



A NEO-MAHANIAN VIEW OF
THE GREAT WASHINGTON AREA

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A NEO-MAHANIAN VIEW OF THE GREATER SEATTLE AREA

The coastline of the Puget Sound, from its waters and access to the Pacific Ocean on the west to the rising Cascade Range on the east, offers a unique setting to examine the application of Mahanian and Neo-Mahanian postulates. The area, which today includes the city of Seattle, has experienced numerous changes throughout history in its role for human use, correlating to social and technological changes that have occurred there and around the world. This change in the scale of technology is accompanied by a change in the Mahanian perception of the area and its potential utility. However, this evolution can be observed and predicted by the principles of Neo-Mahanianism.

Mahanian and Neo-Mahanian postulates predict the ability of a nation or nation-State to utilize the sea for its advantage, primarily defense and affluence. Mahanian principles can be expressed in four postulates, while Neo-Mahanianism is appended in an additional two. (See Appendix A)

The original inhabitants of the east coast of the sound arrived there following the herds of game that were their sustenance. The precise century of the arrival of these nomadic hunter-gatherers from Asia is still a point of debate among the experts. However, it is commonly presumed that they

arrived on foot, carrying 40-80 lbs., and therefore probably arrived when sufficient seawater was locked into glaciers to lower the sea level about 50m to expose a terrestrial connection between Siberia and Alaska.¹ The earliest land bridge existed between 50,000 to 40,000 years ago, as evidenced by the fossil remains of Old World species, including the caribou and the woolly mammoth, in North America. After a period of submergence the land bridge again appeared between 28,000 and 10,000 years ago. Although this time covered with a thick sheet of ice, the bridge did become passable during the last 10,000 years of its existence. Whether man made the crossing during the first occurrence or not is uncertain, however, it is certain that man did inhabit the New World by 12,000 years ago.

Archeological evidence of the new inhabitants is limited. Detailed information of their life styles exists only for about the last 500 years. This is also the period of the most dramatic changes in the history of the area, its people, their society, their government and technology.

It does not appear that these inhabitants constructed a neolithic lake society of raft and pole structures. It is entirely possible that they are descendants of such societies in Asia, washed downstream or forced to leave when population exceeded carrying capacity. However, environmental pressures

1 Meggers, B.J. 1979. Prehistoric America, an Ecological Approach. Aldine Publishing Co. New York

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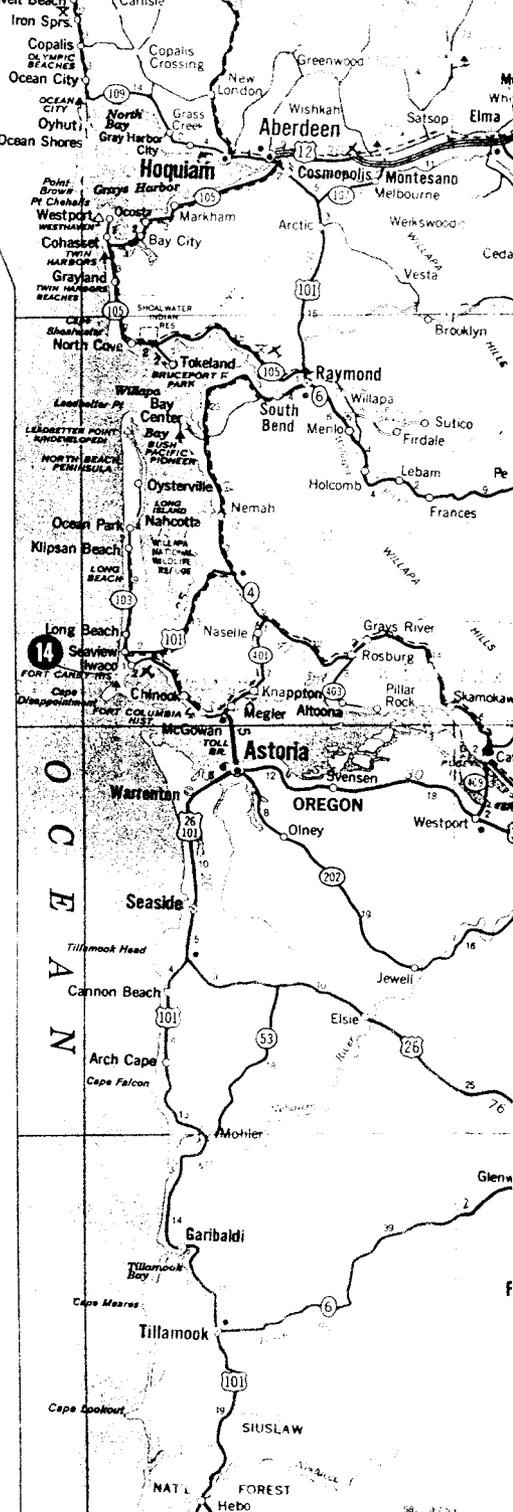
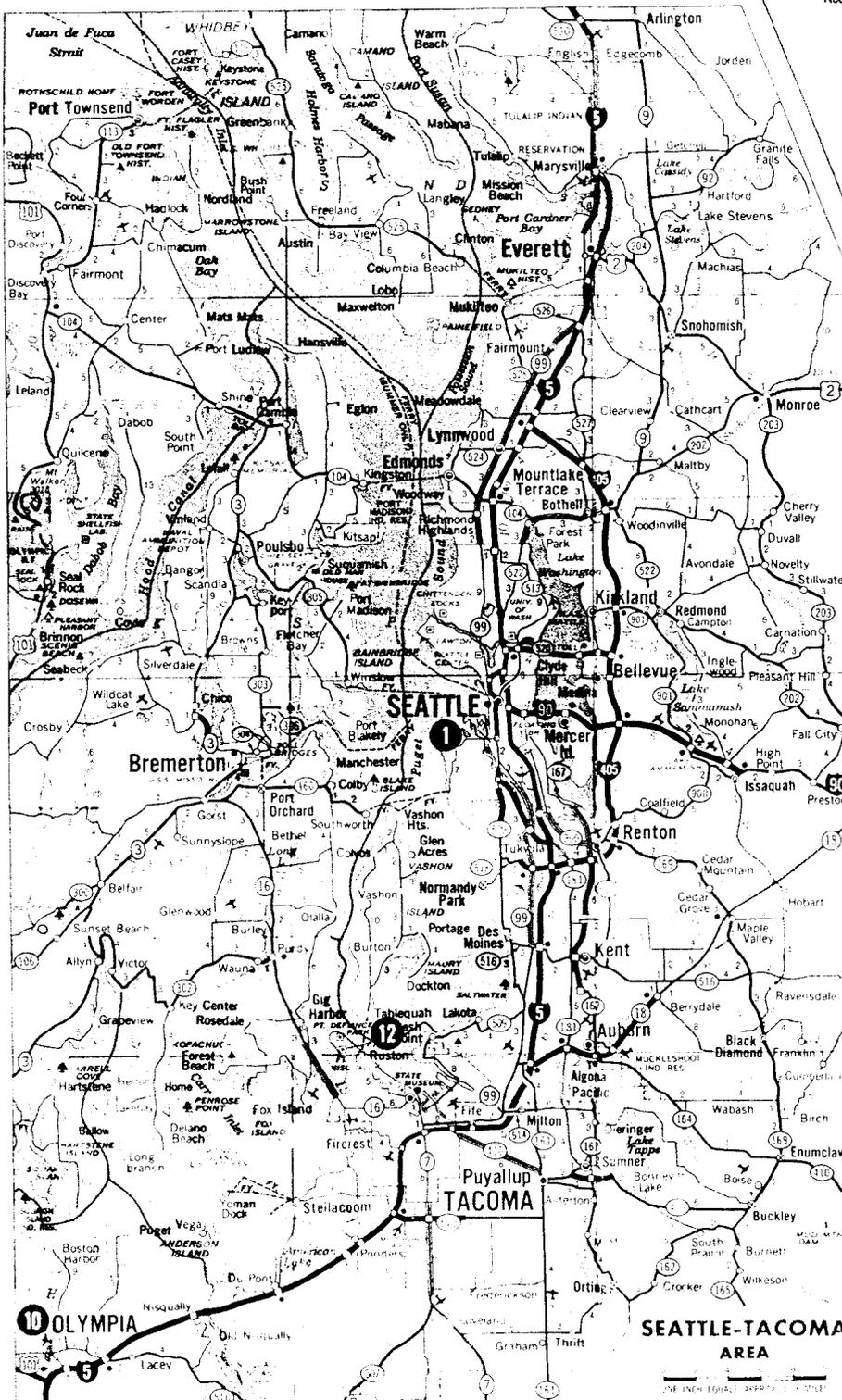
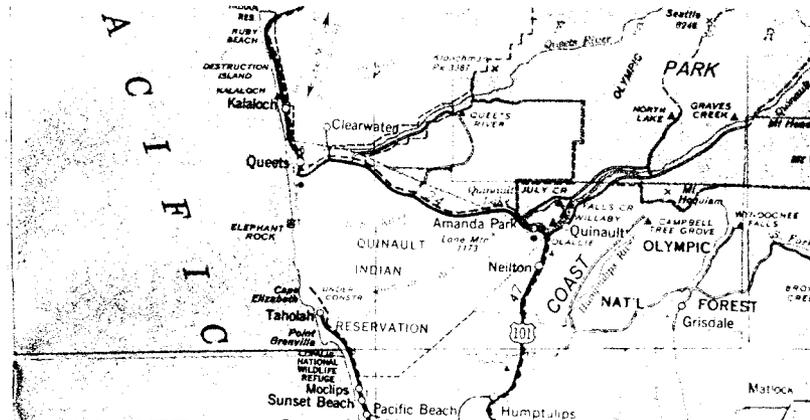


Fig. 1 modern Greater Seattle area. 1971 H. M. Gousha Co. CA

of the region were not suited to this type of community. Many lakes occur within the region but usually at too high an elevation to support much life due to very low temperatures in summer and freezing in winter. At lower altitudes many streams and rivers exist but are usually quite rapid and subjected to seasonal flooding during spring melts of Alpine snow and ice.

However, within the context of this setting the closest equivalent to raft and pole community existed on the numerous small islands and peninsulas. These lacked all the benefits of true raft and pole communities and were often seasonal. Perhaps the social and technological evolution of these people remained somewhat retarded due to the configuration of their environment. They have remained the same simple hunter-gatherers since their arrival over 10,000 years ago. Even in the late 20th century there is an effort by many to denounce modern society and nostalgically return to the ways of their ancestors. There are times when any sane person in modern society may have similar thoughts, but it may be disadvantageous for a society to stagnate around a configuration that worked 10,000 years ago. As the scale of technology changed, the indigenous peoples did not, and found themselves inevitably overwhelmed by outside cultures.

Tribes generally centered around the naturally advantageous peninsulas. Most islands in the area were too small to provide

adequate fresh water and game, though seafood was plentiful. The ideal configuration for a supply of food, clothing, water, shelter and defense for the Indians of Puget Sound was the peninsula, second best ranking of the land-sea configurations described by Mahan.

The Indians of Puget Sound were primarily hunter-gathers of roots, berries, fish and meat. Chief economic tribal differences were the proportion of seafood to meat.² The Misqually that lived on the shore of the Sound collected high quality clams. These could be traded with tribes of the interior for large portions of dried meat. Shells were also used as currency, increasing in value the further inland they were used. Shells were used to purchase slaves and baskets.

Gathering continued throughout the year. Though tribes always had permanent winter houses they often chose to move frequently to be close to the source of what they were collecting. In May, clams and shellfish were gathered, some which would be dried and stored in the winter house. Men were involved in hunting at this time, while women collected roots and berries. After storage of the surplus, the most important activity of the year began. Fishing continued through early November. The preferred catch was salmon, supplemented by smelt, herring, flounder, trout and occasionally sturgeon, cod, and skate. Some shellfish were still collected, barnacles being preferred

2 Haeberlin, Herman and Erna Guuther. 1930 (Reprinted 1952). The Indians of Puget Sound. University of Washington Pub. in Anthro. Vol 4(1):1-84

over oysters. Duck eggs and fish eggs both were eaten.

During the winter small parties would hunt for ducks and seals. Deer and elk were the preferred meats, which were either roasted or boiled with hot stones. Nuts were buried for consumption later.

With the exception of potatoes there appears to have been no attempt at agriculture. However, the bountiful environment precluded any necessity of cultivated foods.

Dugout canoes were the primary method of transportation for moving more than 40-80 lbs. of goods. These were constructed by shaping the outside of the canoe first, then the inside by burning pitch-wood and controlling the fire by means of wet clay.³ The shovel-nose was the most common design and was seaworthy in surf and rough waters in the open sound. These canoes maybe historically related to the dug-out boats of Northeast Asia.⁴

A man without a canoe was on foot. Canoes were necessary to the way of life of the coastal Indians. Under compulsion, a man might surrender his house or even a wife or two, but never his canoe.⁵

Artisans decorated canoes as well as producing wood carvings. Though Puget Sound Indians didn't have the totem

3 Olson, Ronald L. 1927. Adze, Canoe, and House Types of the Northwest Coast. University of Washington Pub. Anthropology Vol 2(1):pg18

4 Ibid pg23

5 Dryden, Cecil. 1968. Dryden's History of Washington. Portland: Binford's & Mort, Publishers. 412pgs

poles of tribes further north, their crafts did display elaborate intricacy. Predictably a class of artisans, craftsmen and medicine men arose. Slaves captured in warfare with other tribes, were never allowed to learn the arts of canoe building, house construction or fine carving.

Land logistical systems were few. Paths lead to areas used for gather foodstuffs or construction materials but, the coastal tribes moved about primarily on the water. Unlike their counterparts east of the Cascades, the "horse" Indians, the coastal tribes exploited the numerous inlets, bays and rivers for transportation.

Because of this, the natural defense of islands and peninsulas was rarely bridged. Outside influence by would-be invaders was minimal. Though the coastal tribes sometimes battled among themselves they retained possession of their land. The great number of distinct tribes living on the Puget Sound attest to the insulation the natural barriers provided. Yet the commonality of a single dialect spoken among these numerous groups may indicate contact for the exchange of goods and ideas. The Chonook Jargon was spoken at pow-wows at the Yakima Valley and most tribes were represented. The jargon became a clearing house for tribal dialect.⁶

This configuration was to remain in effect thousands of years, until a major change in the scale of technology. This

6 Ibid pg112

change arrived in the 17th century in the form of European sailing ships.

There remains some uncertainty regarding exactly who and when Puget Sound and the Seattle peninsula were discovered.⁶ Earliest explorers were in search of a Northwest passage as a trade route between Europe and the Orient. Juan Cabrillo in 1542 got as far north on the North American west coast to pass San Francisco, though he missed the Golden Gate. Sebastain Vizcaino got as far as Oregon in 1565. Pirates and privateers then made some of the best progress. Sir Francis Drake in the Pelican, later renamed the Golden Hind, sailed up the west coast plundering Spanish ships engaged in trade with the Orient. He cut down ships rigging to avoid pursuit. Drake's ships, heavily laden with booty, had left so many enemies behind him it was impossible for him to retrace his path back to Europe. He counted on a Northwest passage.

However, it is doubtful that Drake proceeded beyond Oregon before turning West. His log recorded 48° but description in his journal does not match the coast line.⁷ To the west Drake reached the Philippines then returned to England around the Cape of Good Hope. He is honored today as the first Englishman to circumnavigate the globe.

Rumors continued of a Northwest passage. The stories were believed in part because of the usefulness of such a waterway

7 Ibid pg198

and in part because of substantial rewards offered by European governments to the founder of such a passage.

One of the most credible was by a Greek seaman, Apostolos Valerianos known in history as Juan de Fuca. In Venice in 1596 he related his story to the English merchant Michael Lok. He claims to have been in the employ of Spain on the trade route between the Philippines and Mexico. On one occasion he was sent to discover the fabled "Strait of Aman". His mission eventually ended due to mutiny and an attack by the British privateer Cavendish. But he claimed to have discovered a strait between 47° and 48° latitude and gave a plausible description of the coast and its natives. Juan de Fuca was bitter that he had received no compensation from Spain for his discovery, begged Lok to seek employ for him with British merchants. In 1602 Lok received word in England that de Fuca was dead. He died without the satisfaction of knowing his name would be perpetuated in the Strait of Juan de Fuca.

Spain, England and the US remained the chief explorers of the Northwest coast. In the 1770's, two centuries after Drake and numerous distracting wars with France in Europe, England returned to the Northwest lead by James Cook commander of the Resolution and William Clerke of the Discovery. Cooks voyages were successful around the world and establishe in the Northwest. Both Cook and Clerke rightly guessed that if there was a Northwest passage it lied so far North as to be covered with ice.

However, Cook somehow missed the Strait of Juan de Fuca, though he describes and charts its seaward opening accurately. It was to be his apprentice sailor George Vancouver that finally accurately charted the Puget Sound. In 1791 Vancouver left England with two ships, the Discovery and the Chatham and headed for Nootka Sound as Englands representative in a territorial dispute with Russia and Spain. Beyond this Vancouvers mission was to be scientific, a rare endeavor at this time.

Though many fur traders and privateers frequented the area, Vancouver was the first to fully explore and accurately chart the Puget Sound. Vancouver is responsible for many of the present day names, for example, New Dungeness, Mount Baker, Port Discovery, Port Orchard—now site of Bremerton Naval Ship Yard, Mount Rainier and even Puget Sound, named after one of Vancouvers lieutenants. Vancouver also charted Elliott Bay on which sits today the city of Seattle, though, Vancouver was not impressed enough to give it a name on his charts. He took formal possession of the Sound he had surveyed and its surrounding land for Great Britian under the name New Georgia.

Vancouver was duly impressed with Puget Sound. As the modern US Navy does today, Vancouver took advantage of these sheltered waters to perform repairs on his ships. Wooden ships twist and strain under the impact of sea and wind, resulting in open seams and wear and tear on all the rigging of the masts and yards. Such repairs had not been performed

since his ships left Tahiti, thousands of miles and many months earlier.

During this time Vancouver established a camp ashore where his crew attended many urgent tasks, not the least of which was operating the brewery for the production of spruce beer. Small boats were used to continue detailed surveys of shallow coastal waters, and establish contact with local Indians.

Explorers and traders continued to visit the coastal villages of the Sound on the Seattle peninsula over the next hundred years. But they finally arrived en masse by that great vehicle of land logistical systems, the railroad.

The quantum leap in technology that the white man possessed over the Indians left them little chance even with their natural defenses. Technology is the chief selective pressure in the postulated social evolutionary cycle, (See Appendix B). A new society established itself and the evolutionary process begins again.

The newcomers recognized the abundance of food and materials for constructing shelters that the Indians had known. Successful voyages to the Sound were richly rewarded in furs and timber. After the construction of mills and housing, churches and other pyramids were constructed by the new class of artisans.

The railroad bridged natural defenses and between 1880 and 1900 Seattle's population boomed from 3,553 to 80,671.

Chief Seattle, for whom the city was named because of his friendliness, or lack of capable resistance with the invaders, must have been astounded. Gold in Alaska and the Klondike expanded the population as rapidly as it induced inflation. By 1910 Seattle had 237,194 citizens who found it was cheaper to send their laundry to Hawaii by ship than have it done locally.

This change in ~~te~~chnology also brought about a change in the topological configuration of Seattle, and hence, a change in the Mahanian ranking. No longer was this area a collection of inlets or even a peninsula. Bridges span waterways and link land masses to form a single coastline configuration, with 1400 miles of coastline on 700 square miles of Sound. This configuration is lower in advantage than either island or peninsulas but 20th century Seattle is superior in other Mahanian features.

Its capacity for ports and harbors is one of the best in the world. During World War I, Seattle's shipyards, already expanded as a result of the gold rush, produced more freighters than any other port. During World War II Seattle shipyards were again a major fabricators of ships (and aircraft), and a major port of debarkation for the Pacific theater of war.

The population of Seattle (metropolitan area, 1,421,869 in 1970) is very aware of the sea that laps at its coast. Perhaps much more so than superior Mahanian topological configura-

tion residents, such as those of the island of Oahu. Seattle is a major shipping port, has numerous shipyards, abounds with pleasure craft and water recreation areas, and has an enormous fishery industry.

Ferries crisscross the Sound where bridges don't. Seattle's port was one of the first to use computers to monitor traffic, and use containerized freight.⁸ Many people live in modern versions of raft and pole communities, rediscovering some of the benefits, and calling them house boats.

The city continues to grow annually. Ports are enlarged regularly and new houses are built daily. Artisans are at work building Space Needles and other pyramids.

The immediate future of Seattle seems secure. However, problems of the distant future are a potential danger. An ever increasing population places more strain on food and resources. Fuels to power the industries and homes arrive in Puget Sound in increasing tonnage. A shipping mishap could destroy fishing grounds and oyster beds in a Sound that flushes very gradually. Wastes of industry and population could also have the same effect if not disposed of properly. Many residents feel it may be only a matter of time till disaster.⁹ Daming of rivers that empty into the Sound for hydroelectric plants

8 Graves, William. 1977. Sea Gate of the Pacific Northwest: Puget Sound. National Geographic Vol 151(1) pg76

9 Ibid pg86

presents potential destruction of a rich salmon industry if not properly constructed.

A future change in technology (one as relatively large as the white man brought the Indian) that could result in the hostile closing of the Strait of Juan de Fuca at Admiralty Inlet would be predictably devastating. Seattle and its surrounding area would be reduced to land locked, the worst configuration proposed by Mahan. Capacity for ports and harbors would diminish to nothing of world wide importance.

The knowledge of arts and technologies of the sea possessed by so many persons would have little significance in a land locked environment. Locally produced food would dwindle as a stagnant Sound died or dramatically changed with fluctuating salinity from incessant seasonal flooding by terrestrial runoff. Again technology is the selection pressure in the evolutionary cycle.

Seattle is a difficult area to apply Mahanian postulates to for several reasons. First, it is difficult to precisely define the area to examine. Little history exists if too small or specific of an area is exemplified. Encompassing a larger area for discussion affects the topological configuration and ranking.

Second, the change in technology in the Seattle area made a tremendous leap over a relatively short time. This also affects the topological configuration and ranking.

Though Mahanian and Neo-Mahanian postulates are at work they are not as clear and exemplatory as other places in the world. Seattle has never been a major battle ground and natural defenses tested, but its advantage from the sea is evident in its food, energy, and transportation.

Mahanian postulates allow the construction of scenarios for the future as well as explanation of the past. Applied worldwide, reasonable logistics, defenses, and resources can be developed.

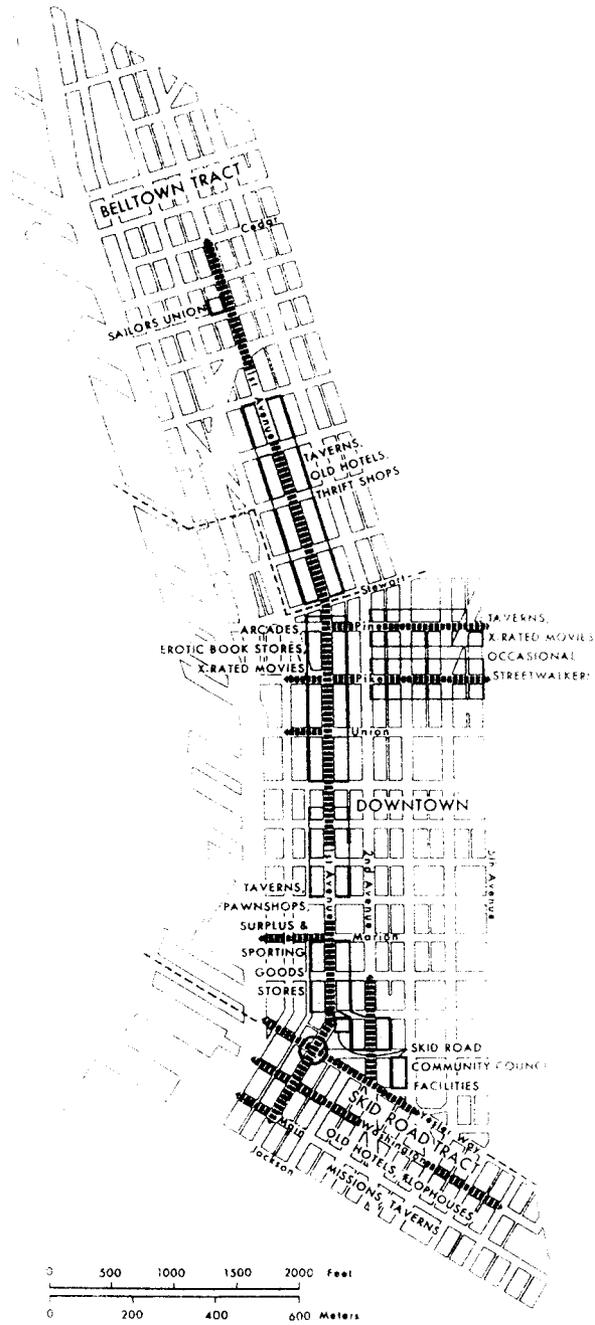


Fig. 3 Downtown Seattle, later 20th century configuration. Visitor Bureau Publication.

Appendix A

NEO - MAHANIAN POSTULATES

The ability of a nation to utilize the sea for its national advantage depends upon:

1. Its topological configuration with respect to the sea, its relative superiority in accord with the following ranking:
 - a) Islands
 - b) Peninsulas
 - c) Single Coast Lines
 - d) Multiple Coast Lines
 - e) No Coast Line, Multiple Access to the Sea
 - f) No Coast Line, Single Access to the Sea
 - g) Land locked

2. Its capacity for ports and harbors

3. The number of people living in the vicinity of the Coast having a knowledge of the arts and technologies of the Sea.

4. The character of the people and their government.

5. The characterization of a the topological relationship, the capacity for ports and harbors, and the knowledge of the coastal inhabitants is a function of the state of art of technology and the scale of technology. Relevant scales include:
 - a) Life expectancy
 - b) Human physiological capacity
 - c) Bit rate and distance of communication
 - d) Transportation time and distance for humans carrying forty to eighty pounds of goods
 - e) Transportation time, tonnage and distance for airborne cargoes
 - f) Transportation time, tonnage and distance for seaborne cargoes
 - g) Depth and size of harbors and roadsteads

6. The Sea is a behaviour shaping environment in that it provides drastic punishment for disregard of the physical nature of the sea, it provides large rewards for successful voyage, and adaptive behaviour is feasible.

Appendix B

THE POSTULATED EVOLUTIONARY CYCLE

1. For a given state of technology the world or worlds will stabilize around land sea configurations which provide, for a number of nation states, an adequate supply of food clothing and shelter, natural defense, and a surplus.
2. Immediately after stabilization the nation state will dedicate its surplus to pyramids and palaces and to other artifacts of interest to the nation state rulers.
3. In the process of building palaces and pyramids there will develop a class of artisans and engineers who will be surplus to the perceived needs of the sovereign.
4. These artisans and engineers will dedicate their skills to the design and construction of land oriented logistical systems; roads, bridges, aqueducts, granaries, warehouses, armories, etc;
5. These land logistical systems will breach the natural defenses of the society providing avenues of transportation and support for out landers and invaders to descend upon the society.
6. Battles and wars will thus be fought on land until the land logistical systems are destroyed at which time the conflict will be resolved in favor of one side or the other by which ever side controls the sea.
7. If there has been no substantial change of technology during this process then the new society will stabilize about the old configuration and the process will be replicated.
8. If there has been a substantial change in the scale of technology during this process then the new society will stabilize around a new configuration and the process will begin again with respect to this new configuration.