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J. H. PATERSON, M.A. in the Chair

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**THE GEOGRAPHICAL BACKGROUND IN  
OLD TESTAMENT EXEGESIS**

By

J. M. HOUSTON, M.A., B.Sc., D.Phil.

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THE VICTORIA INSTITUTE

22 DINGWALL ROAD, CROYDON, SURREY

# THE GEOGRAPHICAL BACKGROUND IN OLD TESTAMENT EXEGESIS

By JAMES M. HOUSTON, M.A., B.Sc., D.Phil.

## SYNOPSIS

The geography of the Old Testament is portrayed as accurately as its history. The development of topography, cartographic surveys and archaeology now provides a clearer understanding of the geographical background. The allusions to climate in the Old Testament demonstrate the stability of ecological controls, so that the geography of the present helps to illuminate the conditions of the past. However, the moral issues resulting within the context of the environment are the most significant. The Hebrew views on Nature help to elucidate many of the references to the physical phenomena.

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Much has been written on the progress of archaeological research in the Near East, and its vindication of the Biblical narrative. Less notice has, however, been paid in recent years to the contribution which geographical synthesis can provide to Biblical exegesis. The nineteenth century was a period of intensive exploration and survey in Palestine. Once the surface features had become known it was then recognized that below that surface, now accurately surveyed and mapped, there remained a buried past to dig and unearth from scattered sites. We have now reached a third stage, however, when a closer synthesis of archaeological discoveries and geographical research is required to uncover the buried landscapes and their past societies. There still remains "much land to possess" in this new field of work. The aim of this paper is simply to trace the development of thought concerning Palestine and to consider what aspects of the geographical background are illuminating to Old Testament exegesis.

The Bible is consistently reasonable with the geographical background. Throughout its pages, there breathes the *genius loci* which can be recognized in all the physical elements of climate and landscape, and of the traditional modes of life and customs, so long a part of the environment of Palestine. At the same time the Bible does not profess to be a textbook of geography and such study of its environment can only provide an indirect contribution to its exposition. A knowledge of the geographical features may illuminate revelation but it cannot interpret independently. There is, however, a tendency amongst some Christians to assume that all is known about Scripture and that it is presumptive to expect more to

be discovered. To guard against such tendencies, the findings of archaeology and geography can together greatly enrich the setting of the Biblical narrative without impairing its authority in any way. The contention can be made that in conservative Biblical exposition the levels of observations in such works as John Kitto's *Palestine* (1841-66) and W. M. Thomson's *The Land and the Book* (1859) are frequently still the basic geographical sources. Even an authoritative work like G. A. Smith's *An Historical Geography of the Holy Land* (1894), which ran into twenty-five editions, is no longer up to date, so rapidly has the youthful subject of academic geography progressed. Nearly all the attempts at geographical interpretation have been made by specialists coming from other fields and the majority of cartographic and physiographic work done before 1918 had primarily an archaeological purpose. It is desirable therefore to review the development of geographical research in Palestine and appraise its value to Biblical study.

In the seventeenth and eighteenth centuries a number of explorations were made by European travellers and scholars in Palestine but none could be called "scientific" in a modern sense. The first scientific exploration of Palestine was that of Dr. Edward Robinson in 1838. This American theologian realized that most of his problems were "relating to the geography of the Bible, and intimately connected with its interpretation, and I remember too, that they had never been discussed by anyone who had himself visited the Holy Land."<sup>1</sup> In two intensive tours lasting only seven months in all, he laid the foundations of modern critical knowledge concerning the country. Kiepert prepared a creditable map for him, from Robinson's route-traverses, but his main geographical interest lay elsewhere. "One branch of these historical investigations which I cannot but consider as important for the future geographer and traveller presents a field comparatively untrodden. I refer to the mass of topographical tradition, long since fastened upon the Holy Land by foreign ecclesiastics and monks, in distinction from the ordinary tradition or preservation of ancient names among the native population."<sup>2</sup> Until Robinson's work, the only source of topography even vaguely reliable was H. Reland's *Palästina* (1714). The distinctive value of Robinson's investigations was that he worked critically and independently of the monastic centres from which previous travellers had journeyed and had, in varying degrees of credulity, accepted the traditional identification of sites. There are some 622 place-names recorded in the Bible, of which Robinson identified 177; few of these have been subsequently altered.<sup>3</sup> By 1871 about 262 place-names had been located, and by the termination

<sup>1</sup> E. Robinson, *Biblical Researches in Palestine* (London, 1867, 3rd edit.), p. viii.

<sup>2</sup> *Ibid.*, p. ix.

<sup>3</sup> E. Robinson, *Later Biblical Researches* (London, 1856).

Page 64, line 5, "of those" *should read* "to those."

of the Palestine Exploration Fund Survey in 1877 a further 172 names had been added.<sup>1</sup> Conder, in particular, added to place-name identification with some 147 new ones, bringing the total to 469 in 1889.<sup>2</sup> The mania to identify Biblical place-names was pushed too quickly however, and it remained the task of later scholars to reduce the number of those actually proven. A number of these place-names are still in dispute. Few writers contributed original methods which Robinson had not already demonstrated, except for the brilliant work of the French scholar Charles Clermont-Ganneau, who fruitfully combined historical, philological and archaeological researches, during the 1880's and 1890's.

A second requirement for geographical accuracy was a good map. In the period 1838-71, that is from Robinson's first journey to the commencement of the Palestine survey, Röhricht lists no fewer than 995 authors writing on the geographical aspect of the country.<sup>3</sup> But no work could be well-established without cartographical accuracy, a deficiency from which even Ritter's own monumental work on Palestine suffered. Thus expositors such as Pusey asked, "Would it be possible to have a quasi-ordnance map of Palestine? I think," he added, "that we shall never properly understand the geography of the boundaries of the tribes but also as to passes, roads, etc., until we have."<sup>4</sup> Admiralty charts had already fixed the coastline but the route traverses of explorers had not been very accurate in fixing inland location. The Palestine Exploration Fund, founded in 1865 as a result of the conviction that the knowledge of Palestine was very inadequate, realized fully the cartographical deficiency.<sup>5</sup> Under the direction of two army officers, Conder and Kitchener, a topographical and archaeological survey of Western Palestine was carried out between 1871 and 1879. A primary triangulation was established and the details completed by prismatic compass sketching, the finished map being drawn on the scale of 1 : 63360. It has remained standard until modern times and is surprisingly accurate in its topography; less than 10 per cent of the Arabic place-names are erroneously transcribed on the twenty-six map sheets.<sup>6</sup> In Transjordan, however, the survey work started by Conder, Mantell and Schumacher has never been completed, although twelve sheets were issued before the close of the nineteenth century and subsequently additional sheets have been made from air-photographs. On the basis of these maps, physiographic

<sup>1</sup> Sir Charles M. Watson, *Fifty Years Work in the Holy Land, 1865-1915* (London, 1915).

<sup>2</sup> C. R. Conder, *Palestine* (London, 1889), pp. 262-3.

<sup>3</sup> R. Röhricht, *Bibliotheca Geographica Palestinae* (Berlin, 1890).

<sup>4</sup> Quoted by Watson, *op. cit.*, pp. 67-8.

<sup>5</sup> Palestine Exploration Fund, *The Survey of Western Palestine* (London, 1881), vol. I.

<sup>6</sup> W. F. Albright, "Palestine in the light of Archaeology", *The Annals of the Amer. Acad. of Pol. and Sci.*, 1932, p. 185.

models have been constructed such as those made by the Palestine Exploration Fund and Koepfel, and a number of historical atlases have been made, such as those of Hagen (1907), Smith (1915), Riess (1925) and the *Westminster Historical Atlas* (1945) by Wright and Filson.

A third and more popular basis of geographical commentaries in the past was the collection of data on customs and folklore. Many resident missionaries like Thomson and Masterman, and scholars like Robinson and Clermont-Ganneau, "were deeply struck with the truth and strength of the Biblical descriptions of manners and customs almost identically the same as they existed at the present day."<sup>1</sup> It is fortunate that a great accumulation of such data has been already published before the present rapid social changes. Much of this literature was written, as Thomson himself acknowledges, "in the countryside, in rural abandon in matter and manner,"<sup>2</sup> but it does bring freshness to the living Word. In Palestinian folklore, however, there is also much which demonstrates the persistence of the old gods of environmentalism, whether as the water spirits, the rain-god Baal, or the other fertility cults.<sup>3</sup>

Advances in the more exact disciplines of geology and archaeology provided other allied bases of Biblical study. Professor Hull's geological expedition to the Dead Sea in 1883-4 was the first comprehensive effort to survey the seismic nature of this region. Next the Survey of Egypt commenced geological mapping in the Sinai Peninsula in 1898, which was continued by later expeditions such as those led by Ball in 1913, Moon and Sadek in 1921. Sir W. M. Flinders Petrie's excavation at Tell-el-Hesi first opened the period of modern scientific archaeology in 1890. Much of the proto-archaeology of Western Palestine, however, has only been gradually unearthed from 1925 onwards. Since the 1930's much knowledge has been gained concerning the Middle Bronze Age which has helped to enliven the narrative of Genesis, while the Iron Age finds have increased respect for the high culture and trade in the age of David and Solomon.<sup>4</sup> Some 1500 excavations made in Transjordan by Glueck have revealed much data on the Nabataeans, the trade-routes and the mining activities centred on the Wadi-Arabah.<sup>5</sup> It is now possible to enjoy a better understanding of the relations between the geographical environment, and the peoples at successive periods, much of which illuminates or enriches the Biblical narrative. The works of Dalman<sup>6</sup> and Koepfel<sup>7</sup> have

<sup>1</sup> Robinson, *op. cit.*, vol. I, p. 498.

<sup>2</sup> W. M. Thomson, *The Land and the Book* (London, 1859), p. vi.

<sup>3</sup> See T. Canaan, "Haunted Springs and Water Demons in Palestine", *Journ. Palestine Oriental Soc.*, 1, 1922, pp. 153-70.

<sup>4</sup> W. F. Albright, *The Archaeology of Palestine* (London, 1949).

<sup>5</sup> N. Glueck, *The Other Side of the Jordan* (London, 1945).

<sup>6</sup> D. G. Dalman, *Hundert deutsche Fliegerbilder aus Palästina* (1925).

<sup>7</sup> R. Koepfel, *Palästina* (Tübingen 1930).

been pioneer in the attempt to portray past landscapes with the aid of air-photography and the regional correlation of archaeological sites. Much more research on these lines is now possible, plotting the limits of former cultivation, woodland, hydrological data, ruined settlements, etc. By such synthesis of archaeology and geography it will be possible to reconstruct partially the features of the past landscapes.

The basis of such research will depend upon the assumption that climate has not changed since Biblical times. Yet many observers in Palestine, travelling across the wilderness of Judea, the Negeb or Transjordan, have been impressed by the evidence of former settlement and abandoned cultivation in a land clearly not "flowing with milk and honey". Thus theories of climatic changes in historic times have been propounded by a wide range of writers such as Thomson, Blanckenhorn, Buhl, Hull, Fleure, Brooks, and notably Huntington.<sup>1</sup> Others, however, such as Robinson, Benzinger, Conder, Hellmann, Smith, Gregory and Abel have believed that the evidence for climatic changes cannot be proved from either the information of the Old Testament or from the present condition of the country. This problem is not simply an academic debate, since it is only on the grounds of continuity in ecological conditions that conclusions from the present environment can be made about the past. As Conder argued in 1876 "the change in Palestine is one of degree only and not of kind. The curse of the country is bad government and oppression. Justice and security of person and property once established, Palestine would become once more a land of corn, vines and olives, rivalling in fertility and in wealth its ancient condition, as deduced from careful notices of all such references as remain to us in the Bible and in the later Jewish writings".<sup>2</sup>

Stability of climate in Palestine is clearly evidenced. The Bible distinguishes the wilderness from the desert, as to-day distinction is made between the steppe and the true desert. The life of the settled cultivators is also contrasted with that of the nomads, such as the Simeonites of the Negeb (Gen. 49: 7) or the Rechabites of Transjordan (Num. 32: 1, 16; Jer. 35: 6, 7). The struggle between the peoples of the desert and the town, is graphically described in Gideon's victory over the Midianites (Judg. 6: 11-16; 8: 1-12, 28). The climatic data from the Bible is more convincing.<sup>3</sup> Distinction is made between the hot and cold seasons (Gen. 8: 22 and Amos 3: 15) and Josephus makes similar observations. The inception of autumn rainfall is clearly described (Deut. 2: 14;

<sup>1</sup> E. Huntington, *Palestine and its Transformation* (London, 1911).

<sup>2</sup> C. R. Conder, "The Fertility of Ancient Palestine", *P. E. F. Memoir* (London, 1876), pp. 195-207.

<sup>3</sup> See N. Shalem, "La Stabilité du Climat en Palestine", *Proc. Desert Research* (Jerusalem, 1953), pp. 153-75; also C. M. Botley, "Climate and Weather in the Bible", *Journ. of Trans. Victoria Inst.*, 73, 1941, pp. 212-35.



Hosea 6: 3; Joel 2: 23) and "rain in harvest" is still proverbial for unusual conditions (1 Sam. 12: 17, 18; Prov. 26: 1). To pray for rain after Pentecost (June) was asking for a miracle (Taanith 3: 3). Variability in the amount and distribution of rainfall was common (Amos 4: 7) and the incidence of prolonged drought is recorded on several occasions (1 Kings 17: 7; Jer. 17: 8; Joel 1: 10-12, 17-20). Recent research by Duvdevani at Karkur has demonstrated the importance of dew in advancing geophytes before the autumn rains arrive.<sup>1</sup> Similarly the notices of dew in the Old Testament suggest its value in dry farming (Gen. 27: 28; Deut. 33: 28; Isa. 18: 4; Zech. 8: 12) and its absence makes the drought the more disastrous (2 Sam. 1: 21; 1 Kings 17: 1; Haggai 1: 10). The incidence of snow is also mentioned. The snow cover on Lebanon, which frequently lasts throughout the summer months in sheltered parts, is a symbol of security for the inhabitants (Jer. 18: 14), while lower down in the Hauran it is not infrequent (Ps. 68: 14). Elsewhere, however, snow is a rare phenomenon (2 Sam. 23: 20). Snow-fed streams account for their maximum volume in May-June (Josh. 3: 15) but most streams dry up in the summer months (1 Kings 17: 7; Job 24: 19; Joel 1: 20), especially those of the Negeb, mentioned in Ps. 126: 4. The sudden spate of streams with the autumn rains is graphically described in the disaster upon the armies of Sisera (Judg. 5: 21) and the parable of the poorly sited house (Matt. 7: 27). Neither have the seasonal feasts of the Jewish calendar been changed in history, indicative of a comparable agricultural rhythm of life throughout the centuries.<sup>2</sup> Finally, there is a similar distribution of crops as in the past. All references to date-palms in the Old Testament are in places where they can be cultivated to-day.<sup>3</sup> The importance of the barley crop in Judea rather than wheat, and the fame of Carmel for its vines and Ephraim and Galilee for olives, are still justified. These selected references from a mass of other literary evidence demonstrate clearly that absolute climatic changes as Huntington postulated have not occurred in Palestine in Biblical times.<sup>4</sup> The subsequent evidence of Arab writers further confirms this.<sup>5</sup>

Apart from climatic conditions, Biblical references allude to many other geographical characteristics of Palestine. Situated on the western edge of the rift valley occupied by the river Jordan and the Dead Sea, it is not surprising that earthquakes and other forms of seismic activity have been the *alter ego* of the country. The disastrous earthquake in 1837 at Safed in eastern Galilee, when four thousand lives were lost, is a recent

<sup>1</sup> S. Duvdevani, "Dew gradients in relation to Climate, Soil and Topography", *Proc. Desert Research* (Jerusalem, 1953), pp. 136-52.

<sup>2</sup> See Talmud, *Mishna Taanith*, ch. 1.

<sup>3</sup> Conder, "The Ancient Fertility of Palestine," *op. cit.*, p. 206.

<sup>4</sup> See also discussion by J. W. Gregory, "Is the Earth Drying up?" *Geographical Journal*, 43, 1914.

<sup>5</sup> A. S. Marmardji, *Textes Géographiques Arabes sur la Palestine* (Paris, 1951).

reminder of this.<sup>1</sup> There is some evidence that in the land of Midian, south-east of the Gulf of Aqaba, there was active volcanic activity in the thirteenth and eighth centuries A.D.<sup>2</sup> The allusions in Exodus 19: 18 and Ps. 68: 8 are difficult to relate to the site usually identified with Sinai, though it is undeniable that the volcanic cones of Harrat en-Nar, mentioned above, were still active at the time of the Exodus. There are other references to vulcanism (e.g. Jer. 51: 25; Ps. 144: 5), to geological faulting (Num. 16: 31-35), and to earthquakes (Gen. 19: 25; 1 Sam. 14: 15; 1 Kings 19: 11; Matt. 24: 7). The dislocation which downfaulted the southern shore of the Dead Sea,<sup>3</sup> probably caused sulphurous gas and liquid asphalt to destroy the cities of Sodom and Gomorrah (Gen. 14: 10; 19: 23-28). This disaster is vividly remembered and interpreted as divine judgment in many references (Deut. 29: 23; Job. 18: 15; Ps. 11: 6; Isa. 13: 19; Jer. 23: 14; 49: 18; 50: 40; Ezek. 38: 22; Amos 4: 11). The earthquake which appeared momentous in the reign of King Uzziah is used by Amos to date the commencement of his prophetic ministry (Amos 1: 1; cf. Zech. 14: 5).

The Biblical atmosphere of such natural catastrophes explains perhaps the resistance of many geologists in the nineteenth century to the new concepts of uniformitarianism, which now explain the erosional processes of geology and geomorphology. Yet the modern scientist can only applaud the sagacity of Solomon's observations concerning the cycle of nature (Eccles. 1: 4-9). The everlasting character of God (Isa. 40: 28) is fully revealed in the Old Testament allusions to His continuous activity in the natural forces of the environment (e.g. Ps. 104: 29-30; 147: 8-9; 16-19; Jer. 10: 13). This outlook of continuous creation is fully in harmony with the modern knowledge of the natural sciences. Apart from this general philosophical outlook common to all lands, there are particular allusions to the distinctive context of the Palestinian environment. Its Mediterranean features are epitomized by a feeling of balance and restraint, in a land where man has established himself on the frontiers of permanent settlement between the desert and the sown. Thus it is recognized that neglect of cultivation soon brings evil consequences (Prov. 24: 30-34). War upsets the limits sustained between the wilderness and the sown. Hence the Israelites were told by Jehovah, "I will not drive them out from before thee in one year; lest the land become desolate and the beast of the field multiply against thee. By little and by little, I will drive them out from before thee until thou be increased and inhabit the land" (Exod. 23: 29-30). Fires easily spread during the summer drought,

<sup>1</sup> E. Hull, *Memoir on the Physical Geology and Geography of Palestine* (London, 1886), p. 97.

<sup>2</sup> Father Abel, *Géographie de la Palestine* (Paris, 1933), Tome I, p. 49.

<sup>3</sup> See discussion following paper by E. W. G. Masterman, "The Dead Sea and the Lost Cities of the Plain", *Journ. of Trans. Victoria Inst.*, 69, 1937, pp. 212-29.

spreading across the mountain scrub (Ps. 83: 13-14). Soil erosion is another threat, possibly alluded to (Job 14: 18-19), and the "slippery places" so frequently mentioned are testimony to the rapid dissection and sharp relief associated with the cycle of erosion in semi-arid highlands (Deut 32: 35; Prov. 3: 23; Jer. 23: 12; 31: 9). Aeolian deposition resulting from wind erosion is another feature of the environment characteristic of the "Hammada" of the Negeb, and the loessal deposits of the Judean Highlands. Direct reference is made to it in some verses (Exod. 10: 20-23; Deut. 28: 24; Nahum 1: 3). Locusts brought with desert winds are also characteristic, the invasion of which is depicted in some terrifying passages (Exod. 10: 4-7, 12-15; Deut. 28: 42; Joel 1: 4, 7, 15, 16, 18), and whose habits are well recognized (Ps. 109: 23; Prov. 30: 27; Nahum 3: 17).

It is clear from the context of most of the references alluded to above, that the environmental background is not described *per se*, but as the incidental framework of moral issues. The Hebrews had no word for 'Nature' other than the idea of the activity of Jehovah Himself.<sup>1</sup> Thus the narratives, poetry, wisdom books and prophecies are all loaded with allusions to the acts, judgments, blessings and mysteries of God's activities through the medium of nature. God spoke in the thunderstorm (Exod. 9: 28; 19: 16, 19; 1 Sam. 7: 10; 12: 18; Job 37: 1-5; Ps. 18: 13; 29: 3-9; 104: 7), blessed in the rainfall (Levit. 26: 4; Deut. 11: 14; Ps. 104: 13; 147: 8; Isa. 41: 17-19), breathed in the wind (Gen. 1: 2; cf. Isa. 40: 7), cursed in the drought (Lev. 26: 19-20; 1 Kings 17: 1; cf. 18: 1; Amos 4: 7), judged in the earthquake (Job 39: 24; Jer. 4: 24-26) and manifested His glory in the heavens (Ps. 8: 3; 19: 1). There were some like Elijah, who recognized that God's revelation lay beyond nature. It was his experience that Yahweh was neither in the wind, earthquake nor fire, but in the consciousness of a still small voice (1 Kings 19: 11-13). The Hebrew faith, which saw God working in the activity and mysteries of nature, realized He was also transcendental (Hos. 2: 21-23). Yahweh was not circumscribed by the environment, as the Syrian pagan cults suggested in the well-known passage of 1 Kings 20: 23, 28 (cf. Ps. 121: 1-2). If their belief in God was not credulous, neither should it be faithless. The crowd who thought it thundered did not have the insight to know God spoke (John 12: 28). Similarly to-day, we may seek to interpret the nature miracles of the Bible in terms of an understanding of the physical phenomena, such as the plagues of Egypt (Exod. 7-10), the wind that provided a passage across "the Red Sea" (Exod. 14), the landslide that dammed the Jordan at Tell-es-Saidiyeh (Josh 3: 16), the lightning that consumed Elijah's sacrifice on Mount Carmel (1 Kings 18: 38) and many other

<sup>1</sup> H. Wheeler Robinson, *Inspiration and Revelation in the Old Testament* (Oxford, 1946), pp. 1-16.

instances. The acceptance of such narratives depends not upon our scientific beliefs but upon our presupposition. Either they can be explained away and nothing miraculous is left, or else our faith will accept them as miracles of coincidence in each case, and interpret them as instances of God's active intervention. Knowledge of the physical process involved, may help us to answer the question "What caused it?" but only faith in the divine revelation enables us to know why it was caused. In such fear is the beginning of wisdom.

It is from this standpoint that the moral significance of the geographical environment is the most profitable study to the Christian. As a denial of environmental determinism, Sir Charles Warren was right when he said in a lecture to this Institute, "So far as the physical effects of Palestine are concerned, I do not think that they can have had any appreciable effect on the mind or actions of the people beyond influencing the imagery used in their writings."<sup>1</sup> But he overlooked the moral issues involved in the environment of Palestine, for the elements of position, climate and economy all formed an intensive background to their religious life and problems. For example, the nodality of Palestine has blessed and cursed it, according to conditions of peace and commerce, war and invasion. This land-bridge of "the world island",<sup>2</sup> focussed on the trade-routes of Afro-Eurasia, provided the moral challenge of reliance upon diplomacy and material wealth, or upon the unseen power of Jehovah. This was the burden of the prophetic messages. Of the two great trade-routes, the coastal highway from Egypt and the inland route from Arabia through Transjordan to Damascus and beyond, only the latter could be controlled by Israel without upsetting the strategic interests of the great powers to the north and to the south (1 Kings 9: 26-27; 10: 1-2, 15). Even in Solomon's day the coastal highway was too much controlled by the sea-powers to warrant any interference there (1 Kings 9: 11; 10: 22; Ezek. 27: 17). On the royal highway of the interior, Edom alone was the strong rival and hence the bitter hatred expressed in prophetic books such as Obadiah.<sup>3</sup> Thus in the pivotal position of Israel it was easy to forget Jehovah, seeking alliances abroad, and, as middlemen, to become absorbed in the wealth brought by the trade-routes.

The climate also was fraught with moral issues. When the Israelites entered Canaan they were warned that they could not depend on the mechanical assurance, such as was provided by Nile irrigation; they would be cast upon the bounty of God in a sub-steppe climate of uncertain rainfall (Deut. 8: 3, 7-10; 11: 10-17). The sedentary settlements of the Canaanites had previously been located at the foothills or on the plains

<sup>1</sup> Sir C. Warren, "The Significance of the Geography of Palestine", *Journ. of Trans. Victoria Inst.*, 49, 1917, p. 191.

<sup>2</sup> Sir H. J. Mackinder, *Democratic Ideals and Reality* (London, 1919), p. 89.

<sup>3</sup> Glueck, *op. cit.*

where the chief series of springs outcropped, and where shallow aquifers made many wells possible.<sup>1</sup> The invention of a mortar impervious to water at the turning point of the Bronze Age and Iron Age, made it possible to store water in cisterns. This helps to explain the rapid expansion of Israelite settlement in the hill lands of Judea and Samaria, colonizing clearances in the woodland, which formerly, with few exceptions, had not had a sedentary population (Josh. 17: 15, 18). The great number of place-names in the Wilderness of Judea with the prefix *Bir* or cistern is significant. In a subsequent age, Josephus makes mention of 240 nucleated settlements in upper Galilee which were dependent upon cisterns.<sup>2</sup> Thus rainfall and water storage were significant in the moral life of Israel. There was the continuous temptation to submit to the environmental conditions of drought and to worship the rain-god Baal, or to trust in the material provision of cisterns rather than to trust in Jehovah (Jer. 2: 13). The Ras Shamra tablets have shown how Baal dominates the Canaanite pantheon. As the god of fertility he was worshipped particularly in the rich agricultural lands, especially in the north (Josh. 11: 17; 12: 7; Judg. 3: 3). In this context Elijah's victory against the priests of Baal on Mount Carmel was a triumphant vindication of Jehovah (1 Kings 18). As a later prophet said, "Are there not among the vanities of the nations any that have the power to cause rain? or do the heavens give showers? Art Thou not He, O Lord our God? In Thee do we hope; for Thou hast made all things" (Jer. 14: 22).

In the environment of the semi-steppe, climatic conditions discourage a peasant society because droughts tend to introduce debt and servitude. Yet the ideal Hebraic economy, which was envisaged at the entry into Canaan, was a system of small landowners with no large estates, no strange labour and no slavery of kinsmen, features which were to be maintained by the ideological privilege of sabbatical years (Levit. 25). By the time of the monarchy, however, crown land (1 Sam. 22), *corvée* (1 Sam. 8: 16) and large estates (1 Sam. 25: 2) had clearly modified the system, though the ideal was sustained in the aspirations of the prophets (e.g. Isa. 36: 16; Micah, 4: 4; Zech. 3: 10). Such changes may be understood simply in the context of the continual struggle between the desert and the sown, but to Israel it implied spiritual issues. It is significant that our Lord probably began His ministry in a year of Jubilee. But when He preached "the acceptable year of the Lord" it was to introduce a new moral order, distinct from that of the Old Testament.

Finally, in more obvious ways the geography of Palestine has influenced the history of its peoples. The ideal unity of the kingdom, so frequently envisaged as extending "from Dan to Beersheba", is fragmented by the

<sup>1</sup> See Abel, *op. cit.*, pp. 145-6, for a study of the distributions of springs.

<sup>2</sup> Quoted by W. M. Thomson, *op. cit.*, p. 293.

multiplicity of small physical units. Within the 6,000 square miles of Western Palestine, there are at least twenty-nine distinct morphological regions, which may be grouped broadly into the highlands of Judea, Samaria and Galilee, the Shephelah or western foothills, the lowland basins, the coastal plain, the Negeb, and the Jordan valley. Within each of these units, diversity of soil types and climatic conditions accentuate distinctive features apparent in the characteristic economy and history of each region; lucidly illustrated in Sir George Adam Smith's great work. In addition, the exposed position of the country has made it the melting-pot of many peoples and the focus of syncretic languages. It is a mistake to over-emphasize the peculiar distinctiveness of Israel, which has been often in the past the result of a vacuum of ignorance concerning other Canaanite peoples. The miracle of Israel's history has been the preservation of its individuality, despite aberrations of mixed marriages by its members (Deut. 7: 3-5; cf. 1 Kings 11: 1-8; 14: 21; 16: 31; Neh. 13: 23-27). In the light of this, it is understandable why we have so many geographical details concerning the delimitation of tribal boundaries in the book of Joshua. As God used nature for the benefit of His people, so He had prepared the land specifically for their occupation. Certain tribal limits are clearly related to relief features. The rift valley of the Jordan, for example, has always been a separator of peoples, so it is apparent why Moses was perturbed by the decision of Reuben, Gad and half of Manasseh to remain on the east side in Gilead (Num. 32: 5-7, 16-19). It is significant that there is an absence of Biblical place-names in Transjordan. In contrast, the separation between the kingdoms of Israel and Judah does not have a clear physical basis. The strategic elements of passes and routeways are important, however, in the warfare of Palestine. Garstang has used terrain appreciation to admirable advantage in his study of the military campaigns contained in his *Joshua-Judges* (London, 1930). Similarly, the narrative of the Exodus can be traced geographically with some success, as in the summary given by Wright and Filson.<sup>1</sup>

This paper has inevitably covered a wide field. Much has been learnt since Robinson made his epochal contributions to the geographical background of the Bible. Yet a great deal remains to be done in a closer synthesis of archaeology and geography. Such study cannot provide an ultimate explanation of the Old Testament. It may explain only some of the conditions of divine revelation. For unlike the pagan rites of Israel's neighbours, which appear closely moulded within the framework of the environment, the faith and history of the Hebrews break out imperviously from this mould and find new sphere in a unique revelation of God. It is, however, in a real world that this divine message has been declared so that its landscape can be recognized as vividly as its people.

<sup>1</sup> G. E. Wright and F. V. Filson, *Westminster Historical Atlas to the Bible*, pp. 37-41.