

When the Rains Failed: Studies in Climatology and the Biblical Text

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CHAPTER 7: CLIMATE CHANGES AFTER THE CONQUEST

Climatology and the Sea People

The famine that may have had the greatest impact on Israel's history was not recorded in the Old Testament itself. It occurred around 1200 BC, and it marked the end of the Late Bronze Age in the Levant. The famine broke out during the reign of pharaoh Merenptah. The Hittites in Anatolia asked Merenptah to honor Ramesses II's treaty with them by sending them grain for famine relief. When Merenptah described his battle against the Libyans west of the Nile delta, he mentioned the famine in Anatolia and economic difficulties in North Africa that had led to the Libyan war. Merenptah wrote:

They spend their time going about the land, fighting, to fill their bodies daily. They come to the land of Egypt, to seek the necessities of their mouths; their desire is ----- my bringing them like netted fish on their bellies. Their chief is like a dog, a man of boasting, without courage; he does not abide ----- bringing to an end the Pedetishew (*Pd.ty-š w*), whom I caused to take grain in ships, to keep alive that land of Kheta.¹

A letter was also found at Ugarit that mentioned the famine in Anatolia. The Hittite king commanded Ammurapi of Ugarit to provide a ship to transport 2,000 measures of grain from Mukish to Cilicia.² The Hittite king stressed repeatedly that the supply of grain was a matter of life and death. Ammurapi had also sent grain to Cyprus to ease the famine there.³ Ugarit may soon have suffered from the same famine. Schaeffer argued that the final occupation layer at Ugarit was covered by two meters of pale yellow, powdery dust. Schaeffer interpreted this soil as irrefutable evidence that Ugarit's last days saw a prolonged drought.⁴ A generation after that drought, Arnuwandas III of Boghazköy wrote about the hunger that had struck western Anatolia during his father's reign.⁵ Redford argued that this famine may also have been mentioned centuries later by Herodotus and Diodorus.⁶

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James H. Breasted, *Ancient Records of Egypt: Historical Documents*, 5 vols. (New York: Russell & Russell, 1962), 3: 244.

2

R. D. Barnett, "The Sea Peoples," 359-378 in I. E. S. Edwards et al, eds. *The Cambridge Ancient History*, vol. 2.2, (Cambridge: Cambridge University Press, 1975), 369. A. Jeonard, Jr. "Archaeological Sources for the History of Palestine: The Late Bronze Age," *Biblical Archaeologist* 52 (1989): 30.

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M. C. Astour, "New Evidence on the Last Days of Ugarit," *American Journal of Archaeology* 69 (1965), 255.

4

F. A. Schaeffer, "The Last Days of Ugarit: Drought, Famine, Earthquakes and, Ultimately Fire Ended Civilization at Ugarit," *Biblical Archaeology Review* 9 (1983): 74-75.

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G. A. Wainwright, "Menepthah's Aid to the Hittites," *The Journal of Egyptian Archaeology* 46 (1960): 25.

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Redford noted that Herodotus and Diodorus mentioned a famine that had forced the people of Syme, Naxos, and Sardis to leave their homes. Donald B. Redford, *Egypt, Canaan, and Israel in Ancient Times*, (Princeton: Princeton University Press, 1992), 244. It is not clear whether this was the same famine.

This famine greatly affected the Aegean Sea area and Asia Minor. Mendenhall noted that almost every site excavated in Greece was destroyed somewhere between 1250 and 1150 BC.⁷ Rhys Carpenter argued that the famine affected Crete, the southern Peloponnesus, Boeotia, Euboea, Pholia, and the Argoid, but not Western Europe.⁸ As these cities were destroyed, ethnic groups around the Aegean Sea left their homes in search of habitable land. While the specific causes of this immigration have been debated at length,⁹ the famine at least contributed to their decision to immigrate. The Egyptians called this collection of ethnic groups the Sea People. They moved by land and sea across southern Asia Minor and south along the coast of Syria and Palestine. They destroyed cities and cultures as they overflowed the Levant and poured inexorably toward Egypt. Ramesses III described the Sea People aggression and the destruction that they brought to the region. He wrote:

The foreign countries made a *conspiracy* in their islands. All at once the lands were removed and scattered in the fray. No land could stand before their arms, from Hatti, Kode, Carchemish, Arzawa, and Alashiya on, being cut off *at [one time]*. A camp [was set up] in one place in Amor. They desolated its people, and its land was like that which has never come into being. They were coming forward toward Egypt, while the flame was prepared before them. Their confederation was the Philistines, Tjeker, Shekelesh, Denye(n), and Weshesh, lands united. They laid their hands upon the lands as far as the circuit of the earth, their hearts confident and trusting: "Our plans will succeed!"¹⁰

When the Sea People were finally defeated, Ramesses III allowed them to settle in the Philistine Pentapolis as Egyptian vassals. Cities like Beth Shean that had been Egyptian strongholds and administrative centers were now inhabited by Egyptians, Canaanites, and Sea People. The arrival of the Sea People brought the Iron Age to Palestine.

Before the Sea People entered Palestine, Israel's highlands had been occupied by a thinly scattered agricultural population. The identity of this population has been debated at length. Those who claim that Israel first appeared in Palestine after 1200 BC often deny that the highlands were inhabited by Israelites at this time. For example, Mazar argued that many small ethnic groups populated the highlands instead of the Israelites.¹¹ If Israel left Egypt during the 18th Dynasty, the highlands would have been inhabited by Israelite tribes who were following a lifestyle closer to their *habiru* roots than the tribes who lived among the Canaanites on the coastal plains. Merenptah's stela could be interpreted as a description of such a culture perhaps three decades before the Sea People settled into the Philistine Pentapolis.

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George E. Mendenhall, *The Tenth Generation: The Origins of the Biblical Tradition*, (Baltimore: The Johns Hopkins University Press, 1973), 148.

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R. A. Bryson, et al. "Drought and the Decline of Mycenae," *Antiquity* 48 (1974): 46.

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Suggestions have included: the Trojan War, a Dorian invasion, an earthquake, volcanic activity, climate change, famine, disease, or a combination of these factors.

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James B. Pritchard, ed. *Ancient Near Eastern Texts Relating to the Old Testament*, (Princeton: Princeton University Press, 1950), 262.

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B. Mazar, *The Early Biblical Period: Historical Studies*, (Jerusalem: Israel Exploration Society, 1986), 38.

When the Sea People settled in the Pentapolis, many inhabitants of the region fled before them. Canaanites generally fled north into Syria while Israelites on the coastal plain fled east into the highlands. Archaeological evidence suggests that a great wave of immigrants entering the hill country from the coastal plains at this time. Around 300 new settlement sites have been identified from this time period. Bimson noted that the new Iron Age settlements in the highland included 68 settlements in Gilead, 96 in Manasseh, 122 in Ephraim, 12 in Benjamin, and 10 in Judah.¹² These Iron I settlements were Israelite sites because several of them continued into the Iron Age II period as Israelite sites.

Israelites who fled to the highlands would have brought along elements of the city state culture. The highlands certainly saw a dramatic cultural shift at this time. After the beginning of the Iron Age I period, Israelites in the highlands began to dig cisterns instead of relying on collar-rim jars for water storage. These cisterns made it possible for Israel to occupy semi-arid regions that could not have seen permanent occupation without them.

Climate Changes after the United Monarchy

For example, Elijah's drought in 1 Kings 17:1 may have been described in Menander's record of Ethbaal's annals. Ethbaal of Tyre was Jezebel's father. Menander quoted from Ethbaal's annals when he claimed that, "There was a drought in his reign, which lasted from the month Hyperberetaios until the month of Hyperberetaios in the following year. But he made supplication (to the gods), whereupon a heavy thunderstorm broke out." Katzenstein argued that the drought was shorter and less severe on the northern coast of the Levant than it was in Israelite territory. So it only lasted for a year at Tyre.¹³ The biblical text witnessed to the fact that the drought was less severe in the north. 1 Kings 8:1-3 noted that Elijah was able to find shelter in Zarephath after the brook Cherith dried up. Zarephath was a harbor near Sidon in Canaanite territory.

Climate played a role in Israel's history once more toward the end of Israel's Babylonian captivity. Jeremiah had prophesied that the city of Babylon would fall to its enemies. That hardly seemed likely. Babylon's city walls were so thick that six chariots could travel abreast around the top of the wall. It is hard to imagine that anyone in that culture could have knocked down Babylon's walls. However, the Euphrates River flowed through the middle of the city. The Persians were able to take the city in a single day was walking down the river bed. Yamauchi noted that the river would normally have been at its lowest point for the year at the time that the Persians attacked. However, the river depth would still have been over 12 feet deep. Yamauchi noted that there had been a drought for several years. So the river level was unusually low and the Persian army was able to walk up the river bed.¹⁴

Climate instability remained a feature of Palestine throughout history. For example, Acts 11:28 recorded a famine that struck the ancient world during the reign of Claudius.

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J. J. Bimson, "Merenptah's Israel and Recent Theories of Israelite Origins," *Journal for the Study of the Old Testament* 49 (1991): 4.

13

Menander, *Ant.* VIII: 324, as quoted in H. J. Katzenstein, *The History of Tyre*, (Jerusalem: The Schocken Institute for Jewish Research, 1973), 153.

14 Edwin M. Yamauchi, *Persia and the Bible*, (Grand Rapids, MI: Baker Book House, 1996), 86

Conclusion

Several kinds of evidence shed light on Old Testament history. While archaeological and textual evidence will always remain the most important data for the study of the Old Testament historical background, climatology may also begin to play a significant subsidiary role as an arena of academic discussion. Climatological studies can demonstrate the general accuracy of the Biblical text, and they can suggest ways that God may have accomplished His will in Israel's history.