

had high proficiency in dealing with celestial navigation, the storms, the sea, the men, the ship, economics, biology, geography, history, and science. The wider and more long distanced their anticipatory strategy, the more successful they became.

But these hard, powerful, brilliantly resourceful sea masters had to sleep occasionally, and therefore found it necessary to surround themselves with super-loyal, muscular but dull-brained illiterates who could not see nor savvy their masters' stratagems. There was great safety in the mental dullness of these henchmen. The Great Pirates realized that the only people who could possibly contrive to displace them were the truly bright people. For this reason their number-one strategy was secrecy. If the other powerful pirates did not know where you were going, nor when you had gone, nor when you were coming back, they would not know how to waylay you. If anyone knew when you were coming home, "small-timers" could come out in small boats and waylay you in the dark and take you over—just before you got home tiredly after a two-year treasure harvesting voyage. Thus hijacking and second-rate piracy became a popular activity around the world's shores and harbors. Thus secrecy became the essence of the lives of the successful pirates; ergo, how little is known today of that which I am relating.

Leonardo da Vinci is the outstanding example of the comprehensively anticipatory design scientist.

Operating under the patronage of the Duke of Milan he designed the fortified defences and weaponry as well as the tools of peaceful production. Many other great military powers had their comprehensive design scientist-artist inventors; Michelangelo was one of them.

Many persons wonder why we do not have such men today. It is a mistake to think we cannot. What happened at the time of Leonardo and Galileo was that mathematics was so improved by the advent of the zero that not only was much more scientific shipbuilding made possible but also much more reliable navigation. Immediately thereafter truly large-scale venturing on the world's oceans commenced, and the strong sword-leader patrons as admirals put their Leonardos to work, first in designing their new and more powerful world-girdling ships. Next they took their Leonardos to sea with them as their sea-going Merlins to invent ever more powerful tools and strategies on a world-around basis to implement their great campaigns to best all the other great pirates, thereby enabling them to become masters of the world and of all its people and wealth. The required and scientifically designed secrecy of the sea operations thus pulled a curtain that hid the Leonardos from public view, popular ken, and recorded history.

Finally, the sea-dwelling Leonardos became Captains of the ships or even Admirals of Fleets, or