

Human History through 2022

## by Jim Davies

Here's the thrilling story of ten thousand years of mankind, told in a way that will never be taught in a government-school classroom or on History Channel.

The universal premise is that without government, all human society would dissolve into bloodshed, chaos and abject poverty. From the actual record of 10,000
 years of governments all over the world, author Jim Davies here demonstrates that premise to be totally false - that the exact opposite has been the case.

He shows how human beings have striven to improve their lives - and in almost every age succeeded, only to have the benefit stolen by Authority and wasted on war and luxuries for the governing élites, in brutal and mindless suppression of freedom - which is what all humans were born to enjoy. Nobody will be able to read "Denial of Liberty" and continue to believe that government is benevolent, beneficial, or even a necessary evil.

He also points to an era in the very near future, in which that liberty will be enjoyed, and shows what is being done to introduce it.
[Back Cover]

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## Dedication

To all whose lives have been blighted by the arrogance of government, and to the memory of the hundreds of millions of those whose lives its malevolence cut short.

## Also by Jim Davies:

## Transition to Liberty A Vision of Liberty

Resolve to serve no more, and you are at once freed. I do not ask that you place hands upon the tyrant to topple him over, but simply that you support him no longer; then you will behold him, like a great Colossus whose pedestal has been pulled away, fall of his own weight and break in pieces.

Etienne de la Boëtie, 1553.

## Contents

Foreword ..... 7
1: Beginnings ..... 9
2: Options ..... 18
3: Ancient Egypt ..... 26
4: Roma Aeterna ..... 38
5: Europe, Asleep? ..... 56
6: Curiosity, Reborn ..... 74
7: The Pink Bits ..... 94
8: Killing Fields ..... 124
9: Crats \& Conclusions ..... 144
Appendix ..... 162
Index ..... 164

## Foreword

The United States of America is the most free country in the world. It was so when it began its independent life, in 1776; it has been so ever since, and is so today. How, then, can the title of this book suggest that liberty has been and is being denied, and that denial will continue until 2023 ?

For reasons spelled out in my Transition to Liberty, 2023 is the year when, most probably in my opinion, things will noticeably start to change. That upheaval will probably continue for five years, culminating in real liberation in or about 2027 - after which a free society will at last emerge as I described in Vision of Liberty. But still, in what sense are we all denied our freedom through 2022?

To answer that question we must do what is seldom done: define the terms. We need to understand what liberty is, in its essential nature. When that is done, it won't be too hard to understand that for all of recorded human history, there hasn't been much, not even in this Land of the Free. It has been systematically and substantially denied.

So, what is liberty, or freedom?- it is simply the right of each person to enjoy sole charge of his or her own life.

The fact that each human being owns his or her life is an "axiom", is it is an undeniable fact. Try denying it: if you don't own your life, who does, and how did he acquire that ownership? Two impossible questions, which is why it is
certain that each person is his own. No alternative fits.

Now, "ownership" means "control" - we own something, we rightfully control its use. Therefore, self-owning human beings rightfully each control all the decisions we rational animals can make... about our own lives. Since that's true for everyone, that means we can rightfully make no decisions about the use of anyone else's life.

Hence the definition of liberty: the right of each person to enjoy sole charge of his or her own life. Notice that the right is inherent in every human; it's inseparable from the person. If we are living, we are free - by right.

But rights are sometimes denied by force, and that is what has happened, everywhere, for a very long time past. The right to make all our own decisions has been removed in practice. Self-owning decisions are daily supplanted by rules made by someone else, who does not rightfully own us at all. They perfume those supplanting rules by calling them "necessary laws" (as in the American Declaration of Independence) for the "public good" - but the simple, ugly fact is that other people are making choices for you and me that we each have the right to make for ourselves.

The natural order of things has therefore been inverted. The purpose of this book is to point out the immense chaos, misery, suffering and premature death that has been caused by that inversion - that denial of liberty. Having seen that havoc, it's hoped that the reader will hurry to put it right, using a means to do so that already exists.

## Chapter 1

Beginnings

In his remarkable book The Journey of Man, Spencer Wells relates how he has been able to trace by means of DNA the approximate paths of migration of the human species from its origins in Africa to every part of the world. It is an amazing, romantic and thrilling story.

Wells estimates that while homo sapiens had developed earlier during several hundred thousand years, something took place about 50,000 years ago there which enhanced by a significant leap mankind's intellectual capacity, in the nick of time for him to cope with a crisis of changing climate; the fertile grasslands of Africa were being dried out by drought. He had to migrate for food, for there was too little to go around.

Those ancestors of 2,000 generations ago moved to the East coast and many headed North East - catching fish and hunting and gathering on the better-watered coastal lands. They followed the Indian Ocean round to what is now Persia, where some groups branched off to head for central Asia and, ultimately, North America via the Bering land bridge; others continued round the coast of India and across to Australia. Only later did some of the central Asian tribes migrate West to populate Europe.

The collision that took place in the last 400 years in

America, between descendants of those who moved East and West after thousands of years in central Asia and Northern Siberia, closed this amazing circle. Development had been much more rapid in the kinder climate of Europe. Agriculture (living in one place and cultivating food which could in some manner be stored) had been discovered about 10,000 years ago apparently near what is now Lebanon, and that fundamental change in the manner of living spread far and wide - but not so far as to affect those still in Siberia or America. The collision was tragic, in large part because following the discovery of agriculture and written communication and eventually of economies based on capital accumulation, had come the practice of government - and with it, force and warfare.

The invention of writing unfortunately took place later than the invention of government, so we have no record of exactly how and when the practice of ruling societies by edict (instead of consensus) arose. Art flourished early, as in the caves of Lascaux in France (dated about 17,000 years ago) but prose of any kind was missing until after rulers had become established.

Franz Oppenheimer in The State noted that there are only two ways by which man "is impelled to obtain the necessary means for satisfying his desires. Those are work and robbery; one's own labor, and the forcible appropriation of the labor of others." He called "one's own labor and the equivalent exchange of one's own labor for the labor of others the 'economic means' for the satisfaction of needs, while the unrequited appropriation
of the labor of others [is] the 'political means."' His equating of politics with robbery is unusual, but accurate.

He then made the reasonable hypothesis that after groups of people settled into villages, raised crops and kept animals in a fixed area nearby, some of them (or more likely, nearby groups of herders) got the idea that it would be easier to raid a neighboring village and enslave its occupants (the "political means"), than to work themselves to grow their own food. That, he thought, is how government arose; with warfare, murder, mayhem, theft and enslavement. The conquerors would mate with the conquered - and widowed - women and within a generation would establish themselves as a permanent ruling class on the basis of a spurious claim to "protect" the community from further invasions - spurious, because their only fighting resources were the very people whom they claimed to protect. It's the same today, as we'll see.

I'm not sure Oppenheimer was right. It seems to me that to make war any group needs ample spare resources, of men and weapons, and groups without settled farms did not have any spare, beyond what was needed for survival. In contrast those who did have such spare time and men were the defenders, not the attackers - and it's well known that in warfare, to overcome a prepared defense one must have a substantial advantage, perhaps of 3 to 1 . Therefore the math conflicts with this theory.

A second objection to his hypothesis is that like all animals, mankind does not kill his own kind without
strong motivation - it's bad for the survival of the species - and to that natural "taboo" is added in our case a measure of ethics; we have consciences, standards of right and wrong.

That second objection is overcome by a recent theory formed by Prof. Robert Carneiro, which he calls the "circumscription theory." He says early humans did raid neighbors and impose control on them, but only when under extreme stress, for example when their local populations had outgrown their food supply because the geography prevented expansion. However this still does not overcome the first objection (that to prevail, starving attackers need a $3: 1$ resource advantage over better-fed defenders.) Further, the Carneiro theory depends upon a very large number of stressful "circumscriptions" to exist very soon after fixed agriculture was discovered, because government did develop very quickly and very widely. It is not easy to imagine how so many could arise. Lastly it relies on the unlikely assumption that a population that was running short of food could still continue to increase; the sad fact is that when famine looms, children die and so the population is self-limiting.

I think it more likely that some within the farming communities, relieved of the need to work the fields, hit upon the idea that they could "manage" the nascent market economy better than it ran itself, and sold that idea to the rest of the group, so that limited power was granted - perhaps under a quite reasonable contract for management which, at first, may well have brought better
productivity. It was then only a few generations before the limits eroded and the employed managers became governors instead. I call it the "Slippery Slope Theory."

Whichever of the three is more accurate, the birth of government was based on force or fraud; and each is a form of the other.

The change to settled cultivation was of huge historical importance. First and most obviously, it was a more efficient way to get food; instead of constantly moving, capturing what Nature had happened to provide, human beings set about the business of planning crops. Just think of the enormous change that implies! Having discovered perhaps that some grain could be planted, with a food yield at a predictable amount of time later, they tried out the idea of not picking up their tents every few days but of using the saved time to till the ground and see the crops were well watered. Time and labor were, for the first time ever, invested, as a form of saving. People elected to work now, so as to eat later. That "postponed consumption" is what true capitalism is, and is what took mankind from subsistence poverty to astonishing wealth; it works because resources that are saved are invested in some potentially useful project, some of which succeed. Some fail, of course, so if $10 \%$ is saved and invested in a year the resulting growth will be less than $10 \%$ - but over time, even a $2 \%$ sustained growth rate produces immense increases in everyone's standard of life.

Having grown a crop, it needed storage so that the seasons
could be tamed; no longer was there a season of plenty and one of hunger. With a need for storage and with the time and labor now available, new kinds of building were designed including housing for the settled members of the community, and so civilization saw its beginnings.

Further and even more significantly, each community was able to produce all it needed for survival in much less time - that is, its members had time to spare. That time was soon invested in activities other than agriculture - more tools (to release even more spare time!) and better dwellings (to bring extra comfort to living) and primitive medicine (to extend life) writing systems (to keep accounts and convey discoveries to generations following) and research (development of metals, with all manner of beneficial results) and so on; also no doubt more food was produced, so that all were better fed. Thus, civilization had begun. So, however, had government; because in one way or another, from then on there were parasites who set about the business of stealing the fruits of that "agricultural surplus" so as to enjoy them without having had to engage in the work of their production. They chose the political means, instead of the economic one - labor. We shall see that pattern repeating, time after time.

So for 10,000 years societies everywhere have been subject to rule by edict, not consensus or agreement; and that meant that inventions of new designs and techniques were not wholly up to the individual who would profit or lose by their degree of success, but in part by the arbitrary rule of some with nothing personally at stake in the
venture. While immensely rapid compared to the preceding 40,000 years, human progress was accordingly retarded. It could have happened much faster.

The earliest stone carvings in the form of pictograms or proto-language are found in China as early as 9,000 years ago and in Sumeria (modern Iraq) from over 5,500 years ago, but in greater numbers only after about 5,000 years ago, notably in Egypt. In that civilization too we know of a rich heritage of stone buildings, monuments such as the pyramids, exquisite artistry, and an advanced form of agriculture and administration. There, too, alas, there is ample evidence of powerful government - and of warfare and slavery.

The thousand-year civilization of ancient Greece was the most influential upon our own, from 3,000 to 2,000 years ago - and it's there that a rather decentralized form of government (city-states, rather than a centralized empire) coincided with an intellectual flowering such as was not seen again for more than 1,000 years after it ended. It is astonishing to realize that all the basic elements of geometry, some of astronomy and many of those of philosophy had already been worked out before the Roman Empire reached its peak, and that art and literature as fine as any produced today were all commonplace that long ago. One of the great tragedies of history is that following first the rise and then especially the fall of the Roman Empire all such development went on hold, for the newly-established Christian religion drew scholars into a monastic life to preserve what was seen as a full, revealed
body of knowledge to which little need be added. As Charles Freeman writes in his seminal The Closing of the Western Mind, "When the Emperor Constantine converted to Christianity in the fourth century AD, he initiated a change that would thrust the Western world into a dark age." Only in the $14^{\text {th }}$ Century did intellectual progress pick up where the Greeks left off.

The cost of government has been appalling, in every age. Our knowledge of the history of the earliest civilizations is sketchy, but whenever it is written, the story told is one of bloodshed and conquest. Rulers thirst for power; to get it in the first place, then to protect it from other rulers, then to acquire more from neighboring rulers. Government and war are inseparable; where there is the one, the other will soon be found. In fact, one might even say that by definition, government is a war machine - for every time it takes any action at all, it violates somebody's right of self-ownership, and so makes war on him.

The old monuments themselves not only tell that tale, they revel in it; from start to finish for example the Roman civilization, rich though it was in its engineering, justice, commerce, literature and art, was built by conquest and enslavement, administered by a powerful central government - first as a democracy and later as an empire or virtual dictatorship. Every arch in Rome celebrates some military victory, or series of battles; for a wellknown example the Emperor Trajan (53-117 AD) had a 30 -meter stone column erected with a 190 -meter frieze "wrapped" around it to depict two of his most successful
military campaigns in full, gory detail.
Rome's economy was built on slavery; as each new area was subdued, from North Africa to North England and from Judea to Spain, some of those conquered were taken as slaves but the key trick was to incorporate the rest into the Roman community - to employ them as soldiers and administrators and to tax their work product. Tax may be taken as coinage but partial enslavement is precisely what it does, now as then. The Empire collapsed when it became so large (relative to the communications available) as to be too cumbersome to expand (the supply of new slaves and produce stopped growing) while the cost of maintaining an increasingly idle Roman population in comfort did not stop growing. Despised "barbarians" beyond Roman borders hit back and eventually wore down the will to resist; shockingly, after 700 years of supremacy Rome was sacked, in AD 410, by invaders from the North.

The sad fact is, therefore, that at or about the time when settled agriculture was developed, and followed quite swiftly by the invention of writing, those two massive advances in human progress were accompanied by the invention of government. That tragedy was appalling and is the subject of this book; it need never have happened, and it can be reversed. Above all, government is no more than a construct of man; and what man built, man can demolish. For reasons detailed in my other books, Transition to Liberty and A Vision of Liberty, that will happen. Quite soon.

# Chapter 2 Options 

> Taking the State wherever found, striking in to its history at any point, one sees no way to differentiate the activities of its founders, administrators, and beneficiaries from those of a professional-criminal class. - Albert Jay Nock

Before we examine the harm governments have caused in every age, let's pause to show the alternative; for people today are so well trained in its schools as to be unable easily to imagine a human society without government.

Always and very clearly, some kind of rule is needed in human society, to guide every interaction between individuals. You and I meet; is it okay for me to hurt you, if by so doing I can derive some kind of perverse pleasure? Is it okay for me to take your coat, because I feel cold? - obviously, there has to be some kind of guideline about what behavior is and is not acceptable.

Although the absence of any written record means we have to speculate, this must have been true in the simple, nomadic communities of 50,000 to 10,000 years ago as well as the more recent ones since humans began to farm. You spend a day chipping at stone, to fashion the point of a spear so that hunting parties will be more productive. Is that your spear, or can anyone use it? How do we know? My family erects a tent, of poles and animal skins. Is it ours exclusively, or can it be commandeered or shared by
someone else? A party brings back to camp a deer, ready to be butchered and barbecued; is that for the whole community to eat, or just for some particular few? Why?

However, the obvious need for rules does not for an instant imply any need for government. The two concepts are quite different. Government (some person or group handing down rules for the society) is one possible way to have rules in that society, but it is only one such way. That is the way of edict; someone or group of people makes rules for all to follow - the way of government. That way necessarily requires force, because if some malcontent disagrees, he must be brought back in to line for the good of all; it is the way of regimentation. All must march in step, or the harmony is broken, and chaos follows.

That way also implies that when it starts, someone is held either in universal fear (he is a conqueror, able to impose his will and kill resistors) or in universal respect (he is a Solomonic elder or guru, whose unusual insights everyone acknowledges.) The trouble with the latter is that after he is gone, a generation or two later, his successors will be seen correctly as ordinary mortals; hence, again, force is required to execute whatever laws he made.

The other way is that of freely made agreements or contracts (and while mankind was still illiterate, those would have to be oral - though they could readily be witnessed.) This way does not require any submission of one person to another, however wise, and requires force only in the presumably rare event that one of the
contracting parties appears to renege on the deal.

Free agreements (an arrangement we now call "the market") would by no means exclude consensus in cases where the whole community needed to make a decision (shall we move camp tomorrow, or a week hence?) - for any who were fixed in a contrary opinion could simply leave the community. For all the years that non-literate man walked the Earth, there was ample room. Until the Europeans arrived, those who had wandered East from Central Asia found the same in the Americas; land was abundant, and the problem came only when those Westward migrants fenced off the portions they wished to cultivate. Until then, consensus was perfectly feasible and seems to have been the norm among native Americans, who often had a "Chief" or current guru whose opinion was especially valued, but nobody stopped a dissident riding off and forming his own community - of any size.

People in societies without rulers have no obligations at all except those they undertook voluntarily, and so there is no built-in mechanism for discontent and friction. Further, everyone gets what he is willing to pay for (or exchange by barter, in primitive days) and so wants are satisfied to a perfectly optimal degree. Those two benefits we now call peace and prosperity - two things most notable for their absence in every era since rulers started governing.

Clearly, social organization by means of free agreement is the superior way and although there is no evidence to point in either direction, due to the lack of written records,
it's reasonable to assume that since human beings survived for 1,600 generations before any settled down to farm, they must during that time have adopted this second way for making decisions. That record is not just one of survival, moreover, but also one of astonishing success; we tend to despise primitive cultures today because in a mere 400 generations we who are literate have moved from the first farm to a state of enormous wealth and sophistication - but we are also poised on the brink of extinction, because alongside that breathtaking technical achievement we have used force to govern societies, and our governments have always been rivals, and the rivals now have the WMDs to wipe out the entire species, along with most others. Some "progress!" So we're in no position to boast; the tribes that migrated here through Siberia for ten thousand years endured hardships we shall never know. That's success.

These two ways - government or market, political or economic means, imposition of superior force or contracts between equals, robbery or work - have always been available and still are; and they were available to man after he discovered agriculture, 400 generations ago. We noted already that tragically, he chose the way of government, or had it imposed upon him by force of conquest; but in these last 10,000 years the market alternative would have been especially beneficial. That's because after settlement of fixed farms, property took on a new and growing importance and contractual agreements are particularly well suited to its disposition.

How do rules operate in a free, market society? - contracts are the key. Nobody is obliged to enter a contract, but once it is entered, the parties are obliged to honor its terms. Therefore, nobody in such a free society has any obligation except those voluntarily undertaken. Contracts can be oral or written, but written ones obviously make for fewer misunderstandings.

What teeth do such "obligations" possess? - standing, in the society. Someone enters a contract but then breaks it. The injured party brings him to an arbiter to make sure who broke what and how, and judgment is rendered and compensation ordered. Then come the teeth: if that order is flouted, the contract-breaker loses his reputation or standing in the community. From then on, he will find it much harder to enter new contracts, eg for employment; for who would trust someone who has broken his word?

This is true in any kind of market society. It was true in primitive, nomadic groups; a young man hunted down a hare having agreed to bring it back to camp for all to share - but ate it all himself. Who will trust him with a bow and arrow next time? And it is true in our own day; an eBay member advertises a gizmo as working well, but it fails on the first try; his reputation is severely affected if he doesn't put the matter right and he'll have a hard time selling there again. It's not that a free, market society is more virtuous in the traditional sense of the word - rather, its members are virtuous because they are eager to be successful. Self interest is the mainspring!

It's very interesting to me that reputation was key in old, small communities and reputation is key again today in the virtual "communities" on the Internet, because it's now again so easy to disseminate information. In between the two there were some centuries during which anonymity in large cities was much easier to achieve, and while that certainly brought some advantages of privacy it also gave opportunity for breaking agreements and escaping the loss of a good name. In those times it was perhaps a little harder to achieve a smoothly-running market; that is no longer true. The time is ripe.

The time was also ripe when mankind first began to farm. Previously not many agreements or contracts had been needed, but then there were many matters to settle because in-place farming begged for division of labor and storage of property. Once the crop was harvested, it needed to be stored; so barns and animal shelters needed to be built and commitments made to use (buy?) that crop and sow the next. More tools were invented and constructed, fitted to the new tasks; promises were needed about who would provide what in exchange. And then as we've seen there was need to protect these assets from marauders, and that is where they failed.

As we saw in Chapter 1, Oppenheimer doubted that they chose to have a government as protector - but that when an invader thrust upon them the alleged "service" of protection they gave way and accepted it. I think it more likely that they were swindled into it and so did think they were choosing it, and by the time they realized it was all a
swindle, it was too late to dislodge the rulers - they had lost the option, so that after a few generations government became the accepted norm, and few could think of any other way of arranging society. What a tragedy!

The market option is real; the government era can end, despite its great age. What mankind has foolishly created, mankind can terminate. There is nothing about the State that is inevitable or in some way "necessary;" every one of those of its functions that are useful can be performed by a market better, cheaper or both, and those functions that are not useful will disappear, releasing resources to produce more that are. The method of terminating government is more the subject of my other two books (see Foreword) than this one, but in brief it is simply to withdraw support.

Government has no resources whatsoever of its own; it depends totally upon people being willing to work for it. When those people are re-educated to understand what government really is and what destruction it causes, they will no longer be willing to do that. When they have all walked off the job, government will no longer exist.

The task is therefore simply that of universal re-education, and one means to achieve that is already in place and on schedule. It is The On Line Freedom Academy and if its web site is still operating it can be reached at www.tolfa.us - or if not, just ask around for a copy of it on CD. I estimate its good work will be completed by about 2027, and that five years before then it will cause a "tipping point" after which government will inevitably dissolve.

However, that's not the subject of this present book. We have now seen that a peaceful, prospering human society needs a structure of rules, and that only two means exist to provide them. One relies upon force, the other upon voluntary exchange under contract. We have seen that at least since humanity began to farm some 400 generations ago, the former has everywhere prevailed. We will now examine some of the damage that actually caused, so as to motivate every reader to help replace forcible rule by the alternative of voluntary, contractual exchange.

Best take some Dramamine; it's not a pretty story.

## Chapter 3

## Ancient Egypt

Between 10,000 and 5,500 years ago there were no large groupings of human beings. Thanks to Wells' work we know how our race continued to populate the earth, and that writing and agriculture had started and so that settlements flourished, but nothing is known about how neighboring ones associated with or against each other until the first records of a "civilization" appear, in Sumeria 5,500 years ago. Presumably, neighbors joined for economies of scale, and their governments allied with or fought each other for domination, and gradually larger and larger administrations developed until records reveal that and other empires or large groups; archaeology has uncovered them that early in the Indus valley in what is now North India and Pakistan, and in China as well as Iraq. There were over thirty of them that left traces before a carpenter from Nazareth changed the course of history.

We will here take a look at one of those thirty: Egypt. It was in some ways the most spectacular, and certainly the longest in duration. Egypt prospered because of the fertile valley and delta of the Nile river. That was the settlement that grew wealthy and farming formed the economic engine of its power, which lasted 3,000 years, from 5,000 to 2,000 years ago - so it spanned the early use of copper and the discovery of both bronze and iron. Its estimated
population was of 1 million when that period began, and of about 4.5 million when it ended.

The area was ideal for the development of a prosperous society. The Nile Valley had 500 navigable miles, providing a ready-made superhighway for trade; to the West was desert, to the South eventually the rising hills of the interior of Africa, to the East lay the Arabian (Red) Sea and the Indian Ocean and to the North lay trade routes to what we know as the Middle East, with connections to China by the Silk Road. Fertile, well irrigated land was the foundation on which Egypt rested, but the opportunities for economic growth were boundless. One can imagine multiple industries and trades developing along the valley, to support farming and then to branch out into shipping and metalwork and building - the works.

The wheel had been invented long before Egypt became prominent, but its engineering was improved for use on chariots - with spokes. For the heavy work of moving stone for the pyramids and other monuments, however, it seems that sleds were preferred; much of the land was soft sand, in which wheels got stuck.

With voluntary exchange, therefore, conditions were ideal for rapid growth - but growth was actually negligible, for through all these 3,000 years the country was heavily governed. There was a dead weight of bureaucratic control and the governing class stole most of the agricultural surplus. Whereas those farming this rich land could and should have been most prosperous of all, they were in fact
living at subsistence level - some of the product of their labor was stolen. The diagram nearby shows how it worked, and it is typical of governed societies.


Notice the ominous signs. Farmers, tradesmen, households had to pay taxes to a Royal domain but also to furnish services and labor to scribes, aristocrats and temple people - priests. No matter what these various classes did in return, a tax is not a payment made in voluntary exchange, it's a confiscation, taken whether the payer thinks it well spent or not. According to the very informative web site about ancient Egypt at nefertiti.iwebland.com,

Ancient Egypt is considered by some to have been the most heavily taxed nation, and to have collapsed under the weight of the levies imposed on the populace.

Right off the top, therefore, the agricultural surplus generated by the producer of the society's primary product, which gave life itself to all its members, was stolen from the producer. What he could have used in exchange for something useful or productive, to invest in the growth of his farming business, was taken from him by force. In direct effect that is a confiscation of his labor, meaning he was partially enslaved; other people (kings known as Pharaohs - and aristocrats and scribes and priests) all lived as parasites on his back. Possibly if they had not formed a "government" - if the society had been free - some of the things they did might have been purchased in the marketplace; I imagine scribes, for example, may have been useful to keep accounts between crop producers and distributors. But it wasn't free; there was no choice.

Notice too the presence of slaves, meaning those whose labor was confiscated not partially but $100 \%$ - by pretending, contrary to the self-ownership axiom in our Foreword, that it is possible for one human being to own another. Slavery is still practiced, and has been ever since one government went to war and captured those it did not kill. The Egyptian Pharaohs were no exception.

Slaves were bought from slave traders and taken from
foreign sources in war, notably in the New Kingdom of around $1,600 \mathrm{BC}$. They worked wherever they were told, and had all their self-ownership rights removed by force. Unusually however it seems to have been common practice in ancient Egypt to liberate slaves after some period, and freed slaves could pursue careers. The case of Joseph is well known from the Biblical account in Genesis 37, 39ff - having been bought from traders as a slave, he rose to become a high official in the Royal palace. Slavery can exist only when government enforces it - otherwise, the slave would simply walk away.

Slavery is high-order folly. It obviously destroys the victim, for he is unable to exchange his skills profitably nor develop them as he wishes; but it's also a lousy deal for the slave-owner, because the incentives of slavery are to do as little work as possible, without suffering extra torment. The owner meanwhile has to clothe, feed and house the slave so the cost to him per unit of work obtained is actually higher than simple employment under a voluntary contract. There, the employee has incentive to deliver the greatest amount of useful work that he can, so as to develop his skills and reputation - to make himself marketable for a higher wage even if one is not offered by the present employer. Meanwhile he normally meets his own costs of living.

It's very curious, therefore, that slavery remains so widespread, even while reason requires its abolition. Perhaps it has to do with the opportunity to govern, to control other people; a taste of power generates a taste for
more. A slave owner is a government in miniature. That taste is the root of all evil - whether the enslavement is of one person fully, or of millions partially, by taxation.

From the diagram notice lastly the presence of priests - or "temple domains" as they are called there. Priests are among those living off the taxed labor of the producers. Religions are found everywhere. Why?

In part they seem to emerge as apparent "answers" to what inquiring, human minds would like to know. The key driver of human intellectual activity is curiosity, and there comes a point - much sooner in ancient times than in our own - when no more answers seem possible. That is galling. So the mind (and a priestly class, spotting an opportunity) creates myths, to "explain" things. They don't really - they merely push the question one stage further back - but they seem to, until one probes further. Thus, the question "How did the world originate?" is answered with "In the beginning God created the heaven and the earth" but when we look closer we see that actually that's no answer at all; in fact it's really a new question, in disguise: "Who or what is 'God', and how did he originate?"

Even so, to pass such myths down from generation to generation provides a comforting if mysterious set of tales to tell to children who most persistently ask them, and they get accepted in to the culture. Naturally, those mysteries need dispensing by a priestly class, and presto! we have another set of people living off the useful labor of the producers. That is not for a moment to say that if a
producer wants to pay for the services of a religious person he should be prevented from doing so - not at all! That would be to negate the vital principle of voluntary contractual arrangements. The problem comes rather when the payment is not voluntary - when the priests are funded by taxes, as in the diagram of ancient Egypt and in a large number of societies ever since.

There's another part to the answer to the question about why religions are found so often: it is that governments like to have them around, for backup in the case that some intelligent but impertinent serf ever asks "Who made you to rule over me?" - that is, to question authority. If there is an established or otherwise respected religion or two around, the answer is simple: God did. Once again, it's not a true answer since it really poses another - but it has the superficial appearance of a "final answer." Thus, there is always a tidy synergy between ruler and priest; the former helps pay for the latter, out of tax revenues, while the latter seems to validate the former with words such as "the powers that be are ordained by God." (Romans 13:1.)

All these key features of society in ancient Egypt - a king or supreme ruler or government, taxation that enslaves the producers partially by confiscating some of the fruits of their labor, and a religion to make it all seem good and proper - are present in every governed society we shall observe in this book, and in some of them there was $100 \%$ slavery as well.

Chapter 1 noted that war and government always go
together. Did that hold true in the 3,000-year Egyptian case? Certainly. Again quoting nefertiti.iwebland.com,

> War remained throughout pharaonic history a tool of foreign policy. It was legitimate because it served to defend the proper world order in which Egypt was the land where the will of the gods was realized, while the lands beyond and their inhabitants belonged to chaos. No need for justification was felt until the New Kingdom, when enemies who did not surrender to the pharaoh were called rebels.

So war was "a tool of foreign policy" for the rulers. Plus ça change, plus c'est la même chose. Where government is, war is sure to follow.

There were civil wars, in which one area or domain fought another using its laborers, and foreign wars in which, for example, the Nubians to the South were conquered and enslaved and in which the Sinai to the East was captured for its deposits of metal ore. The army was powerful but it seems not to have been used at all as liberally as was later the case in the Roman Empire; the emphasis was more on defense and cautious expansion where resources were coveted. Towards the end of the 3,000 -year period there were invasions to repel, but ultimately the Romans prevailed and closed its supremacy.

I've been unable to find an estimate of the number of human beings killed in wars that the Egyptian Pharaohs
waged. Suffice it to say that war always kills, while free trade (whether domestic or cross-border) always enriches both participants. Whether the body count in the 3,000 years of this Empire was low or high, every death ended the life of a human being, just so that the governing class could enjoy more power. The human race is poorer.

Alexandria was a city on the Egyptian North coast facing the Mediterranean, and towards the end of the pharaonic period (about 300 BC ) the ancient world's finest library was founded there - but by Greek scholars, not Egyptian. Tragically most of it was destroyed, perhaps accidentally during the Roman invasion or perhaps 600 years later by Muslims because its contents were, to them, heretical.

We can't leave Egypt without noting its most famous monuments - the pyramids of Giza.

Curiously, they were all built in the first 1,000 years of pharaonic Egypt - part of the so-called "First Kingdom." It's amazing that the building began, and surprising that it stopped. It's also amazing that it could be done at all, and a great testimony to the engineering skill of so ancient a people. Even now, it's not certain exactly how it worked. Not only were huge blocks of stone quarried and transported (partly thanks to Nile barges, presumably) to the site, they were assembled with such precision that each abutted the other with no more than half a millimeter of separation. The outer layer (removed in recent centuries to provide building materials for Cairo) was made of polished limestone or granite. It's an astonishing
achievement, yet it was done more than 4,000 years ago.

All the pyramids were burial monuments for Pharaohs when they died. They thought themselves so important that instead of erecting just a nice tombstone, they arranged to have a pyramid costing tens of thousands of times more, and built with scant regard for the value of the lives of the slaves who often died under the huge blocks of stone. Such is the vanity of government leaders.

Their mummies were buried, moreover, with an assortment of artifacts beside them in the burial chamber, ready for the long journey into eternity as the priests assured them would be needed. No expense was spared there either; treasure was buried with the Pharaoh and ingeniously hidden among the stonework to frustrate anticipated grave robbers - but it didn't, for long. The richest art work of the ancient world, recovered in the $20^{\text {th }}$ Century AD, came from better-hidden tombs in the Valley of the Kings, not from pyramids, and can be seen in the Egyptian Museum in Cairo and others around the world.

The biggest pyramid is the one built for the Pharaoh Khufu, completed in $2,560 \mathrm{BC}$. It was one of the wonders of the ancient world and its height of 481 feet remained a record for man-made structures for 3,800 years.

The resources needed for these construction projects, about once every generation, are hard to calculate but must have drained a huge portion of the nation's wealth, confiscated as above by taxation from productive people.

They are astonishing and marvelous and awe-inspiring but are, ultimately, a total waste. Had the monarch labored to produce goods or services his customers wanted to buy by voluntary exchange, and then used his profits to build a pyramid to keep his name alive for ever, well and good; it would have all been by choice and nobody should second guess his choice of how he spent his own money. But then, he would have been an honest merchant, and not a monarch at all.

Instead, they were all built with stolen money.
In summary, these three millennia of Egyptian history show the best of human progress and the worst. Stone masonry had reached a degree of precision 5,000 years ago that has not been bettered since - but all that pyramid construction was done in the first millennium of the period, apparently not pursued in the second or third.

The natural situation of the society favored great prosperity, some of which was enjoyed - but only by the political class. The folk who fed that class, operating the breadbasket of the ancient world, were little better off in 1 BC than they had been in $3,000 \mathrm{BC}$. They were ingenious in cutting channels out from the Nile River so as to irrigate extra land for production, but during all that period the only important agricultural invention we know about was the Archimedes Screw, a simple device to pump water from river or ditch to irrigate a yet wider

area of arable land - and that device was invented by a Greek. Outside of agriculture there was one invention for which Egypt is justly famous: papyrus, a writing material made from reeds of that name that grew beside the Nile, and immensely important worldwide. But that's about it. The standard of life did not materially improve for 3,000 years.

Ancient Egypt has been called a "command economy", though some freedoms were allowed - land could be bought and sold, for example. We'd call such a régime "Fascist" today. The massive theft of the farming surplus by the governing classes effectively prevented farmers and tradesmen saving and investing, so economic growth was virtually nil. Contrast that with what it would have been had a zero-government, free market society prevailed. We are used to "real GDP" growth rates of the order of $2 \%$ or $3 \%$ a year, and double those have been seen recently in China and India after those governments lifted restrictions on enterprise; but for ancient Egypt, economic growth seems to have been no more than it took to sustain a quadrupling of the population, or perhaps one twentieth of one percent per year. Had modern rates been at work, the human race would have reached a degree of sophistication a very long way out of our reach or understanding, long before the Roman Empire came to be.

Instead, plunder and tight control of its economy by the governing classes prevented any significant growth in Egypt for three thousand years. Its economy was stagnant, for free enterprise was choked off. Liberty was denied.

## Chapter 4 Roma Aeterna

Rome wasn't really eternal, but its Empire lasted for 700 years, which is a heap longer than Hitler's "thousand year Reich" (it survived only twelve) and its influence, through the Roman Church, is with us still. So it's had a good run, and technically was the longest-living empire ever, for the far more durable Egypt, while it made forays outside its natural borders, was never an "empire" in the sense of conquering other countries and taking them over.

We've skipped over the golden age of Greece, which perhaps we should not have done, so let's mention how that civilization furnished most of the intellectual wealth of the ancient world. If the Egyptians were farmers, craftsmen and bureaucrats, and the Romans soldiers and engineers, the Greeks were thinkers, scientists and writers. Their influence was and is wide, and prevailed between 1100 and 200 BC. The Romans expanded power from 350 BC , so the two overlapped, and each developed an alphabet. We inherit the Roman one, but the Greek alphabet survives too (the very name comes from alpha and beta, its first two letters) and is rather similar. Alphabets are greatly superior to hieroglyphics such as were still used across the Mediterranean, although hieroglyphs may form the origin of alphabets - they started in Egypt in its first millennium and were improved
later in Phoenicia and eventually modified in Greece where vowels were added so letters could be used to represent all spoken words. Greek writers of plays, poetry, philosophy, geometry, astronomy and mythology made elegant and ample use of the new tool for expression.

The Roman or Latin alphabet was derived from the Greek, apparently via a Greek colony of about 700 BC in Cumae in Southern Italy - whence it was picked up and simplified somewhat by the expanding Romans.

During the Greek heyday of the 1 st millennium BC, Rome started as a village and was dominated like most of the Italian peninsula by the government of Etruria, a city to its North. After breaking free in about 500 BC, Rome grew and by the mid-300s its government became established on a rather democratic model, perhaps influenced by the Greek example, and that was the start of the Roman Republic. Its government is said to have feared conquest by neighboring cities, including a revived Etruria. I don't know how true that is; politicians lie whenever it's to their advantage and war is seldom announced as an offensive enterprise, always as a "defensive" necessity. Even the Iraq War was portrayed that way; a tale was woven that Saddam was preparing to launch nuclear and bio-chem missiles at America, so a force was sent in to unseat him. Sure. Myth writing didn't end with the Greeks.

Either way, Romans felt the need to conquer and expand, and that is the story of Rome; for over 500 years, the expansion didn't stop. The village became an empire.

Warfare, which to the Egyptian governments had been a tool of foreign policy to be used from time to time as needed, formed the whole modus operandi of the Roman governments; they lived, and died, by the sword.

The first acquisitions or annexations were of other cities on the Italian peninsula, then by the mid-200s the nearby islands of Sardinia, Corsica and Sicily. By 146 BC Rome's government - still republican in form - had subdued Greece, ending its independent existence, and conquered Carthage on the North African coast - a very powerful rival. By 100 BC Roman power extended to Spain, while the army fended off attacks from Germany and so the Empire was solidly established across most of the Mediterranean.

The following century saw further great expansion - into Gaul (France) and Britain and Pontus (Turkey) and Egypt in 31 BC and Palestine in 63 BC , and an unsuccessful invasion of the Parthian Empire, now Iraq and Iran, in 55 but there were also internal squabbles, between rivals for control of the levers of what was now an unprecedented level of government power.

A short digression about nomenclature: in terms of what it did (bringing foreign countries under its domination) Rome built an empire from about 300 BC to 400 AD - so for 7 centuries it should be called "The Roman Empire." However prior to 44 BC , because its form of government was republican, some call that earlier phase "The Roman Republic" while others refer to it as the "First Empire"
with the later period as the "Second Empire." Yet others reserve the term "Empire" for that second phase. It's true that there were no Emperors ("Caesars") as such before 44 $B C$, but I see all that as a distinction without a difference.

Most modern historians draw a thick line between the First and Second Empires, at the change from a republican to an autocratic form of government - a change brought about between 44 and 27 BC. Probably that's because all of them have swallowed the fiction that government is OK provided it is answerable to "the people", but monarchies are not because The People have no say in national policy.

They are mistaken. It's true (as Rummel has well shown, see Chapter 8) that the wreckage governments cause is related inversely to the degree that they listen to those they rule (ie, democratic ones kill fewer than totalitarian ones) but the distinction completely misses the point that all governments are destructive and alien to human nature as presented in the first couple of chapters of this book.

The change occurred after numerous civil wars had taken place after 100 BC - three of them, slave uprisings - at the same time as the Empire was operating offensive and defensive foreign wars, so the period was heavy with slaughter. The problem was that while nominal power resided with the constitutional republic, real power was found in the highly successful and professional military; and further, with so many campaigns going on at the same time in widely separated parts of the Empire, different generals were attracting the loyalty of their soldiers to

## The Roman Empire


in 44 BC

in 337 AD
Maps courtesy of www.roman-empire.net
themselves more than to the distant government. So they fought each other, and they even fought Rome (under Sulla, for example, in 82 BC) itself. This serious internal dissension was resolved when Julius, the victor over Gaul (France) turned on Rome in 49 BC and won; he was declared the first Caesar in 44. He was assassinated the same year, and after some wrangling in the resulting Triumvirate his adopted son Octavian settled in as Caesar in 29 BC and the change was complete by 27 . The maps on the preceding page show the scope of the Empire at that time and in 337 AD respectively, to indicate the unprecedented size of what the Empire controlled.

Those are the bare facts, whose detail can be read in any history of the period. What interests us is the relationship, in this 700 -year period, of government, people, technology and above all, freedom. The period saw immense developments in literature and engineering but most of all, military technology. Romans were masters of the world first and foremost because their armies were well equipped, well disciplined and well led. With few exceptions, they were unstoppable. Having conquered, however, their policy was most interesting; the defeated populations were absorbed as Romans. The pattern was brutal but simple:

- Conquer; crush all resistance with military might
- Exploit; take slaves, institute taxation
- Share: provide improvements, let locals participate

The objective was to exploit conquered territory for the
benefit of Rome, always - but after conquest the locals were "given" (with their own money, of course) benefits of efficient administration, education, justice, modern buildings, magnificent roads (as fast in their day as those of Hitler and Eisenhower two millennia later) a common language and trading system, and participation. Those enslaved could look forward to eventual freedom, as in Egypt; others could aspire to Roman citizenship (for example the Apostle Paul in Acts 22:27 took some pride in his status as such.) This was quite clever; the conquered peoples were not so much eliminated as they were absorbed; there was a quid pro quo. Administration was done by governors answering to Rome (and that became a source of difficulty because of the long communication cycle) but the Romans doing that work frequently originated in provinces far removed from Rome itself, and in due course that was true even of the Caesar; the first was Trajan (53-117 AD) who was born in Spain.

This was an elegant example of avoiding the slaughter of the golden goose. The aim was to exploit, not to vandalize. Subdued peoples, having not "beaten them" were given incentive to "join them" instead and so to keep producing. This was and is always the objective of governments; to live well at the expense of their subjects. The more successful have realized that the more those victims produce, the more they can be milked - and that they will produce more only if allowed incentive. Arthur Laffer rediscovered the principle in his famous "curve" in 1974; that to maximize tax revenues, one should not set out to maximize tax rates, but rather pick an optimum rate
that may well involve a reduction, so as to leave ample incentive to produce. But the Romans got there first.

Absorption was the practice in religion also. There was no attempt until the fourth century AD to impose any one religion on conquered peoples; their own was welcome to join the club - pantheism prevailed. The only problems came with Judaism and Christianity, with their exclusive monotheism; for the one requirement was that everyone pledge loyalty to Caesar. If that was in place, anyone could believe whatever he liked - the more, the merrier. This, too, is well emulated in modern America: freedom of religion is enshrined in Amendment 1, but Amendment 1 is part and parcel of a package which sets up government as the source and "protector" of that "right"!

Religion (of some kind) was as important to government in Rome as it was in Egypt, and for the same reasons; it helped validate the existence of the governing classes. It's perhaps significant that Paul's Christian teaching that all government is established by God was addressed to his followers in Rome (Romans 13:1) - who were apparently having some trouble with the authorities at the time. The evident absurdity of supposing that a benevolent God could not only endorse but also originate a bunch of killers, oppressors and thieves was forgotten in his eagerness to appease the rulers. It's the same today; some of the most ardent supporters of government go to worship every Sunday, preach obedience and submission, and even volunteer for its armed forces.

Throughout the period of Roman rule it's important to see that trade was managed, not free. There can be little doubt that at least in its first 500 years there was considerable economic growth, with living standards being raised in all parts of the Empire, helped by brilliant engineering inventions not least of which was the "Roman arch" by which stone could be suspended not as a massive flat piece across the top of columns, but with angled, smaller stones kept in place by those on either side. That design dominated for a thousand years (until the pointed, Gothic arch was discovered) and is still in use. Large numbers of Roman arches survive throughout Europe; the photo shows the magnificent aqueduct at Pont du Gard near Nimes in southern France. Such distributors of fresh water were lined with lead, for which the Latin word is plumbum and hence the origin of all that we take for granted in modern plumbing. Heated
 public baths, swimming pools and sports arenas were constructed in every part of the Empire, predating others in Britain, for example, by seventeen centuries like this one at Bath, England.

The public was kept amused, pacified and distracted by an
ample supply of entertainment arenas, of which many also survive in large part - the Colosseum in Rome being the best-known. These were amazing structures, sometimes equipped with giant sunshades for the better seats nothing like them was to be seen until the $20^{\text {th }}$ Century. The contests included fights to the death between animals and between gladiators, sometimes of animal versus man. Reality TV has nothing on that. They also included chariot races with, presumably, a lower body count. Basic food (bread) was sometimes provided "free" (as in, food stamps) so government treatment of the common man was characterized as "bread and circuses." Roman government knew most of what modern ones do, about the science of distracting folk from thinking or questioning.

Success attended the Roman Empire, despite the tight central control that governed all major trade; engineering progressed and lives were bettered. No other state has facilitated so much advance in civilization. The cost was appalling, in that it was based from start to finish on war (ie, legalized mass murder) and theft, but until the British one of the $18^{\text {th }}$ and $19^{\text {th }}$ Centuries, which was partly based on the Roman model, none was administered as cleverly.

That was true for its first 500 years. Its last 200 were a different matter. By then (about 200 AD) expansion had stalled; there was no more territory the Empire could readily absorb, given the long journeys from center to periphery. Those strains were telling so badly that in 285 AD the Empire actually divided into two, the Eastern one being centered in what became Constantinople.

The absence of new societies to subdue and absorb meant that the supply of fresh slaves dried up, and while the ambitions of Roman citizens throughout the Empire were as great as prevailed in Rome, so it became increasingly hard to keep Romans in the style to which they had become accustomed; the old days of zero taxes in Italy ( 168 BC until the Caesars) were gone, and free enterprise, which could readily have continued to furnish an everrising standard of life, had been virtually eliminated by the government's vice-grip on all education and trade. Rome was always a fascist state (the very word comes from fasces, a bundle of canes used to
 symbolize authority, seen on the left of this Axis stamp) and now at last it became a declining fascist state.


It's hard to estimate how much percapita living standards rose during the 700 year Roman Empire. Clearly (unlike the case of Egypt) they did rise; Pompeii was encased in volcanic ash in 79 AD until it was recently excavated, and it's clear from the way ordinary houses and villas were designed and decorated that a substantial middle class perhaps the first in history - had developed.

Even if one counts only the improvements in plumbing, entertainment and buildings over such a huge geographic area we might guess that it improved by a factor of three to ten times, over the seven centuries. To take the higher guess, 10x in 700 years means that the Empire's economy grew by $0.3 \%$ per year; a whole lot faster than Egypt but pitiful by the modern standards that are five or ten times higher, and negligible by the standard that a free society would deliver. This poor performance is no coincidence.

Managed trade cannot possibly furnish incentives to match the profit motive in a free competitive environment. Success derives from political influence, not from pleasing a large and varied array of independent customers. That was the only kind of trade permitted, however, and all the education ensured that each new generation saw it as the norm, probably not even being aware of the alternative. The parallel to modern state education - and control of trade - is ominous. Again, the Romans got there first.

Innovation and invention are triggered directly by the need to compete, and in the absence of that need it's amazing that in the Roman Empire there was as much we've seen. However, it was not merely not encouraged, it was deliberately suppressed. When a new form of breakresistant glass was invented and shown to Caesar Tiberius ( $14-37 \mathrm{AD}$ ) he reportedly had the inventor killed, lest the new material made thousands of regular-glass and other workers unemployed. He might be called the first Luddite.

The decline of the Roman Empire has been attributed to
moral decay, but that theory doesn't stand up well. True, debauchery in the Imperial Palace was common, and Tiberius would have made Bill Clinton seem virtuous; and his successor Caligula is infamous for his blood-soaked depravity. Later Caesars were usually more sober and diligent, but those two reigned in the First Century AD, when Rome was at its most powerful, so can hardly have caused its collapse. So no, in my view the decline had economic causes, as above.

Attempts to stop it were quite bizarre. Government in its economic ignorance tried repeatedly to manipulate money, which it controlled. What was needed, obviously, was more production of goods and services - not of the currency that measured their value - yet government people were obsessed with increasing the coinage. Again, plus ça change. Money had largely replaced barter by about 500 BC (earlier in China), and the Roman units were the silver Denarius and
 the Aureus, made of gold. The way the government of Rome anticipated John Maynard Keynes in debauching their currency was by decreeing the exchange rate. The "Aureus" article in Wikipedia tells us that there were:

25 Denarii per Aureus in 70 AD

833
4,350
4.6 million
in 301
in 370 and
in 402

Interesting trivium: that 332-year inflation rate averaged $3.72 \%$ a year, just slightly less than the one experienced in America since the Fed was chartered in 1913. The Denarius was at first made of silver but was debased as the decrees reduced its value. Payment of taxes to the government was required to be in gold or silver, while the increasingly worthless Denarius was the currency in which soldiers, laborers and bureaucrats were paid - so in effect real value was transferred from producers to parasites. FDR pulled a similar trick in 1933 when he confiscated all private gold and issued in exchange paper currency, whose purchasing power fell by $90 \%$ in the following 70 years - while government stored the gold.

So it's neatly proven that it's not essential to have paper money in order to create hyperinflation. Only government in charge of money is indispensable for that purpose.

Diocletian, in 301 AD , made a terrible situation much worse by also decreeing caps on wages and prices, so from then on it became more closely impossible for folk to live in a money economy. What they did was to move out of the cities and back to the countryside, in the hope of at least growing their own food. When the other barbarians invaded a century later, Rome was almost empty; the collapse was complete.

One other notable policy was followed in Rome's years of decline, in an attempt to arrest it; and this one was fairly intelligent and it concerned religion, a key factor in the
morale of the Empire. As we saw, it was pantheistic anything went - but during the 250 years following the execution of Jesus, his followers had quietly grown in number and influence and by 300 AD they surprisingly formed the largest single religion of all. Constantine the Great, who was Caesar from 306 to 337, noticed that and saw a way to revive the sagging faith in his empire; he set out to unify church and state by "establishing" or endorsing and subsidizing this large religion so as to make the latter share in adherents' loyalty to the former. This was especially cunning because Christianity had been one of the very few religions that had drawn persecution (from Diocletian, his predecessor, for example) because of the Christians' reluctance to swear loyalty to Caesar. He was attempting to neutralize that lingering resistance and to gain a powerful new ally, in one single move.

Christianity was divided. Then as now, churches and dioceses followed differing interpretations of Scripture and became fractious. There was no single agreed version of a holy book, for documents originating in the founder's lifetime were few and fragmentary. Constantine played upon this weakness and offered a deal they were all hard put to refuse: he convened a conference in Nicaea in 323 and in effect banged the bishops' heads together.

The deal was that they got their house in order and formed a single, united church with a single, approved "canon" of what was to be the authoritative Bible or written basis for their religion, while he for his part would end all persecution and announce that henceforth Christianity was
the approved religion of the Empire. For good measure he announced his own miraculous conversion.

The bishops took the bait. Tax money poured in to the church, for building permanent worship houses and for good works; it became well financed by the State for the first time, but by no means for the last. Evangelists swiftly populated the farthest reaches of Empire including outposts like Britain, all with official blessing. Doctrine was encapsulated in the Nicene Creed - a masterful summary that is still recited in major denominations and whose sense is accepted in all; while non-agreed doctrines were excluded and heretics excommunicated. From 323 on, Jesus was officially God in human form (a few had seen him as merely a prophet) and the doctrine of the Trinity was set in stone. Dan Brown's popular 2003 novel The DaVinci Code explores some fictional results of that settlement, and the deal set up the primacy of the Church of Rome for the next millennium.

But it didn't work, any more than did FDR's assurance that "the only thing we have to fear is fear itself"; the problem in 323 as in 1933 and now in 2009 was not a lack of good morale or optimism, but of hard-nosed economics. Government had created the aspirations of its citizens but was no longer able to satisfy them; it was bleeding the Empire to death, and no amount of fine wording or of religious fervor or unity or of unreserved loyalty from the Christian faithful could save it. Less than a century after the Nicaean deal was done, Rome was finished. But as we'll see, the church remained.

In summary, the Roman Empire was a brutal kleptocracy. The whole source of its wealth was plunder, and while that is true of every government, the Roman one made little attempt to hide the fact and even gloried in it; war and conquest were its whole way of life and for as long as the victims of its plunder were foreigners, the Empire grew and prospered - and its governments were smart enough to let the subdued nations share the wealth, conditional only upon loyalty.

When there were no more foreign potential victims its leaders had no idea what to do; their class had long since forgotten the equation between work, ingenuity, investment, and prosperity so the plunder was turned inwards to its own middle classes. At that point the decline began and, as we saw above, there was no way to stop it. The population had been trained to rule and administer, not to trade, invent and produce - so Rome was not really conquered by outside forces, rather it collapsed from within. When Alaric marched in, there was no "there, there." Rome was a massive Mafia, a savagely efficient enforcement racket, a gigantic bubble, and in due course it burst. Its impressive organization had been built upon an economic fiction - a Ponzi scheme, neither more nor less. Its history formed perhaps history's best demonstration of what Harry Browne wrote sixteen centuries later: Government Doesn't Work.

Along the way, Romans refined the art of governing to a degree not repeated for over a thousand years, made
enormously impressive structures from roads to arenas and enabled millions of people to enjoy a standard of home comfort never experienced in history outside the mansions and palaces of top members of government. Its achievements are undeniable. Their price was far too high.

That price was the massive loss of life in its unceasing wars, universal loss of liberty, and the extinguishing of knowledge outside what was needed for administering an empire. The knowledge of how to work, save and reinvest for personal financial success - the whole essence of free enterprise - was missing from the Roman school curricula. The ability to invent and improve was channeled into government projects, not left to individual farmers and business owners. When the Roman bubble burst, all such skills and understanding had disappeared from the societies the Empire had governed. It existence was a blow to human freedom from which our race would take a very long time to recover.

The denial of liberty is not cheap.

## Chapter 5 <br> Europe, Asleep?

What vanished, after 410, was the superstructure of the Roman state. The magnificent buildings and monuments and roads and arenas remained, and many still do. The population remained. For five more decades, even remnants of the government remained; the invading barbarians took that long to defeat its armies throughout Europe, before the final Caesar (Romulus Augustulus) abdicated in 476. The resources - of equipment, vehicles, tools - remained. What disappeared was the flow of taxes to Rome, and that of decrees from Rome.

Why, then, did not a free society rapidly emerge?
As a reminder: a "free society" means the second of the two ways of meeting needs, identified in Chapter 1 with reference to Oppenheimer: the "market", or voluntary exchange. For that to develop, two things are needed:

1. Each person must understand why he is responsible for his own success, and
2. There must be no interference with voluntary agreements by some third party

Neither, unfortunately, applied in post-Roman Europe.

The first had not applied for at least 700 years because the State had taken on more and more responsibility for the welfare of ordinary people - directing them what to do and providing for their basic needs, with "bread and circuses." 700 years was about twenty-eight generations, so a sense of sturdy independence, and an understanding of universal self-ownership, were almost obliterated from the culture - just as they have been from our own, in a mere four or five. The 1990 collapse of the Soviet Union also illustrates this point: in Russia, producers (farmers) had been serfs for hundreds of years, so there was very little basis for a free market to develop in the years since and such as has appeared has been dominated by large enterprises run by former government thugs. In the satellite countries like Hungary and the Czech Republic, on the other hand, business and trade had been operating fairly widely before WW-II so they recovered much more quickly from communist domination. Finally, recall: in the Fifth Century there was only a limited amount of writing, so most of that culture was handed down from parent to child by means of the spoken word.

The second prerequisite for freedom was also missing. First, there were ongoing wars between invading barbarians and the residue of the Roman state, and when that was all done the Goths, Franks and Vandals required the spoils of war from the people they had defeated. Government changed, but it did not disappear. Second, when former agents of the Caesar could retain their location, they now operated on their own behalf; they stole the agricultural surplus and kept it for themselves and
ruled their local domain their own way. Third, there was the Roman Church, left intact and quite well endowed, holding its position whichever rulers held secular power.

The church had a huge effect on the beliefs and ideals of ordinary folk, and all its priests and preachers (thanks to Constantine's Nicaean uniformity) sang out of the same hymnal. From Galatia to Britannia to Iberia, everyone was taught that all anyone needed was to be found within the pages of the Bible, as interpreted by the priests, and that they ought to "be content with such things as [they had]" by Hebrews 13:5. The benefits of the Christian religion don't include a strong stimulus to personal ambition.

One other factor resulted from the supremacy of the church: intellectual life was diverted into its monasteries. Now, an intelligentsia isn't essential for a free society to work - what's needed more is simple ingenuity, hard work and a measure of "street smarts", not scholarship. True, among his other accomplishments Jefferson the scholar did design a "mathematically perfect" mouldboard plow with reduced resistance, for more efficient field work; but usually, academic contribution to enterprise is long-term, not hands-on. Archimedes was not known as a merchant or shipbuilder, but his discovery of the physics of flotation influenced naval architecture for all time. When virtually all scholars after AD 400 were siphoned off into theology and to transcribing the works of Revealed Truth (in an age long before the printing press), there were few left to contribute to profitable trade and manufacture, still fewer to tease out the secrets of science. The scholarly tradition
of rational scientific and mathematical enquiry, practiced so well by the Greeks and adapted and applied by Roman engineers, did not reappear; bright minds were sidetracked.

So the vacuum of power was filled, alas, at the local level; there was less coordination or central planning and direction, but the agricultural surplus of those who produced it was still stolen, now by local overlords instead of a distant Caesar. Europe became a patchwork of fiefdoms, overlaid by foreign kings and a religious culture that encouraged conformity and submission. Thanks to the University of Texas at Austin, here's a map of how Europe appeared a century after Alaric sacked Rome:


We'll return shortly to Europe because of the immense effect its history had on that of the world in the last 500 years, but first let's take a brief tour of the rest of the world in the millennium that began after Rome fell. At peak, the Roman Empire had about $21 \%$ of the world's population, so this excursion concerns $3 / 4$ of our race.

There were, first, large areas where writing had not developed - Siberia, North and South America, Australia, subsaharan Africa; and we can assume that there, neither agriculture nor government had developed either. As we saw in Chapter 1, discovery of agriculture was the key and this just means that in the 50,000 -year saga of modern man, people in those areas happened to find it $20 \%$ later than the rest.

Elsewhere, agriculture and the dramatic boost it gave to invention and life standards through its "surplus" was, sad to say, always followed by government parasites. That is true in China, India, Arabia, Central America and the Eastern Roman Empire. Always, everywhere, government was accompanied by one or more religions, to fool everyone into supposing government was useful, beneficial, or one of the unchangeable facts of life.

China has a history of war, from its earliest records of nearly 4,000 years ago. Different dynasties gained and lost power and territory from 1000 BC through the present day, in a grim story of conquest and reconquest so as to divert the agricultural surplus into the hands of competing parasites and away from the producers, who might so
readily have reinvested them to bring the great gains of civilization very much sooner. The endless wars among those thieves, in contest to grab the surplus being produced, testifies to the size of the riches being stolen and to the ruthlessness of the governments competing to steal them.

Those riches were produced by an inventive people. Silk was first made about 4,000 years ago, and hence the great trade route to the Middle East called the Silk Road, and during the period of this Chapter movable-type printing was invented, four centuries before Gutenberg. Also in 800 AD gunpowder was invented - though the driving force was not a market demand for firecrackers or stonebreaking, but government orders for rockets and bombs. But for the deadly, wasteful influence of government China could have been a powerhouse for world civilization long before Europe got its house in order.

India was one of the very earliest areas to be populated by modern man, both in the coastal areas on his southern migratory route about 30,000 years ago and in the Indus Valley in its North West, where a substantial civilization prospered 4,000 years ago. There is no evidence that after agriculture developed, any free society flourished; yet again, governments stole the surplus and wasted it ruling and extending their rule. During our Middle Ages the Pala dynasty dominated, and used the Buddhist and Hindu religions to subdue resentment. It's interesting that the former founded a very early university at Nalanda, and that during this period Indian scholarship was prominent,
especially in mathematics.
Some of the Greek scholastic tradition had found its way to India 500 years earlier, but it was here that a decimal number system was actually developed, and its importance cannot be overstated. Contrast its simple 10-digit foundation for arithmetic with Roman numerals, using which this book was published in MMIX, written by an author born in MCMXXXVII. How the Romans could add or subtract, let alone multiply or divide is, to me, a mystery. Indian scholars explored vital concepts like zero and infinity, and even founded trigonometry. Such knowledge passed back to the Middle East when Muslim Arabs raided India during the $8^{\text {th }}$ Century and eventually reached us as the "Arabic" system - but the real credit belongs to Indians.

During these "Middle Ages" there was an unusual event in Arabia; a government arose based around a new religion. Muhammad led a tribe that fought its way to domination and he elevated himself to the status of Prophet to secure his position. An application to Jews for recognition as such was turned down, so he created a new holy book and fired up his followers to spread political power by military conquest, but with motivation as evangelists for the new faith - a neat trick. The claim was that the Angel Gabriel had taught him there is but one God, not a pantheon. Nearby, the map shows the astonishingly rapid subsequent spread of Islam. War between its factions, often over the right to be "successor" to Mohammad, began soon after his death and continues to this day, with increased

ferocity as the oil-based spoils of victory have become so much richer.

Controlled by the theocracy, Arabic learning thrived, and to a degree Muslim scholars took up the Greek tradition as well as bringing to Southern Europe the mathematical findings of India. The theocrats forbade artistic representation of people, and the result was an immense and beautiful variety of geometric designs, found often on mosques. It can be fairly said that as European intellectuals slept at the switch during these Middle Ages, originating little while just copying what had allegedly been revealed, Muslim ones kept scholarship alive - and contributed a good deal to agricultural knowledge (crop rotation and imports of foreign varieties, milling, better mechanization...) and even an early form of capitalism, as well as spreading the new, Indian decimal number system.

Central America is a puzzle. Modern man populated all parts of the world as he migrated through it (some stayed behind, others continued) and migrants from Siberia twice crossed the Bering bridge into America; about 40,000 years ago to the Pacific North West, then about 10,000 years ago on an inland route through North, Central and South America. They did not bring knowledge of agriculture, but apparently found it independently - but only in the isthmus connecting the two continents. Hence a civilization developed there but not in the larger land areas; it was marked, like Egypt, with magnificent stone monuments in the form of pyramids. How it happened that the design was similar to those of Egypt and Mesopotamia is the puzzle. It's hard to imagine how any communication could have existed between the two parts of the world; pyramid building ended in Egypt about 4,000 years ago and began in Mesoamerica about 3,000 years ago. How at that time could any architectural student have made the trip? Yet if not, how were the designs were so similar? It's a mystery awaiting solution.

This Mayan civilization had, alas, so little respect for the principle of individual self-ownership that they used those pyramid structures for the ritual sacrifice of human beings - some of whom actively cooperated in the process. Such is the power of state religion.

The Byzantine or Eastern Roman Empire did not end with the sack of Rome in 410; it survived another 1,000 years until overcome by Muslim armies from the South, at
about the same time as Muslim conquerors of Spain were expelled after seven centuries of occupation. Throughout the period, church and state are intimately involved in its history. Its peak power was in the mid- $6^{\text {th }}$ Century under the Emperor Justinian, best known for codifying Roman law, whose armies reconquered Italy so that the "Eastern" empire, centered in Constantinople, operated for a time a territory that almost fully encircled the Mediterranean. His successors had to fend off Lombards and other enemies from the North and Muslims from the South, and one phase of the wars against the latter was the "Crusades" to recover Jerusalem, aided by armies from as far as Britain.

Military conflict was accompanied by ecclesiastical squabbles. Greek was the language used in the Eastern Church, not Latin, and gradually, doctrinal differences hardened. It was at root a matter of supremacy; in the East the bishops held that each city-church was complete in itself, with no authority over it acceptable from either Constantinople or Rome; in the West, Roman Popes asserted leadership power over the whole church. The schism came in 1054, and has never been healed.

In 1453 the Muslim Ottomans finally overwhelmed Constantinople and the Eastern Roman Empire came to an end. Its whole history, as was that of every powerful state we have quickly noted in this excursion, was about using the productive capacity of ordinary people to pass power and wealth to governors, and to fritter lives and fortunes and resources on warfare to increase or defend that power. Religion - it hardly mattered what kind - was no more
than a myth, to convince the millions who made all of it possible that this totally absurd, irrational activity made some kind of sense.

Our quick world tour over, let's return to Europe and see what was going on in the thousand years after 410. These are known as the "Middle Ages" or the "Dark Ages" and for sure, they were nowhere near as spectacular as had been the 700 years of the Roman Empire. They were also dark in that despite its collapse, no free society developed.

As noted at the start of this Chapter, the power vacuum was quickly filled, by the invaders from the North and East - Goths (West and East), Franks and Vandals. They occupied not only Italy but Benelux, France, Spain and North Africa; all Roman resistance ended by 476. Then, a funny thing happened: over a few generations the invaders became Europeans and absorbed or were absorbed by the culture they found in place. They brought no scholarship or non-military expertise so it was a long time before the existing infrastructure was improved, but today's Europeans are descended from the invading barbarians. Even the names (Frankfurt, France) come from the invading Franks. They absorbed the religion they found, joined the Roman Church, and used Latin.

Saxons, in the NW of Germany, crossed the North Sea to raid and settle parts of England between 500 and 700 AD , only to be troubled in their turn by Viking raiders from Denmark. On the Continent itself two main dynasties Merovingian and Carolingian - spent the same period
fighting for control of the area from the Elbe to the Pyrenees. One of them was Charles Martel, who in 732 changed the course of world history by stopping at Tours the Muslim advance from Spain into the rest of Europe. King Charles followed, and was known as Charlemagne or Carolus Magnus, for having hammered most of today's Germany and France into one central kingdom - a first (and a last.) He was crowned in 800, and ruled from Aachen, a.k.a. Aix-La-Chapelle.

The pattern may be monotonous, but it's what happened: the population produced the food and basic necessities, but their agricultural surplus was stolen by governments which warred among themselves to control the loot. The resources that could have been used by their owners to devise ever better goods and services from mousetraps to medicine, were wasted in warfare. And all the time, the brightest minds around were locked up in monasteries of the church that endorsed the carnage and plunder; their main notable contribution to civilization being the art with which they so richly and beautifully embellished their texts.


Against that dreary background of endless wars between governments, in the first half of the millennium following 400 AD , there were just a few faint signs of a desire to live without them, or at least to reduce their power.

The first came in Iceland, in the year 870. During the next half-century about 10,000 Vikings, mainly from Norway, emigrated and settled this island that had been discovered in 850 . The migration seems comparable to the massive one to America, a thousand years later; settlers went to escape unsatisfactory conditions at home in order to own and work their own virgin land. Thus, they left a society under government (the Norwegian monarchs) and founded a society without one. They were too busy creating an economy in a harsh landscape to bother about politics and happily, the governments they had left gave no pursuit or not for almost 300 years. For that period, therefore, Iceland formed an unique case: a peaceful and productive society without government.

There was an annual meeting to hear cases of alleged wrongdoing, and the judgments were to restitute victims; there were no prisons, no executions. The value of life was well recognized, and if a person was killed, either in a fight on purpose or by accident, payment was made to the victim's family - under the order of that assembly if need be, but often it wasn't; the killer frequently announced the circumstances and negotiated a settlement directly.

Equipped with the huge advantage of economic and other knowledge, we will no doubt do a lot better than these
simple farmers, when we get to set up a zero-government society - but the Icelandic example will be closely studied and used. If this period of Europe's history was the "Dark Age", Iceland forms in it a bright crystal of light.

There's one other sign of interest in liberty during this period: in Anglo-Saxon England, at least, it was normal practice to settle legal disputes, including what would now be called "crimes", in courts composed of village elders that is, there was no "king's law" or "kings' court" run by his agents to exact fines and other punishments. These local assemblies provided a model for the later jury system that provided some measure of protection against government rule, and which was imported to America. In Anglo-Saxon England there were certainly governments, but evidently not as all-intrusive and powerful as some.

Life changed radically in England after 1066, when the Duke of Normandy crossed the Channel and conquered the country - for the last time. Defense was provided by a government under King Harold, and it failed; government or collectivized defense does have the weakness that if the single commander surrenders or is (like Harold) killed, the whole war is lost. William, the winner, rapidly subdued the country, dividing it among his friends so as to create a landowning aristocracy of which some still survives. That aristocracy was subservient to the king, but he depended upon it to execute his will. One of the first acts of the new government was to document what the population owned, so as to tax it; the confiscation was made possible by a census known since as the Domesday Book. Its etymology
is interesting; "dom" was old English for "reckoning" and the origin of the present-day "doom"; so these Norman thieves used a vernacular word presumably to strike fear into the population - not Latin or French. Government scare tactics were as obvious a millennium ago as they are today, with its ominous publicity surrounding April $15^{\text {th }}$ as the day a tax return is allegedly due.

William's successor a century and a half later was King John, and with him our story of freedom and domination records another key event: he formed an ambition to take part in a "Crusade" to capture Jerusalem from Muslim conquerors, in an alliance with other European armies. We have noted the importance of religion to governance, and here was a highly symbolic city in a rival's hands, so in the name of the Prince of Peace all these princes set out on a mission of mass murder. However, John's noble friends, who would actually furnish the killers by doing without some of their farm laborers for the duration, made the granting of his demand conditional upon his settling a grievance; namely that he stopped being an autocrat. His practice had been to enact a decree and then enforce it; he was lawmaker, judge, jury and executioner all rolled in to one and the aristocrats didn't like it. They wanted a bigger share of the cake of power, and at Runnymede in 1215, they got it. John's Crusade army was provided, but only at the price of his signature on the Great Charter.

That Magna Carta was the first document by which a king surrendered some of his power to others in his kingdom. From then on, his edicts could be over-ruled, because the

Charter provided that if a nobleman was accused of breaking one, he would be judged by a group of his fellow nobles, called "peers", who could first determine if the law was acceptable and then judge whether the defendant had truly broken it. "Peer" is still used, and those groups were the first juries. Thus, the normal Anglo-Saxon practice of resolving disputes by in an assembly of neighbors was in part (though only for the aristocrats) restored. Our jury system is a direct descendant. It is of course no substitute at all for a free society; but it can form a useful brake on government power.

As the Middle Ages drew to an end there were other encouraging signs that Europeans were starting to question authority, and in England one was the 1381 "Peasants' Revolt." It failed, but the fact that it took place at all clearly indicates that government was no longer seen as infallible or inevitable.

Richard II was at war with France and to raise extra funds to fight it he (or rather his regent, since he was only 14) levied a new Poll Tax, on top of others. This enraged the peasants of Kent, South East of London, and thousands of them marched on London in protest. The King had their leader (Wat Tyler) killed and made the crowd promises he promptly broke when they dispersed (nicely exemplifying the thieving, murderous and mendacious nature of government) but the event had taken place; the peasants had revolted. Ordinary people could no longer be taken for granted. It's interesting that it was a poll tax that formed the straw to break the back; that's one to be paid as a flat
rate per person, not related to any property he might own. Six hundred years later Margaret Thatcher too imposed a poll tax and the most vigorous protesters, some of whom I met to discuss it, were the most socialist. I dare say that is the only time socialists have ever protested a tax, and the objectionable part to them was not that it was theft, but that it was an even theft, equally applied. That is actually a dangerous idea for governments, because they get away with their confiscations by pretending "the rich will pay" but a poll tax places the cost of government equally on all, leading to the obvious question about what exactly government is for. So it was in 1381; King Richard backed down on his tax eventually, and so did Dame Thatcher. She, at least, may have intended to raise that question.

In the very same period, the authority of religion was also being questioned, and as we've seen government and religion depend on each other. In England, the questions were put by a theologian, John Wycliffe, and they were about the authority of the Pope. Wycliffe studied for himself, and concluded that doctrine had been perverted by the priesthood, and that the only authority Christians needed was in the Bible, directly. This became a central theme of the Reformation a century and a half later, but in 1375 it was radical; if people could bypass the hierarchy, the state-church link might break.

He produced the "Wycliffe Bible", the first translation ever into English, and openly challenged a key doctrine of the Roman Church - that at Communion, the bread was literally changed into the body of Christ (and therefore,
that access to God came only through the administering priest.) Wycliffe asserted that instead, the bread merely represented that body and that priests had no such monopoly. It was a very small step towards liberty, but it was a first one and Wycliffe deserves credit for taking it. Unlike later questioners he was not executed for his impertinence, but in 1415 his bones were exhumed and burned, on the Pope's declaration that he was a heretic.

Jan Hus, in Prague, was not so lucky; the Pope had him too burned in the same year, but while he was still alive. Hus had followed Wycliffe's teaching and promoted it in Bohemia; he was a Roman Catholic priest and scholar. His rigged trial and execution proved nicely that the Church was about authority, not compassion. His were not the last.

The title of this Chapter ends in a question mark. Was Europe really "asleep", for the thousand years following Rome's collapse? The period is known as the Dark Ages or the Middle Ages and because so little is known about it compared to later periods and even to the earlier cultures of Rome and Greece, it has seemed dark and mysterious. Certainly, the progress of science and discovery was small compared to both those other ages. But no, a great deal was going on, as we've seen, in Europe as well as in the rest of the world. Some of the key foundations of a later, more free society, were discovered in this period and among those are juries, and the proof that society can flourish without government, and the breathtaking idea that religion is not infallible. The era is under-rated.

## Chapter 6 <br> Curiosity Reborn

Humans are curious; we want answers. We ask "Why?" Demanding reasons is what we do; it is the primary way we differ from other animals.

We members of homo sapiens aren't always too wise, but to a fair degree every one of us can reason. As far as we can tell, that ability is unique - and it doesn't seem to vary much with time; I am astounded by the thought that 2,500 years ago Pythagoras could so elegantly prove that for a right-triangle, $\mathrm{A}^{2}+\mathrm{B}^{2}=\mathrm{C}^{2}$. You try it, today! It's also astonishing that Archimedes could deduce some of the properties of $\boldsymbol{\pi}$, the ratio of circumference to diameter for any circle. How would you show that its value is close to $22 / 7$ ? He did! He also figured it has no precise value.

Reason is always based on some premise (whether sound or not) with the result that no line of reasoning is ever any better than its premises. The big problem is that from the earliest time that man could write, his self-ownership right had already been violated by government for the previous several generations. Accordingly, it was quite natural that he should always take the existence of government as a one of his premises - a "given", like darkness. So it's not all that surprising that this fundamental premise was never questioned, in all the 9,000 years of our story so far - or
not as far as I'm aware. The exciting thing about the $14^{\text {th }}$ Century is that, as we saw in Chapter 5, some such premises were at long last being lined up for scrutiny. But there was a very long time to go. Our story continues.

With the few exceptions noted, the 1,000-year Middle Age had almost abandoned reason. Scholars tried to understand what had allegedly been revealed, instead of probing for new truths. The Greek mode of thought - questioning authority - had almost disappeared. Happily that period ended, around 1400; the Greek style was rediscovered. Mankind hasn't looked back since.

It's not too clear how it came about. The Greek tradition had survived to a degree among Muslim scholars, and in the Eastern Roman Empire, but in 1400 Islam had run out of intellectual steam. Muslims had been expelled from Spain but finally conquered Turkey, marking the start of the Ottoman Empire and ending the Roman one, sending its scholars West as refugees. So, from Islam and the Christian East, refugees reached Italy, where scholars with new ideas were less unwelcome than elsewhere in Europe because government was more fragmented there; it took the form of city-states rather than of a central monolith.

That's one possible explanation; bright minds migrated, just as they left Germany in the 1930s and brought huge benefit to American culture and engineering.

Another reason for the resurgence of secular thought was that Wycliffe and Hus had shown, as we saw in the last

Chapter, that the previously unquestioned source of all knowledge - the Roman Church - might not be infallible. Once that horse had left the stable, it was off and running!

Other factors included the remarkable scholastic work of Thomas Aquinas in the mid-1200s. He was a Dominican friar but had encountered the works of the Greek philosopher Aristotle in a fresh translation, and made it his main life's work to reconcile Aristotle's reason-based philosophy with revelation-based Christianity. His efforts were denounced in some quarters of the Church but he evidently had friends in Rome because they got him canonized in 1324. Thomas opened the door to rationality.

From whatever origins, by 1400 the Renaissance had begun, and it centered on those Italian city states like Venice and Florence and rapidly revolutionized art, science and engineering and initiated the most exciting 600 years in human history.

I find it thrilling, that knowledge that had been hidden for all eternity has been exposed and used to benefit our race at such an unprecedented rate since 1400 . One way to express the overall result is in the chart on the next page.

It shows that whereas the world population took about 49,400 years (counting from Wells' estimate of when our ancestors migrated from Africa) to reach about 0.3 billion, in the 600 years since the Renaissance began, 5.7 billion were added to bring us to the present 6 billion estimated

total. That is an awesome acceleration!

Population grows as a result of many factors, but two key ones are:

- couples choose to have more children
- longevity increases

Increases in longevity result obviously from better medical science, and that was one of the many sciences that were boosted by the newly-recovered scientific method of thought. The replication rate (choice of family size) is a function of infant mortality and of wealth; in dirt-poor countries today, even, it remains high because parents want old-age insurance and their children provide
it. As living standards rise, that need diminishes and people have fewer children; and living standards derive from science and its application. So from both directions, Renaissance thinking directly and indirectly gave life to billions of human beings; its importance is immense.

Not only are there that many more of us, we also enjoy an almost immeasurably improved quality or standard of life as a result of the same change - or so, at least, for a large and fast-growing minority of the world's people. Compared to 600 years ago, it's hard to think of any aspect of life that has not dramatically improved - health, food and drink, transportation, entertainment, housing, you name it. These all derive from human curiosity, the drive to find out why things work and use what is found to make life better; science and enterprise. Yet for thousands of years prior to 1400 , such improvements were modest.

Even that is not the half of it; for freedom to think and research and freedom to offer the results for sale both depend on an environment in which government plays a small role at most; and for all these 600 years government has played as big a role as it could. All the benefit we've seen has come about in spite of government interference; just think what could have happened had there been none!

Government interference in freedom of thought and enterprise comes from two directions: it tries to control thought, by monopolizing education or religion, and it tries to regulate enterprise by skewing the market so as to favor its friends, ie those well-connected politically. Its
purpose always is to acquire and keep power.
600 years ago most of the thought-control was done through religion (hence the importance of questioning its pretended infallibility) while today it's done mostly through education - it controls what is taught, in schools and colleges. So over that period, the mix has changed. There has been less change regarding control of business; close relationships between government and large firms was the norm then and is the norm now - and in all cases the purpose is to corral money into the hands of those who favor government, while hobbling small, nimble firms that would puncture existing cartels and monopolies. Progress was made most rapidly during times when that cozy relationship was broken when new technologies opened up new business opportunities.

Let's now take a closer look at how the process worked in the first part of this period: 1400 to 1700. Progress in those years was principally preparatory - the research. Development based upon the research came mainly in the second part, bringing the most visible benefits.

The year 1400 itself sounded a promising note by seeing the invention of the world's first piano - the spinet - and in 1420 oil paints were first produced, so raising the lifespan of innumerable works of art. A year later came a significant aid to building: a gear-based hoisting apparatus. Mundane in itself - but it came in the nick of time to enable Brunelleschi to build the amazing Duomo

in Florence, without the use of internal scaffolds. The dome was completed 1,000 years after that on Constantinople's Hagia Sophia, and 1,300 after the remarkable Pantheon in Rome - but that's what was happening in the Renaissance, a return to ancient roots. And this dome had a point to it, being non-hemispheric.

In 1440 A German Cardinal, Nicolas de Cusa, invented glasses to help the short-sighted, and in the same year came the most important invention of not just the $15^{\text {th }}$ Century but possibly of all time: Gutenberg's mechanized, movable, metal-type printing press in Mainz. Block type had been invented, as we saw in Chapter 3, in China much earlier - but Gutenberg was the first to enable the printing of books inexpensively in quantity. The implications were huge, especially during the century that followed; for the whole Reformation depended on anybody who wanted to read it getting his hands on his own copy of the Bible. Not until the Net was invented in the late $20^{\text {th }}$ Century was there a development of comparable significance for the widespread availability of knowledge. From 1440 on, any priest or scholar who wanted to act as an "expert" with a monopoly lock on his particular field of specialty, had his work cut out. It's interesting though that Gutenberg never
made a fortune from his work; his first published book was the Bible, but the market demand for it was disappointing. Reason: Luther had not been born. Why own your own, when the trustworthy priest would read and interpret everything you needed to know?

The later 1400s saw even more exciting discoveries, for this was the great era when world exploration got in gear with history-changing journeys by Da Gama, Magellan and Columbus.

They had precedents. From the free society in Iceland, explorers had sailed as far South as the Mediterranean and in 1003, Leif Ericsson settled briefly in Canada, 500 years before Columbus and Cabot "discovered America."

Also, the Venetian trading family Polo was exploring in the $13^{\text {th }}$ Century, when Marco took his famous business trip to China along the Silk Road, and for sure that opened European eyes to the fact that an ancient and great civilization existed outside their familiar area. His journey also has the great merit of being motivated by a search for profits as well as curiosity; he didn't go to claim to new possessions for his monarch, but to expand friendly relations with existing trade partners. However, the Silk Road was well known and ancient and China was known to exist even though Europeans had never seen it; his was not therefore a voyage of pure discovery, and was made overland and not by sea. After 1492, that changed.

Christopher Columbus came from another Italian city-
state, Genoa; but his life-defining commission came from Isabella, Queen of Spain. Her purpose was to find a faster route to India and Indonesia so as to gain a trading advantage for Spanish merchants bringing spices to Europe, and the mistaken premise was that the size of the Earth was much smaller than it is. When Columbus got to the Bahamas, he thought he was near India; hence the name "West Indies." He disagreed with a calculation of the size of the planet first made 1,600 years earlier by Eratosthenes and risked his life on his opinion - but he was wrong, and the Greek was right. One more example of the tragedy of the Dark Age. We might also speculate that if he'd used Eratosthenes' calculation the trip would not have been judged feasible and he'd never have got his funding from Isabella... another historical "What if...?" But never mind the miscalculation; he had just introduced a new epoch.

Key fact about Columbus' expedition: he drove it. It was he who saw the commercial possibilities, he who risked his life on the venture, he who solicited investment from first the King of Portugal, then the government of Venice, then King Henry VII of England, and only then from Isabella of Spain - who provided half the needed funds after Columbus had himself obtained the other half from private Italian investors, but who then double-crossed him when he returned triumphant; such are the risks of dealing with a mega-thief. So while the Spanish government took credit for the venture in later years, the initiative came mainly from traders in the market.

As Columbus opened up America after having aimed to reach India by sailing West, three years later Vasco da Gama left Portugal to reach the Indies by sailing East round the Cape of Good Hope; and he succeeded. Then in the new Century the Spanish government commissioned Magellan to try again to reach the source of spices by the Westward route, and this time succeeded; he had to sail all the way South to the tip of South America and then back across the Pacific - eventually, his crew (he himself was killed while in the Philippines) actually circumnavigated the globe for the first time, in a truly epic journey.

Before leaving the 1400s we should note that this early phase of the Renaissance was on the verge of changing art. Pictures from the Middle Ages are typically "flat", like this one of Marco Polo as he leaves Constantinople for China; its perspective is limited. On the right is shown an

exercise in perspective by Paulo Uccello made in about 1450; there was a conscious attempt to return in art to the realism of the Greeks and Romans, to portray objects and people in the way they are actually seen by the eye.

The 1500 s continued and amplified that trend with such an abundance of brilliant works of art as had not been made since the fall of Rome; too many even to list here. "David"

by Michelangelo was completed in Florence in 1504, for example; and in Nürnberg Albrecht Dürer published his analysis of the proportions of the human body, and in 1508 produced this magnificent study of praying hands. Humans were exploring again, discovering how things worked, what things were like - from the form of animals to the structure of the solar system. No longer constrained by the myth that all useful knowledge had already been
revealed, they were finding out for themselves by observation and reason. Authority was being questioned, in one of the most exhilarating periods in human history!

Two intellectual giants stand out in any account of the $16^{\text {th }}$ Century: da Vinci and Copernicus. Leonardo da Vinci was the quintessential "Renaissance Man", a master of all he did, whether it was to draw, paint, unravel the organs and muscles of the body or design weapons or machines to fly. His "Last Supper" was made in 1498 and the "Mona Lisa" in 1507; in 1502 he designed a bridge to span the Bosporus. Unused for 500 years, in 2006 the plan was picked up and is now the basis for just such a bridge in Istanbul. His ideas for a helicopter never flew, but his design for hang gliding works well enough. His mind, it may be said, sometimes ran a long way ahead of the properties of matter; metals and fabrics in the 1500s were not light and strong enough to implement his designs.

Nicolaus Copernicus was born in Poland - another exception to the general rule that Renaissance geniuses lived in Italian city-states. He remained a priest in the Roman Church but his main interest was astronomy and in 1514 he published some notes on heliocentricity which made the rounds, and in 1536 the Archbishop of Capua wrote politely to learn more:

[^0]moment to send me your writings..."
It wasn't obvious whether the earth or the sun was mobile, going round the other - and in ancient Greece both theories were current. The problem, which Copernicus dimly foresaw, was that Holy Writ favored the latter, while his own reasoning had led him to the former; neither he nor the Archbishop anticipated the firestorm that would break out a century later when it was realized that indeed, this scientific reasoning meant that Holy Writ was wrong, and so that the authority of the Church - one of the two pillars supporting the age-old denial of human liberty was being undermined. But Copernicus could see something of the problem, and when in 1543 he published his "On the Revolutions of the Heavenly Spheres" he covered himself by dedicating it to Pope Paul III. Clearly, he didn't set out to challenge Authority; but was honest enough to follow where reason led him.

In 1517 began the most formidable attack in history on the religious half of the government duopoly: Martin Luther, a German monk, nailed to his church door the " 95 Theses" as a challenge to Roman orthodoxy. He did not set out to remove religion - far from that; he wanted to reform it, to bring it closer to its Christian roots. The Theses were short propositions, each taking aim at some ordinary practice of the Church. For example there is \#76, "We say... that the papal pardons are not able to remove the very least of venial sins, so far as its guilt is concerned." The practice was for the Pope and his agents to grand pardons for sins in exchange for contributions of money. Notice the layers
of deception here: first that there existed something called "sin" about which people should worry; second that they needed "pardons", third that pardons could be delivered by the Pope's representatives on behalf of a "God" whose very existence is incapable of proof, and fourth that money could in effect purchase these pardons. The Roman Church had become a mixture of massive myth and financial fraud, and Luther took aim at the latter, so as to puncture its hypocrisy.

He bravely stood alone when cross-examined in Worms in 1521, and was excommunicated. He was lucky not to have been burned. He set about publishing a German Bible and having it printed; now came the buying motivation which Gutenberg had lacked, and Gutenberg's press made the religious revolution possible. It spread like fire. Other preachers like John Calvin in Switzerland led comparable "Reformations" with different doctrinal emphases, but the outcome was to terminate the authority of the Pope and put matters of belief back in individual hands. It was not a removal of mythology - but it was a start. The old duopoly of the Middle Ages had come apart at the seams.

The Reformation affected most of Northern Europe (in which Germany was in the center of a union of principalities known as the Holy Roman Empire, ruled as such) and spread to England by happenstance - King Henry VIII cared little for religion but a great deal about securing his dynasty, and had well-known wife problems. Pope Clement VII would not help, so Protestant clerics manipulated matters so that he would head his own

Church and sever the authority of the Roman Pope. Thus the government-approved religion in England was tied to the monarchy, and in the century that followed monarchs were not all Protestants; much blood was to flow before it was all settled. It was, overall, a healthy development; the vital habit of questioning authority had taken root. What it did not even begin to do was to apply that habit to the main part of the duopoly - government itself.

Governments continued to war with each other so as to plunder the work of productive people in territories taken; the Ottomans attacked Northwards into Hungary but were defeated at Vienna in 1529; the English under Elizabeth I ended Spanish naval supremacy in 1588 and so began 300 years of Britannia, ruling the waves; and Spanish expeditions looted treasure from South America by means of a nasty joint venture between private raiders and the Spanish government. Laws obliged all treasure ships to unload in Spanish ports, and taxed the booty $20 \%$ - but otherwise it was kept by the raiders. The effect, over two centuries, was to cause inflation; for any increase in money supply, relative to goods and services produced, always raises prices. This may be the only inflation in history caused by an abnormal increase in the true supply of gold and silver. Normally, governments did it by adding tin to the silver or by clipping the coinage.

The Church continued to take hits from astronomers. Tycho Brahe, the Dane with an observatory in Prague, held to geocentricity but was a meticulous observer and was the first to spot a supernova; Giordano Bruno of

Naples joined Copernicus as a heliocentrist and developed the view that the universe is infinite, with an infinite number of solar systems - a notion sure to outrage the Church, adding to its troubles with the Reformers. It responded not with reasoned argument (people with power seldom do) but by burning him alive in Rome in 1600.

The $17^{\text {th }}$ Century continued the excitement of discovery and the rational exploration of everything hitherto taken for granted - even, very nearly, government itself. In 1649 the English King, Charles $1^{\text {st }}$, was beheaded. This was not a coup d'etat by aspiring rivals, but a deliberate act of regicide by the Parliament which was supposed to exist at his pleasure; and so was quite extraordinary. In fact it was not a rejection of government itself, merely a replacement of one form of government (monarchy) by another (elected representatives) but it was for sure a rejection of the arrogant claim that Kings derived authority from God - and as such, it sent shivers down every Royal spine in Europe. It was a step towards freedom, no more - and it used lethal violence, for which there is no need at all. The beheading anticipated a much bloodier revolution in France a century and a half later.

The Century was immensely important for science. In 1609 Galileo perfected a Dutch design for a refracting telescope, so enabling the precision of astronomical observations to expand by an order of magnitude; in 1668 Newton made one with reflecting mirrors, adding more yet. Each of them is a towering figure in the history of the uncovering of knowledge.

Galileo Galilei of Florence concluded with Copernicus that the earth does revolve around the sun, and so ran the same deadly risk as faced his student Bruno in 1600. He was a friend of Pope Urban VIII, and that saved his life when in 1632 he published his "Dialogue Concerning the Two Chief World Systems." He was however put under house arrest and obliged to recant his opinion, thought there is no doubt that he held it. The story precisely illustrates the sharp clash between science and religion, reason and revelation, curiosity and authority.

Isaac Newton was pre-eminent in physics, mathematics and optics. His college (Trinity, Cambridge) subsidized him as a student in 1661, and by 1665 he had developed a system of calculus. Leibnitz, in Hanover, worked in parallel and there was a controversy about who finished first; the result in any case provided a new foundation for math that has lasted ever since and a great deal of our modern civilization was made possible. Newton's relentless logic produced his famous Laws of Motion and of Gravity, which resolved questions that had been left open for two thousand years and finally nailed down the argument about planetary movements. His awesome finding was that bodies attract one another, on the surface of the Earth just as between Earth, moon and every other heavenly body, with a force proportional to the product of their masses and inversely to the square of the distance separating their centers. Only Einstein could challenge it, 250 years later, and his work was more of a refinement than a replacement for Newtonian Physics.

Then for good measure Newton demonstrated that daylight is composed of a mixture of light of different colors; another breakthrough that changed everything.

Art and music flourished wonderfully in the 1600s; this was the century of Bach, Handel, Pachalbel and Vivaldi and of Bernini, Rubens, Velasquez and Vermeer. It also saw a massive explosion of literature and drama (thanks again to the printing press) - from Defoe, Milton, Molière, Pepys and Shakespeare. An unprecedented era!

Meantime the puzzle of what "stuff" is made of was being cracked, by several chemists including Boyle, Priestley and Dalton in England, Scheele in Sweden and Lavoisier in France, who between them uncovered the nature of air and oxygen. Again, this was ground-breaking work which laid a foundation for all that has followed. I think it is immensely exciting, and notice that not one of these lifechanging discoveries owed anything to government. They took place because curiosity re-awoke, and individuals used reason and creativity in place of superstition.

Among the abundance of writers and thinkers was John Locke, born a Protestant in England in 1632. He became perhaps the first philosopher since Aristotle to consider what government is for, and how it relates to individual freedom; in 1689 he published his "Two Treatises of Government" which later influenced the writers of the Declaration of Independence. His theory was that men rightly own their own lives and property but need a
government to protect them - rather as discussed here on Page 11 - and that the right solution is to have some form of contract between the members of a society and their government. That apparent need is of course false, and the solution impossible to implement (who would sign such a contract, and how could they be held to its terms?) but his idea was a vast improvement on what prevailed at the time, with its nonsense about the "divine right of kings", and Locke was in part the philosophical inspiration for the English Classical Liberal movement that brought so much benefit in the $19^{\text {th }}$ Century - including the peaceful freeing of slaves and the liberating of international trade.

So Locke didn't get it all right - but he did ask some of the right questions and as this book has shown clearly, I hope, that's prerequisite for finding answers.

While all this superb research was in progress, all that governments could do was fight each other for control over the fruits of their citizens' labor. From 1618 to 1648 in central Europe there was the Thirty Year War, a devastating and complex conflict centered around the Holy Roman Empire and motivated in part by religion Roman vs Protestant - but in part by acquisitive governments like Sweden's, then a powerful force. The religious issue in England was stirred up by Guy Fawkes in 1605, who tried to bomb Parliament with the aim of restoring a Catholic King; but by mid-century the struggle was pretty well over, with Protestants left standing. Ottomans repeatedly attacked Eastern Europe from the South, and were repeatedly repulsed. In France, Louis

XIV outlawed Protestantism in 1685, as a result of which 500,000 Huguenots emigrated - including the ancestors of my paternal grandmother. And in 1620, a shipload of refugees from the approved religion in England landed in Plymouth on the far side of the Atlantic, to begin another phase of human history - but by Century's end, their grandchildrens' government in the town of Salem, MA, was busy executing harmless women said to be witches.

Progress happened despite government, not because of it.

## Chapter 7 The Pink Bits

The poignant movie "Hope and Glory" portrays life in WW-II London as seen by a ten-year-old boy; and one of its classic scenes has his schoolteacher displaying a world map and presenting a form of geopolitics with the words "This war is to keep the pink bits, pink."

In this chapter we'll review how the battle between freedom and government progressed during the $18^{\mathrm{th}}$ and $19^{\text {th }}$ Centuries, and to a large degree it's the story of the British Empire, which on maps was usually painted that color. A Europe dominated by Germany was thought dangerous to its continuing prosperity, hence its governments' declarations of war in 1914 and 1939.

The race to explore the world and establish colonies was on, by the year 1700. Portugese mariners had had good success, and Spain had gained an early lead, in South America especially; with Balboa having as early as 1513 crossed Panama (also called "Darien") and caught sight of the Pacific Ocean; an awesome moment in which mankind for the first time ever viewed that ocean after having crossed another from the East. But in 1588 Britain had ended Spanish naval supremacy and by 1700 had taken the lead in exploration, trade and colonization.

In Chapter 6 we noted that the three centuries from 1400 to 1700 were ones of astonishing renewal and research, which laid the foundations of all progress since; now in the two hundred years from $\mathbf{1 7 0 0}$ to $\mathbf{1 9 0 0}$ we'll see some of the fruits of that, in what we might call development or engineering. Pure science, which had begun to grasp what gases are, fed in to thermodynamics and the steam engine, which powered the Industrial Revolution and the dramatic rise it brought to living standards. Pure chemistry led in to huge leaps in medication, pure astronomy into precise navigation, and so on. Pure science did not end, of course - on the contrary, it accelerated; and the unprecedented wealth of the $20^{\text {th }}$ Century resulted.

A short digression, first: so far in many parts of Denial of Liberty I've written about material progress as if it were the same as personal freedom. The two are of course quite separate. It might be possible for a society to be well advanced technically but with no liberty at all - for a while, at least. The reason the two concepts are closely linked in my view is that ingenious improvements that save labor, or that yield a medical breakthrough, or anything in between, derive from a drive to discover new ideas; and that drive is always suppressed by authority but liberated when people are free to make their own way. Authority says "This is what to do; do it" while freedom says "If you find a better way, choose it and enjoy the results." It doesn't mean a government-infested society cannot make progress; just that a free one would make much faster progress; and we've seen how even a little freedom led to a lot of progress. Now let's reset to 1700 .

Governments during this Century continued as usual, manoeuvring and battling each other for control of more territory and the productive wealth which came with it; among the winners were the governments of Russia (led by Peter the Great), Prussia and France (in Europe) and among the losers were those of Sweden, Spain and some of the Northern principalities in the Holy Roman Empire (Germany.) France and Britain were rivals overseas, notably in their North American colonies, and the latter prevailed, thanks to naval supremacy and French financial failure. Due to some further outstanding maritime venturing by James Cook and others, the British gained huge colonies in India, Australia and New Zealand, as well as a presence in Hawaii. The result became the largest empire in history, on which the sun didn't set.

France was in the 1700s a study in contrast. Its governments (Louis XIV, XV and XVI) sought to enlarge the empire and built some of the most extravagant palaces ever seen, but with little regard for money or for those at the base of his society who produced it. The widening economic gulf between peasant and aristocrat stimulated two results: some hard thinking, and some deep outrage.

The hard thinking was all done outside Louis' government - by people like Voltaire and Rousseau who proposed that all men are equal and have the right to choose their own government (so near, and yet so far!) and that no King has any right to rule. Voltaire succeeded in understanding the hollow nature of religion, but neither grasped the equally
vacuous nature of government; they merely said everyone has the right to choose who will govern him under what Rousseau called a "social contract." He didn't specify who was to sign such a contract, nor how it was to be enforced; and it was marred from the get-go by his absurd contradiction that private property was a hindrance to prosperity. Even so, though wrong answers were emerging, some of the right questions were being asked.

Inside government, that was far from the case. After Louis XIV died in 1715 a regent (the Duc d'Orleans) ruled the country and accepted a proposal by John Law, a Scottish banker, to found a central bank and print money. Seemed a good idea at the time, and it's surprisingly resilient; Obama is using the same idea today. It didn't work. Sixty years later Louis XVI appointed Necker, another banker, Minister of Finance - whose key achievement was to publish Compte Rendu to assert that the Royal finances were in good shape, when he knew full well they were on the brink of ruin. These two tricks - fiat money and false reporting - are central to government economic control.

Finally in 1788 the King had to admit that he was unable to balance his books and called the "Estates General" to sort out the mess, thereby relinquishing absolute rule. That led in turn to the Revolution and to the loss of his head. The fundamental problem, which nobody admitted, was that he and his high-living aristocratic friends had stolen the whole agricultural surplus of those who actually produced the country's wealth, as in our Chapter 1; there was no more to take, they had bled the country white.

Even the rebels who took power did no better, arguably worse; from 1790 to "solve" the government bankruptcy they issued "Assignats" or promissory notes that were used as currency, along the lines of American Continentals a dozen years earlier and equally worthless. 400 million livres were issued in 1790 along with a government promise that such a stimulus package would be "ample"; six
 years later the total in circulation was 40,000 livres or 100 times as many. Thus, the republican government that had swept to power on the slogan of "liberty, equality and brotherly love" had in that short time devalued the currency by $99 \%$; so destroying all members of France's small middle class who had been so foolish as to trust it, and setting a record of malfeasance that stood unchallenged until the democratic government of Germany wiped out its Reichsmark in 1923.

There being no domestic answers left (except the obvious one that government go out of business and take all its laws with it - wholly unacceptable to the only people able to choose it) the French government then set about stealing the agricultural surplus of other countries, and thanks to the brilliant military talents of the young Corsican Napoleon Bonaparte, this did the trick. For twenty years, the rest of Europe was plundered and even Britain trembled the other side of its protective Channel.

The body count of his murderous expeditions is about four million. That was the price of rescuing the French government from two centuries of arrogant financial folly.
$18^{\text {th }}$ Century economic thought was not all hokum. In 1776 a Scottish professor of moral philosophy published the result of his Inquiry into the Nature and Causes of the Wealth of Nations - he had been curious about why some societies prosper more than others, even though their people appear to work equally hard. That was a really good question to ask!

Adam Smith's answer had to do with freedom. He showed that the more free people are to pursue their own profit, the better off is the society as a whole. We today might well say "Duh!" as if that is obvious - and indeed it is but in 1776 it was not obvious at all, and Smith's turned out to be the most profound revolution of that year, still very much to be completed. Two key findings stand out from Wealth of Nations: (1) "Mercantilism" is the enemy of prosperity and (2) in his timeless words,

> It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages.

So, benevolence - however desirable - does not produce prosperity. Self interest, on its own, is quite enough. This was dramatic; it cut clean across all previous ideas of morality and particularly the prevailing Christian idea of
self-sacrifice as being a prime virtue.
"Mercantilism" is the name given to the monopoly status granted by governments to certain large trading companies. Today those monopolies tend to be partial rather than absolute; recent US examples include Halliburton. In the 1700s the most prominent, and probably the one Smith had most in mind, was the British East India Company. It had been chartered in 1600 and in 1708 trading with China and India was combined in the "Honorable East India Company" or HEIC, in another splendid attempt to tell a Big Lie; any merchant who uses government force to exclude rivals can rightly be called anything but honorable. HEIC traded mainly in cotton, silk, dyes, tea and opium and after making contracts with local rulers incredibly became, in 1757, the ruler of India! What Smith noticed about mercantilism was that by excluding competition, the company could too readily cheat both customers and suppliers as well as rivals, with resulting massive inefficiencies. Such exclusion can take place (over a significant period) only with the aid of government force, and Smith was the first to point it out. Governments have yet to pay any attention.

So Smith's first key proposition said that government was a hindrance to wealth, and his second said that religion was a hindrance to wealth. Conventional thought was turned on its head. Smith didn't get all his answers right, but he was pre-eminent in his Century in asking the right questions - and in founding a new science: Economics.

The British came to pre-eminence during the $18^{\text {th }}$ Century by the happy coincidence of several factors; government in London was not so foolish as to fight endless land wars in competition with neighbors; it fended off the French but focused otherwise on using its island status to go sailing, complete exploration of the habitable world, and found colonies. India, as we've seen, was a lucky break; a huge population was added to the Empire just as a result of trading. But North America continued to be settled, South Africa became a way-point for ships en route to India, and Australia, New Zealand and numerous islands in the South Pacific and Caribbean were added for good measure. The problem for the settlers was, where to get labor; there was so much land available that, naturally, all who settled hung out a "Help Wanted" sign.

That was partly solved by having the British "Justice System" sentence felons to "transportation" - to America, from 1720, and to Australia; Aussies often joke about their less than reputable ancestry. Any punitive system violates true justice (which is concerned only with restitution, clearly unfeasible if the perp lives across an ocean or two) so this was a form of slavery. Full-blown slavery was the other part of the "solution" for the sugar plantations in the Caribbean colonies and in America. The appalling costs of this wholesale kidnapping and enslavement are still being paid; is it of course the antithesis of liberty and can exist only if government enforces the imprisonment; otherwise any slave desiring freedom can walk away and expect not to be recaptured. A further solution was indentured labor (the laborer contracts to work off the cost of his passage)
and was, alone of the three, consistent with liberty.
The colonies were, in this Century and the next, profitable to all involved - except to the native Americans, and during the 1700s their persecution was not intense. The settlers got the chance to work for themselves and had a ready market back home for the surplus they produced. The shippers had a healthy demand. Those who stayed home had a new supply of raw materials and a ready market for manufactured products. In this $18^{\text {th }}$ Century, Britain, with the largest set of colonies, prospered as never before and put into operation some of the new scientific discoveries lying waiting to be used.

British population grew by nearly $50 \%$ during the 1700 s, and the move from field to factory had begun by its end. It was fueled by coal, of which the island had an abundance. Workshops started small, and while cramped, the working conditions were warmer and preferable to farm labor. Coal
 warmed also three or four million homes, so coal mining was at the base of industry and it was mines for which the steam engine was developed; perhaps the most significant invention of the period, Newcomen's engine of 1712 drove steam into a cylinder which was squirted with cold water and so condensed, causing
the down-stroke to be driven by pressure of the atmosphere. Both this and then Watt's great improvement of 1775 , which added a separate condenser chamber and enabled power to be drawn from both strokes of the cylinder, drove pumps that expelled the water that seeped into the deep workings and so made mining labor far safer and more productive. It should be remembered that (apart from the mercantilism that marred international trade, as above) most of this burgeoning industry was private; investors and other risk-takers
 went out on a limb and sought profit. Usually, they found some. They laid the foundation of the Industrial Revolution, and government did nothing to help - nor, fortunately, not too much at this stage to hinder.

Inventions came thick and fast. In 1733 John Kay revolutionized weaving with his flying shuttle; loom operators needed no longer to reach forward each cycle to pass thread from side to side - it was mechanically thrown, like a bullet, and had a huge effect on productivity that gave Britain a big lead in textiles. A way to make better steel (in crucibles) was found in 1740 by Ben Huntsman, in 1764 James Hargreaves produced a spinning jenny that

enabled yarn to be spun with eight times greater efficiency than previously. In 1761 John Harrison succeeded after many attempts in producing a chronometer good enough to provide accurate measurement of longitude; clocks were common enough, but none was engineered to stand the swaying and buffeting of an ocean voyage accurately. This breakthrough was enormously important; it made all ships, carrying the goods of international trade, far safer by being able to measure, relative to Greenwich Time, just where they were on the Earth's surface.

That small selection of $18^{\text {th }}$ Century inventions illustrates how well Britain was placed. Its explorers had found vast new territories, its settlers were populating them ready for two-way trade, raw materials like cotton and hemp were readily available from them, and at home the fuel could be mined faster and more safely while machines were being designed to make the best use of labor; there was synergy all round. One more needs mention: canals. Hardly a new idea, but in $18^{\text {th }}$ Century France and Britain they were built long and fast and served as the way to move raw materials, fuel and finished goods from one end of the country to another, over viaducts and through tunnels. One example was that of pottery; Josiah Wedgewood by 1763 was well established in Stoke on Trent as a high-volume, high-quality maker of pottery and he needed clay to be brought in and fragile china to be taken out for delivery. Canals served both needs well, and he was a prime backer and user. One of history's twists is that his daughter married Robert Darwin of Shrewsbury in the next county, and gave birth to Charles Darwin, who influenced
humanity even more than her father.
Canal building was all done by private investors (though government did insist on granting its permission) for profit, and labor was hired where it could be found, including Ireland. The muscular fellows who did what backhoes and dump trucks would do today became known as "navvies", short for "navigators" because ultimately this unprecedented network of super-highways carried vehicles that floated.

Prosperity is fine but health is vital, and the $18^{\text {th }}$ Century saw some improvements in medicine. Notable is that in 1796 Edward Jenner proved that smallpox (a common killer disease) could be prevented by inoculation with cowpox blister pus. He provided some theoretical basis for why it should work, but the discovery came from simple, careful scientific observation: people handling cows got smallpox much less frequently than others.

While the 1700s are best known for engineering, there also continued plenty of pure research, ready to be exploited in the century following. Notable were Carl Linnaeus in Sweden, who spent a lifetime classifying plants in a systematic way and so providing a basis for Darwin's later work, and Joseph Priestley in England, who in 1774 showed that air had at least two components and produced as "dephlogistinated air" what Lavoisier, in France, later called "Oxygen" and showed how important it was in respiration and combustion. The French government guillotined him in 1794, well illustrating the
chasm between rational enquiry and brute power.

The 1700s are best known in America, of course, for the Revolution. While the London government kept out of the way of a good deal of the progress mentioned here, it blew things big-time with regard to the 13 Colonies. The issues are well expressed in the Declaration of Independence, and center on the fact that George III's ministers, bureaucrats and soldiers were insensitive to the desire for self-rule. While the Declaration has often been called the "Most Libertarian" in the National Archive, the fact is that after its sublime opening,
> "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness"

it contradicts itself at once by saying that
"to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed...."

That has two separate and fatal contradictions: (a) that a group whose sole activity is to violate the personal right of self-ownership can possibly "secure" that right, and (b) that the governed can possibly consent to being governed. The Declaration continues with a list of grievances to the effect that "wholesome and necessary" laws are needed to be made locally but are being delayed in London; another pair of contradictions (laws, being one-sided contracts,
can never be either wholesome or necessary.)

It's very clear therefore that the Revolution was not about throwing off government, just about throwing off British government; and that was well confirmed a few years later when the Federal one was set up - and, of course, in everything it has done ever since. Did the American Revolution advance the cause of liberty? - in my view, not much. There were splendid sentiments expressed, and that opening stanza of the Declaration is alone worth the price of admission, but by and large the pro-liberty rhetoric was a cover for what really happened, ie a simple transfer of power from London to (eventually) Washington.

Let's leave the Century with Napoleon. His soldiers, while rampaging through Egypt in 1799, stumbled upon one the most important bits of rock ever found: the Rosetta Stone. It had been carved in 196 BC with a message in three languages: two Egyptian, and classical Greek. Since the latter was well known, this provided the key for the other two and hence for the decryption of all other writings in ancient Egyptian, which enabled Chapter 3 of this book to be written. His army should never have been anywhere close; but the incident shows that even government armies sometimes do something useful.

Anglo-French rivalry continued into the $19^{\text {th }}$ Century, but not for long. Napoleon's string of success hit a pothole in Nelson's Trafalgar naval victory in 1805, and in 1812 his huge blunder in the Russian winter decimated his army and left him exposed to a coalition of which Russian
troops entered Paris in 1814 and which exiled him to Elba that year. An escape and attempt to resurrect his glory days the following year ended in total defeat at Waterloo.

So the American Revolution did little, as I see it, for the true cause of liberty - ie, the replacement of the "political means" of meeting our needs and desires by the "economic means." What of the later, French Revolution which Napoleon morphed into a fresh Empire? That, too, was a complete failure, despite its promising intellectual antecedents and its fine rhetoric. Within five years after it began one of its leaders (Robespierre) chillingly spoke of "...virtue, without which terror is destructive; terror, without which virtue is impotent." Any trace of virtue in the monotonous beheadings of members of the ancien régime no matter how innocent has to be removed by that appalling "terror, without which virtue is impotent."

But it's irrational anyway, to suppose that government can or will ever abolish itself. Why ever would it?

As well as four million dead bodies, the Napoleonic Wars left behind a virus to infect the human race through the present day; the way the Prussian army was swept aside in 1806 by the French came as a severe shock to the pride of that military machine. The remedy chosen was to implement for the first time ever a school system at public expense, which would ensure that all future generations were brought up to respect and obey the State. It was done thoroughly, and was copied during the 19th Century by governments worldwide - including the USA. Today's
universal school system, judged by one of its veterans (John Taylor Gatto) to be an indoctrination factory, not a learning environment, exists worldwide and has been a major factor in slowing down the trend toward less government and more individual freedom. But changes like that take effect over decades, and most of the 19th Century had much progress to make before it kicked in.

Instead, after Waterloo the Century settled to a long period of relative peace and unprecedented prosperity. There were plenty of governments and therefore plenty of wars, but generally they were small conflicts; no government was strong enough to challenge the Pax Britannica. There were uprisings in India and Africa when the residents resented being ruled by a handful of representatives of a pipsqueak island thousands of miles away, and one in South Africa at Century's end when diamonds and gold were flowing and Dutch settlers wanted a share. There were pirates to subdue, in the Caribbean and off the North African coast. There was an embarrassing war in Crimea over division of the weakening Ottoman Empire, and there were wars in North America with natives and Mexicans and a short Round Two in 1812 with the British; worse yet, there was a "Civil War" which sacrificed half a million human beings to keep the Washington politicians in power. But in Europe, there was no massive slaughter such as had torn up the Continent in the wake of the French Revolution; the 1815 Congress of Vienna drew borders that lasted 99 years. As a result, people got down to the urgent business of making a living and making life better; and they succeeded to such a degree that this would
for ever be known as the century of the Industrial Revolution, with its dramatic rise in both living standards and the size of the population enjoying them.

The population growth on its own was amazing. The ink on the dire prediction by the Rev. Thomas Malthus that the world could not produce enough food to support any more people was hardly dry, when the British population grew from 10.5 million to 37 million in 100 years; that in America, aided of course by massive immigration, from 5.3 million to 76 million. During the same period, when there was clearly a large increase in agricultural production, the portion of society living in rural areas (and so likely to be engaged in farm work) fell from $94 \%$ to $60 \%$. Such figures point to an enormous gain in productivity, resulting partly from better knowledge of what to grow and how, but largely from the steady mechanization of farm-labor tasks such as Whitney's cotton gin of 1794 to Quincy's corn picker of 1850 to Dart's grain elevator of 1842 to McCormick's 1831 horsedrawn wheat reaper, and so on; in America in the 1900s there were as many as 100 patent applications for automatic milking machines alone! - and thanks to research by the French chemist Louis Pasteur, the milk produced became much safer to drink.

This huge improvement in agricultural productivity brought unprecedented benefits. First and obviously, many more people were released from farm work and could apply their skills to other trades which produced goods and services others might wish to buy, to enhance their
living standards. Then there's a more subtle point: for all the mayhem they had caused over nine millennia, the cost of governments was somewhat under $10 \%$ of what was produced in any society; even at the end of the $19^{\text {th }}$ Century, in America the rate was $9 \%$ total (Federal, State and Local) whereas today, it's almost $50 \%$. That meant that whereas previously nearly the whole of the agricultural surplus had been stolen by the governing classes, now the portion of earnings available for ordinary folk to spend became much larger - as shown in the Appendix. There was therefore something quite close to a market economy, for the first time ever in human history; decisions about who made what and in what quantity were now being made by millions of investors, customers and producers instead of a few dozen bureaucrats.

To top off the good news, during this Century governments were somewhat "liberal", in the "classical" sense; in England and America, they had some belief in Laissez Faire. That was true in the latter case because at first the Federal Government trod lightly around the restrictions allegedly placed on it by the Constitution (the State governments that set it up were wary of delegating much power) and in the former case Britain was fortunate to be under the influence of people who had read Adam Smith - on that, there is more below. The net effect was that to a degree never known before or since, the market was able to do most of what it wanted to do; widespread prosperity, as a result, shot through the roof.

Improvements in food, hygiene and medicine added $50 \%$
to the average US life span in the 1900s; from about 40 years when the Century began to almost 60 when it ended - including, of course, a dramatic reduction in infant mortality. All these improvements resulted from marketdriven research and development, the drive to discover knowledge and benefit from it, the "reborn curiosity" whose story was told in Chapter 6. Rather often these days, students at government schools are told that the Industrial Revolution was a dark period in history, when the poor were exploited by greedy, unfeeling capitalists and lived in squalor. These teachers have simply no idea. For the first time ever, those at the bottom of the socioeconomic heap were seeing an opportunity to advance a career that did not depend on the ownership of land. One in which if they found a way to work smart, they could keep the resulting benefit and build a better life.

The British industrial boom began with railways. The idea
 of powering a vehicle with steam was first executed by Richard Trevithick in 1803; his passenger carriage was not a commercial success but he and George Stephenson during the following two decades built engines that would haul coal along rails. Then in 1821 Stephenson built a whole railroad from Darlington to the port of Stockton in Northern England to transport coal with big cost savings - which is what
attracted the capital needed. Interesting that coal mining featured in the development; steam engines had been used to keep them dry, and now were to be used to move their product. From then it was a race; the obvious advantages of fast, smooth travel for passengers as well as goods stimulated a fever of railway building for fifty years and the British standards were copied worldwide.

One of the first was the Liverpool and Manchester line, and Stephenson won a competition to design a locomotive for that; he called it the "Rocket" and it can still be seen today.


The network of railways, most of them radiating out of London, was built with privately-invested money and for profit. The government was involved in that plans for a new line had to obtain its approval; I'm not clear what rationale was used, if any, but suspect that owners of land, well represented in Parliament, were eager to keep some kind of veto power. They generally came out ahead - the rail builders paid them well for the land and often provided stations at nearby villages for their convenience - but some were reluctant to sell and used the power of government to delay progress.

Another remarkable engineer was I K Brunel, big in rail
development (the Great Western) but also in shipping. He built several steamships including the first screw-driven ocean liner (the "Great Britain") and burrowed the first tunnel under a navigable river.

To serve the booming demand from railway and shipping companies, steel became a major industry; and in 1855 Henry Bessemer perfected his process for controlling the carbon content of iron, cheaply and in large volume. One rather ominous aspect of the development story is that some of the demand came from governments, foreign as well as British; they were looking for steel strong enough to make bigger guns to fire bigger shells with greater accuracy to kill more enemies. Meantime, though, demand for peaceful use was ample and steel mills grew where coal was most abundant - Sheffield, Stoke, South Wales.

These "big" industries give no adequate account of the multiplicity of smaller enterprises which blossomed in $19^{\text {th }}$ Century Britain. All over the country there were companies small and large to manufacture whatever was in demand, and of course sell and deliver the products. Perhaps the best known is the "rag trade" - the weaving of fabric and manufacture of clothing. Mills multiplied, notably in the North near the Mersey River, and Britain became known as the "workshop of the world" because cotton would be imported and finished fabrics, exported. Cotton came from Egypt and India as well as from the Southern United States, but the latter were a vital source and British importers paid well - better than the millers of New England, a disparity which formed one key cause of
the American Civil War; the Northerners tried to use the power of government to force Southerners to sell to them, instead of to the better-paying Brits. The efficiency of the Lancashire millers affected India too; for traditional spinners and weavers could not compete with the wellmechanized British mills and it was cheaper for Indians to buy British-made clothing even after paying the freight for a journey of thousands of miles. Gandhi later used the resulting resentment in his campaign for independence but he chose the wrong solution. Instead of demanding political separation, he should have learned a little freemarket economics and pioneered a way to emulate the British industrial revolution. Had he done so, Indian living standards would have risen as fast as did those in the Home Country over half a century earlier. That is what the Americans did, trailing Britain by only a very few years; and the results surround us.

The dramatic rise in living standards and longevity during a century when population more than tripled, is eloquent and sufficient proof that "freedom works." Such success had never attended any human venture anywhere, at any time in history. Regardless of any moral or philosophical considerations, if what mankind desires is better living, he need look only to what Brits did in the $19^{\text {th }}$ Century. We can therefore usefully check out the political and religious environment in which this success took place.

This first factor helping the success is that government kept out of the way, to a degree never seen before. Two parties alternated power - Conservatives and Liberals -
but the Liberals were driving public opinion and they were classical liberals, actually believing in some freedom as the name properly implies. The Conservatives represented the established landowner class, and they had to move steadily towards Liberal opinion in order to take turns in running the country. There were two seminal decisions made: Parliament scrapped the Corn Laws, and "outlawed slavery" in the British Empire, three decades before the Land of the Free did so, and without bloodshed.

The Corn Laws had "protected" British agriculture from lower-price produce from France and elsewhere; they enabled farmers to charge more by imposing tariffs on imports, distorting the market. When in 1846 they were repealed, it marked the beginning of a policy that brought immeasurable benefit to Britain and all with whom her merchants did business. Oddly, the repeal was pushed through by a Conservative Prime Minister (Peel) who followed the counsel of free-market economists like Richard Cobden, and the main opposition came from other Conservatives. Nothing is simple in politics.

Slavery was "abolished" in 1834, as a humanitarian move championed by Lord Wilberforce after his conversion to Christianity - arguably this was the high point of that religion in this Century. It's worth noting that while it was given the name "abolition" what really happened was that government withdrew support for slave-owners. Slavery can exist (supposing the slaves are put to work, and why else might anyone one wish to own them?) only if there is a way to prevent their escape. That means a widespread
system of policing and arrest. Only government can provide that. When that support ends, slavery collapses; the wording about "abolition" was just political hype.

Government did not keep out of the way later in the Century, when it came to schooling. The pressure for government-funded schools from those who wanted education for their children but did not wish to pay for it by fees charged directly was such that in 1870 they were put into place - 30 years, be it noted, later than many US states did and 60 years after they had been established in Prussia, upon which they were all modeled. So one could say even here that Brits were reluctant to take that fatal plunge into Socialism - but they did so anyway. The rest of the baggage came not far behind.

Behind the front-line politicians were thinkers, and in $19^{\text {th }}$ Century Britain there was plenty of contrast. Cobden was a strong and genuine influence for freedom, as was John Bright (L) and together they led what was known as the
 "Manchester School" of economics. Mankind owes these gentlemen a huge debt of gratitude. On the other side there was no less than Karl Marx, funded by his friend Friedrich Engels - a fellow-German expat who held his well-paid position mainly because his father owned part of the Manchester company that employed him. Marx famously
based his theories on the absurd premise that the value of labor is objective; ie, that a day's work was worth $£ \mathrm{X}$ whether or not anyone wished to buy its output. That is the economic fallacy underlying communism and its corollary is that in order for everyone to have work, people must be compelled to buy whatever is produced. Seventy years of misery in the Soviet Union demonstrates what happens when that is put into practice.

Exhilarating though it is to review its huge rise in material wellbeing, the $19^{\text {th }}$ Century was in no way deprived of culture - even though it must be said that "the pink bits" contributed less than Continental societies. The joyful genius of Mozart's music narrowly predated the period, but the 1800s saw - and heard - a majority of my own favorite composers: Beethoven, Berlioz, Bizet, Borodin, Brahms, Bruckner, Chopin, Debussy, Dvorak, Grieg, Mahler, Liszt, Mendelssohn, Mussorgsky, Saint-Saëns, Schubert, Schumann, Tchaikovsky, Verdi and Wagner, as well as (from one Pink Bit) Elgar and Gilbert \& Sullivan. Elgar's pleasant, dreamy music is pastoral and his "Enigma Variations" just qualified for the Century in 1899. The Gilbert \& Sullivan "comic operas" were produced in the 1870s and 1880s and portrayed the sublime self-confidence of a society very satisfied with its place in the world, poking gentle fun at itself but quite certain that the British Empire was God's gift to the planet.

Likewise, religion was by no means missing from the time of the Industrial Revolution - quite the contrary, this period is known for its religious zeal and Victorian
prudery on both sides of the Atlantic. In this book I have emphasized that religion is the hook on which governments hang their hats; that is, having no rational moral justification for their outrageous existence, they pretend that some supernatural authority has appointed them to rule their people. This is so, and remains the emphasis here. Nonetheless, some good has come of it. Already mentioned is the repeal of slavery in all Pink Bits, and a religious respect for the value of human life seems to have been the motivation. Christian missionary work worldwide was never more earnest than in this Century, and it took with it genuine compassion as well as doctrinal teaching. Medicine and schooling accompanied it, or came soon afterwards, everywhere it was allowed; and it was allowed throughout the Empire. Those positives deserve mention, and are all part of the fruits of freedom. Against them however must be placed the controversy of the later 1800s, occasioned by that grandson of Wedgewood, the naturalist Charles Darwin.

Marked as it was mostly by engineering, the $19^{\text {th }}$ Century was also host to an explosion in pure science, research for its own sake, and Darwin's was the most prominent of all. Fascinated since childhood by botany, he systematically explored the origin of species for all his life. He was curious; why were some species so
evidently similar to others, yet at the same time persistently different? Why did some species appear isolated, to his own environment in Europe, but others to South America - to which he made his famous journey in 1831 aboard the HMS Beagle? And why was some isolated even to the small group of Pacific islands he visited, the Galapagos? Darwin was not anti-religious; his upbringing was a mix of Unitarianism and Anglicanism, and when he found what he did he waited years to publish the results because he realized they would challenge the very heart of theistic religion and shrank from doing so.

His results are well-enough known; that all species mutate into others, and mutations suited for survival as well as or better than the source will survive, while the others perish. He did not and could not understand the mechanism of mutation, but faithfully recorded what he observed of its nature, and so qualifies as one the greatest scientists of all time. It was for Jacques Monot, a century later, to put his findings into the form of an accusation against theism: in La Chance et La Necessité he observed that since mutation is a random event and survival is a cruel process, the attributes of both wisdom and compassion can not be applied to an all-powerful Creator - that is, if a Creator exists, He is neither wise nor benevolent; or if He is wise and benevolent, he cannot also be all-powerful. Darwin foresaw some of this conclusion and dreaded it; he did not coin the phrases "survival of the fittest" or "nature, red in tooth and claw" but he knew that they were true and appropriate and that his research had led inexorably to what they said. So did the theologians of his day; and just
as the Roman Church had bitterly resisted the heliocentrists, all churches vehemently opposed Darwin and his Theory of Evolution - and do so to this day. Their own survival depends on it; and ultimately, so does the survival of government. Darwin has undermined the only moral justification for existence it has ever offered.

Darwin was by no means the only brilliant scientist of the 1800s. On the contrary there was an abundance of them, all setting the stage for development by and the benefit of the generations to follow, including our own.

Gregor Mendel uncovered genetics, Amedeo Avogadro explored molecular weights, Charles Babbage built a mechanical computer, A G Bell brought us the telephone, Louis Braille found a way for blind people to read, Robert Bunsen examined the emission spectra of heated elements, Marie and Pierre Curie pioneered radioactivity, Gottlieb Daimler developed internal combustion engines and mounted them on vehicles, Christian Doppler explained how sound and light waves appear to change frequency when moving and so provided a baseline for Einstein's famous thought-experiment early in the next Century, Thomas Edison was a prolific inventor who brought to market both the light bulb and the phonograph, Michael Faraday uncovered many of the secrets of electricity including electromagnetism and electrolysis, Heinrich Hertz linked light to radio waves and built a device to detect the latter, Robert Koch contributed enormously to the science of medicine and proposed elegantly logical "Koch Postulates" applicable to the diagnosis of any
disease, James Maxwell produced a unified model of electromagnetism, Dmitri Mendeleev classified known elements in tabular form which was later explained in terms of atomic structure, Alfred Nobel found a way to tame nitroglycerine for use as dynamite, Louis Pasteur and Joseph Lister slashed the rates of death from childbirth and surgery with their discovery of germs and sterilization, John Rockefeller discovered, exploited, refined and marketed petrochemicals - so ending the slaughter of whales (for oil) and introducing a new era of transportation, William Talbot invented the photonegative, and Lord Kelvin made numerous advances to theoretical physics including thermodynamics and electromagnetism and gave his name to the Kelvin temperature scale with its absolute zero at $-273^{\circ} \mathrm{C}$.

Such is human curiosity in action. The comforts of modern living all derive from the work of great men and women like those, and they come directly from the fact of a large increase in the disposable resources available to everyone. Liberty was denied in the $19^{\text {th }}$ Century as in all others, but less so than ever before; the result was peace and prosperity to a degree never seen before. The diagram in the Appendix may help to show why. It was in the $19^{\text {th }}$ Century that the agricultural surplus at long last greatly expanded but government was slow, fortunately, to steal more of it. Instead, everyone in the developed world and particularly in the United States and the "pink bits" was free to use that resource (time, money, decisions, expressed however it may be) as each saw fit.

The dramatically longer lifespan, relative peace and abundant prosperity of the Century came from freedom. The lesson is perfectly obvious: the lot of ordinary people improved very little indeed during all of history, but in a single century of significantly increased liberty, they rose more than they had in the previous 9,000 years. Just think what they will do when freedom is altogether unimpaired!

## Chapter 8 Killing Fields

When the 20th Century began, the world was full of promise and confidence; the relatively golden age of the 19th was expected to be surpassed - and in some important ways, it was. But in many even more important ways, it was a disaster. The difference lay in the deadly growth of government and its reversion to traditional form.

By 1900 about two generations of Americans had been educated in socialized government schools, and in Britain, one generation; the principle was the Marxist one of "to each according to his need, from each according to his ability." This magic formula was and is of course as impossible to implement as it is undesirable to all but the net recipients - but was certain to require the power of an obviously much enlarged government bureaucracy, such as is commonplace today. Marx was, as we saw in Chapter 7, writing in London and a range of socialist opinions had developed around him, culminating in the "Fabian" movement that generally agreed with his aim of equalizing outcomes (rather than status and opportunities) but reckoned to achieve it gradually via democratic votes, rather than quickly by revolution. The Fabians were successful; Britain's first Socialist government took office in 1924 and much of the Communist manifesto had been implemented by 1950. Americans did the same by 1940,
but with superior, deceptive salesmanship called it not socialism but a "new deal." The tragic and needless change from laissez-faire to socialism was greatly aided by the betrayal of liberal ideas by new leaders in the Liberal Party; notably David Lloyd George, who in 1906 helped introduce compulsory government insurance for unemployment and old old age (effectively prohibiting perfectly viable voluntary alternatives) in part to keep the Labour Party at bay, and who became Prime Minister in 1916 and then represented Britain in the disastrous Versailles Conference of 1919.

Yet for all its dreadful effects, Socialism was not really the story of the 20th Century; rather, that story was written in blood. Governments found their stride again, and resumed their endless habit of waging wars, but now they could do it with all the technological efficiency that modern science had put at their disposal and with the much enlarged agricultural surplus that was available for them to loot.

The slide into slaughter began after Queen Victoria died in 1901. British foreign policy had been to divide and maintain power; that is, to do what was needed to keep a balance in Europe between France and Austria. That was disturbed after 1870 when Bismarck had hammered together an united Germany, a natural ally for Austria, and to counter it the British and French governments formed a noisy "entente cordiale" in 1904 as a signal that no German expansion was welcome. The monarch in charge was Wilhelm II, a bombastic idiot who took offense. To "secure" a continued balance, a complex web of alliances
was constructed over nine years, such that if any one government should attack another, the whole of Europe would be engulfed in war - this was Mutual Assured Destruction, without the name. Perhaps they all thought that such an outcome was so dreadful that nobody would break the ring. If so, they were all wrong.

The delicate balance was upset in June 1914 when a group of Serbians, desiring to separate Serbia from Austrian hegemony and rule it, assassinated a prince visiting from Vienna. Their action so offended the Austrian government that it moved troops into Serbia, so offending the Russian government which wanted the country to stay no more part of Austria than it already was, and so the machinery of Mutual Assured Destruction swept into operation and killed about sixteen million human beings in the next four years. The catastrophe vividly demonstrates the folly of allowing governments any power whatever, for this unprecedented slaughter was also totally pointless; there was no threat to the wellbeing of any Englishman from any German, or to any Frenchman or Russian from any Austrian. Governments had abstained from their squabbles for 99 years, and unprecedented prosperity had accompanied the peace, as everyone traded rather freely with everyone else; yet in one month of colossal folly, all those governments threw it all away. As the liberal Foreign Secretary Edward Grey accurately remarked: "The lamps are going out all over Europe; we shall not see them lit again in our lifetime." He was in a position to know; while all participating governments were to blame, he was the key player in London so bore more
responsibility than any other Brit.
World War I could not have happened if governments had not existed and played their silly diplomatic games, while armed to the teeth; perhaps more than any previous war, this one therefore cries out for their abolition. The age-old but vacuous claim that they exist in part to "protect" those who are forced to fund them was never more open to ridicule. Yet such ridicule never came. The bloodbath ended in 1918 with an Armistice, under which the British Navy continued to blockade vital food supplies so that Germans would starve and oblige their government to sign whatever terms were dictated in the "peace" conference the following year; they did, and as was observed even by J M Keynes, who attended, its terms virtually guaranteed a second round of the war after Germany had recovered.

In less than two decades, therefore, the governments of Europe had ruined the prosperity of their countries, killed 16 million soldiers and civilians, brought about such chaos in one (Russia) that a small and ruthless band of Bolsheviks could grab power and further devastate that sad country for another seven decades, and then impose such savage terms on the losers that there was an even bloodier replay twenty years later. Such is government.

One of them was America's. The debate over whether to enter the War (and on which side to enter!) lasted through 1916 but was settled in favor of the UK, France and Italy and President Wilson marched in some fresh but inexperienced troops - who distinguished themselves and
were just enough to tip the balance and break the stalemate in 1918. At quite small cost, therefore (a mere 117,000 Americans dead) the US Government had gained a place on the world stage, which was probably Wilson's motive for agreeing to participate. The ploy worked; although he did not get what he wanted at Versailles, it was from 1919 that we can mark the replacement of British worldwide power by American worldwide power. Any doubt about that was settled in 1945 after Round \#2.

The aftermath was in some countries near-chaos, for all government treasuries except America's had been drained. In Germany the early starvation almost led to a Bolshevik revolution, and by 1923 did lead to hyperinflation - the first since the French case noted in Chapter 7. The peace terms required Germany to pay reparations, out of a devastated economy; that circle was squared by devaluing the Mark. If the war had destroyed much of Germany's working class, elimination of cash balances destroyed the remnants of the middle class. There was outrage everywhere, and Hitler offered an answer.

Meanwhile the British government was broke, yet facing massive unemployment as soldiers were demobilized, and tried going off the gold standard so as to devalue the Pound also. None of them could pay American debts, and that left the American government with just the kind of clout Wilson had anticipated. In Washington, meanwhile, the separation of government money from the discipline of gold had already begun, in 1913, with the formation of a US Central Bank (though thinly disguised as a private one
so as to sidestep the prohibition on central banking that had followed Jackson's closure of 1836.) The new one (the "Federal Reserve") had the ability to create fiat money but put that power to only moderate use during the 1920s. Even that use, however, was enough to inflate the money supply so much that there was a stock market "bubble" that burst in 1929, for the creating of false credit must always be followed by a "bust" in which unwise investments are liquidated and the economy can recover.

That process of correction, which had worked well in earlier boom/bust cycles, was however prevented from taking effect by large-scale and repeated government interventions throughout the 1930s and the result was a deep, widespread depression which caused immense suffering in the United States and worldwide. An example of how intervention spread it and made it worse was the infamous Smoot-Hawley Act of 1930 - enacted despite a petition signed by over 1,000 economists. Smoot-Hawley viciously raised import tariffs so as to "protect" domestic manufacturers; foreign governments naturally retaliated and international trade was cut off at the knees.

The fast-rising prosperity of a relatively free $19^{\text {th }}$ Century was thus brought to a shuddering halt - by governments that were so inept as to fight a bloody, wholly needless war, to create counterfeit "money", and then imagine they could repeal the natural laws of economics like King Canute allegedly tried to turn back the ocean tide. Was this all deliberately planned, or just the natural outcome of bungling government incompetence? - hard to tell, but it
does leave us with that binary choice: either governments are malevolent, or else they are lethally stupid. Take your pick - but in neither case ought they to exist.

The 1930s were bleak in two other countries also: Russia and Germany. Russia had been the first to quit WW-I in 1917, utterly exhausted; the chaos in the capital, Petersburg, was appalling and a Communist faction called Bolsheviks, who had been allowed to cross Germany from exile in Switzerland so as to foster it and so close the Eastern Front, had succeeded; led by Lenin, they grabbed power and shot dead any who stood in the way. By 1930 they had quelled all opposition and had formed the Union of Soviet Socialist Republics; but they had, knowing nothing of free markets, entirely failed to bring more than subsistence prosperity. In this decade Lenin's successor Stalin solved that problem by doing what all governments do best: lacking food, he stole it. Ukranian farmers had good harvests so Stalin stole them, leaving as many as 7 million owners to starve to death - those that didn't get shot resisting the theft. Thus, a decade later, Churchill and Roosevelt allied their countries with a monster who had already murdered that many human beings, in order to defeat another monster who had not yet murdered Jews by the million, and when they did not know that he would.

In Germany in the 1930s those Nazis began to govern, after an election process about as fair as any other. They gained popularity because their Leader promised reversal of the hated Versailles Treaty terms, and he delivered on the promise - winning back previously held German
territory without provoking a war. His lieutenants were so skillful as apparently to avoid the depression operating everywhere else; later analysis showed though that their method was that of smoke and mirrors. Unemployment statistics were doctored and jobs were created to re-arm the military (though by much less than he boasted!) - and by late in the decade the pretense was on the verge of collapse because food and other resources were running short. Hitler's solution was to grab extra land, in the East; and this time (1939) he miscalculated. The invasion of Poland did provoke another war, and his thousand year Reich was in ruins after another six.

So to the 1940s, the most catastrophic decade of them all; the British government declared war on the German one late in 1939, the French followed, and the second great slaughter of the Century was under way. It was so great that sixty years later, estimates of how many died are still approximate; somewhere between 50 million and 72 million. 25 million of those were in uniform, the rest were defenseless civilians, most of them Russian. As a percentage of pre-war population Poland lost the most (16\%) then the USSR and Lithuania (each 13.7\%.) Britain lost 450,000 or just under $1 \%$, and the USA lost 419,000 or $0.3 \%$. The heaviest proportional loss was suffered by Jews in the Diaspora; about 6 million were deliberately murdered - more than half of all Jews in Europe. World War Two was a perfect example of governments in action; governments began it, and governments prolonged it, and both the start and the continuation were almost needless.

I say "almost" needless because, given the utter folly of Versailles, it was inevitable that a German leader would arise and demand its terms be rectified. There were plenty in both France and Britain who sympathized, when Hitler did so; his blustering manner was distasteful, but as government claims go, his were not particularly unfair. Had his 1939 demand for a corridor to Danzig been granted as had been the 1938 one for the Sudetenland, there would have been no 1939 war. Would he have then demanded more yet? - probably. Quite possibly, after the German economy had been repaired by stealing resources from more territory in the East (Romania and its oil wells for instance) Hitler might have turned on the Soviet Union and, undistracted in the West, made it capitulate. Certainly, Germans were welcome in the Ukraine, and little wonder after Stalin's treatment. Had he done that, what war would have remained to be fought?

That's one of history's unknowns, but my opinion is that, given clear sight of German acquisitiveness, British and French defenses would have been strengthened so much that the Germans would have just consolidated their new Empire from the Rhine to the Urals and beyond. Certainly, resistance would have kept their occupying armies busy, while the food and raw materials available for the grabbing would have been rich enough reward. Why, it would have been asked in Germany, risk it all by tackling two Powers now far better armed and prepared? In that case, a nasty dictatorship would have oppressed Eastern Europe for a generation or more - but that's exactly what did happen anyway. The difference: most of those 50- to

72-million dead would have lived full lives.

So, most of WW-II could and should have been avoided. In London, Chamberlain should have bitten his lip and risked loss of office and done nothing in September 1939 to save Poland, because in fact nothing could be done or was done. The French would have followed his lead. Two years later no popular opinion in America would have supported US entry to the War to rescue either (and there was little enough such support as it was) so unless FDR (who tricked Americans into support for war by provoking the Pearl Harbor attack and concealing his foreknowledge of its imminence) was determined to fight the Japanese regardless, there would have been no WW-II for the USA.

There's more: once the UK and US governments were involved, their deliberate and repeated policy was to force Germans and Japanese to surrender unconditionally; they repeatedly ignored overtures from Berlin to end the slaughter. This was deadly folly; the Nazi leadership made no secret of it, so the German population, heartily sick of the war though it was, saw no alternative but to keep fighting. As Thomas Fleming remarks in his excellent book The New Dealers' War (p. 467) that policy alone probably cost 8 million lives in the last two years of the war, many of them Jewish in the death camps.

The Napoleonic Wars had cost 4 million lives, and WW-I cost another 16 million; WW-II, in the consummate folly of government arrogance, cost about three times both of those put together. This is what governments do.

The killing continued with the Century. The victors of WW-II soon squabbled, when the contradictions inherent in the alliance with the Soviets became obvious; Stalin was now as interested as the rest in expanding his hardwon empire. The first test was Korea (1950-53), done by proxy, and with participation by the newly-communist nation of China, which shares a border with North Korea.

The outcome was a stalemate that continues at this writing but the cost was at least 3 million dead and possibly as many as 10 million - a surprisingly wide range of estimates, given the accounting technology then available. The "justification" for the war was that by degrees, communism would otherwise take over the world; this displays either profound economic ignorance or (more likely) profound cynicism. The whole $19^{\text {th }}$ Century had demonstrated the economic strength of relatively free capitalism, while the communist Soviet Union had been an economic basket case from the beginning, wholly dependent on quiet US support. The idea that a command economy could generate enough wealth to overcome and suppress the rest of the world even by military force is evident nonsense; if it was truly believed, it means the Western leaders had no idea what capitalism was all about. More likely, they knew that somewhat but wanted anyway to continue to play their lethal games of power.

After a further decade, the Korean fiasco was repeated in Vietnam (1959-75), with US involvement escalated by the infamous lie told by President Johnson, that the North

Vietnamese government had attacked a US ship in the Tonkin Gulf. As intended, this so enraged Congress as to cause it to commit massive extra force to the war, but the tale was wholly false. Just as FDR had lied about Pearl Harbor to get America into WW-II, LBJ lied to keep her in Vietnam. A few years later, when it became unwinnable, he changed his mind. But by then, it was too late.

The war was a loss for America, and so deeply wounded national pride and embarrassed its government - and the death toll is, again, surprisingly approximate. Military deaths were 1.4 million (of which 1.1 million were in the North) and civilians, 4.6 million ( 3 of them in the North.) To that 6 million total should be added about 700,000 Cambodian dead. So there was a zero net accomplishment, but the cost was the best part of 7 million human beings.

Following that war came the disaster in Cambodia (19751979), whose new communist government under Pol Pot reinforced its hold on power by forcing those living in the cities to relocate to the countryside and engage in manual farm labor. In so doing, between two and three million people died, often of starvation - a quarter to a third of the whole
 population of the country. This Asian Holocaust has been called the "Killing Fields" and this Chapter is named in
honor of those victims. Pot's murderous government killed a far bigger fraction of its "own" people than even Mao of China and Hitler of Germany, so he can be called the archetypical Government Man of the $20^{\text {th }}$ Century.

Mao Tse Tung does, however, hold the record in terms of the absolute number of people murdered by a single government. From 1966 to 1976 as his communist government had failed to generate either prosperity or enthusiasm, he turned loose a set of well-trained young thugs on the whole country with his "Cultural Revolution" to better indoctrinate the population in his communist theories and to direct it what to produce. It was a total failure, because as always, market participants know what is in demand better than bureaucrats who have never had to earn an honest living by exchanging goods and services on a voluntary basis. In this case, the young "Red Guards" were so inept that industry almost ceased and the population starved; an estimated twenty five million died.

Ever since the US and UK governments had used just two bombs to kill about 200,000 people in Japan in 1945, nuclear weapons had overshadowed all inter-government rivalries and this continued in the 1980s with vast sums being stolen from productive people in the Soviet Union and the "West", to stockpile enough missiles to destroy the world many times over - in a process appropriately called "MAD", for Mutual Assured Destruction. Unlike the case in 1914, so far this has worked; almost certainly because government leaders themselves would be destroyed in any nuclear war. In the 1980s, however, the cost of this lunacy
began to tell. The USA was still partly free and so was producing far more than the USSR, yet their military budgets had been similar; so standards of life in the latter were decreasing fast. Life expectancy was falling, medical services became primitive, food ever more scarce and alcoholism, chronic. In 1989 it became unglued; the Berlin Wall fell, and two years later so did the Communist Party of the Soviet Union. The "Cold War" was over, and it had been "won" by the West. The tens of thousands of nuclear warheads, however, remain to menace humanity.

Wars in the 1980s were few, for a change (the worst was a brutal one between two Muslim nations, Iraq and Iran; no significant territory was won or lost but between half a million and a million people were killed.) A minor war was also fought between Argentina and the UK over the governance of some rocks in the South Atlantic.

Governments didn't stay peaceful for long, however, and the 1990s began with a US intervention to remove Iraqi government forces from neighboring Kuwait - with many participating nations. This war was fast, successful and popular - but it set a precedent for later US intervention which was none of those things.

The other, very horrid slaughter of the 1990s was an intertribal one in Rwanda. The minority Tutsis, generally regarded as smarter, were in charge then the Belgians left but in 1961 the Hutus displaced them in a coup and many left for neighboring Uganda, where they formed an army (the RPF) to invade Rwanda in 1990 to regain power.

Hutu zealots responded by calling for the slaughter of all resident Tutsis and nearly a million people died in 100 days in 1994, mostly Tutsi. Was this a government genocide? My answer is yes it was; for (a) the ruling Hutus failed to protect Tutsis by controlling their zealots, and (b) the whole basis for the squabble was a power war, to settle who ruled whom. Government exists by threats of violence, and this terrible story shows what happens when that violence is unleashed. There is a far better way.

Sociologist R J Rummel has coined the term "democide", defined as "the murder of any person or people by a government, including genocide, politicide, and mass murder" and at www.hawaii.edu/powerkills/ and in his extraordinary book Death by Government he shows his current estimates for how many of those in their "care" governments have murdered or let die by culpable neglect. His work covers all of history, but for the $20^{\text {th }}$ Century alone he has counted (by this writing) a worldwide total of 262 million human beings, in addition to the tens of millions who died in uniform during wartime. Understand: these 262 million were supposedly under the protection of the governments that killed them; the well-known six million in the Jewish Holocaust are among them, as are the 25 million in the government-induced Chinese famine of the 1970 s - but battle deaths are extra.

That is what governments actually do, in total contrast to what they say. Those are the $20^{\text {th }}$ Century killing fields.

Although the appalling record of mass murder by the
world's governments is the primary story of the 1900s, it's not the only one. To round out this chapter, let's recall a few other aspects of its history that affected human liberty.

As we saw in Chapter 7, there were huge advances in living standards in the 1800s, but they redoubled in the century following. A 1999 British TV series documented what happened when a family in that year tried to live in an ordinary London house built in the 1890s but altered so that all $20^{\text {th }}$ Century improvements were removed. It was very difficult! No TV, no radio, no indoor flush toilet, no central heating, no telephone, no microwave, no refrigerator, and a cooking range built around a coal heating stove. And, of course, no garage or automobile.

All those "essentials" of modern living appeared during the 1900s, although some - including the internal combustion engine - had just been invented in the 1800s. Today we may cross the Atlantic almost as readily as one might have hopped a bus in 1903, yet that was the year in which mankind made the first-ever powered flight. Phones had been installed in a few places before 1900; a century later there were few where they had not been installed and even teenagers were using lightweight portable phones with photo and text capability. Cash registers and adding machines could be found in shops and offices in 1900 but by 2000, a majority of homes had complete computers in daily use, sometimes several; and an ordinary horseless carriage had more computer power aboard than was at work in the world in 1945. Best of all, perhaps, the whole world of knowledge had reached the fingertips of any who
plugged their PC into the Internet - and better yet: that worldwide database was not put in place by dispensers of approved knowledge like the government and its friends in holy orders, but by anyone who cared to upload a web page. Communication and learning had been torn loose, at long last, from "authority." This was a first; and it will significantly help cause the end of the government era.

There was an abundance of pure research done during the Century, as well as engineering development. In medicine antibiotics were discovered for example, with great saving of life; as years went by however an increasing portion of medical research was brought under government control, as in the US National Institute of Health; and in other countries the health-care industry had been politicized fully even by mid-century. The result was that instead of brilliant minds being applied where the individuals saw fit, research was done where bureaucrats directed, so a deadly "group-think" tended to operate. In the 1980s for example a new disease was said to have appeared, which destroyed the immune system and which would spread like an epidemic by sexual contact; this theory was mainly false. There was no epidemic, and twenty years later AIDS was still predominantly a homosexual problem. It had furthermore been redefined to consist only of "that which is caused by the HI Virus" and so research into possible alternative causes was cut off by the single funding power.

The Century also ended with no cure in sight for cancer, despite the expenditure of vast sums of stolen money. The market, had there not in essence been a single-payer
system, would have provided the incentive to avoid that.
Human understanding of the atom developed fast between 1900 and 2000, with new particles being described pretty well every decade; and Einstein's famous equivalence of mass and energy was proposed in 1906 and demonstrated (with deadly effect) a mere 39 years later. A nonprofessional genius did the original work by himself, and a government crash-program using stolen funds did the lethal development. The new energy source was then developed for peaceful use, but also under tight government control; the speed of implementation was therefore artificial. Had it been under market control, nuclear power generation would have been developed more slowly at first (as safety precautions were put in place to satisfy risk-bearing insurers) and then faster after about 1970, when those safety concerns had been met. As it was, designs were rushed through with liability artificially limited by law, then several near-tragedies led to a near-closure of the industry later on, so that dependence on Arab oil grew to a dangerous degree.

No sooner had man taken flight, than he wondered if it were possible to fly above the atmosphere into space. Even that noble dream was, however, distorted by government control; early rocket experiments by Goddard in the 1920s were overshadowed by the German government's weapons program of the 1930s. This had in turn been stimulated by the Versailles Treaty, for Germans were forbidden to make other kinds of weapon - so they turned to that science, first used by the Chinese.

Development was far ahead of anything being done in the US or UK and had it begun just a year earlier, the outcome of WW-II might have been different and as it was, the German engineers were hired en bloc to lead the US space race. Thirty billion stolen dollars later, in an awesome moment of history on July $20^{\text {th }} 1969$, mankind set foot on the Moon.

We may wonder: how would space exploration have developed in the absence of government? At first sight the answer would seem to be "much later", because that huge pot of money would not have been provided by the market - the anticipated return might not have excited investors. However that misses a point of this book; in 1969, man had suffered ten thousand years of government delay; the advances of the $20^{\text {th }}$ Century AD would have taken place in its absence several thousand years earlier. At some point, the technology being available, some group of wealthy benefactors would have certainly combined to explore what lay outside Earth's gravity. Is that fanciful? no. The reason I'm sure of that is that wealthy people very often become benefactors, and specifically that even in 2003 a private company (Scaled Composites) flew a craft into orbit, and its successor The Spaceship Company is poised to go further yet, even while NASA continues to exist, with funding from billionaires Richard Branson and Paul Allen. In fact, they are investors, more than benefactors - they hope to gain a return, by selling seats!

Twentieth Century culture exploded dramatically. Serious music was written by such as Britten, Debussy, Delius,

Holst, Lutoslavski, Milhaud, Prokofiev, Rachmaninov, Ravel, Shostakovitch, Sibelius, Stravinsky, Vaughan Williams, Walton and many others - some of whom are too discordant for my own taste. For the first time, American composers feature well: Copland, Ives, Bernstein, Gershwin and Joplin for example - and it was in America primarily that the new art-form of jazz developed; from here, too, came many (Beatles excepted) of the abundant waves of popular music. All tastes of this glorious audio heritage can now be enjoyed not just by members of a governing élite, but by anyone with pocket change for a CD, and that was made possible by a profitseeking market. The market also made movies, creating a completely new entertainment medium - and Hollywood has been world leader since it began.

More perhaps than in any other period of history, the $20^{\text {th }}$ Century demonstrated that two opposing forces have formed the story of man: one is the ebullient, creative ability that is always curious, demanding answers, designing solutions, usually without encouragement or support from any "authority" and sometimes pursuing the interest for its own sake, without even profit in view. The other is the deadly and destructive influence of all government, which distorts the creativity and has slaughtered, as we saw, more human beings in 100 years than inhabited the whole world 2,000 years ago. The first has caused progress in spite of the second. Equipped with this knowledge - for the first time ever - it should be abundantly clear that the future of our race depends on the total elimination of government from the affairs of man.

## Chapter 9 Crats \& Conclusions

Before reaching the conclusion (which the reader may have correctly anticipated from Chapter 1) that there is no way to reconcile the force of government with peace and harmony for society, and suggesting how it can be eliminated in practice, there remain a few loose ends to tidy up. Since that conclusion is so very radical, it may be wondered: is there no via media, no way to soften the evil effects of government? Might not limits be placed upon it? Could it not be moderated with the compassion of religion in some way? How about Churchill's famous opinion, that "Democracy is the worst form of government, except for all those other forms that have been tried from time to time"? So let's take a quick look at these possibilities and ask whether Democrats, Theocrats or Local Bureaucrats might offer acceptable alternatives.

## Democracy

R J Rummel has demonstrated powerfully that the deadly character of government operates with worst effect when it is least answerable to its population - in some form of dictatorship - and murders fewest when it is most answerable, as by frequent elections in which it gives account of its behavior. Rummel's Law ("Power kills, and absolute power kills absolutely") is a fine complement to

Lord Acton's, formulated a century earlier, that "Power corrupts, and absolute power corrupts absolutely" - and is in my opinion stronger and more applicable, for Acton was viewing the world through the eyes of a $19^{\text {th }}$ Century English scholar, heavily influenced by decades of benign classical liberal administration as we saw in Chapter 7.

Rummel's inverse relationship between democide and democracy holds good, but with a couple of caveats:

1. He does not extrapolate his graph to zero - which is to say, he does not draw the conclusion that since a heavily-limited government is less lethal than a non-limited one, a zero government is not lethal at all. That must obviously follow, but it is not a conclusion he draws; presumably because as a professor of sociology he is strictly a counter, a scholarly observer of fact; he cannot report a zero rate of democide because there has never been a society with a zero government. Yet.
2. Although generally true, there are exceptions.

An important exception was $19^{\text {th }}$ Century America. Never before had democracy been so fully exercised, as was noted by Alexis de Tocqueville. The Constitution was well known and although the Feds repeatedly tested its limits, voters repeatedly beat them back. Majority rule, bounded by provisions to protect minority rights, was never more enthusiastically in operation.

And yet it was in the $19^{\text {th }}$ Century that America, as well as wonderfully raising living standards in its Industrial Revolution, shed by far the most blood in its history. In the name of "preserving the Union" (only later was the 1861-65 war "justified" in terms of abolishing slavery) its government killed one American in sixty. Worse: it was in this highly democratic period that the US government committed democide against native Americans.

The sad history of how native American populations were reduced goes back to the first colonists and it's fair to say that a great deal of it was unintentional and not even understood at the time; European diseases did the work, for the colonists had developed immunities while the natives had not. Nonetheless, in democratic $19^{\text {th }}$ Century America the "Indian Removal Act" was put in place with all deliberate forethought and that policy was terrible in its execution. It's all the more shocking that no accurate count was made; "Indians" were regarded as less than human and were expelled and exterminated as if they were cattle. There was no systematic extermination of the kind Himmler designed for Jews, but they were taken away from their only means of livelihood without care for the consequences and they died in vast numbers. Russel Thornton, in his American Indian Holocaust and Survival estimates that their population declined in this period from 600,000 to 250,000 . Not much of that slaughter would be by disease, for three centuries of contact had by then followed colonization; so it may be that 300,000 or $50 \%$ of the native American population was exterminated by the democratically-elected American governments of the
$19^{\text {th }}$ Century. That's a larger fraction of the population than was liquidated in Cambodia by Pol Pot's communists. Even though clearly the murder was by white supremacist Americans and the victims were almost defenseless, native Americans were portrayed uniformly as "bad guys" in American culture into the third quarter of the century following; Hollywood produced nothing empathetic towards the indigenous people until Kevin Costner's 1990 movie, "Dances with Wolves" - and all the friends of my own extreme youth when playing "Cowboys and Indians" casually but uniformly branded the latter as the villains.

American democracy was less fully trusted in the $20^{\text {th }}$ Century, and as it progressed the disillusion grew more pronounced; in its fourth quarter, voter turnout was often below $50 \%$ and in the 2008 "landslide" election of Barack Obama, only 66 million picked him as President, out of a 300 million population; that is, $22 \%$. Some landslide!

In the somewhat less democratic America of the last 100 years, when government had refined the process of riding roughshod over popular wishes, the carnage rate was reduced from the that of a century earlier, not increased as might be expected from Rummel's findings. Very true, foreign warfare - all of it non-defensive - was much greater, but the body count from US Government policies was little greater in the $20^{\text {th }}$ than in the $19^{\text {th }}$ Century despite a rise in population of four or five times. So, there are exceptions.

Democracy stands anyway on a completely false premise,
namely that it is magically possible for voters to delegate to elected representatives powers which they never possessed in the first place. We may delegate those we do possess (a power of attorney, for example, to take decisions on our behalf) but all such powers relate only to our own lives, not to the lives of anyone else. We have no power at all to compel our neighbor to pay to educate our children, or to don a uniform and go kill some foreigner we dislike, or to abstain from smoking (outside our own property) or to pay wages only above some minimum, or even to donate money to the needy. Not having any such powers, it's impossible to delegate them to anyone else; the entire election process is therefore a complete fraud, from top to bottom.

That fraud would apply even if the delegation were bound by an enforcible contract, which it never is or could be for once elected, the politician acts on behalf of thousands of voters with conflicting wishes, and is himself merely one legislator among many. The whole scheme stinks of deception, gullibility and irrationality - so in some ways it could be said that democracy is a modern religion.

Furthermore, democracy is still rule, and rule means denying the losing voters their wishes, and forcing everyone to behave in a manner he or she would not choose if left free to do so. Churchill may have been right to describe democracy as the least evil of all forms of government - but it's still a form of government, and as this book has shown, the real problem lies in government itself, not the particular form it takes; and as we'll
conclude below, it is not necessary to have any at all.

## Theocracy

We noted on page 31 and elsewhere that there is always a tidy synergy between government and religion; the former often helps pay for the latter, out of tax revenues, while the latter seems to validate the former by teaching that a supposed Higher Authority appointed it to rule. Relative influence between the two varies with time and place, but sometimes and notably in Islam, the two may be hard to tell apart; priest and ruler are one and the same. When that is literally true, the arrangement is a theocracy; the alleged representatives of the alleged creator are the government. Is it reasonable to hope that this makes things better?

Despite the ethical teaching that forms a large component of every religion, and despite its usually kindly nature, the opposite is unfortunately the case in practice. No sooner has some religious zealot got his hands on all the levers of power, than blood starts to flow.

In Chapter 5 we saw that Islam was founded in warfare, and made all its rapid advances into Europe by means of warfare - not by reasoned persuasion or compassionate medical or educational missionary work, even though in the Middle Ages its adherents were well able to deliver some. It was eventually ejected from Europe by the same means, but it secured Turkey and formed the Ottoman Empire, also by force of arms. The same bond between sword and Q'ran is clearly seen today; the young are
raised in religious schools that brainwash them so well that as adolescents they can be used on hundreds of suicide missions worldwide every year, with the aim of enabling their leaders to acquire more political power. Those of different religions may claim that this travesty is not a true or good religion, that their own is superior; well, maybe. Let's take a look.

In Chapter 6 we saw that the Christian religion was at the peak of its power in the 1400 s and 1500 s, yet it was vicious in its suppression of "heresy." Any challenge to its authority, even to such a minor doctrinal point as whether the sun revolves around the earth or vice-versa, was met not with reason but with the force of being burned alive. In the long conflict of the Reformation, Papists burned Protestants and Protestants burned Papists; in 1572, French Catholic mobs murdered thousands of Huguenots in righteous fury. Enmity between the two lasted through the $20^{\text {th }}$ Century in Ulster, where they bombed and shot each other until exhausted.

That is what religions do, when they have power. They also practice piety and show compassion and give comfort to those in need, no question; but hand them power, and they are no better than anyone else handed power. Evil is what tends to happen when people acquire power over others, and whether or not they are religious makes little difference if any. The Crusaders, in the $12^{\text {th }}$ and $13^{\text {th }}$ Centuries, went on holy and noble missions to rescue Jerusalem from the infidel, and did so using the cross of a crucified Savior as the symbol on their shields and killed
all who got in the way, all in the name of gentle Jesus. Anomalous? Hypocritical? Unrepresentative? - maybe. But it was a long time before the Pope repudiated his predecessor's role in sponsoring those wars and the hymn "Onward, Christian soldiers, marching as to war!" was written to make deliberate use of a military analogy as late as 1865 , and is sung with gusto to this very day.

So no, any kind of theocracy would in my view tend if anything to be worse than other forms of government. They not only rule (that's the fundamental objection) but also try to rule the inner man, to control thoughts and beliefs as well as actions. That profoundly denies liberty.

## Small Governments

If the ugliness of government cannot be restricted by democracy or religion, is it valid somehow to prevent its growth beyond local dominion, so that we have a large number of small governments instead of a small number of large ones? One well-advertised Libertarian campaign in the early $21^{\text {st }}$ Century asserted that "Small Government is Beautiful" but the slogan, though well-meant (the wish was to make government smaller by reducing taxation) was very unfortunate. There is nothing "beautiful" about brute force in any shape, form or size. We can verify this by examining the conduct of any local government; one ruling a town, city, or state.

Take a look at what they do, not so much at what they say they do. Pick up a simple summary of how they steal, and
how they spend what they steal; and identify the biggest few items (if you can- they sometimes make that difficult). First let's check how they get it; as well as borrowing (which shifts the burden on to future taxpayers, who may not be even represented in the current decision) you'll probably see that three methods ${ }^{1}$ of robbery are used.

Property Tax removes money from residents according to the value of the real estate they own. If it is not paid, title to that property is transferred to the local government and it is sold from under the owner-occupier, who is then ejected to the street to die of exposure. Real estate cannot be physically moved out of the thief's reach, so it's a simple case of "your money or your life." This tax has also, in effect, terminated private property ownership in America. It is no longer possible to own real estate without paying tribute to the nearest government, hence the occupant doesn't really own, he merely rents. If a big part of the "American Dream" was home ownership, that dream has been destroyed.

Sales Tax rips a usually small sum off every item bought in the jurisdiction of the thief, often with a few exceptions such as food. Anybody wishing to live at a standard above subsistence level is therefore punished, in exactly the same way as is used by the Mafia in its "protection racket." If the retailer does not hand over to the enforcer a

[^1]specified percentage of sales, his business is smashed; as they all operate on slim margins, he has no alternative in practice but to pass on the theft to his customer. The tax therefore turns every retailer into an associate thief.

Income Tax at the State level is normally enforced as an add-on or "piggyback" to the Federal system. The resident is told to file a state tax form showing the "income" he entered on his IRS 1040 Form and then to pay money as the State formula directs. The trouble here is that federal income tax does not exist in law, so the States that obtain money this way are accessories in a huge deception. It was never written into federal law because if it had been, such laws would have been unconstitutional. The i-tax was enacted in 1913, following a Constitutional Amendment (\#16) supposed to remove those legal problems but which, in the Supreme Court's opinion, "gave Congress no new taxing power." The i-tax is therefore wickedly deceptive; a trillion dollars a year at the Federal level, another trillionplus in the form of Social Security "contributions" that it triggers, and perhaps a further trillion in State income taxes hooked to it amount therefore not merely to the most massive heist in history, but also the most massive fraud.

So much for how local governments obtain their resources. Now let's see how they spend them.
"Education" may well be the biggest item on the budget of your local government; the word is an euphemism for "schooling". Instead of parents being free to choose how their own children shall be taught, they are forced to pay
for them to attend a government school; and even if they don't use the places, payment will be extracted anyway. It's as if one is forced to pay for breakfast at Burger King, even though one may choose always to buy at Wendy's.

The government school monopoly graduates students of whom a large minority cannot functionally read. The idea that those schools teach the "Three Rs" and more is therefore nonsense on its face; they entrap children for 12 of their most formative years but what they actually teach is something else. That actual curriculum is respect for authority, exactly as they were always designed to do (see page 107) - and the high crime rate suggests they don't even succeed in that. Instead of "leading out" students, which is what "education" means, they dumb them down so that few can think for themselves. Little wonder that any can; a deadly sentence of twelve years of rushing from subject to subject at timed intervals during the day, regardless of interest in each subject if any, is likely not only to fail to satisfy curiosity but to deaden such curiosity as may survive. That is, again, no accident. As Hitler said, "How fortunate for government, that people do not think."
"Health \& Welfare" will be high on the list in most local government areas. The need for help when ill health or misfortune strikes is real, and has always been real. It may be worth comparing what happens today with what happened a century ago.

Then, care was delivered by the family first, and if extra help was needed, by church or provident society - a form
of insurance. Today, it comes as an alleged "entitlement", just as if the writing of a law can grant Peter a right to use money belonging to, and earned by, Paul. To use the product of someone else's labor is rightly called "slavery."

As with all "services" delivered by government, it comes with massive additional costs; for the real purpose of any government program is to provide jobs for its employees, regardless of the quality of service rendered, if any. That is nowhere more true than in the government school system, but it applies to the welfare bureaucracy too.

A century ago, help to the needy was given with love and compassion, and with maximum encouragement to get back on one's own feet so that the charity could end and be used elsewhere. In the case of health care, physicians actually made house calls! - and charged only what the patient could evidently afford. If those able to help chose not to do so, that was their right - but news of it would get around. The twin incentives to compassion were the satisfaction it gave the giver, and the reputation for being generous that it brought him. Today, "entitlement" has crowded out compassion, and it's a tragedy.

Road construction and maintenance is one activity most people appreciate, and is for sure a vital function. Nothing however says that it must be performed by the force of government instead of by choice in the marketplace, and numerous disadvantages follow from the former:
(a) It comes with seizure of land. In the US that's known
as "eminent domain" and it means that if a government body decides to build a road through your land, it will do so and will pay you what it says is "fair" - regardless of your interest in selling it. In a market society, roads would be built only on land sold by agreement; choice, not force.
(b) It costs at least twice as much as it would in a market. Early roads in America were built by investors seeking profit, and they were well made and rationally placed; as governments took over the task, they were neither.
(c) It comes with licensure. Governments don't just operate the roads, they issue licenses for their use - and don't limit that merely to a one-time certificate of driving competency, they require all drivers to carry a detailed ID-like document and to renew it every few years. In addition the vehicles have to be licensed, with annual inspections which bring good business to the workshops allied with government but which add considerably to the cost of transportation. The DMV in most states is one of its most detested agencies for those reasons. The net of it is that at the drop of a hat, DMV bureaucrats can cripple anyone's ability to earn a living or to enjoy travel. And if a complaint is ever made about their arrogance, don't expect it to be handled by any disinterested party.
"Justice" is another function of local government, and includes policing as well as adjudicating. Like every other such function, it consists primarily in providing "jobs for the boys" and could be performed better and cheaper by a competitive free market in protection services; because it
knows no competition (no government monopoly ever does) it costs at least twice what is necessary.

Not that cost is the primary problem with government justice; it usually costs less than $10 \%$ of the budget, and sometimes a lot less. The problem rather is that it provides nothing recognizable as true justice, while justice lies at the base of any civilized society.

Instead of restoring lost or stolen rights, by arranging for a victim to receive restitution from an aggressor, "justice" as monopolized by government tests only whether the accused has broken some law that it imposed, and if so makes him suffer punishment. The actual victim gets at best a "thank you" from the court, as a witness. The perp suffers the penalty, sometimes at the heavy expense of a third party (taxpayers) from whom funds are stolen to keep him in prison. The only winners are lawyers. This is a total travesty of justice, yet it is what government forces everyone to buy, at State level as well as Federal.

So no; just because state and local governments are many, and small, does not mean they are not evil. They exhibit as "tin gods" all the malodorous characteristics of their bigger fellow-thugs.

## Conclusion

Oppenheimer's alternatives are therefore just as he said; force, or the free choice of voluntary exchange of the products of our labor, which we call a "market." Those
alternatives are ours to choose, and it's my hope that every reader of this book will by now have no doubt at all: the clear, moral choice is the latter. The only question then is: how can the immense power of the world's governments be broken so that they disappear?

It's the biggest challenge mankind has ever faced, but happily we have learned something about how to achieve high objectives. As in every strategic plan for any purpose, there are two steps to take:

- specify the objective, and
- lay out a plan to achieve it

Surprisingly, many who are uneasy with the monstrous power that government wields have failed to take that vital first step. They imagine that somehow government might be limited, and are vague about how tight are the desired limits. No wonder that they also have no idea how to go about imposing them.

In fact is is never possible to limit government, because by definition government has supreme power in its domain; if arguendo any superior power could limit it, that new entity would become the government - and in need of limits; and so on ad infinitum. That's the undeniable theory, and the practical proof is that no finer attempt to have a limited government has ever existed than the one in the United States, yet it has proven a spectacular failure.

Therefore, no compromise: Step \#1 must be to define the
objective as creating a zero-government society. A set of people (I'd say, in America first) who wish to live only by voluntary exchange, in a free market.

That immediately influences what is to be done in Step \#2, for if a magic wand abolished government today, few folk would have any idea what to do or what was happening; the government school system has distorted understanding very effectively, and they would squeal for reinstatement within 24 hours. Step \#2 must include, therefore, a rather thorough and universal re-education.

Fortunately, if it can be done, an universal re-education would suffice not only to prepare everyone to live without imposing force on each other, but also to bring about the termination of government; for as soon as anyone understands what government is, and that we can very well live without any, he will not wish any longer to work for it. Any who are working for it at the time they reach that understanding will therefore walk off the job. Since no government has any resources whatever except the people who work for it, to execute its thefts and operate its laws, it will immediately cease to exist; it will evaporate.

Therefore, the task in Step \#2 reduces to this: how can a quarter billion literate Americans be re-educated quickly?

I can see only one answer to that, and it's a good one: it will happen only by person-to-person introduction to a learning facility good enough to deliver the teaching that is required, so that once "graduated", each student will
bring one of his or her friends at a time to undertake the same course and thereby bring about exponential growth.

The alternative of some kind of "broadcast" school cannot possibly work, because no such persuasion entity can hope to attract close to $100 \%$ of the population. Friend-to-friend recommendation, on the other hand, can and will.

Such a facility already exists, and others will very likely be formed to furnish friendly rivals. That first is called The On Line Freedom Academy, and at this writing it can be accessed on the Internet at www.tolfa.us - but every student is recommended to download the course to CD and present a copy to each friend he introduces. That way, it is independent of any future restrictions on Net freedom.

Assuming the recommended rate of one new student per graduate per year, the whole population will graduate by the year 2027 and therefore government will evaporate during that year; the math is $2^{28}$, or 268 million, with 28 being the number of years taken. (When the Academy began there was a one-time boost to membership, whose effect was the same as if it had begun in 1999 - hence, a projected completion in 2027.)

It is fascinating to speculate what measures, if any, government will take to try to avoid its fate - to stop its employees leaving in disgust. I have give some thought to that and cannot foresee any that is likely to succeed, though that won't prevent the attempt. The story is told in my Transition to Liberty, which sets out to relate what will
happen between 2022 and 2027. Then when it has all vanished, huge changes will continue to take place for a while and my A Vision of Liberty offers an account of the first three years of the new, free society to take the reader of this present book through 2030.

Finally the reader will want to know about the rest of the world. Powerhouse of production though it is, America's 300 million make up only $5 \%$ of the world's people; what about the prospects of a free society elsewhere? - I believe they are very good, and that others will follow America's lead very quickly. The English-speaking world will be just as able to latch on to the Freedom Academy, via the Internet, as Americans, and that covers a great deal of the world (the "pink bits" plus!) and most of the remainder has many who can read English as a second language. For the rest - Russia, China, Arab nations - it may move more slowly; but the example of rapid progress here will be apparent to all immediately, and from 2025 onwards, every government in the world will tremble in its jackboots. None can tell how many years will be needed for the whole world to become free; but as a rough guess, I think that happy event will occur before mid-Century.

It remains, dear Reader, only for you to do your part. Find a friend who will mentor you through TOLFA and begin the task; or if you know none, use the Net link as above.

To Liberty!

## Appendix: Agricultural Surplus



Here's a way to see how government steals our freedom. The four time periods are " $>10 \mathrm{Kya}$ " or older than 10,000 years ago when as far as we know there was little or no free time above what was needed to obtain food to live,
nor any government. The next bar portrays what happened between when fixed-farm agriculture was discovered, and AD 1800; there was a useful agricultural surplus but government stole most of it, so there was still little freedom and little investment for better living. Abject poverty was endemic, except for the governing class, with a few exceptions like the middle class in Roman times.

Then after about 1800 (Chapter 7) there was a dramatic fall in the resources needed to grow food; the agricultural surplus became large but government was slow to grow so freedom to enjoy and invest the fruits of one's labor was larger than it had ever been, before or since.

Finally after about 1900, government seized its chance and dramatically raised its tax grab, to the current $50 \%$ level (or more or less, depending on the country.) The cost of growing enough food has fallen a little more, but still the amount of disposable time or money we have - ie, liberty - is reduced, as a proportion of all we earn.

The vertical scale of each bar is proportional, not absolute. Thus, the US "national product" is far greater today than it was 150 years ago, and the European one in the 1800s was far greater than it was 4,000 years earlier. Nonetheless, the chart is one way to express human freedom and its denial.

## Index

1914 ..... 94, 126, 136
2022 ..... 7, 161
Adam Smith ..... 99, 100, 111
Africa. ..... $9,17,27,40,60,66,76,101,109$
Agricultural surplus. 14, 27, 29, 57, 59, 60, 67, 97, 98, 111,122, 125, 162, 163Alaric.54, 59
America...7, 8, 9, 10, 20, 39, 45, 51, 60, 64, 68, 69, 75, 81,$83,88,94,96,98,101,102,106,107,108,109,110,111$,$115,120,124,127,128,133,135,143,145,146,147$,152, 156, 159, 161
Archimedes ..... 36, 58, 74
Asia. ..... $.9,10,20,135$
Assignats ..... 98
Australia. ..... $.9,60,96,101$
Authority. 32, 48, 65, 71, 72, 73, 75, 85, 86, 87, 88, 89, 90,$95,119,140,143,149,150,154$axiom.7
barbarians ..... 17, 51, 56, 57, 66
Barter. ..... 20, 50
Brahe, Tycho. ..... 88
Britain. .40, 46, 53, 65, 94, 96, 98, 102, 103, 104, 111, 114, $115,116,117,124,125,131,132$ Browne, Harry ..... 54
Brunel. ..... 113
Bruno, Giordano ..... 88, 90
Caligula ..... 50
Cambodia ..... 135, 147
Canals ..... 104, 105
central bank ..... 97, 128, 129
Chamberlain. ..... 133
Charlemagne ..... 67
Charles Martel ..... 67
China. 15, 26, 27, 37, 50, 60, 61, 80, 81, 83, 100, 104, 134,136, 161
Christianity ..... $16,45,52,76,116$
church $38,52,53,58,65,66,67,72,73,76,85,86,87,88$,89, 121, 130, 144, 154Churchill.130, 144, 148
Classical liberalism ..... 92, 116, 145
Cobden, Richard ..... 116,117
Columbus ..... 81, 82, 83
Constantine ..... 16, 52, 58
Constantinople ..... 47, 65, 80, 83
Contract.....19, 20, 21, 22, 23, 25, 30, 32, 92, 97, 100, 101, 106
Copernicus ..... $.85,86,89,90$
Crusade ..... $.65,70,150$
Cultural Revolution ..... 136
Curiosity $5,31,74,78,81,90,91,112,122,154$
da Vinci, Leonardo ..... 85
Darwin ..... $104,105,119,120,121$
de la Boëtie ..... 4
de Tocqueville ..... 145
Declaration of Independence ..... 8, 91, 106
Delegation of power ..... 111, 148
Democide ..... $138,145,146$
democracy. ..... $16,144,145,147,148,151$
Depression ..... 129, 131
DMV ..... 156
Domesday Book. ..... 69
Economics.....10, 14, 21, 26, 27, 37, 46, 50, 53, 54, 68, 96,97, 99, 100, 108, 112, 115, 117, 118, 129, 134
Education....24, 44, 48, 49, 78, 79, 117, 149, 153, 154, 159Egypt...5, 15, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38,40, 44, 45, 48, 49, 64, 107, 114Einstein.$.90,121,141$
England. 17, 46, 66, 69, 71, 72, 82, 87, 88, 91, 92, 93, 105,111, 112, 114
Eratosthenes ..... 82
Europe...5, 9, 10, 20, 46, 56, 59, 60, 61, 63, 66, 67, 69, 70,$71,73,75,81,82,87,89,92,94,96,98,109,120,125$,126, 127, 131, 132, 146, 149, 163
Fabianism. ..... 124
Fascist. ..... 37, 48
FDR ..... 51, 53, 133, 135
France....10, 40, 43, 46, 66, 67, 71, 89, 91, 92, 96, 98, 104, 105, 116, 125, 127, 132Free trade.116
freedom.....7, 24, 37, 43, 44, 45, 55, 57, 70, 78, 89, 91, 94, $95,99,101,109,115,116,117,119,123,160,161,162$, 163Freedom Academy24, 160, 161
Freeman, Charles ..... 16
French Revolution. ..... 108, 109
Galileo ..... 89, 90
Gandhi. ..... 115
Germany 40, 66, 67, 75, 87, 94, 96, 98, 125, 127, 128, 130,132, 136god....................31, 32, 33, 45, 53, 62, 73, 87, 89, 118, 157
Goths ..... 57, 66
Government school monopoly ..... 109, 154
Greece ..... $15,38,39,40,73,86$
Gutenberg ..... 61, 80, 87
Heliocentrism ..... 85, 89, 121
Hitler. $38,44,128,131,132,136,154$
Huguenots ..... 93, 150
Hus, Jan. ..... 73, 75
Iceland. ..... 68, 69, 81
Income Tax ..... 153
India.....9, 26, 27, 37, 60, 61, 62, 63, 82, 83, 96, 100, 101,
109, 114, 115, 147
Industrial Revolution. $95,103,110,112,115,118,146$
Inflation. ..... 51, 88, 128
Internet ..... 23, 80, 140, 160, 161
Iraq ..... $15,26,39,40,137$
Islam. ..... $.62,75,149$
Jesus ..... 26, 52, 53, 151
Jews ..... $.62,130,131,133,138,146$
Journey of Man. ..... 9
Judea. ..... 17
Jury system. ..... 69, 71
Justice. $16,44,101,156,157$
Karl Marx ..... 117,124
Keynes ..... 50, 127
Korea. ..... 134
Laffer ..... 44
Laissez Faire. ..... 111
Lascaux. ..... 10
law. $8,19,65,69,70,71,88,90,93,97,98,106,116,120$,$129,141,144,153,155,157,159$
Leif Ericsson ..... 81
Lenin. ..... 130
Limited government. ..... 158
Locke, John ..... 67, 91, 92
Longevity ..... 77, 112, 115, 137
Longitude ..... 104
Lord Acton. ..... 145
Luddite ..... 49
Luther, Martin ..... 81, 86, 87
Magellan ..... 81, 83
Magna Carta. ..... 70
Malthus, Thomas ..... 110
Managed trade ..... 49
Manchester School ..... 117
Market.....12, 20, 21, 22, 23, 24, 29, 30, 37, 56, 57, 61, 78,$81,82,102,111,112,115,116,121,129,130,136,140$,$141,142,143,155,156,157,159$
mercantilism. ..... 99, 100, 103
Middle class ..... $.48,54,98,128,163$
mills ..... 114,115
money. . $36,44,50,51,53,79,86,87,88,96,97,113,122$,$128,129,140,142,152,153,155,163$Monot, Jacques.67, 108, 120
Music ..... 91, 118, 142, 143
Mutual Assured Destruction. ..... 126, 136
Napoleon ..... $.98,107,108,133$
Native Americans ..... 20, 102, 146, 147
Newcomen. ..... 102
Newton ..... 89, 90, 91
Nicaea. ..... 52, 53, 58
Nomad. ..... 18, 22
Nuclear power. ..... 122, 141
Obama, Barack ..... 97, 147
Oppenheimer. ..... $10,11,23,56,157$
Ottoman Empire. ..... $65,75,88,92,109,149$
Peasants' Revolt. ..... 71
Polo, Marco ..... 81, 83
Ponzi ..... 54
Pope. $65,72,73,86,87,88,90,151$
Portugal ..... 82, 83
Powered flight. ..... 139
Property ..... $.21,23,72,91,97,152$
Prussia. ..... 96, 108, 117
Pyramid ..... $15,27,34,35,36,64$
Railways. ..... 112, 113, 114
religion....15, 31, 32, 45, 51, 52, 53, 58, 60, 61, 62, 64, 65,$66,70,72,73,78,79,86,87,88,90,92,93,96,100,116$,$118,119,120,144,149,150,151$
Renaissance ..... $.76,78,80,83,85$
Restitution. ..... 101, 157
Roads ..... $.44,55,56,155,156$
Robespierre ..... 108
Rockets ..... $.61,113,141$
Roman Empire....15, 33, 37, 40, 42, 47, 48, 49, 54, 60, 64,65, 66, 75, 87, 92, 96
Rosetta Stone ..... 107
Rousseau. ..... 96, 97
Rummel, R J ..... $41,138,144,145,147$
Russia. $.57,96,107,126,127,130,131,161$
Rwanda ..... 137
School system ..... 108, 109, 155, 159
Siberia ..... $10,21,60,64$
slavery.......15, 17, 29, 30, 32, 101, 116, 117, 119, 146, 155
Soviet Union ..... 57, 118, 132, 134, 136, 137
Space race ..... 142
Spain $17,40,44,65,66,67,75,82,94,96$
Stalin ..... 130, 132, 134
Steam engine ..... 95, 102, 113
Steel. ..... 103, 114
Stephenson, George ..... 112, 113
Sweden ..... 91, 92, 96, 105
Tax.....17, 28, 29, 31, 32, 35, 43, 44, 48, 51, 53, 56, 69, 70,
$71,72,88,149,151,152,153,157,163$
Thatcher, Margaret. ..... 72
Theocracy ..... 63, 149, 151
Thomas Aquinas ..... 76
Tonkin Gulf ..... 135
Trajan. ..... 16, 44
Transition to Liberty ..... 7, 17, 160
US Constitution ..... $.41,111,145,153$
Versailles ..... $125,128,130,132,141$
Viking ..... 66, 68
Vision of Liberty ..... 7, 17, 161
War....10, 11, 15, 16, 29, 30, 32, 33, 34, 39, 40, 41, 47, 54,
$55,57,60,61,62,65,67,68,69,71,88,92,94,101,102$,$108,109,115,125,126,127,128,129,131,132,133$,$134,135,136,137,138,146,147,149,151$Wedgewood, Josiah.104, 119
welfare ..... 57, 154, 155
Wells, Spencer ..... 9, 26, 76
Wycliffe, John ..... 72, 73, 75


[^0]:    "...you maintain that the earth moves; that the sun occupies the lowest, and thus the central, place in the universe... Therefore with the utmost earnestness I entreat you, most learned sir, unless I inconvenience you, to communicate this discovery of yours to scholars, and at the earliest possible

[^1]:    1 The option of printing fiat money, lavishly employed by all governments with a central bank and control of the money supply, which imposes tax on everyone in the form of inflated prices a bit later, is not generally available to State and local governments.

