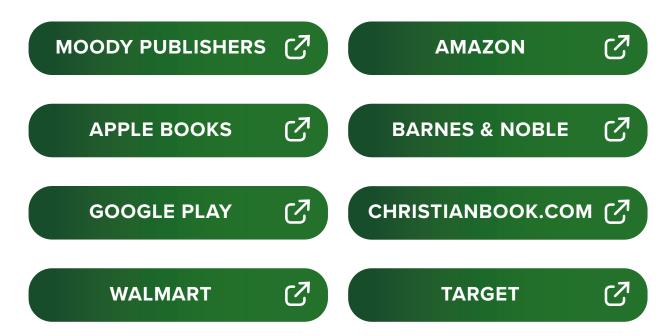


Barry Beitzel
has blended the
topographical
and historical in
multicolored maps
that accurately
reflect evangelical
Christianity. One of
the most useful and
accurate atlases
available today.

Interested in the whole book?
Select your preferred book seller:



### **CONTENTS**

Abbreviations		8	The Patriarchs in Canaan	114
Maps and Illustrations		9	The Route of the Exodus	116
Preface		11	The Historical Background	116
Preface to the Third Edition		14	The Geographic Setting	118
			The Israelites Beside the Sea	122
1	The Physical Geography of the Land		Searching for Mt. Sinai in Saudi Arabia/South Jorda	n 123
1	(Maps 1–27)	15	Searching for Mt. Sinai in the Northern Sinai Peninsu	la 124
Role of Geography in Understanding History		16	Searching for Mt. Sinai in Southern Sinai	125
Role of Geography in Understanding the Bible		18	Continuing the Israelites' Route	126
A G	eographical Introduction to the World of Canaan	20	Israel's Forty Years in the Wilderness	127
A	As a Component of the Fertile Crescent	20	Israel's Conquest of Transjordan	129
A	As a Land Prepared by God	27	The Battles of Jericho and Ai/Bethel	131
I	Historical Terminology	32	The Battle of Gibeon	133
(	Geopolitical Districts	36	The Battle of Hazor	135
Geographical Overview of the Land of Biblical Israel's			The Tribal Distribution of the Land	137
Teri	ritorial Inheritance	43	The Levitical Cities and Cities of Refuge	139
7	Гhe Land's Physical Topography	43	An Analysis of Israel's Settlement of Canaan	141
7	Гhe Land's Geology	62	Recent Intriguing Discoveries	144
7	Гhe Land's Hydrology	65	Egyptian Campaigns into Canaan	149
7	Гhe Land's Climate	72	Thutmosis III	149
7	Гhe Land's Forestation	73	Amenhotep II	150
(	Cities in the Biblical World	79	Seti I	150
I	Proper Identification of Ancient Cities	82	Merneptah	150
I	Roadways and Transportation in the Biblical World	86	Shishak	150
Ι	Difficulties of Ancient Travel	90	The Era of the Judges	151
7	Гhe Location of Major Roadways	93	Othniel, Ehud, and Samson	154
7	Travel by Sea	95	Othniel	154
	·		Ehud	154
Historical Geography of the			Samson	155
_	Old Testament Period (Maps 28–87)	97	The Judgeship of Deborah and Barak	156
Gar	den of Eden	98	The Judgeships of Gideon and Jephthah	158
The Table of Nations		101	The Movements of the Ark	160
7	Гhe Fourteen Descendants of Japheth	101	The Wars of King Saul	163
7	Γhe Thirty Descendants of Ham	103	The Kingdom of Saul	164
7	Γhe Twenty-Six Descendants of Shem	106	David and Goliath	167
The Migrations of the Patriarchs		108	David the Fugitive	168
7	Γhe Wanderings of the Patriarchs	110	The Battle of Mount Gilboa	170
Abr	aham in Canaan	111	The Exploits of King David	172

Solomon's International Trading Networks		Jerusalem Through the Ages	
Tarshish: A Real Location		(Maps 94–98)	239
The Ships of Tarshish	180	The Name	240
Evidence for Tenth-Century BC Phoenician Trade		Topography	242
on the Mediterranean	181	Explorations and Excavations	243
Solomon's Domestic Administration		History	
The Monarchy Divides	184	,	
Rehoboam's Fortified Cities	187	Historical Geography of the	
Judah and Jerusalem Besieged	189	New Testament Period (Maps 99–118)	253
The Battle of Qarqar	193	The Roman Empire	254
The Exploits of Jehu Against the House of Ahab	195	The Rise of Herod the Great	255
Israel's Prophets	197	Jesus' Early Years	257
The Assyrian Empire	199	Jesus' Move to Capernaum	262
The Assyrian Campaigns Against Israel and Judah	201	Jesus' Journeys to Jerusalem	267
The Battle of Carchemish	203	Jesus' Post-Resurrection Appearances	268
Jerusalem Falls to Babylonia	207	Jesus: the Cultural Mapper	270
Jewish Deportations and Returns	210	The Jewish Diaspora at Pentecost	273
The Babylonian Kingdom		The Ministry of Peter and Philip	274
Jeremiah Is Taken to Egypt		Philip	274
Judea after the Exile	215	Peter	275
The Persian Empire		Extensive Travels of the Apostle Paul	276
Cyrus II	215	Paul's Missionary Journeys	278
Cambyses II	217	Paul's First Missionary Journey	280
Darius I Hystaspes	217	Paul's Second Missionary Journey	282
Xerxes I	219	Paul's Third Missionary Journey	287
Darius II Nothus	219	Paul's Voyage to Rome	290
		The Seven Churches of Asia	293
Historical Geography of the		The First Jewish Revolt	294
Intertestamental Period (Maps 88–93)	223	The Spread of Christianity in the Roman World	297
The Campaign of Alexander the Great Against Persia	224		
The Battle of Issus	229	Modern Israel	
Hellenistic Cities in Canaan	231	(Map 119)	303
The Maccabean Revolt		Notes	305
		Map Citation Index	332
		Scripture Citation Index	341
		General Index	347
		General Reading	350

CHAPTER 1

# THE PHYSICAL GEOGRAPHY OF THE LAND

ARTIST

ERICHO

The state of the s

PETENDO

MAPS 1-27

## **Role of Geography in Understanding History**

West, Oriental/Occidental, Near East/Far East/Middle East.¹ (Note the first word in dividuals, iving and pragraph!)

Christian theology itself has not escaped such an encompassing mode of thinking: God may be described in terms that are corollary to time (*infinity*, *eternality*) or space (*omnipresence*). And Christianity asserts that those attributes of deity were willingly relinquished by Christ through the drama of incarnation, when he became "locked in time and space." Accordingly, even upon superficial reflection, one can begin to comprehend something of the far-reaching significance of the temporal and spatial disciplines: history and geography respectively.

Moreover, history is in many respects inseparably bound by and subject to geographic limitations. Geography is an impelling force that both initiates and limits the nature and extent of political history, what we might call geopolitics. Geologic formation and rock type have a decisive effect on altitude, manner and extent of erosion, location and quantity of water supply, and physical topography. These, in turn, have a profound bearing on certain aspects of climate, raw materials, soil formation, and land use—factors that may alternatively repel or attract human settlement and certainly influence the location, density, and socioeconomic makeup of a settlement. Where settlements are founded, roadways are eventually opened and used by migrants, traders, or armies, and culture ultimately arrives at a particular location. Stated more succinctly, "With every step back in time, history becomes more and more geographical until, in the beginning, it is all geography."2

In short, factors of geography often dictate where and how geopolitics will occur. Surely it is geographically significant that



ancient civilizations emerged on the banks of rivers. Ancient Egypt owed its existence to the Nile; Mesopotamia drew its life sustenance from the Tigris and Euphrates; the Indus Valley civilization was situated along the river by the same name; the Hittite Empire rested astride the Halys; Old Indian culture sprang to life in the Brahmaputra and Ganges River Valleys; ancient China had its Yellow River and the Yangtze; and European culture emerged on the banks of the Tiber, Thames, Danube, Rhine, and Seine. Nor is it inconsequential that the Roman Empire was able to expand as far as the Danube and Rhine Rivers, a boundary which for part of the twentieth century also corresponded to the Iron Curtain. Even in twenty-first-century America, virtually every major commercial and industrial city has an outlet to river, ocean, or the Great Lakes network. Those few exceptions are located at the hub of important interstate highways or airline routes.

Other factors of geography, such as earthquake activity and volcanic eruption, have likewise played their part in fashioning history.<sup>3</sup> It is axiomatic that the face of much of western Asia and eastern Africa has been formed through seismic activity. A huge fissure in the earth's surface has been the single dominant factor in shaping the landscape of western Syria, Lebanon, Israel, Jordan, Ethiopia, Uganda, Tanzania, Mozambique, and the island of Madagascar [map 13].

In western Asia, earthquake activity has always meant that certain areas were inhospitable to human occupation, causing arterial travel to be funneled into an essentially north-south grid. The seismic forces that produced the mighty Himalayan chain, on the other hand, created what in antiquity was an impenetrable longitudinal barrier that caused culture to expand and traffic to flow on an essentially east-west axis. Vast badlands of congealed lava confront a potential settler in a dreary terrain broken only occasionally by basaltic plugs or cinder cones, gaunt reminders of bygone volcanic activity. More important is the harsh reality that this volcanic activity often rendered the soil totally unsuitable for human productivity. In antiquity it always presented a cruelly hostile environment that was intolerably painful to the limbs of pack animals, and thus precluded any sort of arterial traffic.

Volcanic eruptions can bring a segment of history to an abrupt termination. The image of Vesuvius' eruption upon Pompeii in AD 79 often comes to mind. The 1815 eruption of Tambora on Indonesia created a casualty count of approximately 92,000 and produced an ash cloud in the upper atmosphere that reflected sunlight back into space and produced a

The slopes of the vestige of the volcanic caldera of the island of Santorini; the houses on top and the ship enables one to see something of the size and vastness of the volcanic eruption.

year without summer. The 1883 eruption of Krakatoa was audible across one-third of the earth's surface, caused a tsunami that was perceptible in all oceans of the world, adversely modified climate on a global scale for several years, and killed more than 36,000 people. Yet in vivid contrast to all these events stands the eruption of the Greek island of Santorini (Thera), located in the south Aegean Sea approximately midway between mainland Greece and Crete [maps 112 and 113].

Santorini's explosivity index at ground zero is calculated to have been more than fifteen times greater than the force of the atomic explosion over Hiroshima. In the wake of the colossal eruption that occurred on Santorini around 1525 BC (± one hundred years, whether dated archaeologically or radiometrically), some thirty-two square miles of earth collapsed into a caldera of approximately 2,250 feet in depth. When the Aegean waters rushed into this newly created and superheated chasm (estimated to have been in excess of 2550°F), a gigantic tsunami was formed that is estimated to have been as high as eight hundred feet at its apex. Within twenty minutes, this massive tidal wave—also propelling an enormous volume of searing, toxic gases—catastrophically struck Crete at an estimated speed of two hundred miles per hour and at a height of two hundred to three hundred feet. 4 Pumice laminated the vestige of Santorini with a volcanic deposit ranging in depth from between sixty-five and 195 feet. A cloud of pumice, ash, and lava estimated at between 8.5 and 11.25 cubic miles in volume was thrust some fifty miles into the sky where a predominantly northwesterly wind blew it toward Crete. The thick blanket of falling ash would have created an atmosphere of lethal air, producing polluted water, rancid food, and diverse diseases. What is more, basaltic cores the size of a person's head were hurled like missiles directly from Santorini to Crete. Waterborne pumice fragments manifesting a Santorini origin have been found across the entire stretch of the eastern Mediterranean basin, even at inland places as far away as Israel and Egypt.<sup>5</sup> It is not difficult to comprehend how the entire Minoan culture on Santorini was brought to a disastrous, abrupt end, nor how a number of Minoan palaces on Crete were severely damaged and may even have been destroyed at that time.

Mountains, deserts, and oceans have all influenced the location or nature of geopolitics. Today's newspapers often contain lead stories having to do with the continental effects of El Niño, salination, widespread famine and food shortages, or global warming. Some of those same geographic factors played a profound role in ancient Near Eastern geopolitics. Famines were often described in ancient literature, and scholars have amply demonstrated how climate fluctuations in antiquity had an adverse effect on ancient culture.<sup>6</sup>

A "Mediterranean theater" of history existed from the demise of the Persian navy at the Battle of Salamis (480 BC) until the defeat of the Spanish Armada (AD 1588). Northern and southern shores regularly vied for political and cultural superiority. But after the oceanic voyages of Christopher Columbus, Vasco da Gama, and Ferdinand Magellan, the geopolitical sovereignty of the Mediterranean was challenged as the Renaissance and some of its important cities began to fade, and "history" moved westward.

Natural resources represent yet another geographic factor that has influenced the location and nature of geopolitics. A wide array of ancient documentation explicitly addressed the need to maintain control over the tin of Afghanistan, the cedar of Lebanon, the silver of Assyria, the copper of Cyprus, the gold of Spain, and the ivory of the African interior. And who can doubt that the whole complexion of modern geopolitics has been dramatically altered by the OPEC cartel? Indeed, geography represents the stage on which the pageant of history is presented, without which history itself would wander about aimlessly as a vagrant. To paraphrase the aphorism commonly but probably erroneously ascribed to Will Durant, civilization exists by geographic consent, subject to change without notice.

Geography's effect upon history extends also to the theoretical domain. Like the effect of environment on culture, geography actually establishes the boundaries within which history must operate. Students of the effect of geography on history have made a most helpful distinction between its *determining* effect and its *limiting* effect. Where a frigid winter climate necessitates the wearing of heavy clothing, there is nothing in the temperature itself that decrees whether people shall wear sealskins or Shetland wool, *but they must procure and wear winter clothing*.

When a region unsuitable for agriculture somehow becomes populated, very little in the environment predetermines which domestic animals shall be grazed or whether food shall be secured with hooks, nets, traps, or spears, *but a non-agrarian society will surely emerge*.

It is geographically pertinent that places in the Near East manifesting the most ancient human habitation—Mt. Carmel, Shanidar, Çatal Hüyük, Jarmo, Hacilar [map 23]—are situated precisely in areas that receive an average annual rainfall capable of sustaining the spontaneous generation of wild grains that can support human existence. It is also geographically pertinent that certain plants and animals are peculiar to only one hemisphere, or that writing arose where, when, and in the form that it did. These all represent expressions of geopolitical history that have been and continue to be subject to the limitations and indirect controls of geography.

Many of the same limitations are discernible even in our modern technological world, where deserts can be extensively irrigated or the effects of oppressive heat can be mitigated by air-conditioning; where Landsat photography equipped with infrared capability can discover vast reservoirs of fresh water buried deep in the cavities of the earth's interior, or cloud-seeding and widespread irrigation can lessen the gravity of an arid environment; where rampaging rivers can be restrained by huge dams and even harnessed for hydroelectric purposes; where formidable mountain barriers can be leveled, penetrated, or easily surmounted; and where air travel can put faraway places within quick and convenient reach. One might imagine how much more defined and deeply etched such geographical limitations would have been in a world that existed before such technological sophistication—one like the biblical world.

# Role of Geography in Understanding the Bible'

Atters of "time and space" remain among the difficulties that vex a twenty-first-century student of the Bible. The proclamations of Scripture were occasioned and penned from distinctive settings, yet modern students of the Bible live in a different millennium and adhere to a different worldview. Most live on a different continent. So in our desire to properly interpret and apply the Bible, we must ensure as much as possible that our enterprise is built knowledgeably upon the grid of the Bible's own environment. At the outset, it is imperative for one to view geography (space) as something more than a superfluity that can be arbitrarily divorced from biblical interpretation. To the contrary, the biblical portrait of both Israel and the church is

painted on several levels, including the territorial level.<sup>10</sup>

In point of fact, biblical narratives are often driven by the notion of "space." An incident may be said to have occurred on a certain hill, in a particular valley, on a discrete plain, at a given town. At times the name of the place itself becomes an important part of the revelation, frequently including a word-play or pun on the name in order to reinforce the location of the event in public consciousness. Occasionally an aspect of geography becomes a theological axis around which an entire biblical book revolves, or a large portion of a book is particularly rich in geographical metaphor: for example, fertility and the book of Deuteronomy, forestation and the book of Isaiah,

hydrology and the book of Psalms, or agriculture and the book of Joel. Often it is precisely a geographical reference or allusion that enables scholars to assign a book to a place of origin (such as Amos in Israel's northern kingdom, or James in the eastern Mediterranean basin).

Perhaps even more profoundly, Jewish faith in the Old Testament was inextricably tied to space, and "land" became the prism of this faith. Land/space was an arena in which God acted mightily on behalf of his people. (Consider the call and covenant with Abraham and his descendants, the Exodus/Sinai motif, the conquest/settlement of the land, the captivity away from the land, the return to the land, the New Israel.) Many of God's promises related directly to the original possession (or later restoration) of a particular parcel of real estate. It is not an overstatement to declare that, during its years of recorded biblical history, Israel's rootage in this "land" provided its faithful their foundational identity, security, and even prosperity.

When they were not in possession of their land, Israelites were often described in terms that reflected the precarious connotations of landlessness, aimlessness, and estrangement:

- "Sojourning" (Gen. 12:10; 15:13; 47:4; Ex. 6:4; Deut. 10:19b; 26:5b; cf. Heb. 11:13)—A sojourner was a resident-alien who did not belong and could not settle down to enjoy the privileges afforded the citizen.
- "Wandering" (Num. 32:13; Hos. 9:17; Deut. 26:5b)—A wanderer was someone en route to nowhere. He was not just between stops, but he actually had no specified destination or home.
- "Going into exile" (2 Kings 18:11; Isa. 5:13; 49:21; Ezek. 39:23; Ezra 1:11)—An exile was someone who had been forcibly uprooted or disenfranchised from his own land and obliged to live in another "place."

Whether removed to Egypt, Babylon, or elsewhere, land-lessness was tantamount to hopelessness. Israel's covenantal faith was very much based on and grounded in events that transpired at certain places *in this world*. There was an acute consciousness of a national home, a definable geographic domain in which even the soil was divinely consecrated, what one may call "the holy land." One can rightly characterize Israel's faith by its "here and now" essence—one where the ascetic principle of 1 John 2:15–17 was largely absent.

Similarly, in the New Testament gospels, much of the teaching of Jesus may be related to where he was situated at the time. He talked about various kinds of soil, the east wind, the flowers of the field, and branches abiding in vines. One later observes a

geographical correlation between the uniquely centrifugal form of Jesus' Great Commission in Acts 1:8 ("[from] Jerusalem, [then] in all Judea and Samaria, and [finally] to the ends of the earth") and that book's presentation of the expansion of the early apostolic movement.

And for Christian faith as well—not only for Jewish faith many crucially important aspects of biblical history have transpired in very precise places on earth—not just in empty space nor in heaven (e.g., the location of the birth, crucifixion, resurrection, and ascension of Christ; the flow of the early apostolic missionary journeys; etc.). If the Christian gospel were simply a matter of otherworldliness or concerned only with spiritual or moral values, gaining an appreciation of the spatial dimension of the Bible would hardly matter, and seminal events in the New Testament would hardly have been geographically located in the text by the biblical writers. But it is neither of these! Central to the kerygma of the New Testament is the foundational claim that God became human at a definite moment in time and at a precise point in space. To be unaware of or to neglect the geographical DNA of the Bible or the biblical world will therefore often mean that one may run afoul of the biblical argument or that reality may dissolve into sentimentalism.

Armed with a geographical knowledge of the Bible, one is better able to understand references such as "the former and latter rains," "the strong east wind," or "a land flowing with milk and honey." Similarly, one can better appreciate the scorching effect of Israel's hot sun; the implications of "no rainfall" and the importance of dew for crop survival; the prevalence of fertility (Baal) worship; the nature of Egyptian, Canaanite, and Mesopotamian deities; the migrations of Abraham, Moses, and Nehemiah; the terrain Joshua's forces could conquer but over which the Philistines could not run their chariots; the astounding success of David in eluding Saul's manhunt; the social psychology of the ministry of John the Baptist; the motivation(s) behind Jesus' astute move from Nazareth to Capernaum; and the staggering distances traveled by the apostle Paul. In addition, the pronouncements of the prophets make more sense as they predicted a stunning day to come when valleys will be lifted, mountains will be lowered, uneven and rough ground will be made level and smooth, and even when the water of the Dead Sea will become crystal clear and nourish abundant sea life.

Cultivating a spatial awareness is a necessary and valuable component in any serious study of the Bible. Like the Bible itself, faith is formulated from within the spatial and temporal context of which it was a part. Hence, the geographical discipline should become both the object and the vehicle of some of the most rewarding and enlightening Bible study; it is clearly worthy of a detailed investigation.

### A Geographical Introduction to the World of Canaan

### As a component of the Fertile Crescent<sup>12</sup>

 $\bigcap$  rapped like a mantle around the Mediterranean, Black, and Caspian Seas is a vast geologic formation of elevated and rugged mountains, known as the Alpine-Himalayan chain [map 1]. This rocky and convoluted landscape stretches eastward from the Pyrenees Mountains of northern Spain in a nearly unbroken 7,000-mile line to the towering Himalayan chain of India and Nepal and the Tsinling Shan range of inland China. Near the center of this sprawling alpine uplift stand the lofty Taurus, Pontus, Urartu, and Kurdistan Mountains of Turkey (rising at places to an elevation of nearly 17,000 feet, with peaks snow-clad year-round) and the Zagros and Elburz ranges of Iran (a few peaks of which ascend over 18,000 feet, the highest in all the Near East). Whether Akkadian, Egyptian, Assyrian, Babylonian, Phoenician, Persian, or Greek, ancient civilization was never fully able to transcend or penetrate such formidable terrain for imperialistic purposes. Indeed, all Near Eastern empires prior to the time of Julius Caesar were largely restrained by this northern barrier. Moreover, there always lurked in those dim and mountainous recesses fierce peoples who periodically threatened Semitic domination of the northern frontier.

Farther south, extending eastward from the Atlantic shores of North Africa, is an enormous expanse of almost waterless terrain. Known across that continent as the Sahara Desert, this barren and desolate environment stretches beyond the Red Sea and spans the entire Arabian Peninsula as the Arabian Desert. The arid zone crosses the mountains of Iran to the north side and continues through the Salt Desert (Dasht-e Kavir), Tarim Basin, and into the Gobi Desert of southern Mongolia. Broadening at places to more than 1,000 miles in width, and stretching nearly 5,000 miles across two continents, this band of savage, foreboding sand was yet another impassable barrier to imperialism and civilization in antiquity.

Hemmed in by these two natural barriers of mountain and desert lies a thin, semicircular strip of comparatively arable land that arches northward from the southeastern corner of the Mediterranean Sea near Gaza (Acts 8:26) [map 2], through Israel, Lebanon, and western Syria. Near the northeastern corner of the Mediterranean, this strip bends eastward and then curves southeastward, essentially following the flood plains of the Tigris and Euphrates River Valleys as far as the head of the Persian Gulf. Since the days of the egyptologist James Breasted, <sup>13</sup> this strip of land has been known as the "Fertile

Crescent." In this Crescent, humankind invented the plow, the wheel, the lever and screw, and the arch. Here they learned how to domesticate animals, to cultivate grains and become a food producer, to cluster buildings and build cities, to work metals, and to write (first pictographically and later alphabetically). It was in this crescent of civilization that humanity developed art, music, literature, law, mathematics, philosophy, medicine, astronomy, cartography, chemistry, and the calendar.

At the risk of oversimplification, the Fertile Crescent may be divided into two topographic spheres, known respectively as "Mesopotamia" and "Levant." The word "Mesopotamia" (a Greek term meaning "[the land] between the rivers"), was applied to the eastern sphere as early as the writings of Polybius, Strabo, and Josephus (200 BC to AD 100).14 Earlier still, the translators of the Septuagint (LXX) employed the word to designate the district from which the patriarch Abraham had emigrated (Gen. 24:10), rendered by Hebrew scribes as Aram-naharaim ("Aram of the two rivers"). It is likely that this Hebrew expression should be understood to demarcate only the land between the Euphrates and the Balih Rivers, known also as Paddan-aram ("the field of Aram" [e.g., Gen. 28:2f; 33:18; 35:9]), and not the entire terrain between the Tigris and Euphrates [maps 2 and 30]. Nevertheless, contemporary references to "Mesopotamia" conventionally denote the "island" of land bounded on the west and south by the Euphrates, on the east by the Tigris, and on the north by the outliers of the Taurus and Kurdistan mountains. The low-lying plain of Mesopotamia lies at an altitude of about 1.625 feet in some northern sectors and slopes gently toward the Persian Gulf [map 2].

Variations in precipitation differentiate Mesopotamia into a wet and dry steppe. The wet steppe receives more than twelve inches of rainfall annually. It is characterized by red-brown sediment, perennial grasses, herbs, and bushes, especially as one moves from west to east. This area between the Euphrates and the Balih rivers is most closely associated with the biblical patriarchs and consists of low, stony hills that are bare of vegetation except when watered in the spring. Between the Balih and the Habur Rivers, the steppe is less arid and even relatively fertile in the springtime and early summer. The area is quite suitable for pasturage, yet survival in this part of the steppe depended on the numerous wells scattered throughout the terrain (Gen. 24:11; 29:2). The area does not seem to have been heavily occupied or cultivated in antiquity.

The Upper Habur River appears on the map in the shape of an inverted triangle where the land flattens considerably.



Sheep run ahead of the shepherd as soon as they see the water of the Euphrates River.

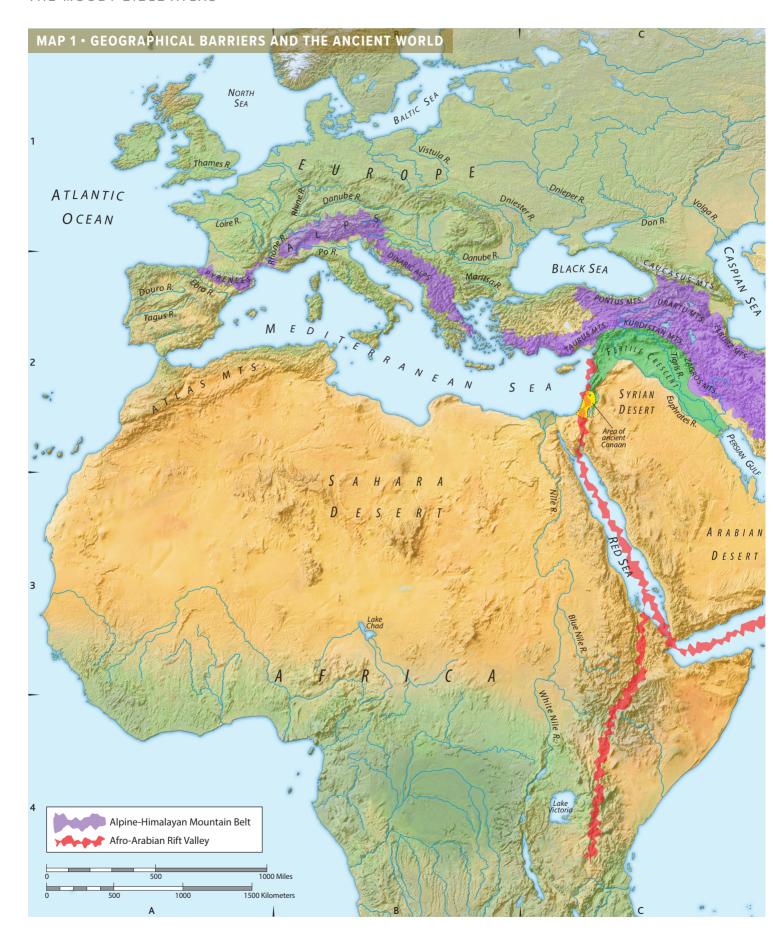
Adequate rainfall and good soil has allowed agriculture to flourish here since high antiquity, producing an abundance of the best grain in all of Mesopotamia. Flanking either side of the southern point of this triangle, mountainous outcroppings retain the soil and mineral deposits washed down from the north. Accordingly, this region tends to remain grassy throughout even the summer and autumn months, so it provided lush grazing grounds for Mesopotamian shepherds who would migrate during the spring and summer from their native areas south of the Euphrates. The mountains also sustain essentially all the native timber available in Mesopotamia—pine, oak, terebinth, and pistachio trees. In modern times poplar trees have been planted throughout much of Mesopotamia, both as windbreaks

and for architectural usage.

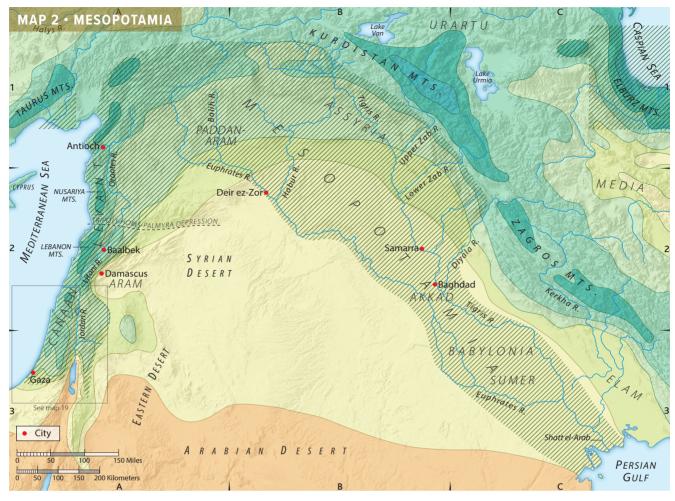
Most of the dry steppe, by way of contrast, is characterized by gray gypsum desert soils, shallow-rooted seasonal grasses, scattered shrubs, and—where the soil is deep enough—marginal dry-farming of winter crops. Below the eight-inch precipitation line, only limited-scale irrigation farming is practiced. The flood plain of the middle Euphrates, particularly in the area of Deir ez-Zor and south, is as deep as three hundred feet and up to eight miles wide. The humus soil deposited there by the Euphrates and Habur is ideal for agriculture, and an entire network of settlements is known to have existed in this region throughout the biblical period. On a much more limited scale, the same conditions exist along a short section of the middle

The Upper Tigris River very near the modern town of Batman, near the Tigris' headwaters.





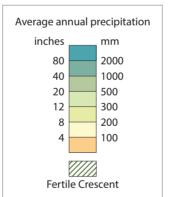




Tigris, in the area around Samarra, where the deposition of the Tigris and the Lower Zab has created a bed of rich alluvial sediments. The soil of south Mesopotamia is uniformly hard and nearly impenetrable. The landscape exhibits windblown formations and dunes, a result of sand blowing off the Arabian Desert. At the same time, southern Mesopotamia has always had to contend with the problem of a higher water table brought on by over-irrigation, thus producing an ever-increasing soil

salination. Some authorities, in fact, suggest that the decline of the Sumerian civilization there, and the subsequent shift northward of the cultural centers, can be attributed to the creeping salination of the soil. <sup>15</sup> This is far from certain, though we do know that the Sumerian economy depended heavily on locally grown grain yields, far beyond what could be produced later in antiquity or any time since. <sup>16</sup>

The region between the confluence of the Tigris and Euphrates and the Persian Gulf is known as the Shatt el-Arab waterway. Twice daily the water level in this vicinity rises



and falls by about six feet, a cause of periodic boundary disputes between Iraq and Iran. Geographically speaking, the fluctuation permits salt water from the Gulf to penetrate inland, thereby creating a marshy area that severely restricts human settlement.

This general overview enables one to realize that the phrase "Fertile Crescent" is quite open to misinterpretation. More accurately, most of Mesopotamia can be called "fertile" only by way of contrast with its arid, desert

neighbor, and only along the sinuous ribbons of greenery in the flood plains of the Tigris and Euphrates Rivers, their tributaries, and interlocking canal systems.

The western sphere of the Fertile Crescent is called the Levant, a French word meaning "rising" that refers to either the rising of the sun or the heights/rising of mountains as viewed from a ship on the Mediterranean headed in that direction. This geographic area consists of a double alignment of mountain belts enclosing the northern portion of the Afro-Arabian fault line [maps 1 and 13]. Longitudinally segmented by three

"depressions," these belts comprise a series of four sets of parallel ranges [map 3]:

- Beginning in the north, near Antioch and the Amuq Plain, is the Nusariya mountain chain, which technically includes Mt. Cassius [map 110]. This chain dominates the western horizon, while the Zawiya chain and its northern outliers rise in the east. It stretches as far south as the so-called Tripoli-Homs-Palmyra depression—a valley through which courses the el-Kabir (Eleutherus) River that demarcates the modern border between Syria and Lebanon.
- 2. In the territory south of this lateral gap stand the mighty Lebanon Mountains in the western field of view. Opposite them on the east, the Anti-Lebanon chain is found, which achieves its greatest height in the southern extremity at Mt. Hermon. The Lebanons range as far as the deep gorge created by the Litani River (immediately north of Tyre), extending east past the site of Dan and on to the flat steppe that separates the hills of Damascus and the basaltic plateau of Jebel Druze.
- 3. Proceeding south, spanning the area between the so-called Litani-Dan-Steppeland depression and the Beersheba-Zered depression, stand the highlands of Galilee, Samaria, and Judah on the western front. Prominent in the east are the Golan Heights, the Gilead Plateau, and the Moabite Highlands.
- 4. South of the Beersheba-Zered depression as far as the Red Sea, the western vista features the wild and forbidding slopes of the Wilderness of Zin and the modern Negeb. The eastern horizon is dominated by the towering sandstone highlands of Edom and the spectacular granite mountains of Midian. (Whether or not this fourth area is technically to be included in the Levant remains an open question. Primarily because this is a geographic discussion, the section is mentioned here in the text, but will be excluded from the map and from subsequent discussion in this section.)

Separating these parallel mountain ranges is the Great Rift Valley (the northernmost portion of the Afro-Arabian Rift Valley). In the north, the Nusariya and Zawiya mountains fall precipitously—more than 3,000 feet—into this chasm, known there as the Ghab ("thicket" or "depression"), which is drained by the meandering Orontes River. South of that, the Lebanon and Anti-Lebanon Mountains, which rise to heights in excess of 10,000 feet, fall off abruptly into the trough, known in that region as the Beqa' ("a place of stagnant water"), drained primarily by the Litani and Abana Rivers. Continuing south, the

highlands of Galilee, Samaria, and northern Judah, and the heights of Golan and Gilead, drop off into the narrow chasm referred to as the Arabah ("wasteland, desert-plain"). This depression north of the Dead Sea may also be identified as the Jordan Rift Valley, named for the river that drains it.

It is instructive to analyze the Levant using a longitudinal cross section. From such a perspective, the Levant itself bears the shape of a mountain, highest in the center, with certain topographic and physiographic features mirrored on the two sloping sides. The key to the geography of the Levant is its towering apex. The lofty elevation of the Lebanon and Anti-Lebanon Mountains far exceeds that of the ranges to the north or the south. In addition, they exhibit an unusual feature of geological structure not present in adjoining regions: a substantial substratum of impermeable, nonporous rocks within their uplift. Because of this layer, water is forced to the surface in vast quantities, producing hundreds of large and prolific springs at the unusually high altitude of 4,000 to 5,000 feet above sea level. Some of these torrents have a flow of several thousand cubic feet per second and emerge from the sides of the mountains as small rivers or cascading rivulets. They form the headwaters of at least four major rivers: the Litani, the Abana, the Orontes, and the Jordan.

In a number of fundamental ways, a certain symmetry can also be observed in the two outlying river valleys (especially prior to the twentieth century, when dams were erected on each river). Both the Orontes and Jordan Rivers had steep gradients, particularly near their headwaters in the elevated heights of Lebanon, and were so fast-moving that they were erosive instead of depository in nature. Neither river has been navigable to any degree throughout history. In their descents, both rivers had to cut through a basaltic dam in antiquity, thereby creating an intermediate lake (Lake of Homs on the Orontes; Lake Hula on the Jordan). Both rivers have seasonal flows that are unfavorable to the agricultural cycle, so were of little value for irrigational purposes. The soils around the Orontes and Jordan are of similar types: alluvial soils along the banks, saline at certain places (especially along the Jordan).

The sets of mountains flanking the Lebanon and Anti-Lebanon ranges on the north and south sides are themselves symmetrical in certain respects. Both are comprised mostly of limestone and manifest an internal transverse valley (Ugarit Valley in the north; Jezreel [Esdraelon] Valley in the south). Both ranges have an approximate longitudinal shape and comparative elevation of 2,500 to 3,500 feet, with peaks approaching 4,500 to 5,000 feet. They each receive similar rainfall amounts (twenty to forty inches annually) in similar seasonal patterns. In both cases, precipitation amounts increase toward the north



# Interested in the whole book? Select your preferred book seller:

MOODY PUBLISHERS	Z
AMAZON	Z
APPLE BOOKS	Z
BARNES & NOBLE	Ø
GOOGLE PLAY	C
CHRISTIANBOOK.COM	ď
WALMART	Z
TARGET	C