

Section III: Nature and Culture

Cultural Ecology, Perceptions of Nature and the Advent of Monotheism in the Ancient Middle East: An Hypothesis

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ABSTRACT

The Middle East encompasses five ecological domains: (1) *the humid highlands* and their intermontane valleys, where rainfed farming was begun and permanent settlements were first established; (2) *the semi-arid steppes*, where the lesser amount and instability of rainfall made rainfed farming marginal but still provided vegetative resources that could be utilized by semi-nomadic pastoralists; (3) *the river valleys*, where irrigated farming was practiced in the floodplains and hydraulic works (including diversion canals and ponding basins) were developed; (4) *the seacoasts*, where fishing, seafaring, and maritime trade were practiced; and (5) *the deserts*, where a sparse population subsisted by hunting and occasional marauding, and eventually by becoming caravaneers conveying products such as herbs and spices overland from distant sources to centers of population. In each of these domains, a distinctive culture evolved, characterized by a specific set of precepts, beliefs, and rituals based on the deification and worship of the dominant forces of nature whose interplay seemed to govern the particular environment. In an exposition more fully elucidated in his forthcoming book *The natural history of the Bible: an ecological reading of the scriptures*, the author hypothesizes that it was the encompassing ecological experience of the ancient Israelites (who shifted from one domain to another in the early course of their history) that enabled them to perceive the overarching unity of all nature and therefore to begin worshipping a single God. The holistic perception of nature as an integrated domain governed by consistent principles was compatible with, and probably contributed to, the much later advent of modern science.

Much has been said and written in recent decades concerning the impact of human societies and their activities on the environment. Less attention is currently paid to the equally important influences of specific environments on the evolution of human societies and their distinctive cultures. People who live in the artificial environment of the city, sheltered from direct exposure to the natural elements, find it increasingly difficult to perceive how profoundly the ecology of each region must have shaped not only the material mode of individual and collective subsistence, but also the mental attitudes and spiritual perceptions of tribes and nations. Nowhere is this reciprocal influence more clearly apparent than in the Middle East.

The region called the Middle East encompasses parts of north-eastern Africa and southwestern Asia. Ecologically, it spans the transition between the humid or semi-humid environment of southeastern Europe and the extremely arid environment of the great desert belt of the Sahara and the Arabian Peninsula reaching to the Thar in the Indian subcontinent. Significantly, it was in parts of this region that in the wake of the last ice age some ten thousand

years ago, humans first made the momentous transition from nomadic scavenging, hunting, and gathering to regular husbandry of crops and livestock. Here they first domesticated plants and animals, established villages and cities, built temples and monuments, and organized nation states. Here they invented ceramics, metallurgy, mathematics, and writing. And here they conceived and enunciated universal ethical and religious ideals and codified them into laws.

The Middle East is, thus, the ancient cultural and spiritual home, indeed the birthplace, of Western Civilization.

The cultural history of the ancient Middle East is not a simple story of uniform steady development. Rather, it is an exceedingly complex process of fitful progress, beset by repeated crises and conflicts, in the course of which disparate societies co-evolved and repeatedly clashed. The complexity of that process can be related to the inherently variable and unstable environment within which it took place.

The variegated environment of this region consists, rather roughly, of five principal domains, each of which gave rise to a characteristic culture. The irregular distribution of these domains is such that they interlace with one another, thus forcing the cultures forming within them to interact continuously, both synergistically and antagonistically, in mutual dependence and rivalry. The five domains are: the humid highlands, the semiarid steppes, the river valleys, the seacoasts, and the deserts.

The first of these domains, the *humid highlands*, is the arc of upland ranges girding the Fertile Crescent on the northwest, north, and northeast (including the mountain ranges of Galilee, Lebanon, Taurus, and Zagros). These ranges face into the path of the cloud-bearing winds rolling in from the west and northwest, and therefore regularly receive a comparative abundance of rainfall. That rainfall gave rise to a profuse cover of herbaceous and woody plants, among which were native species of grain-bearing grasses and legumes, as well as of fruit-bearing trees and shrubs that provided the progenitors of the crops domesticated by the region's early farmers. This is, therefore, the domain of *rainfed farming*.

The second domain, namely the *semiarid steppes*, consists of the plains and hills that lie in the rainshadow of the humid highlands. Here rainfall is of lesser amount and regularity, so that rainfed farming is too hazardous to be practiced perennially. However, this domain does nevertheless provide vegetative resources which, though more sparse than in the humid domain, can be exploited by grazing animals. Indeed, this is the subregion wherein sheep and goats and other species of livestock were domesticated and herded by tribes of semi-nomadic pastoralists. Hence we call this the *pastoral* domain.

The third domain is that of the *river valleys* located in the semi-arid and arid zones. These valleys receive the excess waters (runoff) flowing from the various catchments of the humid zone. Because these flows originate in a different and often distant zone from the major river valleys, they are called “exotic.” As such, they tend to be seasonally variable, with the flows being most copious during and immediately following the distinct rainy seasons. Some centuries following the initial domestication of *croj* in the rainfed domain, farmers discovered that they could import the seeds of those crops into the riverine domain and grow them successfully along the river banks and floodplains after the recession of the annual floods. In time, these farmers also learned to exercise greater control over the water supplies by diverting water from the natural river courses by means of artificial dykes, channels, and ditches. Thus arose the “hydraulic civilizations” of the ancient Middle East, which depended on *irrigated farming* for their subsistence.

The fourth domain, the *seacoasts*, or the littoral domain, consisted of the strips of land and water along the shores of the Mediterranean Sea, the Red Sea, and the Persian Gulf. Here the terrestrial and the marine environments meet and interplay to form a unique ecological zone, with a characteristic community of interlinked aquatic and land plants and animals. Humans who lived along these coasts tended to become fishermen, seafarers, and land-sea traders. Eventually, they developed such characteristic pursuits as glass making (using coastal sand), and dye making (from near-coasts sea snails). Some settled permanently at advantageous sites (such as islands, coves, and estuaries); while others developed a form of maritime nomadism characteristic of the Mediterranean “Sea Peoples,” who combined coastal trading and raiding as means of subsistence.

The fifth domain was the *desert* domain, encompassing the vast dry lands that occupy the southern tier of the region. Here the sparse population continued for a long while to maintain an austere existence as nomadic hunters, gatherers, and occasional marauders who carried out incursions into the adjacent domains. Some also engaged in localized farming in isolated oases and others herded ungulates over the sparsely vegetated rangelands of the semi-desert. In time, the denizens of the desert domesticated the camel, that remarkable animal that has long been called the “ship of the desert.” Henceforth, some became caravaneers, conveying goods such as medicinal, aromatic, and spice plants (along with gems, gums, and silk) from such distant sources as southern Arabia, eastern Africa, India, and central Asia to the centers of population along the Mediterranean.

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perceptions of nature, which expressed themselves in specific sets of religious beliefs and practices. Their religions were based on recognition and worship of the dominant natural forces that, in effect, controlled their lives. And because the landscape of the region is so variegated, and the climate so unstable, the ancient inhabitants of the Middle East imagined the forces of nature to be in continuous conflict. Rainstorms alternated with searing desert winds, drenching floods with droughts, periods of plenty with repeated famine, as if the elements were at war. Hence, the early polytheistic religions were directed toward warding off the evil forces and propitiating the beneficent ones in a constant quest to attain a measure of security in a world that seemed so inherently unstable.

Rainfed farming societies coalesced from individual clusters of villages in separate valleys to form city-states in which a major city served as a center for a hinterland of farming communities. The chief gods of these communities were generally the rainstorm gods such as *Baal*, and an earth goddess, often named *Astarte*. Baal was depicted riding the clouds, and at whim or will, spewing forth or withholding his beneficence in the form of precipitation upon the reclining Mother Earth below, who would then respond with her abundant fecundity. The process of life was thus depicted as the mating of sky and earth. To elicit it, these societies would practice elaborate sacrificial rituals.

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The hydraulic societies appealed to riverine gods, believed to control the annual floods. In the case of Egypt, where the connection between the annual spates of the Nile and its sources in faraway Ethiopia was obscure, a popular river god was *Hapi*, portrayed in murals and sculptures as a rotund hermaphrodite with feminine breasts and masculine genitals, presumably having powers of self-generation. In Mesopotamia, where the threat of soil salination by rising groundwater was felt most acutely, the good river god was perceived to be countered by the lurking *Tiamat*, evil goddess of the briny subterranean waters.

The desert people naturally worshiped their own gods, among them the all-seeing god of the sun and the god or goddess of the moon, as well as the mysterious volcanic mountain gods who dwelt in the bowels of the earth and occasionally emerged from caves. These capricious gods with their pent-up power could lie dormant for long periods of time, only to awaken suddenly and cause the earth to tremble or the winds to kick up dust or even bring about a freak downpour.

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The societies in the various domains did not live in exclusive isolation. Rather, they were aware of, and influenced by, one another's cultures. The people of each domain often accepted the gods of other domains as minor deities alongside their own major gods. And when individuals or clans shifted from one domain to a neighboring one they generally accepted the supremacy of the gods that were relevant to their new domain (even while retaining an allegiance to their old gods—at least for a while).

One particular tribe, namely the Hebrews, appeared to deviate from the general pattern. As recorded in their collective diary, transmitted to us as the Hebrew Bible, they began during the early or middle part of the second millennium BCE. to traverse each of the regions domains. Originating in the eastern riverine domain of Mesopotamia, they embarked upon a venture of serial migrations. First they moved to the pastoral domain of eastern and southern Canaan, where they herded flocks of goats and sheep during the time of the Patriarchs. Some time later, in response to a severe and prolonged drought, they moved to the western riverine domain of Egypt, where—according to the story that remained indelibly imprinted in their ancestral memory—they sojourned for several generations. Next they left that domain at the time of the Exodus to enter into the desert domain of Sinai and the Negev, where they apparently wandered for some forty years. Finally, they emerged from the desert domain to reinvade the pastoral domain of southern Canaan and even to penetrate the rainfed domain of central and northern Canaan. As they entered the latter domains, they evidently encountered and clashed with another nation of invaders—the Philistines—an offshoot of the Sea Peoples who raided the coastal domains of the eastern Mediterranean at about the same time.

At this point, we offer what is admittedly only a conjecture. It seems plausible that the very fact of their inclusive ecological experience enabled the Hebrews, uniquely among their contemporaries in the region, to first perceive the notion of monotheism. Having sojourned in each of the domains and having shifted from one to another, assimilating elements of all the region's cultures, they could begin to coalesce the disparate deities into a concept of overarching unity.

The idea and ideal of a single omnipresent and omnipowerful force, a great common denominator unifying the entire realm of nature, was a radical departure from the prevailing pluralistic view. It could not have been a sudden, unanimous, and irreversible revela-

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tion. Instead, it must have been a painstaking process, first dimly perceived by a few and resisted by many and only accepted gradually after repeated advocacy by cultural and spiritual leaders in successive generations. We have abundant evidence of that process in the repeated exhortations and castigations by the Hebrew prophets against a nation all too prone to revert to the worship of the earlier naturalistic gods long seen as separate entities. The concept was eventually affirmed and carried forth by both Christianity and the Islam.

Eventually, however, the unified vision of nature took hold until it became the major ideological force that over time—much time—transformed the cultural foundation of the entire region, indeed of the entire world. Apart from its ritualistic or moralistic dimensions, which we associate with the practice of religion *per se*, achieving this unified vision was a precondition for the eventual development of a universalist science as a systematic common quest to understand nature as an integrated system.

REFERENCE

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