundaries of fields that were periodically washed away by river floods. To Greek eyes, though, this

¹⁰ Karl Marx in the first volume of *Capital* noted Aristotle’s anticipation of the machine in *The Politics* 1253b35-1254a1. “‘If,’” dreamed Aristotle, the greatest thinker of antiquity, “‘if every tool, when summoned, or even of its own accord, could do the work that befits it, just as the creations of Daedalus moved of themselves, or the tripods of Hephaestus went of their own accord to their sacred work, if the weavers’ shuttles were to weave of themselves, then there would be no need either of apprentices for the master workers, or of slaves for the lords.’” *Capital* volume 1 (New York: International Publishers, 1967), p. 408. Aristotle’s term for the slave was striking and utterly Greek. The slave was the self-moving tool or possession—the animate or ensouled (*empsukhon*) tool (*organon*) or possession (*ktēma*). Self-movement, the soul-like principle of self-regulated movement from within, was the Greek utopia, and one that foreshadowed the end of labor. From water-powered tools to industrial machines to the artificial intelligence of computers, the dream of applying self-movement to the things that make things implied the emancipation of humanity from labor. Ironically, in Greek hands, slavery (the worst kind of human labor) was also an anticipation of the termination of labor.

was mathematics in the service of forced labor. The real—the divine—function of mathematics was *to eliminate labor*. The Greeks imagined things not as a patrimony but as a system. A system had inputs, operations, and outputs. A well-ordered system was well designed. The human imagination was the ally of this designing intelligence. It asked how things could be better designed. Better design meant making systems more beautiful, elegant, efficient, and economical.

Just how powerful such a designing intelligence could be was demonstrated in the victory of the Greek allies over the Persians in the battle at Salamis. Just how pivotal this battle was can be gauged by its size. By some estimates it is still the largest single naval engagement in history.¹¹ To this day, modern naval engineers still do not properly understand the subtleties of the design of the Greek war ships or triremes—‘their extraordinary ratio between weight, speed and propulsion’.¹² The same geometrical spirit underlay the discipline of the Greek naval formations—their ability to think of battle not as the heroic action of the individual warrior in face-to-face combat but as the collective force of impersonal disciplined formations governed by the geometric principles of line and column, and by the abstractions of tactics and strategy.¹³ Circumferential maritime societies would only ever constitute a relative handful of human societies. But their power and influence has far exceeded their size or their numbers. The reason for this is the same reason that the vastly out-numbered Greeks won the day at Salamis. This is because they owed allegiance not to other persons but to beautiful, and sometimes fierce, abstractions. They owed allegiance to the artifices of city, constitution, science, and cosmos—or if you prefer to beauty, freedom, democracy, and any of the other multitude of abstract conceptions that the Greeks bequeathed to humanity.

¹¹ ‘...there must have been somewhere between 300 and 370 Greek vessels arrayed against a Persian armada of well over 600 ships. Both Aeschylus and Herodotus, however, were certain that the Persian armada was even larger, numbering more than 1,000 ships and 200,000 seamen. If they are correct, Salamis involved the greatest number of combatants in any one engagement in the entire history of naval warfare.’ Victor Davis Hanson, *Why The West Has Won: Nine Landmark Battles in the Brutal History of Western Victory* (London: Faber, 2002), p. 44.

¹² Victor Davis Hanson, *Why The West Has Won: Nine Landmark Battles in the Brutal History of Western Victory* (London: Faber, 2002), p. 49.

¹³ On this kind of warfare, see Victor Davis Hanson, *Why The West Has Won: Nine Landmark Battles in the Brutal History of Western Victory* (London: Faber, 2002), especially pp. 46, 230-231, 316.

Circumferential Power in World History

Like all societies, particular circumferential societies come and go. Yet, as a species, circumferential societies have always managed to reproduce themselves. Their spirit seems to be quite immortal, even when the expressions of this spirit rise and fall like any other society.

In this respect, Greek history is salutary. Alexander's armies swallowed the Greek ecumene. It was subsumed by an aspirational Greek patrimonial state, led by a ruthless charismatic general with a brilliant nose for landed warfare. But the Successors of Alexander were as much Hellenized by the Greeks as Greek civilization was subject to patrimonial ways of doing things. This hybrid was a precursor for an even more influential template for merging sea and land power that was to follow. This was the model of the Romans.

Originally a society of yeoman farmers, Rome recast itself first as a citizen soldier city eager to rule the Italian peninsula and then as a sailing republic in order to defeat maritime Carthage and assert itself over the Mediterranean. In its final mutation, Rome became a land power that ruled from Britain to the border of India. The Romans' merger of sea and land power propelled them into the invention of a third kind of power—network power. Rome scaled itself into a massive power using networks of roads, law courts, alliances, and colonial cities. This enabled it to rule over vast lands without relying exclusively, or even primarily, on patrimonial techniques. Certainly Roman consuls and emperors borrowed from the satchel of the Asiatic despots. But more importantly Rome figured out that it could apply the rule of law and citizenship grants, template-type colonial city building and treaty alliances to the management of expansive territories. These devices allowed Rome to rule large terrestrial geographies without turning the state into one giant slave estate.

The principal difference between the Roman and the Greek models was the matter of citizenship. Roman granted its allies and its conquered enemies citizenship. The Greek cities jealously keep citizenship to themselves, even though they welcomed strangers as resident aliens. What Rome and Greece shared in common was a faith in an impersonal order of things—an inhuman order. The impersonal force of

natural law, city, and cosmos surrounded the Greeks and the Romans wherever they went. On the battlefield, in the market place, in the arena, the theatre, the literary and scientific publics and academies, a-social or extra-social norms applied.¹⁴

In history, there have only been a handful of societies that have gravitated to this kind of order. Overwhelmingly, they have been littoral or circumferential societies. All have attracted the criticism of being heartless or cold societies—steely in their mentality. All have had a disproportionate influence in world history. This pattern, which began with the Greeks and Romans, was followed by the Genoa, Venice, and Pisa-Florence, and later by the Anglo-Scottish-Dutch North Sea maritime triangle. From the early seventeenth century to the mid nineteenth century, the British created a maritime circumferential power that ringed the African-Eurasian landmasses. Anglo-Irish, Anglo-Scottish, Anglo-Chinese settlements dotted the world—from the tip of South Africa to Australasia, the Atlantic seaboard of North America, the Pacific North-West, and the China Seas. Littoral colonies and cities were created at Virginia in 1607, on the Indian littoral in 1640 at Madras and Calcutta in 1690, on the Australian littoral in 1770, on the South African Cape in 1795/1806, on the island of Singapore in 1819 and the islands of New Zealand in 1839, and at Shanghai and Hong Kong in 1842. The late nineteenth century saw the rise of the United States as the world’s leading maritime power.

Athens, Rome, Venice, Britain, and America all became the greatest powers of their age. The littoral powers of Holland and Portugal also managed to create far-reaching though ultimately less dynamic examples of circumferential power. Beginning with a sea base, each of these littoral powers developed a circumferential curtain, sometimes defensively, sometime expansively, that hemmed in both nomadic societies and patrimonial states. They despised centralized landed power and eliminated nomadic no-fixed-address insurgency.

Despite many illustrious examples, circumferential power has not always been successful. Historically it has waxed and waned. The great Baltic venture—which was the Hanseatic League of merchant cities—failed to evolve into an effective commonwealth. The Swedish monarchy in the seventeenth century encircled the

¹⁴ On the emergence of this kind of order, see Peter Murphy, *Civic Justice* (Amherst, NY: Humanity Books, 2001).

Baltic from the north—at its height absorbing Finland, Baltic Russia and Estonia. It fought for control of the Baltic ecumene with Denmark, a littoral rival, and with the territorial powers of Poland, Russia and Germany. Despite its seaboard location, Swedish power failed to develop a marine character. In many ways it was a classic landed agricultural and natural resource state. It lacked the knowledge-based markets and publics of North Sea capitalism. Unsurprisingly, it left Baltic trade to the British and the Dutch.

While maritime porosity, intellectual capitalism, and inter-state mobility increasingly came to characterise Scandinavian states in the twentieth century, the effect of Tsarist policies, Bolshevism, Nazism, and the Cold War was to split the Baltic Sea down the middle. With the collapse of the Soviet Union came signs of a resurgent Baltic political economy. Baltic states that had been Cold War captives of the Soviet Union gained their independence. At the same time, old romantic Scandinavian nationalisms inherited from the nineteenth century were in visible decline. The Baltic emerged from the era of the Soviet Empire a bit like the Rhineland in Karl Marx's time or the Baden-Württemberg intersection of the Rhine and the Danube in twentieth-century post-war Europe. Each of these regions had the 'in principle' capacity to forge a kind of liquid power. Yet each was subject to the massive pull of the Franco-Germanic heartland of Europe. The long-term outcome of this invisible tug-of-war cannot be predicted. But it is clear that the geopolitics of Europe continues to be shaped at deep levels by swings between landed and liquid power. For this reason, the same sorts of questions addressed to the Baltic periphery of Europe can be asked of all of the states in successful transition from Soviet-type state socialism: is Budapest aligned to the riverine economy of the Danube or to Franco-Germanic Europe; does Prague follow the logic of the Elbe-Hamburg axis or the logic of territorial-autobahn Europe?

Circumferential Power: The Australian Case

There are many cases of liquid power where such questions don't need to be asked. Mostly these are lie on the world circumference.¹⁵ Sea powers, and later on oceanic powers, on the ever-enlarging circumference of Eurasia have been the most successful creators of forms of liquid, non-territorial power. The Mediterranean, the North Sea, and America's multiple Seaboards stand out for their inventiveness. From their crucible was created a bevy of highly adventurous city-based republics, constitutional unions, commonwealths, and settler-colonial empires that provided an enduringly tough, no-holds-barred counter-weight to both nomadic and patrimonial power. The first true cases of countervailing maritime peripheral power—the city republics and republican empires of the classical Mediterranean—also proved remarkably enduring and exceptionally flexible models of how to construct such a power.

The British, for example, drew extensively on the Roman model. Yet they did so without dogma, and always with their own decisive innovations. The British balked at the idea of extending English citizenship to their colonies. They repeatedly knocked back the idea of representing the colonies in the British parliament. This forced the Americans into rebellion. For the pivotal half century after that bruising experience, the British were content to retreat to a somewhat more Hellenic model of creating a string of soon-to-be self-governing colonies, tied by common values to Britain but otherwise free to run their affairs. The key to the creation of self-governing colonies was city building. We see this spectacularly represented in the case of Australia. Virtually from their inception, the Australian colonies were among the most highly urbanized societies in the world.¹⁶ Their dominant coastal cities were

¹⁵ The basic distinction between the “world island” of the Eurasian landmass and the circumference of societies that ring that landmass comes from the founder of modern geopolitics, Halford Mackinder. See his *Democratic ideals and reality: a study in the politics of reconstruction* (New York: Greenwood, 1981).

¹⁶ “The growth of towns was a distinctive feature of these prodigious settler colonies. Even during the gold rush and the wave of agricultural settlement that followed, two out of every five colonists lived in towns of 2500 or more inhabitants. By the 1880s towns encompassed half of the population, a higher proportion than in Britain, higher also than in the United States or Canada... In every colony the capital city consolidated its dominance. It was the rail ferries and the principal port, the place where the newcomer disembarked and, after the gold rush, usually stayed. It was the commercial, financial and administrative hub, and used its political leverage to augment control over the hinterland. Brisbane, Sydney, Melbourne, Hobart, Adelaide and Perth, each one of them a coastal city established before the settlement of its inland districts, were separated from each other by at least

also among the greatest urban colonial creations in history—not least because a model of self-governing order was implicit in their design.

Originally the Australian colonies were intended to be highly compact settlements, with a tight agrarian perimeter around an urban core. To this Hellenic model, however, was soon appended the Roman model of rule over an extensive continental geography by means of law and roads. The assiduous development of communicative, civil administrative, law court, road and rail networks allowed for the extension of a civil power across an insular continental hinterland that lay behind Australian coastal cities.¹⁷ The center of gravity of Australian political economy, though, never shifted from these circumferential cities and towns.¹⁸ Just as Australia stood as a circumferential society to the ‘world island’ of the Eurasian landmass, so its cities were built as a circumferential chain around the inland of its own island continent.

In a very short order of time, the Australian landmass was subjected to the rational abstractions of transport networks, scientific farming, map grids, and the like. Land was decisively stripped of nomadic significations. Aboriginal hunter-gatherer societies were marginalized by paternal administration, police actions, and

eight hundred kilometers and movement between them was by sea.’ [Stuart MacIntyre, *A Concise History of Australia* (Oxford: Oxford University Press, 1999), pp. 109-110.]

¹⁷ Railway networks expanded from 243 miles in 1861 to 1042 in 1871, 4192 in 1881 and 10,123 in 1891. The means of freighting exports and imports rose correspondingly, from one million tons of shipping in 1851 to five million in 1861 to sixteen million in 1891. See Brian Fitzpatrick, *The Australian People 1788-1945* (Carlton: Melbourne University Press, 1946), p. 68.

¹⁸ Contrast this with the case of British imperial India. Marx in his 1853 articles for *The New York Daily Tribune* brilliantly prophesizes what the British were to do for India: viz., give it the telegraph, military drill, a free press, private property, the railways, and an educated class able to govern and imbued with European science. The result, as Marx predicted, would be real unity across the sub-continent and integration into the world market. Yet, as canny as Marx’s anticipations are, they miss the key, indispensable role of the city. What Marx describes for India is Rome transplanted to Asia, but without its nodal city building capacity: ‘The political unity of India, more consolidated, and extending farther than it ever did under the Great Moguls, was the first condition of its regeneration. That unity, imposed by the British sword, will now be strengthened and perpetuated by the electric telegraph. The native army, organized and trained by the British drill-sergeant, was the *sine qua non* of Indian self-emancipation, and of India ceasing to be the prey of the first foreign intruder. The free press, introduced for the first time into Asiatic society, and managed principally by the common offspring of Hindoo and Europeans, is a new and powerful agent of reconstruction. The *Zemindars* and *Ryotwar* themselves, abominable as they are, involve two distinct forms of private property in land—the great *desideratum* of Asiatic society. From the Indian natives, reluctantly and sparingly educated at Calcutta, under British superintendence, a fresh class is springing up, endowed with the requirements of government and imbued with European science... The ruling classes of Great Britain... intend now drawing a net of railways over India. And they will do it. The results must be inappreciable.’ Marx, *Selected Works* volume 1 (Moscow: Progress Publishers, 1962), pp. 353-354.

intermittent settler violence. Many aboriginals were turned into subsistence pastoral laborers. The extraordinarily effective Roman model granting citizenship or free status to the defeated was not repeated in Australia—or rather only very belatedly.¹⁹ The Romans seamlessly integrated Gallic, Celtic, and German tribes in this manner. Failure to do this in nineteenth-century Australia created the legacy of a permanent indigenous underclass.

Settlement in Australia was a relative term. What arose in place of the pre-existing nomad societies was nothing like the locality-bound structures of patrimonial states with their static mentalities and internal passports. Like North America, Australia was a mobile society. The pattern of its travel was in, through, and between its coastal cities. These urban nodes in turn were part of a world-chain of circumferential cities ranging from Bombay and Alexandria to Liverpool and Boston.²⁰ Bush legends about itinerant Anglo-Celtic trans-national pastoral workers, and (later on) accounts of pre-European nomads, found audiences in these cities. But the stories of such inland peripatetic thin-textured societies had little impact on the actual structure of the emphatically urbanized Australian form of life. After all, this was a place where by the 1990s, four out of five people lived in cities, one in four of the population lived within fifteen minutes drive of the coast, and population growth was almost entirely confined to urban coastal corridors.²¹

This commonwealth of urban coastal dwellers had effectively de-territorialized its territory, and by forging a commonwealth the coastal dwellers had also created a non-proprietary state. Non-proprietary states arise when natural persons no longer have an ownership stake in the state. The state becomes an artificial entity. It acquires a strong civil or public character. Offices are distinguished from persons, as law is from command and permission. Government as an artificial person interacts with other artificial persons: citizens, corporations, cooperatives, universities, trade unions, benefit-holders, municipalities, legal titleholders, qualified experts, share

¹⁹ Citizenship was granted in 1966 by referendum.

²⁰ Peter Murphy, 'The City of Ideas: Cavafy as a Philosopher of History', *Modern Greek Studies* (Sydney: University of Sydney), forthcoming.

²¹ A good snapshot of the statistical evidence for this in the 1990s is contained in Philip Drew, *The Coast Dwellers: A Radical Reappraisal of Australian Identity* (Ringwood, Victoria: Penguin, 1994).

owners, automobile associations, returned soldiers leagues, environment lobbies, and so on. The range of civil classes and artificial bodies is exceptionally large.

Construction of an artificial state was the work of the nineteenth century. From this patient work emerged a structure of power whose logic was geometric in spirit. This crystallized in the idea of the commonwealth—a subtle design for a constitutional arrangement that was strongly architectonic in nature. This arrangement orchestrated states into a federal union, organized around a separation of powers that created a dynamic equilibrium of great ingenuity. The mechanism of forming artificial bodies proliferated through all dimensions of Australian life—from cooperatives and companies to universities and museums to science organizations and trade unions and political parties. At the heart of this process was a genius for replacing natural persons with civil artifices that could act on behalf of social classes and natural environments, old buildings and new bridges, boundary crossing river systems and national industrial sectors.

The Australian Political Economy

The mix of circumferential life, a state-subsuming commonwealth, and de-territorialized territory in Australia had far-reaching ramifications. One of things that it created was a very particular type of political economy. This was an economy in which agriculture, industry, and service economies alike were transformed by a deeper logic of circumferential urbanism and intellectual capitalism. The Australian agricultural heartland illustrates this perfectly. In the world of coastal dwellers, farmers produce for world markets. In this, Australia has always been much more aggressive than the United States. Australia never developed an enduring political apparatus of farm protection or family-farm style agrarian populism. Correspondingly, it never developed the rash of inland cities that the United States did in its period of continental empire building in the nineteenth century. Though a substantial source of wealth, extractive mining, pastoralism, and cropping (even at their height in the nineteenth century) were never the principal source of livelihood for Australians—most of whom were never to be found in the countryside, except on

day trips for recreation. Nor was Australia ever a full-fledged industrial nation. Its manufacturing industry took off late (in the 1920s) and declined early (in the 1980s). The label post-industrial doesn't adequately characterize the Australian economy either, in any of its phases. Generally there was great wariness about developing the kind of back-office tertiary service economy that for instance millennial India began to experiment with on the back of the information technology revolution.

In short, neither agrarianism, nor industrialism, nor post-industrialism really describe an economy like Australia's. These terms obscure the nature of circumferential power. A much more instructive way of understanding such a political economy is to think about it first and foremost as a civic economy. The gravitational center of its mode of production and distribution is the city. Its primary driver is a mix of urbanism and knowledge. Littoral societies typically invest heavily in urban development. Their signature is brilliant demotic cities. These cities are notably different from the other premier urban creations in history: the court, palace, and capital cities of patrimonial and neo patrimonial states. The point of the demotic city is not the creation of bureaucratic court power through splendor and ritual. Rather these cities are the crucible and model of a designing intelligence. As exporting states, circumferential powers rely heavily on such intelligence to drive the long-distance traffic, transfer, and circulation of commodities. Equally, they rely heavily on such intelligence to design what they produce and how they produce it. A significant and (over time) escalating portion of the value of these products lies in their design—whether this might be the design of a crop, an animal, a machine, a manufactured item, a landscape, a written page, an oral address, a painting, or a song.

The faculty of intelligent design propels the political economy of circumferential powers in very practical ways—as the Australian case demonstrates. In 1870, the Australian colonies had a product per head than was more than a third greater than the next wealthiest countries: Britain, Belgium, the Netherlands and the United States.²² Notably all of these were littoral societies, or societies with powerful seaboard-portal economies. Australia achieved what precedence it had not because it was a 'lucky country' enjoying the patrimony of nature but because its notional

²² Bruce Williams, 'Wealth, Innovation, and Education' in *Australia: The Daedalus Symposium* (Sydney: Angus and Robertson, 1988), pp. 281-291.

agrarian economy was based on science, technology and management innovation.²³ Its sheep industries depended on intelligent breeding programs that focused on fleece rather than carcasses, fencing of sheep runs, and the invention of shearing machines.²⁴ Its wheat industry depended on the development of mechanized strippers and harvesters, the design of wheat strains resistant to drought and rust, and the use of super-phosphates to replenish phosphorus-deficient soils.²⁵ Science-based production meant that by 1870 only thirty percent of the workforce in Australia was employed in agriculture in comparison with fifty percent in the United States, Germany, and France.²⁶ Mirroring this, the Australian propensity to patent technologies was higher than in Britain, the United States or Germany.²⁷

A word of caution, though, is required. Science-based production and what corresponds to it—viz. intellectual property in technology—are labor shedding. They are quite different from other technology traditions in which technology supports the social organization of labor. The history of imperial Chinese technology illustrates the latter. Its innovations in paper and printing were efficacious social technologies for a literate bureaucratic society. The wheelbarrow was a perfect complement for backbreaking labor. Gunpowder found uses in rituals and in signaling. It had to wait however for transplantation to Europe before it found an application in military science and (later on) engineering.²⁸ Please note: the argument here is not a rehash of the thesis of ‘the West and the rest’. Archipelago Japan took the sciences of artificial intelligence and robotics, and applied them with great success to factory production in

²³ The term ‘lucky country’ was the ironic title of 1960s book by the Australian author Donald Horne. This book warned Australian governments against relying on extractive industries—i.e. the lucky deposits of nature—for an economic future. The Scottish-Australian philosopher John Anderson provided the philosophical foundation of Horne’s polemic. Anderson took seriously the Stoic warnings against relying on fortune. Goods, in Anderson’s view, were the product of the kind of enterprise typified by science.

²⁴ Bruce Williams, ‘Wealth, Innovation, and Education’ in *Australia: The Daedalus Symposium* (Sydney: Angus and Robertson, 1988), p. 282.

²⁵ Bruce Williams, ‘Wealth, Innovation, and Education’ in *Australia: The Daedalus Symposium* (Sydney: Angus and Robertson, 1988), pp. 282-283.

²⁶ Bruce Williams, ‘Wealth, Innovation, and Education’ in *Australia: The Daedalus Symposium* (Sydney: Angus and Robertson, 1988), p. 283.

²⁷ Ian Inkster and Jan Todd, ‘Support for scientific enterprise, 1850-1900’ in R.W. Home (ed.) *Australian Science in the Making* (Cambridge: Cambridge University Press, 1988), p. 119.

²⁸ Gunpowder appears to have been invented in China in the tenth century CE. It arrived in Europe in the fourteenth century. Some attribute the invention of firearms to a fourteenth-century German monk by the name of Berthold Schwarz.

the 1970s. This reflected its own version of a condition that repeats itself time and again in littoral and peripheral maritime societies. They share a fascination for mathematical sciences and applied art. Even a state like Japan where social connections and social power remain very important, at times to the point of claustrophobia, a counter-tradition of aesthetic economy and mathematical science have produced a very powerful economy and a typically odd-ball but highly productive peripheral capitalism.

Littoral states have been a critical seedbed of the mathematical sciences.²⁹ This is so whether we are talking about Eudoxus in Athens, Archimedes in Syracuse, Ptolemy in Alexandria, Copernicus in Frombork [Frauenberg] on the Polish Baltic coast, Newton in Cambridge, Descartes in Amsterdam, or Minkowski in Königsburg—another Baltic city, and a stone’s throw from Frombork. Eudoxus’ friend Plato exemplifies the impetus to wed aesthetic beauty and abstract form with economy and politics. So does the great Königsburg philosopher, Kant.³⁰ As do Hobbes and Shaftesbury, each of whom (like Newton) hailed from coastal English provinces.³¹ Geometrical-mathematical sciences or formalistic abstraction provide a world-view for littoral states. It is city building that translates this formalism into demotic terms. Thus, it is Christopher Wren who is the great populariser of Newton, Shaftesbury, and Hobbes. This is not because he set out to depict the Newtonian

²⁹ The other crucial seedbed of mathematical sciences is those riverine societies that parse territorial societies. One of the most interesting of these is the Baden-Württemberg triangle bounded by the Rhine and Danube Rivers and that converges at its southern tip on Zurich. Not at all incidentally, this region produced both Marx and Einstein. Marx was born at Trier on the Mosel River in the eastern Rhineland on the doorstep of Luxemburg and Belgium. Einstein was born at Ulm on the Danube in historic Württemberg. If you think that the geography of thought does not matter, then consider this: Einstein was schooled in Munich and absolutely loathed the rote learning, coercive authoritarianism and landed militarism of German Prussia. In defiance of its mindlessness, Einstein taught himself mathematics and physics, most especially from a little textbook he acquired on Euclid, his ‘holy geometry book’. Einstein eventually rejected German for Swiss citizenship, and enrolled himself in Zurich’s Eidgenössische Technische Hochschule. There one of his teachers was the Lithuanian ex-Königsburger Hermann Minkowski, whose 1907 work on four-dimensional space-time was to prove crucial for Einstein’s Special Theory of Relativity. Minkowski and Einstein created a revolution in thought as dramatic as Copernicus and Kant.

³⁰ The city of Minkowski’s higher education and Kant’s working life was also where Hannah Arendt was schooled. Arendt, along with Rawls, was the great political philosopher of the twentieth century.

³¹ Newton hailed from Woolsthorpe, Lincolnshire, a county in the east of England that extends along the North Sea coast. Cambridge is located in an adjacent county. Hobbes grew up in Wiltshire, a county in Southern England located between the Bristol and English Channels. Shaftesbury’s home and power base was coastal Devon.

universe in stone—even less so would he have approved of Shaftesbury’s Whig politics or Hobbes’s atheism. Yet these distinctions mean very little when compared with the belief in civil artifice and rational design that all of these figures tacitly shared. Their common ground was a kind of civil religion, in which God is a synonym for the rational design of auto-poietic or self-organizing systems—from cosmos to micro-cosmos. The city is the visible representation of this designing intelligence. Thus an intuitive civic deism bridges between Tory and Whig, royalist and republican. Its consensus product is the idea that an auto-poietic commonwealth will replace the social state. The city becomes the laboratory for learning how the impersonal equilibrium of a complex self-regulating system is achieved.

Wren was the master city builder. The mathematician turned architect oversaw the rebuilding of London after the Great Fire. Wren’s London was a template. It was translated around the world during the era of English maritime colonization.³² Its geometric-mathematic spirit—altered through many Augustan and Victorian iterations—allowed it to be reproduced across the world, like the Greek and Roman colonial city before it. This model of colonization through city building was astonishingly efficient. Colonial cities were an approximate re-creation of the metropolitan city. This template allowed Australia to emerge in quick time as ‘a new, large, self-governing country, automatically recreating British institutions and reforming familiar clubs and societies’—as one historian has put it.³³ The spectacular capacity for civic mimesis meant that institutions of science developed in Britain through the era of scientific enlightenment were quickly and faithfully reproduced in Australia. In this sense, the dominance of science-based production in Australian political economy was a function of the pattern of colonial settlement inspired by the Greco-Roman model of colonization. The type of city that Wren inspired was a brilliant, subtle everyday reminder of, and education in, the geometrical-mathematical spirit. Wherever one walked, this spirit was present.

The effect of this spirit on nineteenth-century Australia is fascinating. It was a place where state-funded science flourished. Government departments employed large

³² Not to be confused with the land-grabbing imperialism that began in the middle of the nineteenth century.

³³ A.G. Serle, *The Golden Age: A History of the Colony of Victoria 1851-1861* (Melbourne, 1963), p. 381.

numbers of surveyors, engineers, geologists and other science officers and experts. Yet this science was an open book. It held no secrets of state. Its theoretical and practical fruits were disseminated widely to a discriminating public and to interested parties.

The state supported scientific reconnaissance and expeditions, and later in the nineteenth century, university research science. However, this science was not the patrimony of the state. Scientific offices were integrated into a public sphere of science learning, debate, exhibition, and publication. The city was the crucible of these publics. Australian cities saw assiduous investment and participation in self-regulating civil artifices like mechanics institutes. These offered broad-ranging forums for science and technology discussion and dissemination. There were some eight hundred mechanics institutes in the colonial state of Victoria alone. Learned societies, royal societies, exhibition buildings, libraries, and botanical gardens proliferated widely throughout colonial Australia. Each was an artificial person that contributed to the larger civil artifice of an emerging commonwealth.

Frank Speech and the Geometrical-Mathematical Spirit

Crucial to the development of that commonwealth was frankness of speech. Australians did not invent this. The Greeks did. They called it *parrēsia*. Australians however have practiced it wherever they could. Samuel Huntington, in his book *The Clash of Civilizations and the Remaking of World Order*, described Australians as ‘the most direct, blunt, outspoken, some would say insensitive, people in the English-speaking world.’³⁴ I have never seen a better description of the antipodeans.³⁵ Let us dwell for a moment, though, on why this is a true description. Australians are not congenitally rude. In fact, with their origins in the late eighteenth-century English Augustan society, they have the typical Augustan virtues. They are cheerful,

³⁴ Samuel Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon and Schuster, 1996), p. 153.

³⁵ Perhaps the only true competitors in the blunt talk stakes are New Yorkers. New York and Chicago, at tail ends of the Hudson-Great Lakes ecumene, are typical of the liquid portal regions that produce frank speech. This stands in sharp contrast to the politesse of agrarian-tutored Middle America.

optimistic, friendly, and happily skeptical. But they are also brutally frank, and sometimes ice-cold in their judgments and actions.

Their frankness of attitude stems from the fact that Australia in crucial respects is a post-social society. It was built on a refusal of social power. The same rejection of social power marked the Greeks, the Hellenized Romans, Spinoza's Dutch, Deist America ("In God We Trust"), and generations of British Whig and Tory, socialist and liberal radicals. All of the societies that I have just referred to, of course, had countervailing movements that urged social power on them. Sometimes this social power was of the most awful kind, as in the case of American slavery. Sometimes it was of the dim-witted kind, though even bumbling power caused its share of catastrophes as when the Edwardian estate gentry led their troops into battle in the First War World.

The Australians were to prove themselves among the most successful in replacing social power with the power of artifice. Already at the Australian foundation, a deep and abiding architectonic spirit conditioned the Augustan cheeriness of the antipodeans. This spirit was displayed in an extraordinary talent for city building. This spirit acquired a mature form as early as Lachlan Macaquarie's Sydney in the 1810s. This was remarkable considering that Sydney was still then essentially a penal colony. The speed with which a durable civic fabric arose—visible even today amidst Sydney's skyscrapers—is the first sign of a society that had begun to construct itself as an artificial person. In such a post-social, or civil, society, geometric-style relations of equilibrium, grace, balance, proportion, rhythm replace social-style relations of deference, nepotism, corruption, service, and social sensitivity that characterize hierarchical and gentrified societies.

A post-social society is one that devalues social connections and relationships. Its existential slogan is 'leave me alone'. Its workers work best when they are—exactly—left alone. In the Australian case, this mentality is a product of distance—all its denizens come from somewhere else, and they have come a long way to get there, and they all have the capacity more or less to move on should they not be disposed to what they find. In that limited respect at least Australians proved to be a little like the nomads they displaced. The unofficial Australian national anthem is about a sheep-

stealing itinerant shearer who dances his backpack across a mostly empty country. Even Australia's labor movements, which had (and have) a strong attraction to the social power of 'mateship' and other peer-type social solidarities, in their founding years were made up of large numbers of transcontinental and transnational itinerant workers. Notably when these itinerants finally settled, they turned with a passion, and in a mimesis of macro-sociological evolution, to horticulture—in the shape of the Australian domestic garden, the epitome of designed nature.³⁶

Itinerancy is an interesting phenomenon. Non-state societies in pre-history dealt with social conflict by itinerant dispersion. People who clashed moved away from each other. The social state in counter to this prohibited flight. Not uncommonly, it bound natural persons to the soil. Those who were forced to stick together in this way had to 'get on'. They had to develop social manners and social virtues. 'Harmony' in social interaction was often the highest virtue. Smoothing over and organizing relationships became the pre-occupation of these societies. Frank speech was discouraged. Ritual speech took its place. Tool-making also was downplayed, in favor of the social technologies of recording and writing, and organizing labor for big projects.

Pre-historical peoples in contrast were more interested in object-creation than in relationship-formation. Their symbolic societies were small-scale; their functional social units even smaller. They survived not by deference to superiors or through the back slapping closed-shop solidarity of peers, but by fashioning better tools. The Greek innovation was to figure out how to create larger-scale societies without sacrificing human independence. They did this by posing the question: how is it possible to have cooperation between those who have the liberty to go away? The answer was to organize interaction through abstraction: cooperation through the artifices of market, public, assembly, law court, science, federation, and above all, the city.

³⁶ On the Australian garden culture and economy, see Trevor Hogan, ' "Nature Strip": Australian Suburbia and the Enculturation of Nature', *Thesis Eleven* 74 (London: Sage, 2003), pp. 54-75. On the placing of the ubiquitous demotic Australian garden in the English tradition of humanized nature and the landscape garden, see Michael Crozier, 'Simultanagnosia, Sense of Place and the Garden Idea', *Thesis Eleven* 74 (London: Sage, 2003), pp. 76-88.

These artifices constituted places where people could gather and communicate. In these places individuals spoke frankly, even brutally. They could do so because their cooperation did not depend on social manners or social virtues. The Greeks had no sense that anything important depended on ‘getting on’ and ‘fitting in’ with their fellows. They celebrated contest and competition. What they discovered, though, is that price-driven markets could coordinate even the behavior of total strangers thousands of miles apart. Likewise they discovered that persons with no social ties could be solicited to do things in common—such as provide charity or build a navy or accommodate overseas visitors. Assemblies that were based on mathematical systems, and carefully constructed to avoid tribal and family blocs, made general laws and provisions for the common wealth. It was also discovered that beautiful and functional cities could be built by having strangers who chosen by lot sit on public committees.

We would be shocked if we were to listen in on some of the discussions of these assemblies and committees. The Greeks for instance regularly declared their victorious generals in war to be naves or criminals.³⁷ Generals who personalized combat in the savage-heroic mode, or who ignored the rule of the city, or who courted gratuitous violence and senseless risks were held to account, and words were not minced. Frank speech was a practical assertion of a citizenry that understood that their armies won victories not because they were social bodies based on slavish deference or sycophantic peer equality but because they were impersonal ‘machines’.³⁸

³⁷ ‘... there was not one great Greek general in the entire history of the city-state—Themistocles, Miltiades, Pericles, Alcibiades, Brasidas, Lysander, Pelopidas, Epaminondas—who was not at some time either fined, exiled, demoted, or killed alongside his troops. Some of the most successful and gited commanders after their greatest victories—the Athenian admirals who won at Arginusae (406 B.C.), or Epaminondas on his return from liberating the Messenian helots (369 B.C.)—stood trial for their lives, not so much on charges of cowardice or incompetence as for inattention to the welfare of their men or the lack of communication with their civilian overseers.’ Victor Davis Hanson, *Why The West Has Won: Nine Landmark Battles in the Brutal History of Western Victory* (London: Faber, 2002), pp. 35-36. Their episodes did not always have merit. One of the cruelest cases was the treatment of by Athenians of their great general and statesman, Phocion (402-318 B.C.E.) who was tried on trumped up charges and condemned to death. On this episode, and its profound resonance in the art of Poussin, see John Carroll, ‘What Poussin Knew’, *Quadrant* 41:7, July 1997.

³⁸ The machine metaphor here sounds like a souless Babylonian slave detail, but quite the contrary is true. The idea of the machine derives from the idea of the ensouled human being with its principle of moving itself. All machines from the water-wheel technology to the cybernetic machine are in debt to this idea. If frank speech represents the individualism of the citizen or the free person with liberty to leave the city and speak their mind, then the ‘machine’ of the battle formation is an

Sometimes people spoke frankly because they feared these ‘machines’. Also sometimes they thought the human element to be irrelevant. Both were wrong. But still it is true that the Greeks, who were often out-numbered, won wars because their citizen soldiers and generals understood the military geometries of leverage, force and resistance, and least effort. This did not make generals dispensable. But it did make them part of an artificial person that was deadly in war but not the proper subject of normal social sensitivities.

Frank speech is the sign of liberty in a society where persons can ‘walk away’—and yet who also have powerful ways of cooperating through artifice. This is a society that is good at creating objects, artificial persons, and self-regulating systems composed of objects and persons. This is a society that is structured not by social virtues or social manners but by the Platonic forms of proportion, equilibrium, and rhythm. The larger nature in which this society and its civic fabric is embedded is also a nature of forms. It is not a nature that mimics social relationships. Its cosmos has a mathematical-geometric nature. From Eudoxus and Plato to Copernicus, Newton and Kant, and finally to Minkowski and Einstein that idea has been the over-riding consensus of scientific cosmologies. The great demotic cities of the maritime commonwealths habitually mimic this nature. I think this is so because these accomplished city makers, who have no especial sense of modesty, nonetheless have a powerful sense of the impersonal character of their enterprise. So while they create, they do so with an abiding sense of objectivity. Correspondingly, the best of their work, and there is a lot of it, avoids the social language of moralism and sentimentality. It is (in a manner of speaking) hard-hearted. It eschews ethical religion and social virtue, whether it be of a modern or a traditional, evangelical or Confucian kind. Yet the a-social is not irreligious nor is it unjust. Quite the contrary.

example of the collective soul of the many kinds of self-regulating systems that the Greeks and their civilizational heirs were to invent. It would be entirely mistaken to think that individualistic societies with liberty of movement and speech were not also strongly collectivist in nature. The collectivism was not that of the serf or the slave hierarchy but the collective reason of self-regulating systems binding strangers in common action through abstract media of law, drill, theatre, assembly, and the like. The Romantic critique of the machine, which underlies much contemporary anxiety over the machine metaphor, implicitly and explicitly dreamt of a return to organic hierarchy. Yet the creation of nineteenth ‘machines’ like the modern political party was decisive in edging out patrimony, patronage, and personal obligation from politics. On a defense of artifice against Romantic organics, see Peter Murphy and David Roberts, *Dialectic of Enlightenment: A Critique of Modernism* (London and New York: Continuum, 2004).

Immortal Creation

Invariably the a-social society is underpinned by a civil religion. All religion might be thought of as the recognition of necessity.³⁹ In some cases, it is the recognition of the necessity of blood-thirsty gods, sometimes of the fate that besets societies ruled by flood or drought, sometimes it is the necessity of rank and estate and hierarchy—the old chain of being that ascends from microcosm to macrocosm. A civil religion is also the recognition of the power of necessity. It is the recognition of the necessity that attends the artifices of civil society and the responsibilities of the stoic figures that tend, mend, and defend the precarious balances and equilibriums that are embodied in such artifices. Sometimes as in war this responsibility is grave; sometimes as in play it is light-hearted. But, whatever its emotional tenor, it is suffused with a sense of poetical justice—the justice of the well-composed artifice, the artifice whose composition echoes the design of the cosmos from which it takes its cue.

The Australian civil religion has its sacred artifices. The greatest is the Sydney Opera House.⁴⁰ It is the Australian Parthenon. It sits like a white trireme on Sydney Harbor, eternally ready to sail into the distance. Its architect, Jørn Utzon, was a Dane. He grew up at the very far west reach of the Baltic—a child with a love of sailing raised in a naval architect's home. Utzon designed his masterpiece using the sparse simplicity of Euclidean geometry. He simply sliced up a sphere. The result was a perfect Platonic form—resistant to time and fashion. Utzon in the end was hounded out of Australia in a frenzy of political backbiting and devious ambition.⁴¹ The Australians were as insensitive to the genius of the architect as the Greeks were to the genius of their generals. But the raucous bunch of politicians and jealous professional peers who caused Utzon to be removed, still allowed Utzon's creation to stand. They

³⁹ For two beautiful arguments concerning the centrality of necessity in Greco-Christian religion, see John Carroll, *The Western Dreaming: The Western World Is Dying For Want Of A Story* (Sydney: HarperCollins, 2001) and Simone Weil, *Intimations of Christianity Among The Greeks* (London: Routledge, 1987 [1952]).

⁴⁰ For a more sustained analysis of the philosophical significance of this work, see Peter Murphy, 'Marine Reason', *Thesis Eleven* 67 (London: Sage, 2001), pp 11-38.

⁴¹ The story is told in Philip Drew, *The Masterpiece* (South Yarra, Victoria: Hardy Grant, 1999).

envied it, they feared it, they wanted to shine in its light, but above all they could not, and did not, destroy it.

Utzon's creation is an example of immortal architecture. There are not many such examples. It is a creation that truly echoes the design of the cosmos. Utzon's fellow Dane, Kierkegaard, would have understood why this was so. In its absolute fidelity to things, Utzon's creation escapes the deadweight of moralism, and all of the kinds of sentimental hand wringing and desiccated appeals to duty that so often pass for civics, citizenship, and religion. By the sea, close in spirit to the cosmos, its simple geometry and its graceful sails are a representation of a tremendous Herclitean necessity—an order beyond law that is by turns pleasing, beautiful, demanding, exacting, buoyant, and terrible. This is an order for which sacrifices are made. It is an order of things beyond calculation, will, or choice. It just *is*. This great order can make us better than we are. It can move us to do more than we otherwise would. It can lead us up, out of everyday life and care, into the dreaming domain of the imagination. It can even silence the frankest and most insensitive talkers amongst the frankest and most insensitive nation of talkers. All things considered, that is not a bad achievement.