# GEOGRAPHICAL TERMINOLOGY IN JOSHUA 15-19

A Thesis

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by

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#### PREFACE

Two forms of map reference occur in this study. Grid coordinates (of the form 1234-5678) refer to the standard Palestinian grid. These, with hill numbers (elevations of the peaks) are for use with Israel (1967-1974, 1:100,000). References of the form A3 or Cm refer to the sketch maps in the Appendix. The first character, a capital letter, indicates which of the four maps (A,B,C,D) should be consulted. The following number or lower case letter refers to a particular point on that map. See the appendix for a key to the maps.

Text references to Josh 15-19 are frequently cited without repeating the name of the book (e.g., 19:12 rather than Josh 19:12).

It is a pleasure to acknowledge my indebtedness to those who have given assistance. Anson Rainey, my advisor, gave generously of his sabbatical in discussing geographical problems both related and unrelated to this study. James Monson and David Dorsey were willing correspondents on particular points. Gary Pratico and Michael Coogan read parts of the paper and offered some suggestions.

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#### CHAPTER I

#### INTRODUCTION

1.1. The Structure of the Boundary Lists

The present structure of the boundary lists in Joshua 15-19 is outlined in Table 1, and discussed below. Similar lists exist in Joshua 13 for the tribes of Reuben, Gad, and half of Manasseh in Transjordan. But those lists do not employ the verbs which are the object of study in this paper, and so are not analyzed here.

1.1.1. General Introduction.

Most of the lists open with a formulaic statement that the lot (גורל) of a certain tribe "was" (15:1; 17:1), "went up" (18:11a; 19:10a), or "went out" (16:1; 19:1a, 17, 24, 32, 40) in such and such a manner.

1.1.2. The Border Lists.

The border list has three elements, any of which may be omitted in a given description. However, every tribe has at least one of these elements.

- 1.1.2.1. The list is usually introduced by the word "border" (גנול), often in the opening words of the description itself (15:2), but sometimes in a separate statement (16:5).
- 1.1.2.2. The border description proper consists of a list of place names that lie along the border of the tribe, either just inside it or just outside it. The border does not run down the main street of a town, of course. Rather,

part of the border line of each of these towns is a segment of the intertribal boundary. In principle, if the border were straightforward, it would be possible to give just a list of towns in order, and expect the reader, following topographical conventions, to fill out the border. In fact, Dan's list is one such. Not all of the towns listed are in Dan's original allotment along the coast. But they all lie along Dan's border, so far as they can be identified.

More often, though, the place names are joined together
by verbss which define more precisely the movements of the
border from one to the other. These verbs are the central
object of the present study. אואות ("outgoings"), though not
a verb, serves in the lists with a regularity and semantic
force like those of a verb, and is included in our study. When
we refer in general to "the boundary verbs," it is understood
as included.

1.1.2.3. The border descriptions are often closed with the statement, "this is the inheritance (מוֹלֹה) of . . . ."

The same statement is also used to close the town lists in 18-19 (1.1.3.3.). That the same formula has two syntactic slots in the structure of the lists is seen from the lists of Benjamin and (less clearly) Simeon, where both slots are filled. 1.1.3. The Town Lists.

These describe cities actually included in the tribe.

1.1.3.1. Just as the border descriptions frequently used the word "border" in their introductions, so a formulaic reference to "cities" (15:21; 19:9; 18:21; 19:35) or to the

	Jud 15:		Eph	Man 17:	Ben 18:	Sim	Zeb 19:	128 19:	Ash 19:	Nap	Dan 19:
General intro. 1.1.1.	3	1		1	11a	2	10a	17	24	32	40
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1.1.3.3.2.					28b	86	16	23	31	39	48

Table 1

tribe as a possessor (17:11; 19:2) frequently opens the town list.

1.1.3.2. The description itself is found in its most elaborate form with Judah, where several distinct districts are listed, and each enumerated. Less complex lists (such as Zebulun) give only one series of names, and a summary number. The simplest form of the list is the number along, without place names (Issachar). The relationship of the numbers cited to the number of place names provided is problematic, and will not be discussed here.

1.1.3.3. The description is closed by one of two sorts of statements.

1.1.3.3.1. In 15-17, there is a reference to the success or failure of the tribe to appropriate its inheritance.

1.1.3.3.2. In 18-19, the formula used to close the border description (1.1.2.3.) is repeated.

# 1.1.4. Implications.

Although גבול may mean "territory" as well as "boundary," there is no need thus to understand it in Josh 15-19 when it comes at the head of a list of place names.

At times one must decide whether a given place name lies in a certain tribe. The town lists may be studied to derive this information. The boundary lists, though, may list a border town that actually lies in an adjacent tribe, not the tribe being described.

In 3.1. below, we will discuss further the distinction between 15-17 and 18-19 noted in 1.1.3.3. above.

### 1.2. The Problem

Noth (1935) attributes little geographical significance to the verbs which, in his theory, a later editor has inserted into the original bald series of names. In fact, his commentary (1953) on these passages does not comment on the verbs at all, but only on the reconstructed list of names.

But there is a growing scholarly concern over the subjectivity and lack of consensus involved in using a reconstructed ur-form of a text as a basis for further studies (Fokkelman 1975:1-8; Kallai 1958: 135), coupled with an awareness that the final form of the text is at least as worthy of scholarly attention in its own right as are any of its literary ancestors (Sawyer 1972: 12). And boundary lists from Ugarit, while simpler than Josh 15-19, are still not the name-only lists which Noth posits as primitive (Richardson 1969: 97-98).

The objective of this paper is not to settle the literary history of Josh 15-19, but to examine the function of the geographical terminology (and primarily the verbs) in the lists as they now stand. The exercise is one in toponymy and lexicography, rather than literary criticism, and is possible only if one accepts a position something like this:

Whenever and however the lists took their present form of place names joined by verbs and other geographical terminology, they made geographical sense to the person who thus assembled them.

We do not seek to prove this statement, but accept it as the only basis on which a study such as this can proceed. And we invite our readers, for the sake of the discussion, to accept it with us.

One of the implications of this axiom is that the geographical terminology has not been inserted at random, simply as redactorial "glue." Rather, it is used to convey meaning, and is thus susceptible to linguistic analysis.

Another implication is that the place names in the list refer to the place that the compiler thought they represented, not necessarily to the place where the name is preserved now (or at any time other than that of the compiler).

And of course, the axiom implies that the compilation took place in Israel, or at least was done by someone who knew the land intimately.

#### 1.3. The Procedure

Three types of data make up the boundary description part (1.1.2.2.) of the lists. One type is the coupling verbs, our main interest. A second type is the place names. A third is the other geographical terminology, such as directional nouns (north, south, east, west) in a variety of syntactical constructions; topographical formations (shoulder, valley, wadi); prepositions; and terminative  $-\overline{a}h$ . Before we can attack the verbs, we need to have some understanding of the other two categories of material.

The boundary verbs have been neglected for years. The place names have not. Kallai (1967) devotes an entire book

to discussing the tribes, largely on the basis of the place names. Simons (1959) is another comprehensive discussion. For individual place names, the articles in the <code>Encyclopaedia Biblica</code> give full discussion and bibliography up to the time of their publication. The principles of toponymy are outlined by Aharoni (1967: 94-117), who provides a convenient listing of biblical place names and proposed modern identifications (366-85). The text of his book documents and discusses many of these.

Where we accept a place identification proposed by one of these summaries, we will not regularly give discussion or references. Interested readers can readily locate any biblical place name in these works by their indices. Only when we propose a new identification, or one which these discussions reject, will we give references to the literature.

The southern border of Judah, which passes through the desert south of the Negev, is especially difficult, since archaeological surveys and extrabiblical historical traditions of these areas are very sparse. Because of the lack of scholarly consensus on many of these place names, we will not include them in our induction. Probably our conclusions will be of more help in identifying these places, than the places will be in defining the boundary verbs.

Chapter II is devoted to the geographical terms other than verbs.

The third chapter discusses the verbs themselves. For each verb, and introductory section will outline previous study, relevant use elsewhere in the OT, and our proposed definition.

A second section will survey those uses of the verb which most clearly suggest the definition. Often a third section will be necessary to discuss examples of a verb which do not seem to fit the pattern of the other uses.

The entire process involves a lot of pulling one's self up by one's bootstraps. Toponymical identifications depend largely on these very lists. But the meaning of the lists often hinges on the verbs, whose precise geographical sense must be induced from accepted place identifications! Clearly, it would be circular to try to show that the lists make sense. That is not our goal. Rather, we are assuming that they make sense, and are seeking to discover that sense.

## CHAPTER II

## SECONDARY GEOGRAPHICAL TERMINOLOGY

# 2.1. Prepositions and Directive $-\overline{a}h$

## 2.1.1. Directive -ah.

This morpheme is used some sixty-eight times in the border lists. Since its usage varies throughout the OT, we must carefully observe how it behaves in our material.

# 2.1.1.1. Etymology.

Once considered a mater lectionis for a fossilized (adverbial) accusative case ending (GKC 90c), directive he appears clearly in Ugaritic material (UT 8.56) where case endings are present (as attested by third 'alep forms) but not regularly indicated graphically. The fundamentally consonantal nature of the suffix seems thus established, and comparison with Akkadian -is suggests that the morpheme follows the s/h contrast attested in the personal pronouns and causative stems of the various Semitic languages, and perhaps has its origin in a pronoun functioning deictically (Speiser 1954).

# 2.1.1.2. Usage in general.

The morpheme, with spatial significance, is variously used to indicate direction of motion or location, and sometimes appears otiose. There is wide agreement on this

three-fold classification (Speiser 1954: 108-9; GKC 90c,d,e; Margain 1969; Kallai 1967: 171-72, n.217). Meek's insistence (1940) that the morpheme is only directive/terminative appears overdrawn, though Margain's diachronic study (1969) argues convincingly that the directive use is original, and that the local and otiose uses represent later degeneration of the form as some nouns became specialized as prepositions and took over the semantic load.

2.1.1.3. Usage in Josh 15-19.

2.1.1.3.1. Of the sixty-eight cases of the morpheme in Josh 15-19, thirty-nine are clearly terminative-directive.

2.1.1.3.2. Twenty cases, all appended to nouns of direction, might be construed as local uses. These are:

למה 1548.

צפונה 15:5,8; 17:10; 18:12,16,18,19,19

קדמה 15:5; 18:20

מזרחה 16:1,5

נגבה 17:9,10; 18:13,14,15,16,18

Such a classification is suggested by the use of these forms to indicate a place or modify a noun, rather than to modify a verb. However, three considerations inclue us to consider them, after all, as directive rather than local.

First, nouns of direction are intrinsically directive, not local. They do not refer to places (except perhaps in mythic contexts, which Josh 15-19 surely is not). One never arrives "at"the north. The most that can be said with clarity is that one arrives at a place which lies in a northerly

direction with reference to another place. But this is a directive usage, not a local one.

Second, the local usage of the suffix would be expected to appear, if anywhere, on place names or common nouns descriptive of topographical features. Though the suffix does appear twenty-three times with such words, it never bears local meaning in those cases, in the boundary lists. It would be very strange if the local meaning should then surface with nouns of direction.

Third, the syntactical observation which suggested positing a "local" nuance for the suffix with nouns of direction should be made more precise. Our corpus suggests an ełlipsis of a verb by which the basically adverbial directive nuance of  $-\overline{a}h$  may be applied to superficially nominal constructions (2.3.1.2. below).

2.1.1.3.3. Finally, there are six to nine cases where the morpheme is otiose.

ות מצפונה (15:10); בנגבה (15:21); and (19:11); and (16:7) the sense of direction is conveyed by the preposition, the  $-\vec{a}h$  contributing nothing to the sense of the passage.

in 15:12 is predicate nominative, like in 15:5, with no semantic load for the suffix.

in 18:13 seems clearly to be the shoulder of Luz, not the shoulder toward Luz. In fact, the only form in which this place name occurs in Joshua is with the final h. This observation, together with the substantial identi-

fication throughout the biblical tradition of Luz with Bethel, makes it unlikely that 16:2 should be rendered "from Bethel to Luz." We propose, with Kallai, to understand the suffix here also as otiose, and recognize in הווה either a gloss for Bethel, or half of a double name.

nninh occurs in 19:43 in the midst of the list of the border cities of Dan. The form need not be otiose. We have already argued, against Noth, that Dan's list is in fact a border list, not a town list. Within such a list an occasional linking element would be quite possible. Asher's boundary list, for instance, varies between simple listing of border towns, and sites joined by linking elements in the tradition of Zebulon and the southern tribes. But there is no clear reason why only Timnah should have the directive element in Dan's list. Perhaps it is otiose.

אכזכה in 19:29 may be the terminus of the אכזכה from a place called אחר. But the common use of the latter word to indicate a territory associated with a tribe (17:14; 19:9) or place (Deut 3:4,13,14; Zeph 2:5,6) suggests that the MT is correct in pointing it as construct and understanding that the border, on reaching the limits of Achzib's territory, goes out from there to the sea. The ending on the place name would then be otiose.

## 2.1.2. Prepositions.

We propose in this section to discuss only salient problems. In general, prepositions are sufficiently discussed in standard lexicons and grammars to allow understanding of the lists.

## 2.1.2.1. An ablative sense for לע, ל, ב?

The virtual absence of -in from Ugaritic has highlighted the occasional need to translate by, b, and in that language occasionally by "from" in English. The felicitousness of such renderings of Hebrew, in places, as well, has gained new attention, largely in the works of M. Dahood (1953; 1954; 1955; 1962; 1963; 1966a,b; 1968), though noted also by others (Driver 1964; Chomsky 1970; Sarna 1959). As Sarna notes, the interchangeability in some cases of i and -in was fully recognized by medieval Hebrew grammarians long before the advent of Ugaritology. Sutcliffe's caution (1955) that the phenomenon is one of translation necessity rather than strictly of meaning is well taken.

Obviously, such fluidity in the directional idiom of a language could strongly affect geographical studies. We believe that in studying lists where so many variables (such as place names) are unknown or disputed, it is methodologically uncontrollable to allow every occurrence of a preposition its full range of possible nuance. Accordingly, we have not systematically analyzed what would happen if, say, every believe to be read as "from." Rather, we have consistently read the prepositions in their usual meanings. Several considerations may be offered in defense of this restriction.

First, in the vast majority of cases, the usual senses yield good understanding of the boundaries, and consistent meanings for the verbs.

Second, in a technical document of the sort represented

by the boundary lists, it is unlikely that ambiguous terminology would be used, especially when a distinct ablative particle, -in, is available (and widely used in the lists).

Third, the regular and technical usage of other terms in the lists suggests that the prepositions here have technical, and thus more than usually restricted, meanings.
2.1.2.2. על פני

A crucial detail in the boundary of Zebulun concerns the wadi described as על פני יקנעם (19:11). Albright (1922) sought to identify this with the Wadi el-Malik. But there are three closer candidates: Wadi el-Milh, which flows out of the Yoqneam pass; the Kishon; and Wadi Musrarah (Naḥal Beth-Leḥem).

Dorsey (1973: 131) notes that it is unlikely that the Kishon, which "flows near a number of Late Bronze--Early Iron Age cities in its long course," would be exclusively designated by the name of Yoqneam. But a decision between the other two candidates depends on the meaning of '19'.

In several cases (Num 33:7a; Josh 13:25; Judg 16:3; 1 Sam 24:3; 26:1,3; 1 Kgs 7:6,6; 17:3,5), lack of precise site identifications precludes any conclusion about the meaning of the phrase.

It has long been recognized that in topographical application, the phrase frequently means "to the east of" (Moore 1897; BDB). But in most cases (see BDB for references), the derivation from the custom of facing the east to define directions is clearly reflected.

Two cautions should be noted about ascribing a universal meaning "to the east of" to the phrase.

First, twice when it is used in this sense (Num. 21:11; Zech 14:14), a directional phrase "toward the sunrising" or "on the east" is added. This reinforcement suggests that the bald phrase was not enough, in the usage of these writers, to convey unequivocally the sense, "to the east." (There are, of course, many other cases where the eastward orientation occurs without this reinforcement.)

Second, there are three cases, all in Joshua, where the phrase obviously does not mean, "to the east of." In 18:14, a mountain על פני בת הרן is expressly said to be south of the city. In 15:8, a mountain על פני גי בן הנם further defined as to the west. 18:16 repeats this segment of the border, but without the use of the qualifying noun of direction.

Having noted these exceptions, we observe that in the only cases where the phrase clearly does not mean "to the east of," a qualifying noun of direction is included.

18:16 is no real exception to this, since the border description of Benjamin bears marks of dependence on that of Judah (see 3.1.4. below). Thus 18:16 never had an existence out of the context of Judah's border description, where the specifying noun is included. Furthermore, in 17:7, the unqualified phrase is used with the sense, "to the east of."

We conclude that the most straightforward reading of 19:11 identifies the wadi in question as one to the east of Yoqneam. If this is correct, then Wadi el-Milh, which lies to the north and west of the tell, is not nearly so likely a candidate as Wadi Musrarah (Naḥal Bet-Leḥem), to the north and east of Yoqneam.

## 2.1.2.3. hbs

This quasi-preposition occurs twice in the border lists. In 15:7, and again in the parallel 18:17, it describes the relative locations of Gilgal/Gililoth and the Red Ascent.

The word frequently carries the notion of oppositeness. Used to describe the locations of the lampstand and table of showbread on opposite sides of the tabernacle (Exod 26:35; 40:24), it can also be applied to two opposing camps of soldiers (1 Kgs 20:29), or to military opposition in general (1 Kgs 22:35 = 2 Chr 18:34).

In composition with Ty, it occurs in two identifiable topographical contexts. In Judg 19:10, a Levite, traveling from Bethlehem north on the ridge route toward Ramah, comes into view of Jebus. At that point he is said to be not Ty the will have been viewing Jebus across the upper drainage of the Kidron and Hinnom valleys, and in fact across the Hinnom itself, looking across the intervening lowlands to the Ophel.

In Ezek 47:20, a point on the Mediterranean shore is defined as being אָד נכח לבוא חמת עד נכח לבוא סver fifty kilometers inland. Contrast the idiom in Josh 19:46, where the border of Dan, following the Yarkon, meets the sea אול בוא Joppa, visible from the mouth of the Yarkon only ten kilometers to

the north, sits "alongside" it on the coast. In contrast, the orientation of Lebo and its coastline on the other side of the Lebanon mountains is one of opposition.

Though the evidence is scanty, it does suggest that Gilgal/Gililoth is not alongside the Red Ascent, but opposite it. Our reconstruction of the border satisfies this condition by placing the two sites on opposite sides of the Kidron. 2.1.2.4.

We have already suggested that this term differs from in lacking the emphasis on opposition. In 19:46 it seems to indicate that the northern border of Dan's original allotment is "alongside" Joppa.

The use in 18:18 to describe the orientation between a mountain slope and the Arabah has several parallels elsewhere in the OT. In Deut 3:29; 4:46; and 34:6; the plains of Moab are מול בית פעור, one of the Transjordanian mountain peaks. The compount phrase אל מול נועור is used in Exod 34:3 and Josh 8:33 (twice) to describe the lower slopes, or plains at the feet of, Sinai, Ebal, and Gerizim. And in Josh 9:1, the great sea is אל מול הלבנון. The word is thus commonly used to describe a relatively level area at the foot of an elevation or mountain. 18:18 refers, then, to a cliff making the final step from the Judaean plateau to the Arabah.

- 2.2. Topographical and Political Entities2.2.1. Political (Man-made) Entities.
- 2.2.1.1. Borders and Regions.

A survey of אבול and וובל in the boundary lists suggests

that in this technical context, the former refers exclusively to borders, while the latter is used when reference is made to an area or territory belonging to a city, tribe, or region.

2.2.1.1. גנול.--The semantic development of this
word is readily traced, and three clear uses present themselves.

The original meaning of the word was either "border" or Compare also nxl "wadi" with nxlh "inheritance" "mountain" (Koehler,1939: 124-25). The meaning "mountain" is attested in common Arabic jabal, and may be preserved in the OT at Ps 78:54 (KB, Dahood 1964: 396), less likely at 1 Sam 13:18 or 1 Sam 10:2. The use of mountain ridges and watershed lines as common boundary features (3.2.2.1. below) led to a natural metonymy between the uses. It would be gratuitous to argue for the priority of one or the other of these meanings.

By a natural synecdoche of the part for the whole, the word came to stand in contexts where it is obvious that the entire area within the border is meant. Num 20:16; 22:36; and Deut 19:3 are among the more obvious uses (see BDB sub voc., 2). The same development may be observed in the occasional use of nnn, "wall," for "city" (Amos 1:7,10,14), or of "gate" in the same sense (with Judg 11:22, compare Gen 24:60, etc.). It is difficult, if not impossible in most cases, to insist that the word actually means "area" and not "border," since the idiom is apparently alive in the mind of the writer.

Clearly, most references in the boundary lists to the אנול לובול concern the border, not the area within it. This is clearly the case when the noun is used as subject of the various boundary verbs. The symmetry of the introductory formulae (1.1.2.1.) requires that the word have the same sense in each of them. Thus, even in 19:41, where no verbs follow, the parallel with 19:10b and 16:5 strongly suggests that the word means "border," not "territory," and Dan's list is understood as a boundary, not a city, list.

In only two cases might the meaning of "area" be compellingly argued for the word in the boundary lists. Twice in 18:5, in a narrative segment imbedded in the lists, the word occurs. "And they [the surveyors] shall divide it into seven parts; Judah ya'āmōd 'al gbûlô minnegeb and the house of Joseph ya'āmdû 'al gbûlām missāpōn." Does not this phrase indicate that Judah, Ephraim, and Manasseh will abide on their respective territories?

Indeed, it would be unlikely, in a technical document such as the boundary lists present, for such ambiguity to be tolerated. A narrative section such as 18:5 would be a more likely context for the ambiguity than would the boundary lists proper. But even here, the usage of the rest of the OT favors the understanding, "Let Judah abide by his border, and the house of Joseph by theirs." Here, as in Ezek 48:2-8, the border line itself is in view, and may be identified as belonging to either of the tribes which share it.

2.2.1.1.2. bin.--The term is used four times in the boundary lists. Three times reference is made to the region belonging to a certain tribe (17:5, Manasseh; 17:4, the sons of Joseph; 19:9, the sons of Judah). Once, there is a reference to the territory belonging to a city (19:29, Achzib, spelled with otiose -āh, 2.1.1.3.3.). In every case, the common meaning "region, territory" (BDB sub voc. 3) is suitable.

Elsewhere in the OT, we might have expected sense of "territory" to be used in such references. But the technical nature of the boundary lists has apparently led to a specialization in terminology, reserving size for boundaries proper, and introducing sin for "region, area." Such a distinction is known elsewhere in the OT. Deut 3:14, in particular, illustrates the idifference well. "Yair the son of Manasseh took all the hebel argob, 'ad goul haggesūrî wehamma'ākātî."

## 2.2.1.2. Forms of Settlement.

Two words are used in the town-lists and summary portions (1.1.3.) of the boundary lists, to describe settlements subsidiary to cities. The most common term is אר. But three cities have, in addition to מצר, חצרים (15:45, Ekron; 15:47, Ashdod; 15:47, Gaza). In 17:11,16, the villages associated with the cities in the Jezreel and Beth Shean valleys are also termed אונות.

Building on material from Mari and on a linguistic study by Orlinsky (1939), Malamat (1962) argued for the character of מצרים as unwalled villages (cf. Lev 25:31). The association of the term with sites that are known to be fortified (most notably, Hazor in Galilee), is likely a result of the persistence of an originally descriptive name even after a village has become fortified (Loewenstamm 1958: 274; Delekat 1964: 10). Delekat argued that when the term is used generically, rather than frozen into a proper place name, it is to be contrasted with na, which indicates a fortified site. He observed that אצר occurs only in territorial lists, such as Josh 15-19 and Neh 11: 25-26. Lists of conquest (or failure of conquest) speak only of חצרים, never of חצרים (Num 21:32; 32:43; Judg 1:27; 1 Chr 2:23; 18:1; 2 Chr 13:19; 28:18). Delekat concludes, "Es sich bei den 'Töchtern' um befestigte Ortschaften handelt. Sie allein interessierten in diesem Zusammenhang."

His conclusion, reasonable in its own right, is supported by the distribution of nil in Josh 15-19. The term is reserved for the three members of the Philistine pentapolis

which are mentioned in the lists (Ashkelon and Gath do not appear), and for the Canaanite strongholds of Jezreel.

Antagonism between the Israelites and the Philistines was perennial, and the tension with Jezreel is made explicit in 17:14-18. It is reasonable that fortresses associated with these centers, in particular, should be noted.

## 2.2.2. Topographical (Natural) Entities.

Topographical terminology has been the subject of several studies of varying value. Smith's short treatment (1931: 681-88) (is well known but sometimes misleading. Stanley (1871: 475-534) is much more comprehensive and useful. For most terms, he lists all occurrences, biblical and (if known) modern names of the site to which they refer, and endeavors to induce the meaning. Dhorme (1920-23) is useful for verifying cognate usage of anthropomorphic terminology for topographical features. But since his interest is much broader than geographic, he seldom gives detail on geographical problems. Schwarzenbach (1954) is the most exhaustive treatment of the biblical material. Sometimes he is weak on drawing conclusions and differentiating synonyms. Aharoni and Loewenstamm (1962) is more up to date and extremely insightful, though unfortunately limited in scope.

In the light of such a comprehensive literature on topographical formations, it is not necessary here to study exhaustively every geographical term occurring in the boundary lists. We have selected for comment those terms which are particularly crucial for tracing the borders, and those,

occurring in the lists, on whose meaning some serious disagreement exists.

## 2.2.2.1. Valleys.

Considerable discussion surrounds the three terms בקעה, עמק, and גיא. For Smith, איז is a narrow ravine or glen; מין a wide plain surrounded by hills, and מין something in between. Stanley expressly contrasts עמק and עמק with regard to width. A survey of the biblical material suggests that neither summary is as good as that of Aharoni and Loewenstamm, who recognize in מין a general term that at times may be exchanged with either איז (referring to a narrower valley) or מולנות indicating a broader one).

Thus pay and κ'λ are freely interchanged in describing the Elah valley, where David fought Goliath (1 Sam 17:3,52). If the Elah as a whole (and not just the streambed, as Stanley and Smith insist) can still be called a κ'λ, then it is easier to understand how the good-sized Iphtahel can qualify for the term, while the steep-sided Rephaim remains an pay (the generic term being justifiably applied to a valley of any size whatsoever).

בקעה also apparently interchanges with בקעה. The latter term does not demand, as Smith thought, "a surrounding of hills" (1931: 685). The valley of Ono (Neh 6:2) can boast only distant hills, and those only on one side. And with reference to the broad Mesopotamian plain (Gen 11:2; Ezek 23:22,23; 8:4; 37:1,2), the usual notion of "valley" is quite unsuitable (Schwarzenbach 1954: 36).

In the extreme, בקעה can even be used as a parallel to מישור (Isa 40:4). We would not suggest in such a case that it is still equivalent to pay. But when it does describe land between hills, the interchange is quite possible. We suggest that it is attested in 2 Chr 35:22, where the בקעה of Megiddo, plainly the modern-day Jezreel, seems to refer to the biblical עמק יזראל. But the identification hinges on the precise reference of the latter phrase.

לזראי is mentioned in topographical contexts in Josh 17:16, and as the location of the camp of the Midianites in Gideon's battle in Judg 6:33; 7:1,8,12. Both contexts pose a strategic tension between the heights of Gilboa (occupied by the sonsof Joseph in Joshua; by Gideon and his men in Judges), and the enemy in the pny. Smith argued (385) that לאחדי pny is only the valley east of Jezreel, between Givat Hammoreh and Gilboa, and pictured the Midianites in Judg 6-7 as camped in this valley after crossing the Jordan. Kallai (1958: 629) questions the uniqueness of this reconstruction. The precise location of the Midianites is in fact not stated. They might have been to the north, or even to the west, of Givat Hammoreh.

Josh 17:16 seems conclusive that אמק יזראל was not limited to the valley between Jezreel and Beth Shean. There, the Canaanites dwelling in the lowlands are classified into two groups, those who are in Beth Shean and its fortresses (מבות), and those in the Jezreel valley. A glance at a map shows that the lowlands bounding the highlands of Manasseh are not only the right-angled valley with its corner at Beth

Shean, extending west to Jezreel and south along the Jordan; but also the embayment of the Jezreel reaching to the southwest of Gilboa toward Jenin. The latter area is in fact more important, strategically. The mountain slopes much more gently toward Jenin than toward Beth Shean, making the Jenin plain at once more attractive as a direction for agricultural expansion, and also more dangerous as an avenue for Canaanite chariot offense. Why would the children of Joseph have named Beth Shean, and part of its valley, as particular foes hindering their expansion, and neglected the Jenin embayment entirely?

## 2.2.2.2. Parts and Pieces.

If there were any question that the אמ of a hill (15:8,9) is its top or uppermost part, it should be settled by the note of Gen 8:5 that this part of the mountains was the first to emerge from the abating waters of the flood.

Some confusion has arisen between the use of "tongue,"

וושל, regarding the Dead Sea at Josh 15:2,5, with the modern

Arabic use of the cognate to refer to the peninsula opposite

Massada. At 15:2, the tongue facing southward might conceivably refer to the peninsula. Then the southern border w

would begin somewhere in Transjordan, enclosing land to the

east of the Arabah. But in 15:5 = 18:19, the northern Lashon

is associated in parallel structure with the mouth of the

Jordan river. The peninsula would seem much too distant to

be intended here. The reference rather seems to be to the

northern end or bay of the Dead Sea, and perhaps to the

embayment formed between the west bank of the sea and the small

delta of the Jordan extending into the sea.

The only other use of prob in the Bible to refer to something associated with a body of water is Isa 11:15, where the Lord threatens to destroy the "tongue" of the Egyptian sea. The reference is probably to the Gulf of Suez. At any rate, the parallelism in that verse refers to the drying up of the Nile. The judgment in mind reflects the Exodus opening of the q10 07. Isaiah anticipates that men will once again return dryshod to Israel from the lands of their dispersion. The context in Isaiah, then, clearly supports the interpretation of the prob of a body of water as referring to an area of water, rather than a peninsula. There is no need to see a different idiom in Joshua.

What is meant by the shoulder (9no) of a city (15:8,10, 11; 18:12,13,16,19)? Recent inscriptional evidence confirms

that the term, applied to a hill, refers to the slope of the hill (Kallai 1965: 177-79). Josh 18:18 thus refers to a slope or bluff descending to the Arabah. Dhorme (1922: 219) allowed the meaning "slope" in reference to a mountain, but insisted that the term simply meant "along side" in application to a city. Schwarzenbach (1954: 18) noted that the idiom "-JD 9AD >A + place name" used in Joshua was also found in 1 Kgs 7:39. In Kings, it describes the placement of temple furniture on one or the other side of the temple interior. He argued that the phrase in Joshua likewise referred simply to the side of a town on which the border passed, without specifying (as Kallai would conclude) the very slope of the tell.

In fact, the comparison with 1 Kgs 7:39 is not accurate. There, lampstands are being placed along the interior walls of abbuilding. The expression for placing something simply alongside an object, external to it, is simply -ה קחסה, without the א (2 Chr 4:10; 23:10; 2 Kgs 6:11). Even there, is the "shoulder" just the area beside the building? Or is it the wall of the building? Compare 1 Kgs 6:8, where a door is associated with the "shoulder" of the temple.

Schwarzenbach's case would be stronger if he did not seek to exclude totally the sense of "slope" from qno.

The inscriptional evidence cited by Kallai makes this sense indisputable, at least in the case of hills. Most of the cities associated with a qno in Josh 15-19 sit not only on their own tells, but also on natural hills. Only in the

case of Ekron (15:11) might one prefer to read "to the side of" rather than "to the shoulder of." But even there, consistency of usage, and the observed precision of the lists, suggest retention of the sense, "slope, side of tell."

## 2.3. The Syntax of Directional Nouns

The directional nouns (north, south, east, west) may be used either adnominally or adverbally. Sometimes it is essential, in tracing a boundary, to know which use is more likely. Thus we must survey the patterns of each that occur.

2.3.1. Adnominal uses.

## 2.3.1.1. Construct state.

This is the basic pattern for relating a noun of direction to the noun being modified. Thus 15:1 gives miqseh têmān.

אפא, "quarter," referring to the northern, southern, eastern, or western segment of a border, is regularly in the construct state before nouns of direction (15:5; 18:12,14,14,15,20).

Though אנול shows no distinction between the absolute and construct states, it is reasonable to interpret it as construct in 15:2,4,12; 18:19.

## 2.3.1.2. Elliptic use of -ah.

The construction in 15:5 (cf. 16:5) is ambiguous. גנול could, in spite of the terminative ending on the noun of direction, be in construct, as אמ clearly is in all of the references above except 18:14. This, at any rate, is Meek's interpretation (1940: 229-30). But it might, on the other hand, follow the syntax of 18:19, 'el leson yam-hammelah

saponah, 'el-qeseh hayyarden negbah.

What is that syntax? It is not construct, nor is it adjectival (the modified noun in each case is definite by construction to a definite noun, while the noun of direction is indefinite). A solution is suggested in 15:2, hallason happoneh negbah. The noun of direction with terminative suffix is strictly an adverb, modifying a verbal form. The information which is to be conveyed is contained almost entirely in the two nouns. Because the semantic load of the joining participle is so light, it may readily be left out, as understood, resulting in the construction of 18:19, and likely of 15:5 as well. Kallai (1967: 114) perceives the sense, but does not explain the syntax, of this idiom.

Why does אאם enter into construction with the forms of nouns of direction ending in the terminative suffix, when a syntactically smoother construction using the participle (whether expressed or understood) was at hand? The construct state was susceptible of a much wider use than simply the expression of a genitive relationship between two nouns (GKC gl30). אם especially enjoyed a wide range of constructions. Of its 86 occurrences in the Bible, 77 are in construct! Apparently, the construct form was effectively replacing the absolute. The word was in the process (never completed) of becoming a preposition, and in this quasi-prepositional function could appear pleonastically before a noun which already bore the terminative suffix. Compare the use of the before yāmmāh in 19:11.

cf also Num. 16:24 cf. also Num 16:24

2.3.1.3. min- . . . le- . . . constructions and modifications.

2.3.1.3.1. In English, we can relate a directional noun to a place name in the syntactic frame, "to the [directional noun] of [place name]. Thus, such patterns as "to the north of Jerusalem" or "to the west of Jericho" are readily understood. Biblical Hebrew has a similar device, which may be superficially compared to the English pattern by substituting the preposition -ln for "to the," placing the noun of direction in the construct state, and substituting -> for "of."

Examples of this idiom in the boundary lists are 15:3,3, 6,7; 17:9; 18:13. The meaning is clear in contexts where the idiom is used adjectivally (15:7; 17:9; 18:13). The uses in 15:3 are ambiguous, since the absolute and construct of negeb are indistinguishable. But 15:6 is clearly the idiom at hand, if the Massoretic pointing of 110% is followed.

The first occurrence in 15:3 presents an unusual concatenation of prepositions. weyasa 'el-minnegeb lema'aleh 'aqrabbîm. The seemingly incongruous combination of had and is usually explained by noting that the language of the border description is borrowed from Num 34:4, wenasab lakem haggebûl minnegeb lema'aleh 'aqrabbîm. The phrasing minnegeb lema'aleh 'aqrabbîm was, it is explained, taken from Num 34 and inserted mechanically into Josh 15 after the stock phrase have without regard for the grammatical problem which this created. But the idiom with -in + construct + -h is so well defined that in conjunction with a verb it functions as one unit, rather than separately, "from this point to that point."

If it is thus frozen, we can better understand how the borrowing between Num 34 and Josh 15 took place. The border goes out to that area which in Num 34 had already been designated as "[the area] to the south of the ascent of scorpions." The usage is admittedly exceptional. But it is not incomprehensible.

2.3.1.3.2. The English example, "to the north of Jerusalem." It does not surprise us, therefore, to find the preposition

In the Hebrew analog replaced by the directive suffix

-āh at 17:19, weyārad haggebûl... negbāh lannahal. The

-b phrase may be omitted if the reference point is obvious,
as in 15:8,8: 16:1; 18:16. This is very likely what has
happened in 17:10, negbāh le eprayim wesāpônāh limnasseh.

This does not mean, "to the south of Ephraim and on the north
of Manasseh," which is geographical nonsense. Rather, each
directional noun is understood as associated with lannahal
from the previous verse: "to the south [of the wadi] belongs
to Ephraim, and to the north [of the wadi] belongs to Manasseh.

2.3.1.3.3. The force of the construction of the noun of direction and of the preposition -> in the idiom -= n + construct + -> is to specify the location or reference point to which the noun of direction applies. This sort of job could be done equally well by an adverbial accusative, and such seems to be the construction in 16:6, we abar of mimmizrah yanohah, and 19:14, wenasab of haggebûl missapon hanaton. There is no observable difference in meaning

between this construction and that of 2.3.1.3.1.

2.3.1.4. Verb + Subject + 'el ketep + Place name + Direction.

In references of this form, the subject (either expressed or implied) is  $\lambda$ . The passages may be divided into three groups, depending on the form which the element "Direction" takes. In 15:8 and 18:12, it is of the form  $-\eta n + noun$  of direction. In 15:11; 18:13,16,18, it is of the form noun of direction  $+ -\overline{a}h$ . 15:10 presents a merger of the two, missaponah.

These passages are superficially amgibuous. Does the "direction" element modify the verb, or qno? That is, in a sentence of the form, "the border went down to the shoulder of the Jebusite southward" (18:16), does "southward" tell the direction in which the border is being traced (from north to south)? Or does it specify to which slope of the Ophel the border passes (the south slope)? In a particular verse (such as the one just quoted), both interpretations may in fact be true. But it is important for the interpretation of unfamiliar border areas to determine which is intended by the author.

2.3.1.4.1. The form of the directive element with the terminative ending is the more ambiguous, for two reasons. First, the terminative ending is much more common in joining a noun of direction to a verb in these lists than is the preposition - \nabla . Second, although there is one case in the - \nabla verses where the direct modification of the verb is impossible, each of the verses which use "noun of direction + -\alpha h is

susceptible of interpretation either way.

We interpret these forms as indicating the side of the "shoulder" which is in view, rather than as describing the direction in which the border moves. Three considerations lead to this conclusion.

First, as we have shown above, the use of a noun of direction with directive -ah to modify a noun rather than a verb is meaningful, through ellipsis of an understood verb (2.3.1.2.).

Second, the directive words in the construction being studied never come between and and the verb, but are always separated from the verb by the prepositional phrase. Clearly adverbial uses of "noun of direction + -āh" almost always follow immediately the verb, without intervention of a place name (16:3,6,8; 18:15; 19:34). A noteworthy exception is in the use of the verbs and or and, when the place from which a turn is made often precedes specification of the direction toward which the border turns (15:10; 18:14; 19:12, 12). But neither and nor and is used in the construction under study. The only possible exception in the border lists to the principle that directives modifying the verb are placed close to the verb is 18:12, we take to take the principle that directives modifying the verb are

Third, consistent interpretation of the directive element as modifying the verb is not possible. In three cases (18:13,18,19) the verb is עבר 3.2.8. will argue that this verb indicates a bulge in the border, where the line deviates from its expected straight-line course to

"pass by" some location (often for the purpose of including that place in a tribe from which a straight-line border would exclude it). In executing such a bulge, the border will often travel in opposite directions at the two extremes of the segment described. In 18:13, if the directive element modifies און, it can only describe the direction in which the border is moving as it completes the bulge. On the other hand, in 18:19, verbal modification is only possible if the movement of the border at the start of the bulge is in view. But in every case, if the directive element is describing the particular side of the און to which the border moves, no ambiguity or contradiction arises.

In connection with this third argument, 16:1 should be examined. The basic pattern of "verb + adverbial phrase + noun of direction ( + -āh) which characterizes the qno constructions, there takes the form, wayyēsē haggorāt . . . miyyardēn yērîho těmê yērîho misrāhāh. In moving ffrom the Jordan river near Jericho to Elisha's spring, the border is traveling westward, not eastward. The spring is on the east side of the tell, and misrāhāh may be emphasizing this. More likely, it points out that the border comes only to the east side of the spring and its oasis, rather than to the west side, where it would have the disastrous effect of dividing the city from its water source. The boundary comes to the east side of the oasis formed by the spring, then passes to the north of the city to the hills on the west.

The use of a noun of direction and  $-\overline{a}h$  to indicate a

side of a topographical feature is thus not limited to the אָם. 19:27 uses עפונה to indicate that Asher's border touches the Iphtahel valley on the north. 15:8 (twice) and 18:16 use the construction to indicate direction relative to two valleys near Jerusalem.

2.3.1.4.2. In constructions with - n. 18:12 resolves the ambiguity. There, the border goes up (from the Jordan) to the shoulder of Jericho missapon. The precise course of the border between the Jordan and Jericho lies along the Wadi Nuceima, as is apparent from the use of צא in tracing the same segment in the opposite direction in 16:7. (See 3.2.3. below.) The approach to Jericho is directly from the east, and not from the north. But the border does pass to the north of Jericho, including it within the territory of Benjamin (18:21). It appears that we have an abbreviated form of the formula - noun of direction + adverbial accusative (2.3.1.3.3.). The complete statement would be, "The border goes up to the shoulder of Jericho, to the north of the shoulder." The same interpretation fits 15:8 and 15: 10 (though in these cases the geography in view does not eliminate the other reading). One might have suspected, in fact, that the directional element applied to the and rather than to the verb directly, from its position in the sentence, removed as far distant from the verb as possible.

In 16:6, the pattern discerned above with the qno constructions may help resolve the course of the border. weyasa haggebul hayyammah hammikmetat missapon. It is not necessary

(with Kallai 1967: 125-26) to break the sentence after hayyammah and make the last two words a complete non-verbal sentence. The author is simply describing in summary fashion the westward branch of the border, to which he will return in 16:8, before detailing the eastern arm. Had the style of the later boundary descriptions (see 3:1. below) been in use here, the verb שוב would no doubt have been used, for the movement is just that described by שוב in 19:12,27,34 (see 3.2.5. below). hammikmetat is likely an adverbial accusative, modifying the border verb just as the adverbial phrase 'el ketep + place name does elsewhere. Then missapon functions exactly as it would in the and expressions. The border goes out to the sea, by way of Michmethath, to the north of Michmethath. That is, the description explicitly includes Michmethath in Ephraim. This agrees with its location cal-pene sekem (17: 7), a description that fits Khirbet Julayjil (Kh. Abu Nassir, BASOR #190 1792-1784, B29) better than Kallai's suggestion (1967: 128) (1968) pp 40 - 41of Jabal el-Kabbir (B30 , the ridge to the north-east of Shechem, cf. Kallai 1962: 962-63). Also, 17:7 describes Manasseh as extending from Asher to Michmethath. Our reading of 16:6 suggests that Michmethath, like Asher, is outside the boundary of Manasseh, and thus lends a symmetry to 17:7 that would be lacking if Michmethath, unlike Asher, were part of Manasseh.

## 2.3.2. Adverbial uses.

Some uses of nouns of direction in the previous section were, strictly, adverbial, since the syntactical link between the noun of direction and the noun being modified was an

elided verb. But here we are concerned only with nouns of direction which are most readily construed as directly modifying one of the verbs of boundary motion which is explicit in the text. Table 2 groups the fifteen such occurrences according to how the clause in question indicates the origin and destination of the movement. If a preposition or directive  $-\bar{a}h$  is used, it is indicated. "Acc" indicates that the term is in the adverbial accusative. A dash (-) indicates that the clause under consideration does not specify a destination (or origin). "+" may indicate either that two terms in the given category are present, one with each of the markers recorded, or (in 19:11) that both markers are present on one term.

The table suggests that the semantic load of adverbial nouns of direction is very light in the boundary lists.

Only once (18:15) is the noun the only directional element present. One clause has only the source listed (19:12).

Of the other thirteen occurrences, five indicate the origin of the motion, and all indicate the destination. Of course many other segments of the boundary, not tabulated here, rely entirely on destinations and/or origins for explanation, without specifying a noun of direction at all.

TABLE 2

Verse	Destination	Origin	Noun of Dir.	Comments
18:15	-		h-	No origin or dest'n
19:12		מ–	n- + Acc.	Source only
16:3	אל + עד	-	n-	
16:6a	Acc.	-	. h-	
16:6b	Acc.	-	n-	
17:7	אל	-	אל	
18:12	ے	-	n	Destination only
19:11	1 <sup>1</sup>	-	ל + -ה	
19:27	Acc.	_	Acc.	
19:34	Acc.	-	ה-	
15:10	אל	מ-	h-	
16:1	5 + Acc.	a-	<b>n</b> -	
16:8	Acc.	<b>מ</b> –	<b>ስ</b> -	Both source and
18:14	5	-a	h-	destination listed
19:13	n- <sup>2</sup>	<b>מ</b> –	הל –	

Notes to the table:

- 1. מרעלה ומרעלה (מרעלה נכולם לימה ומרעלה Obviously, the ה- on the noun of direction is otiose. The direction and the place name, the direction and the place name, the direction extending the influence of the preposition over more than one noun.
- 2. The ultimate accent on אוץ and אוֹג is anomalous. Three explanations might be suggested, the sense remaining unchanged.

  a. Sometimes directive א- does take the accent, cf. Deut 4:41.
- b. The forms may simply be adverbial accusatives of place names in final h. But one of the names is attested in 2 Kgs 14:25 as name ha. Of course, variant spellings of names for places is not infrequent. But of several places named ha in the OT, none takes a final h elsewhere in the absolute form.
- c. A scribal misreading may have transferred the article from the second word of אות האות (as in 2 Kings) to the end of the first word, where it was understood as directive h. But this does not explain why the vocalization, added later, reflects an anomalous accentuation.

# CHAPTER III

## THE BOUNDARY VERBS

3.1. A Statistical Analysis
of the Distribution of Boundary Verbs
in Joshua's Border Lists

# 3.1.1. The Problem.

The verbs which are used in each list vary. Do some of the lists have "favorite" verbs? Is there any obvious structure in the distribution of the verbs among the boundary lists? Table 3 summarizes the number of times each verb occurs in each list. Tribes are in biblical order, verbs in alphabetical.

		Jud	Jos	Eph	Man	Ben	Zeb	Iss	Ash	Nap	TOTAL
חלר	Get:	0	0	1	1	0	0	0	0	0	2
827	*	5	1	2	0	4	2	0	1	1	16
422		1	A	A	1	6	0	0	0	0	10
סבב		2	0	1	0	1	1	0	0	0	5
עבר	2	3	1	1	0	3	1	0	0	0	14
עלח		7	Ó	0	0	2	2	0	G	0	11
פגע		0	0	1	0	. 0	2	1	2	1	7
שוב		0	0	0	0	0	1	0	3	1	5
าหก		3	0	0	0	2	0	0	0	0	5
nakan		3	1	1	1	3	1	1	1	1	13
TOTAL		29	4	3	3	21	10	2	.7	4	

TABLE 3

Certain patterns are immediately evident. Some tribes have more geographical terms than do others--presumably because their borders are longer, or more involved, or just described in more detail. Similarly, some of the verbs have more occurrences than do others--perhaps because they refer to commoner sorts of border movements. But these very patterns make it difficult for us to see structure that depends, not on how frequent a verb is or how detailed a particular boundary may be, but on the favoritism of a particular boundary for a particular verb. In other words, we must find some way to remove the effects of the independent magnitudes of each of the rows or columns, in order to highlight any effect of the interaction of the two.

# 3.1.2. The Computations

To do this, we adopt a statistical technique developed and explained by Mosteller and Tukey (1977:165-202). We will remove from each row a constant, representative of the relative frequency of the verb in question. We will also remove from each column a constant reflecting the tendency of that particular boundary list to use lots of verbs. Each cell will be left with a residual value, reflecting its "true" value (after row and column values have been removed). Beside each row will be a constant reflecting the overall a strength of that particular row. Beneath each column will be a similar constant for that column. Any cell in the table may be restored to its original value (the raw counts) by adding together the row and column constants for that

cell and the residual recorded in the cell. To avoid working with decimals, we will multiply every value by ten, and then round to the unit's place.

How do we come up with a constant that measures how populous the row is as a whole? There are two commonly used techniques. We might add all of the values in the row together, and divide by the number of values thus added, to arrive at a mean, or average. This could then be subtracted from the original values to leave a set of residuals whose owerall average is zero. This procedure is fine for tables that are relatively constant. But when the data are concentrated in a few cells, and many other cells are empty, cleaning up the data by means tends actually to dirty the picture. It spreads the concentrated data out over cells where the actual datum is zero, and tears down the extreme cells—the very cells which may conceal the structure for which we are looking.

The median cell value is computed for a given row or column by ordering the cells according to their size, and choosing the middle-ranked cell (or the average of the two middle cells, if there are an even number). Thus, if a given verb occurs not only many times, but also in most of the tribes, the median of that row will have a non-zero value, and will reflect the numerical strength of the verb. On the other hand, if the verb occurs many times, but only in the lists of one tribe, and if all of its other cells are empty, the

median value of zero for that verb will reflect the fact that the strength of the verb is related entirely to the tribe in which it occurs.

First row medians are taken out, then column medians.

But taking out column medians may upset the balance of the rows. Their medians are computed again, and if they differ from zero, they are removed. Then the columns must be re-checked. Finally, a situation is reached where the median of every column and the median of every row is zero. All of the extracted medians for each row are added together to give the overall row factor. The same is done for each column. In the case of the present table, four complete iterations were required. Table 4 gives the result. (All values are times ten.)

	Jud	Jos	Eph	Man	Ben	Zeb	Iss	Ash	Nap	*
350	-20	0	1	10	-20	-10	0	. 0	0	0
123	20	0	1	-10	10	0	-10	0	0	10
262	-10	10	£	10	40	-10	0	0	0	0
סבב	. 0	0	3	0	-10	0	0	0	0	0
723	60	10	Ä	0	10	0	0	0	0	0
עלה	50	0	-9	0	0	10	0	0	0	0
eky	-22	-2	-1	-2	-22	8	8	19	8	2
290	-20	0	-9	0	-20	0	0	30	10	0
TRE	10	0	-9	0	0	-10	0	0	0	0
ntuun	0	0	-9	0	0	-10	0	0	0	10
	20	0	9	0	20	10	0	0	0	THE PERSON NAMED IN

TABLE 4

At first glance, the table is confusing. We began with counts of verbs, which could be positive or zero, but certainly not negative. What do all these minus signs mean? They were generated by removing row and column medians. That is, a minus sign indicates that its cell contains less counts than it would be expected to, on the basis of the strength of that particular tribe and verb. This is just as important a piece of information as the observation that a cell contains more than it would be expected to (a positive number), or exactly as many as it is expected to (a zero). Our adjusted table thus gives us the sort of information for which we are looking. Yet we have not lost any data. Consider the cell at the intersection of תצאות and "Ben[jamin]." The residual is 0. The cell has exactly as many counts in it as we would expect simply from the frequency of the "verb" and from the overall size of Benjamin's list. The value of the cell can be restored by adding 0 (the residual) + 20 (the column median) + 10 (the row median) = 30, and dividing by ten. 3.1.3. The Display

Still, though, Table 4 does not show any more structure than did Table 3. First we check for interaction between rows and columns by plotting cell residuals against the products of row and column medians. In this case, there is no interaction. Then we see if by rearranging rows and columns we can group the large cell residuals together in one part of the table, and the small ones in another. This

is easier to do if we code the residuals in a fashion more readily grasped by the eye. By ranking all of the cell entries in order, we observe that we can reflect their values well with the following code: X = 60 to 18; # = 10; + = 8; = 1 to -2; = -9; = -9; = -20 to = -20. After coding and juggling, Table 5 emerges.

	Ben	Jos	Jud	Man	Eph	Zeb	Iss	Ash	Мар	
עבר	香	\$	X			0	٠.	۰		
777	X		0	<b>期</b>		0			•	
THE			ø	۰		0	•		•	
然系》	8	۰	x	0		0	0	•	•	
newen		۰		•	9	0				
עלה	o	•	Х	6	•	F.	6	•	9	•
non	0		0	₽.	o o	0		0	0	
סבב	0	۰	•	٠		۰		•		
yas	0	0	0	-	9	+ \	*	X	*	
218	Q		0		. 0			X	\$	

TABLE 5

That does seem to help. The top five rows are (with a few outlying cells) positive or neutral for the first four tribes, but negative or neutral for the last four. The last four verbs act just the other way. They are negative or neutral for the first four tribes, but positive or neutral for the last four (again, with a few outliers). Ephraim's list is particularly bland. It is the only list with neither strong preferences nor strong rejection of any verb. So we

have fenced it off from the lists on either side. Similarly, אלה is exceptional. It only deviates from neutrality in the positive direction (except for the slight negative with Ephraim), and it does this on both sides of the table-once for a tribe in the first four, and again for a tribe in the last four. We have fenced it off as well.

# 3.1.4. The Conclusion

Table 5 answers the question about interaction between rows and columns that sent us on this quest. Certain tribes do prefer some verbs, and reject others. The structure is clear. But explanations are open to discussion.

' As a matter of fact, two groups of tribal boundaries are distinguished in Joshua. The first three allotments were made with the tribes assembled in Gilgal (14:6). The last after they had moved to Shiloh (18:1). seven came There is no information given on how the geographical data reflected in the first allotments were gathered. Did Joshua use survey notes taken by the spies forty years earlier when they scouted the land (Num 13:21)? His own campaigns would have furnished additional data. But we are told that the tribes who went to Shiloh without receiving allotments were to appoint surveyors for the territory that remained. men were to divide the land in seven portions which they were to record in a scroll and bring back to the camp (18:4,6,9). Do the differences in verbs used derive from such differences in the original gathering of the boundary data? They may reflect topographical differences among the regions (though a glance at a map shows that similar topography must be

described in both groups of lists). Certainly, they do reflect a different way of describing the two groups of tribes. The southern boundaries are outlined independently of one another. But only one tribe in the north, Zebulon, is described with much completeness. The others then abbreviate their descriptions by sharing parts of its border and parts of the borders of other tribes that have already been outlined. A glance at Table 1 will show other patterns that distinguish 15-17 from 18-19. Dorsey (1973: 112-17) has noted two other criteria for distinguishing the first three tribes from the last seven. Place names referring to the same location frequently differ between the lists, with older forms preserved in the earlier lists. And the geographical perspective of the descriptions in 18-19 is uniformly toward Shiloh, as they would be recorded by observers traveling from that center.

Benjamin, though described in 18-19, follows the pattern of 15-17. Probably this is because so much of Benjamin's border description is borrowed from the already-composed border of Judah.

# 3.2. A Lexicographical Induction of the Boundary Verbs

Economy of presentation requires the sort of structured "definition + examples + exceptions outline which we have followed for each verb. Of course, this was not the pattern followed in studying the verbs. We did not pick a definition, see where we could fit it, and then force the other examples into the mold. The actual process entailed jockying back

and forth among place identifications, the details already presented in Chapter II, and piles of maps for each of the verbs, until patterns of usage began to emerge. But both explanation and understanding of the conclusions would be impossible if that winding path were to be set down here.

3.2.1. אלה, יודי,

## 3.2.1.1. Definition.

There are a few passages in the OT where the usual meanings "go down" and "go up" do not seem to fit these verbs (Gen 46:29,31; Judg 11:37; 2 Kgs 2:2; 1 Kgs 24:1; etc.). Sometimes it may be argued that the verb does indeed mean "ascend" or "descend" with respect to a noteworthy part of the journey, though the overall change in altitude may be opposite. Sometimes such an explanation is not available. Scholarly ingenuity, largely under the inspiration of G.R. Driver, has suggested two classes of solutions.

The Semitic lexicon occasionally exhibits semantic polarization, with a word diverging into two opposite meanings (Nöldeke 1910: 67-108; Parunak 1975: 525-27). Perhaps איר, for instance, has polarized to mean both "ascend" and "descend" (Driver 1947; 1950: 347). The process might be better described as a generalization of meaning from "descend" to "change elevation." But without careful control of idioms and contextual features, which Driver lacks, the invocation of polarization can be very ad hoc. Has איץ also polarized? Are the words then synonyms? If so, we might expect one to replace the other in common usage. Certainly a tabulation

such as Table 6 would be expected to show confusion between the two words. But neither of these events has occurred.

A more plausible suggestion is that frequent commerce between the Negev and the hill country may have led to a transformation of אלא from "go uphill" to "go up-country," and then (since the Negev is south of the hill country), "go north " (Driver 1957; Wilson 1962: 173-75). און would then come to mean "go south." Similar developments have been suggested in Ethiopic (Leslau 1962) and Aramaic (Fitzmyer 1967: 31). One may compare the use of "up" and "down" to refer to "north" and "south" (though in the opposite order) in Egypt, based on the direction in which the Nile flows, and thus in which the terrain is sloped (Shibayama 1966). But Table 6 does not reveal any such general pattern in the boundary lists.

Probably, place names in the problematic verses are frequently wrongly identified. There is no guarantee, for instance, that the Gilgal of 2 Kgs 2:2 is in the Arabah, as Driver assumes.

There may be as many as five distinct Gilgal's in the OT (Kitchen 1962)! With such established multiplets as Bethlehem (in Judah, Gen 35:19, and Galilee, 19:15) and Beth Shemesh (in Naphthali, 19:38, and Judah, 15:10), it seems rash to insist on pressing the semantic field of a verb to extremes on the basis of place names alone, without other topographically identifying features.

# 3.2.1.2. Examples.

Table 6 lists sites connected by עלה (part I) and ירד (part II). Each site is followed by its map coordinates and

REF.	FROM	1	TC		CHANGE
			r. ndy		
15:6	Dead Sea	119-131, -397	Beth Hogla	198-137, -325	NW, +72
15:3	En Rogel	1724-1305, 605	Jobus	1725-1309, 650	N, +45
15:8	Jebus	1725-1309, 650	Hill	1703-1325, 810	NW, +160
10:12	Sordan	201-142, -350	Jericho	192-142, -200	W, +150
16:12	Jericho	192-162, -200	"the mountain"		up
	CT TO THE TOTAL TOTAL TO THE TH	x	I. 7°75	*	917
15:10	Shoulder N. of Chesalon	155-133, 550	Both Shemesh	1475-1285, 225	SW, -225
15:3	Ateroth	1702-1462, 875	Lower Beth Hozon	158-1447, 400	W, -475
16:3	Atazoth	1702-1462, 875	Gezes	1425-1408, 225	W, ~650
16:7	Yanoah .	184-173, 650	Ataroth	1909-1613, -20	OSE, -850
16:7	Yanoah	184-173, 650	Waarath	1948-1508,-250	SE, -900
17:9	Tappuah	172-168, 675	W. Qana	163-172, 325	NW, -350
18:16	Hinnom	1715-1315, 750	Jebus	1725-1309, 650	SE, -100
18:16	Jebus	1725-1309, 650	En Rogel	1724-1305, 605	3, -45
	N .				0 80,

altitude (in meters). As עלה consistently indicates ascent, so כרה consistently indicates descent.
3.2.1.3. Difficulties.

- 3.2.1.3.1. 15.3. As noted, the toponymy is not well enough developed in the extreme south of Israel to allow a firm interpretation of the southern border of Judah. But the mountainous terrain certainly allows אלה in 15:3 (twice) to mean "ascend."
- 3.2.1.3.2. 15:6; 18:18. Beth Arabah (15:6) lies close to the Jordan (3.2.8.2.4.), and the stone of Bohan ("thumb"), probably the Hajar el-Asba ("rock of the finger," Devaux 1953: 541), is at any rate one of the mountainous outcroppings which rise from the Arabah to the west. Thus "ascend" is suitable for describing this segment, which must in any case go up in altitude. 18:18, describing almost the same segment in reverse order and moving from a and (which by nature must be elevated) into the Arabah, fittingly uses 77?.
- 3.2.1.3.3. 15:7; 18:17. The route further inland from the stone of Bohan is also described as an ascent (15:7) or descent (18:17), depending on the direction. In 18:17, Gelilot/Gilgal is at the upper end of a descent, which ends at the stone. Thus it cannot be the same as the Gilgal in the Arabah proper, near Jericho. See 3.2.8.2.4. for a hill-country identification within five miles of Jerusalem, which would allow the verbs in question here to have their normal sense.
- 3.2.1.3.4. 18:13. The location of Ataroth (-Addar) enters into the analysis of 777 in 18:13. Bethel is at Beitin,

173-147, 875, B39. The name is preserved at 1707-143, 800, B42, at the foot of Tel e-Nisba. But the ruin has only late remains, and the tell itself is usually identified with biblical Mizpah. The survey of Judea, Samaria, and Golan, shows an ancient settlement near Bira (1702-1462, 875, B41). Strategically, there must always have been a settlement at this crossroads, and Aharoni (1967: 287) and Kallai (1967: 338) are inclined to place Zemaraim (18:22), one of the cities of Benjamin, there, and to let Ataroth end up somewhere in the plateau to the south. But if both sites are important enough to warrant a place in Josh 18 (whether in the town list or in the border list), it seems backwards that Zemaraim, lying on the border, should be listed with the towns, while Ataroth, somewhere in the interior, defines the border! Rather, the alternative location of Zemaraim in the bulge of the border north-east of Bethel should be preferred (Kallai 1967: 338), and serious consideration given to a location of Ataroth near present day Bira.

But this leaves no descent from Bethel to Ataroth. Does 18:13 require one? The verse reads, weyārad haggebûl atrôt addār al-hāhār aser minnegeb lebêt-hōrôn tahtôn. If the verse ended with Ataroth, we would have to interpret the place name as the goal of the verb, and either relocate Ataroth on lower ground, or conclude that the author has in view the descent of the road from Bethel into the wadi before it climbs back to elevation 875. This use of an adverbial accusative without prepositions or directive -āh is clearly

attested in 15:10 and 17:9, at least, with this verb. But no location of Ataroth finds it "on the mountain which is south of lower Beth Horon." This phrase must thus describe the goal toward which the border descends. The mountain in question (153-1435, 400) is more than twelve kilometers west of any reasonable location of Ataroth, as the crow flies, and considerably more along the border line. Probably we are not to see both Ataroth and this mountain as the goals to which the border descends. Rather, after the border encompasses the northern bulge, ending at Bethel, it descends from Ataroth (elevation 875), along a path, the extremity of which is upon the mountain to the south of the lower Beth Horon (C57). One might translate, "The border descends by way of [adverbial accusative] Ataroth Addar to the mountain . . . " It is the movement from Bethel to the mountain that is termed, and properly, a descent.

3.2.1.3.5. 18:15. En Lipta (D44), the only real option for the ma'yan mê neptôah, is at elevation 700. qesēh hāhār 'al penê gê ben-hinnom (D46) is probably the eastern lower extremity (cf. Exod 19:12) of the hill, where the broad valley which now contains Independence Garden turns from an east-west course to a north-south one and narrows into a true gê (at about 1715-1315, 750). But even this change from the rō's hāhār mentioned in the corresponding description in 15:8 to the foot of the hill still leaves an ascent of 50 meters, not a descent.

It is noteworthy that even when the border description includes the top of the hill, at an elevation of over 800

meters, the leg to En Lipta is described not as a descent, but as a turning (nt, 15:9). Perhaps the name refers to a whole settlement as well as to the spring (cf. me hayyarqon in Dan, 19:46), both of which lie in Benjamin. The border would then run to the outskirts of the territory of the town, not to the well itself. Then the border runs along the present course of Jaffa Road, skirting to the north of Givat Shaoul, before following the route of the Roman road which rose to nearly 800 meters before descending into the valley. At its point of closest approach to En Lipta, the boundary would then be no lower than 770 or 780 meters, and though it would rise over 800 meters in crossing the hilltop between it and the Hinnom, by the time it reached the lower extremities of the hill at elevation 750, it would have traced a net descent of 20 or 30 meters.

- 3.2.1.3.6. 19.11. In the southern border of Zebulun, the use of אלה describes the movement of the border from Sarid (1722-2295, 85, A18) to Maralah. Dorsey (1973: 135) suggests identifying the second site with Tel Reala (1666-2321, 60, A19). He notes that, although this location is lower than Sarid, the road to it from Sarid first rises dramatically before falling gently toward it. Or perhaps the site of Maralah has not yet been identified, and is to be sought to the north-east in the foothills of Nazareth.
- 3.2.1.3.7. 19:12. The  $y\bar{a}pia^{\circ}$  of 19:12 is another site not yet clearly located. Modern  $y\bar{a}p\bar{a}^{\circ}$  (Aharoni 1967: 379, 176-232) not only leaves the final  $^{\circ}ayin$  unaccounted for, but

lies far to the west of the expected course of the border.

This course is rather well defined by the notes that Issachar touches Tabor (Al2, 19:22, from the south-east) and that Aznoth Tabor (186-237, Al0) is on the border of Naphthali and Zebulun (19:34). Probably אלה here means that the border, after it leaves Daberath (All) in the saddle to the north of Tabor, climbs the watershed ridge to the north-west.

## 3.2.2. מצאות

## 3.2.2.1. Definition.

Of the 23 OT uses of this word, 19 are in boundary descriptions, either in Joshua or in Num 34. And two of the remaining four uses have clear geographical overtones, derived no doubt from the primary use of the term in the boundary lists (though semantically not quite equivalent), Ezek 48:30; 1 Chr 5:16. It is, then, understandable that the primary clues to the meaning of the word come in the boundary lists.

The word takes three sorts of complements. When the "outgoings" are conceived of as a wide area, such as the sea or a wilderness, the construction is invariably with  $-\overline{a}h$ . When they are a river, into which the boundary runs and along which it may later continue for a while, the construction is with the accusative. When a particular city or local geographical formation, conceived of as a point, is the destination, the preposition  $\flat \kappa$  appears. If this distinction of areas, lines, and points as the termini of a border segment is not coincidental, it is peculiar to Joshua. Three of the

five uses of the word in Num 34 (verses 8,9,12) appear to violate the pattern. But since these concern areas in the south which we have excluded from our study, the pattern will be useful to organize the presentation of data from Joshua's lists.

A priori, two types of topographical features lend themselves to frequent use as boundaries -- mountain ridges, and wadi bottoms. Cross and Wright (1956: 220) recognized the suitability of watershed lines as boundaries for several of the districts of Judah in Josh 15, and Kochavi (1974: 31-32) has extended this principle to the southern districts in that list. Perhaps the etymological relationship between "boundary" (Heb. gebul) and "mountain" (Arabic jabal) derives from the principle that borders generally follow mountain ridges (Koehler 1939: 124-25). If such a general principle was operative (and many of our borders, following watersheds, suggest that it was), it would be reasonable for special terminology to be enlisted to specify when this general principle was not followed, and when wadi-bottoms, rather than the ridges that separated them, were to be followed. Our survey suggests that יצא and מצאות perform just this function.

The use of אוא in 17:18, a narrative section imbedded in the series of border descriptions, confirms that the word refers to lowlands. Joshua has allotted the mountain forests to the children of Joseph. They protest that this will not be enough, because the surrounding valleys are inhabited by

Canaanites, who, with their iron chariots, maintain control of the level land (17:16). Thus, they fear, they will have no room for expansion. Joshua urges them not to underestimate their own strength (17:17). Not only the hill country, but also its אואור, will belong to them, because they will disinherit the Canaanites, iron chariots notwithstanding (17:18). Here, אואור quite clearly refers to the fingers of valley that run up into the hills, the low lands that the children of Joseph had despaired to possess in 17:16, but from which Joshua assured them they would banish the Canaanites.

3.2.2.2. Examples.

See Table 7, which summarizes examples of אואה to an area (I), אוא to a line (II), and יצא (III).

- 3.2.2.2.1. The destination is an extended area (Table 7, I). A consistent reading of the אואה idiom requires that the 3 m s suffix, where present, be understood as referring to the boundary. In 16:8 and 17:9 there is a possibility of confusion with און, which immediately precedes the reference to אואה, and which, like גנול , is masculine in gender. In fact, because the אוא ווב along wadi bottoms, such ambiguity does not distort the boundary description, and thus has no communicative value, which is probably why it was tolerated.
- 3.2.2.2.2. The destination is a line (a wadi) (Table 7, II). Note that the syntax of 19:15 is precisely the same as that of 19:22,33. It is customary to try to trace the border of Zebulun far long the course of the Iphtahel, to the plain of Acco, on the understanding that 19:15 means that

	Ref.	FROM:	TO:	WADI:
ו. מצאות	15:4	Wadi of Egypt	Sea	Wadi of Egypt
to area	15:11	Yabneel C59	Sea	Soreq Cm
	16:3	Gezer C56	Sea	Ayyalon Ci
	16:8 =17:9	N. Qana at 163-172	Sea	N. Qana (Bd,Cd)
	18:12	Mt. west of Jer. B37	Wilderness of Beth Aven, Be (see 3.2.8.2.1)	Makkuk
	19:29	Territory of Achzib (see 2.1.1.3.3.)	Sea	N. Keziv
II. מצאות to a line	19:15	Hill 260, 172-244	Iphtahel, Ab	(runs south from hill 260, joins Iphtahel at 1725- 2410)
	19:22	Beth Shemesh Al4	Jordan Ac	Yabneel
	19:33	Laqqum A(15)	Jordan Ac	Yabneel
iii. יצא	15:9	En Lipta settlement (see 3.2.1.3.5.) C44	Mt. Ephron (69)	Valley west from 1677-1335 to Soreq
	15:11a	Timnah C(64)	Ekron C62	W. Muqanna (N. Timnah)
11.14	15:11b	Mt. Baalah C60	Yabneel C59	Soreq
	16:2	Bethel B 39	indefinite	Suweinit from 1718- 1473
	16:7	Jericho B36	Jordan Bc	W. Nu <sup>c</sup> eima
	18:15a	Kiryat Yearim C68	(north)-westward	N. Yitlah Cj
	19:13	Eth Qaşin A(8)	Rimmon A7	Iphtahel

the border goes out along the Iphtahel. The name of the wadi could be an adverbial accusative giving the route. But the clear examples of 19:22 and 19:33 suggest that it specifies the destination instead. This exposition also avoids the apparent overlap of Asher and Zebulun in the galilean Shephelah.

3.2.2.2.3. The destination is a point, C57-68. Three examples exist, but only one lies clearly along a wadi. The other two are discussed un-er 3.2.2.3. 18:14 records that the western quarter of Benjamin's border has its outgoings at Kiryat Yearim (C68). The mountain to the south of Beth Horon the lower (C57) (extending south-west from 158-144) lies between two arms of the Ayyalon. The turn (סכב) which the border makes on this mountain probably brings it to the southern arm, which it then follows to the confluence of the two arms. Yet another branch of the Ayyalon, today called Nahal Yitlah (Cj), finds its origin in the saddle that separates modern Abu Ghosh (1598-1347) from the hilltop to the north where remains from the seventh millennium B.C. have been unearthed (1599-1352). If these twin hilltops represent the twin cities of Kiryat Yearim, one in Benjamin (18:28) and the other in Judah (15:60), then the wadi extending from that point to the north-west is an excellent boundary. This wadi joins the Ayyalon at 1515-1409, so that the תצאות from the mountain to the south of Beth Horon to Kiryat Yearim follows one wadi down to the juncture, and the other back up to Abu Ghosh.

- 3.2.2.3. Difficulties.
- 3.2.2.3.1. 18:19 B55-Dead Sea. From Beth Hoglah, the border has its outgoings to the point (using b) where the Jordan flows into the Dead Sea. There is presently no single major wadi flowing to this point. But of course, sedimentation from the Jordan has built up a visible delta in this area, and it is likely that at the time the border lists were compiled, the juncture lay to the north of its present location. A visit to the area will show that the problem in tracing a wadi from Beth Hoglah to some spot on the Zor north of the Dead Sea is not that there are no wadis, but that the entire terrain is heavily dissected by perennial stream-beds. This example does not violate the common connection of ningh with valleys and wadi-bottoms, though designation of the exact route is today virtually impossible.
- 3.2.2.3.2. 15:7 D48-49. The nixin reach from En Shemesh to En Rogel. The latter is at 1724-1305 (D48), in the Kidron Valley just south of its confluence with the Hinnom. The only other spring presently active in the area, and usually identified with En Shemesh, is at 1757-1313, the Spring of the Apostles, D50, about a kilometer east-north-east of el-Eizaria, D49. The border need not go all the way to the source itself, but only to the town associated with the spring, which might in fact be at el-Eizaria (compare 3.2.1.3.5. above). There is no clear path of wadis joining el-Eizaria to En Rogel. But it is

possible to connect them with a route that lies along land always lower than its surroundings. Thus, the border arrives at the town from Gilgal/Gelilot (D(5)) by way of the watershed, or high, route. Then it travels to the west along the present Jericho road, crossing the saddle between the Mount of Olives to the north and the hilltop at 174-130. At this point (1737-1307) the road crosses the head of the Wadi Qaddum (Dp), which descends to the Kidron (Df). The border would go down this wadi to its juncture with the Kidron at 1733-1300, and then follow the Kidron uphill to En Rogel. The only part of the border which does not actually follow a wadi is the portion paralleled by the Jericho road across the saddle. And even there the route chosen is a valley route, rather than the watershed route that the border usually follows unless otherwise specified.

#### 3.2.3. לצא

## 3.2.3.1. Definition.

The meaning of אצי has been diversified and generalized through wide use. Our study of the cognate מצאה suggests that in the boundary lists, the root is used to indicate an exception to the usual pattern of watershed boundaries. It designates a boundary that follows a lowland route, and wherever possible, a wadi-bottom.

# 3.2.3.2. Examples.

In seven of its fourteen uses, יצא clearly indicates
a border segment that runs along a wadi-bottom. See Table 7,III.

## 3.2.3.3. Difficulties.

In the seven cases where the border does not clearly follow a wadi-bottom for the entire route, it can still be shown that the usual watershed route is forsaken for a lowland route, which involves wadis for a considerable portion of its length.

3.2.3.3.1. 16:6 B28-27-d, C27-d-Mediterranean.

Passing to the north of Michmethath (1792-1784, B29), the border is summarized by אצי not only westward (yāmmāh), but emphatically all the way to the sea (hāyjāmmāh, Jodon 1911: 396-97). As detailed in 17:7-9 and 16:8, the border runs south along the valley that reaches south from Shechem, and makes its way to Tappuah (in the vicinity of 172-168, B27) before descending to the head of the Wadi Qana (Bd) near 163-172. But from here, the wadi is the border, all the way to the sea (Cd). The use of אצי is no doubt motivated by the coincidence of the Qana with the major part of this segment of the border.

3.2.3.3.2. 18:15b C68-44. Again in summary fashion, אצי describes the stretch of border from Kiryat Yearim (C68) to the settlement above En Lipta (C44). The last part of this border is described in 15:9 with אצי, and follows the Soreq and one of its tributaries. But the border, in reaching from Kiryat Yearim to the Soreq, must cross the ridge of hills that stretches south-west from Qastil.

Probably this crossing takes place at the saddle, 1625-1318, between hill 788 and hill 791 (C69). Then this segment of the border will remain a low-land route.

- 3.2.3.3.3. 18:17a B48-49. יצא traces the border from En Rogel (B48) to En Shemesh (the settlement at B49; the actual spring is at B50), just as תצאות was used in 15:7 for the same segment. See 3.2.2.3.2.
- 3.2.3.3.4. 18:1,7b D49-(51). In 3.2.8.2.4., we reconstruct the border of Judah from Gilgal (D(51)) to En Shemesh (D49) as riding the watershed between the upper branches of the Og (Dg) and the Kidron (Df). That border would follow the present road through Khirbet ex-Zarurah (hill 627, 1755-1278), to the hill on which Abu Dis sits (ca. 175-130), and then skirt the wadi to the north of Abu Dis to reach el-Eizaria. In contrast, the southern border of Benjamin follows the lowlands and wadis just to the north of this watershed, by following the wadis to the north and east of Abu Dis to meet the Og at ca. 1765-1283. The precise course from there to Geliloth depends on the identity of the latter site. This is the only observable segment of inter-tribal boundary whose path is described differently in the two tribes, leaving a narrow strip of "no-man's land" between. But there may have been other cases where two tribes, looking at the same general border area from two different sides, perceived its topographical markers differently. We could only discover such distinctions where we have the same border described in relative detail from both sides -- and the border between Judah and Benjamin is in fact the only such segment preserved thus for us.
  - 3.2.3.3.5. 19:12 A17-11. The use of 22 in 19:22

suggests that Mount Tabor (A12) is included in Zebulun (see 3.2.4.3.2.). Then the stretch of border described in 19:12 must go south-east from Chesuloth (A17), to the south of Tabor, before returning north on the east side of the mountain, and finally reaching around its north-east side to Daberath (All). In fact, Tabor lies between two branches of N. Tabor, which join near 189-231, and which reach respectively to Chesuloth and to within two kilometers of Daberath. The border likely follows these wadis.

3.2.3.3.6. 19:27 A6-3-1. After contacting the western border of Zebulun (at N. Bethlehem, Aa) and the Iphtahel (Ab, the extension of that border to the north-east), the border of Asher "goes out" to the north of Cabul, 170-2526 (A1). We know from 19:13,14 that the border of Zebulun runs through the Beth Netopha valley, to the north of Hannathon (A6) and descends to the Iphtahel by way of the wadi reaching south from hill 260 (see Table 7 II). A topographically reasonable way to reach Cabul from the Beth Netopha valley follows the wadi that enters the valley at Khirbet Qana, 179-247, to the west-north-west. At 1766-2480, an arm of this wadi reaches due north toward a saddle between modern Yodphat (hill 476, A3), and hill 538 to the east. The northern side of this saddle is the upper end of N. Shegev, which passes just to the north of Cabul, as the border description requires.

In the light of this reconstruction, it is tantalizing to reconsider the identification of Beth Emek and Neiel in

this verse. Rather than locating them along the hills that border the plain of Acco, they might rather be settlements in the north-west corner of the Beth Netopha valley. "Beth Emek" is the sort of descriptive title that might be applied to many different valley settlements, so that the preservation of the name near a bronze age tell at 164-264 does not preclude another such place in the Beth Netopha valley. And ne i'el is a theophoric compound with the radicals y1, reflected also in the mysterious hanne ah of 19:13. The article in the latter case may indicate that the place name there is descriptive ("the trembler"?), and that Neiel is the proper name for the place. Then the border of Rimmon (A7) (and thus of Zebulun) . would extend as far as Neiel (A(5)), toward the middle or north of the valley, and Beth Emek and Neiel would be accusatives of extent. 19:27 would be paraphrased, "and the border touched Zebulun, even the north side of the Iphtahel valley, and kept on touching Zebulun as far as Beth Emek and Neiel. Then it went out to the north side of Cabul."

3.2.3.3.7. 19:34 A10-9-(8)-7-(5)-3-2. The border of Naphthali "goes out" from Aznoth Tabor (1862-237, A10) (see 3.2.5.2.3.) to Huqqoq. The rabbinical identification of the name at 1967-2537 is far to the west of any reasonable reconstruction of Naphthali's border. Aharoni (1967: 378) suggests that the settlement be located at 175-252 (A2), a site that lies just to the north of the wadi that carries Asher's border to the north of Cabul, as noted above. 19:34 presents a broad summary of Naphthali's border, which

(see 3.2.8.3.1.) includes ascents along watershed routes and a detour in the vicinity of Kafr Kanna. But once the border (with that of Zebulun) reaches the Iphtahel, a lowland and largely wadi route is followed to Rimmon, then almost directly across the Beth Netopha valley to the wadi that carries Asher's border past Yodphat and leads to the wadi flowing past Shagav-Huqqoq. As at 16:6 and 18:15b, און is used to summarize a broad stretch of border, a significant part of which follows wadis or low-lands, even though some highland travel may be involved.

# 3.2.4. פגע

# 3.2.4.1. Definition.

Other than an etymological note (Rundgren 1953: 336-45), this verb has not received much scholarly attention. Outside of the boundary lists, it is used mostly of an individual (whether human or divine) meeting a person. The person (once, Gen 28:11, a place) who is met is always presented either in the accusative or with 1.

We propose that this verb describes the incidence of the boundary being described with the boundary of another tribe, or with the boundary of a town which lies outside of the area being described.

# 3.2.4.2. Examples.

3.2.4.2.1. או is the only verb used to describe the meeting of one tribe's boundary with the boundary of another tribe (19:34 (thrice); 19:27). In the boundary of Ephraim, it describes the incidence of the border with the boundary

of Jericho (B36, 16:7), a city which lies within Benjamin (18:21; 2 Chr 28:15). Dabbesheth (A(20), 19:11) is not clearly identified yet, but would serve as Jericho does in 16:7, as a noteworthy site in a neighboring trive serving as a point of contact for the border. Shihor Libnath (19:26) is likely Tel Abu Huwam (152-245, A26), which lies between the mouth of the Kishon and the slopes of Mount Carmel at the Mediterranean. If the south border of Asher follows the Kishon, then Libnath lies just outside that border, and is touched (yas) by it in the sense which we have described.

3.2.4.2.2. yas also describes the incidence of the boundary with geographical features which, like the boundary of a city or tribe, describe a line. Thus Asher's border, following the Kishon, "touches" Mount Carmel (A25) between Tel Qasis (1605-2323, A22) and the modern suburb of Nesher (156-241, A24), but withdraws from it to the north-west and south-east of these extremes. Carmel, though used in defining the border of Asher, thus lies strictly outside of the tribe's limits, at its north-west extremity. The border similarly impinges on the Iphtahel (Ab, 19:27).

## 3.2.4.3. Difficulties.

Two passages demand attention because they seem to violate the pattern of every boundary use of נגע thus far cited, of introducing the object of the verb with ב.

3.2.4.3.1. 19:11 A18-(20)-a. The second occurrence of yas in this verse is followed by el hannahal . . . We follow Dorsey (1973: 131) in identifying the wadi in question

with N. Bethlehem (Aa; see 2.1.2.2. above). This not only yields a smoother boundary than the older identification with N. Yoqneam (Aq), but is more in keeping with the usage of Cal pene. Of course, the boundary would make good sense if the verb here meant, "the boundary touches the wadi," as it does in 19:27. But then, why is the object introduced with bx, a preposition that nowhere else in the OT is used to introduce the object of this verb?

The LXX on the verse gives a clue. Both B and A omit the second yas. The border simply touches [the border of] Dabbesheth (Betharaba in B, introduced somehow from 15:6), unto the wadi. That is, it follows Dabbesheth's city limits until it comes to the wadi, at which point it begins to follow the wadi. The second yas may have been introduced secondarily into MT, though the context does not offer a ready explanation for such a change. Probably, the LXX is giving a correct ad sensum rendering of the same Hebrew which we have. The border touches Dabbesheth, and touches [it] up to the wadi.

3.2.4.3.2. 19:22 A12-10-14. The syntax of Issachar's border list in 19:22 requires that not only Tabor (A12, introduced by 1), but also Shahazumah and Beth Shemesh (preceded only by 1) be understood as objects of yxs. Although introduction of the object of yxs as accusative is without parallel elsewhere in the boundary lists, it is (along with the use of 1) quite common elsewhere in the OT. But more likely the first 1 has distributive force (as Hos 3:2;

2 Sam 15:22), and is understood as applying to each of the place names mentioned. The location of Shahazumah is not known. Beth Shemesh is probably near 1996-2327, where the radicals are preserved in connection with a sheikh's tomb (Al4). Map A shows how the border, following the watershed ridge along Har Yabneel, leaves Beth Shemesh in Naphthali, just as Tabor proper lies in Zebulun (1 Chr 6:62). Thus yas is appropriate for both of these sites, and certainly is used in the same way with Shahazumah, named between them. 3.2.5.

# 3.2.5.1. Definition.

With this verb, we have the rare advantage of a comprehensive and usage-oriented analysis (Holladay 1958). Although the very scope of his project precluded the analysis in detail of the geographical sense of the verb as used in the boundary lists (page 65; the summary rubric on page 54, "ultimate destination unstated, uncertain, or unimportant" is strictly not true in several cases), it also demands our notice of what he concludes is "the central meaning of subh" in the Qal: "having moved in a particular direction, to move thereupon in the opposite direction, the implication being (unless there is evidence to the contrary) that one will arrive again at the initial point of departure" (page 53). Our analysis confirms the contrast which he observes between שונ and and. Though the "initial point of departure" is not regularly the terminus of the geographical uses of the verb under consideration, the notion of a reversal of direction

(as opposed simply to a change of direction on the order of a right angle) is central.

# 3.2.5.2. Examples.

The actual uses of the verb in the boundary lists fall into two categories. Three times (19:12,27,34) the verb forms the transition between a border description moving in one direction from a point, and a continuation of the description moving in the opposite direction. Twice (both in 19:29), it seems to note that the border virtually retraces its steps, having included or touched a remote site toward which Israel held a narrow strip of territory.

- 3.2.5.2.1. 19:12 A18-19, 18-17. The first, western half of the southern border of Zebulun has been described beginning at Sarid (A18) (19:10,11). Then the border turns (DID) from (-DD) Sarid, emphatically eastward (with a two-fold directional element similar to that in 19:13, and together with that unique in the border lists), continuing as far as the border of Chisloth Tabor, A17 (1806-2321).
- 3.2.5.2.2. 19:27 A23-26, 23-a. After a straight list of seven towns, the border description describes the contact of the border (with yas) with Carmel (A25), and after that with Shihor Libnath (A26). 3.2.4.2.1. shows that this is essentially a westward movement of the border along the Kishon. Then the border continues, wesab mizrah hassemes bet dagon, after which the border impinges (yas) on Zebulun, to the east. If we accept Kallai's identification (1967: 177) of Beth Dagon with Tel Regeb (1588-2405, A23),

which lies a little more than a kilometer from the river,
Beth Dagon will be the turning point midway between the
western sector going toward the sea, and the eastern sector
which returns to Zebulun. Then Did will function just as
it does in Zebulun's southern border. "The border returns
toward the east [adverbial accusative] at Beth Dagon."

3.2.5.2.3. 19:34 A10-14-c, 10-7-2. Though Aharoni (1967: 373) marks the identification as questionable, there is considerable support for a location near Khirbet um Jubel (AlO, 1862-237) as Aznoth Tabor. The site has late bronze sherds, and lies just to the east of hill 532, where we have traced the border (Kallai 1967: 196). Up to this point, Naphthali's border description has consisted of a list of cities, from which the border goes out to the Jordan. At this point, sab haggebûl yammah aznôt tabôr, whence it is traced westward to Asher. The rest of 19:34 makes it clear that the verb functions only to summarize what was previously detailed as the northern border of Zebulun. Although that border between hill 532 and the Beth Netopha valley is quite complex, it serves more as Naphthali's southern border than as any other, and in fact is only the western half of that southern border. Thus wir points out Aznoth Tabor as the point at the conceptual middle of that southern border, from which the description proceeds in opposite directions.

3.2.5.2.4. 19:29a. This is the first example of the second use of use in the lists (3.2.5.2.). Asher's territory is long and thin, extending all the way to Sidon (19:28),

but without any indication of its breadth. Topographically, north of Rosh Hanniqra, it is conceived of as the very narrow Phoenician plain, and does not penetrate far into the mountains to the east. One does not think of it as an enclosed territory, but as a chain of cities lying in one continuous line. Thus, after tracing a line of cities up the coast to Sidon, the author does not retrace his steps city by city, but simply notes that sab haggebûl hārāmāh we ad-îr mibṣar-ṣōr, the next point of interest.

## 3.2.5.3. Difficulties.

19:29b, moving from "the fortified city of Tyre,"
reads, wesab haggebûl hosah. The analysis is complicated
by problems in the identifications of both the "fortified
city of Tyre" and Hosa. Is the fortified city (LXX B:
fortified spring) the city of Tyre on the island, or
Palaiotyre of the Hellenistic sources, on the mainland?
And is Hosa to be identified with the Usu of Egyptian and As
Assyrian sources? Kallai (1967: 182-86) has discussed the
entire problem in detail, and we will not repeat his discussion,
except where we differ with his conclusions.

We should note that these border details involving the fortified city of Tyre are the only details given in all of the return border from Sidon to Achzib. It would be very unusual, therefore, if the effect of this exceptional detail were to be only a continuation of the expected retracing of the border to the south.

Kallai rejects the verbal identification of Husa with

Usu on the grounds that the Egyptian transcriptions would not have used <sup>3</sup>alep to indicate a Hebrew het. This is linguistically sound. But it does not follow, as he concludes, that the town named as Husa in Joshua is not the same place as that named Usu in other sources. Even in biblical times, doublets of town names were clearly known (Kiryat Yearim/Baalah; Jerusalem/Jebus; Debir/Kiryat Sepher). Linguistic identity of the two names would make their identification likely. But linguistic dissimilarity, whether great or (as here) small, does not make it impossible. Kallai's argument would be more compelling if he could propose another site which preserved the Egyptian name more closely.

A more telling argument against the identification of
Husa with Usu is that the Anastasi Papyrus (Wilson 1969: 477)
describes it before the island Tyre in a list that runs from
north to south, while the boundary list, also moving from
north to south, names Husu after Tyre. But Kallai himself
acknowledges that the order of the names may not reflect the
location of the places, since Tyre, in the ocean, is out of
line anyway.

From its frequent mention in the other sources, Usu was an important site on the coastal route. There seems little to oppose Kallai's identification of it with Palaiotyre, and with modern Tel Rashideyeh. Because Kallai rejects the identification of "the fortified city of Tyre" with the island fortress, he places it at Rashideyeh as well, noting the suitability of the LXX tradition about a fortified "well" (179) to the large spring at Rashideyeh which apparently served

as the water source for island Tyre. Husa he leaves to go begging for a site, noting the possibility that the name is preserved at a small nearby tell.

The use of שוב suggests a 180° turn in the border from the fortified city to Husa. Simon's explanation (1959: 192-93) that the reference to Tyre is a late insertion, and that Ramah is to the south in Naphthali, and that שונ refers to a border line that first goes far to the south, then returns to the vicinity of Tyre to pick up Husa, has no manuscript support. Kallai offers a general definition of the term in line with ours (1967: 183), but does not seek to apply it to this particular segment. By his identifications, he cannot really explain why the border should have to "return" in this area at all. In fact, he cannot explain why these details of the region of Tyre should be necessary in the first place, in contrast to the long stretches of border left unspecified on either side. But if the fortified city is (as one might suspect from its descriptive title) the island fortress, and if Husa is on the shore (perhaps at Rashideyeh, though the conclusions would be topographical and not linguistic), then both the use of wir and the mention of these details are explicable. The details are included in the border list to make it clear that Asher's hegemony includes not just the shore, but the important fortress as well. And שוב indicates that the border, having gone out to the island from the mainland, returns along its own path. We might have expected עבר in such a context (see 3.2.8.).

But the emphasis is on the one city, not the area of sea bottom included in the boundary. And we have seen (Table 5 and 3.1.4.) that the later border lists have a preference for שוב, as the earlier do for שובר.

Kallai presents four arguments for mjecting the identification of "the fortified city of Tyre" with the island city. Our suggestion can stand only if we can answer his arguments.

The reading of LXX B (virtually alone against all other Greek manuscripts), ἔως πηγής Μασφασσάτ καὶ τῶν τυρίων, is taken by Kallai to suggest a Hebrew נין in place of עיר. . If this be the original reading, one might reconstruct עין מבצר צור, "the fortified spring of Tyre." Μασφασσάτ may well be a corruption of מבצר, understood as a proper name. But πηγῆς may simply result from a paleographic confusion between 7 and 1, which would have been possible at times in the intertestamental period. Compare the forms in the script of 4QJera (Cross 1961: 175). Even if the LXX form is original, one might as well reconstruct an original Hebrew עין מבצר וצור, on the basis of the wai before Two Tuplwv. Then the LXX (and its reconstructed vorlage) would in fact insist on a distinction between the fortified spring (Palaiotyre) and Tyre itself (the island). The border would move from Ramma, to Rashadeyeh, then out to the island, thence to return (שונ) to Hosa, which is either the proper name of the town by the spring, or a nearby settlement. In the final analysis, it is easier to accept the LXX (B) as a corruption.

Kallai argues that Judg 1:31 excludes Tyre from the

territory of Asher, because "Tyre is not reckoned with the remnants of the conquest of Asher." The verse in question, of course, does not purport to list all the cities of Asher, but only those whose inhabitants the tribe of Asher had not managed to displace. The verse is evidence of the exclusion of the island Tyre from Asher only if it is joined with the assumption that (1) the Asherites could not possibly have conquered the island, and (2) the list is a complete list of the unconquered cities, rather than simply a representative summary. But Aharoni (1967:214) has already argued that the entire Phoenician coast up to the Litani is included in Judg 1 in the reference to "the inhabitants of Sidon." And one may ask whether it is not the intent of Josh 19 to claim that the supposedly invincible island had actually come under Israelite control -- thus the pains to detail its inclusion in the border.

It is further argued that "the fortified city of Tyre" must have the same meaning in 19:29 that it does in the account of David's census in 2 Sam 24:7, where it is one of the cities visited by the census takers, and thus within David's hegemony. Yet the island city must have been independent by this time, for David (2 Sam 5:11) had dealings with Hiram, its king. Thus, it is argued, the phrase must refer to the mainland city. But of course it is inconceivable that the island and the mainland city could lie for any length of time in different administrations, since the former depended on the latter for its water supply, delivered by ships (Wilson

1969: 477). To whatever extent David exercised continuous control over the mainland, he also controlled the island. It is simplest to understand the phrase here as referring to the island, and to see Hiram as owing some allegience to David, whose censors came to that district to number Israelites living there (Kallai 1967: 183, n. 242).

Kallai's fourth argument for distinguishing "the fortified city of Tyre" from the island is that such a border move would bring the border out to the sea prematurely, before the recorded אוֹאוֹז in the area of Achzib at the end of the verse. Our study of אוֹצאוֹ (3.2.2.) showed that the term is used predominantly for a wadi boundary. This is not the case at Tyre. At any event, the use of אוֹאוֹז in the region of Achzib does not prevent the border from touching the sea before that point, as Kallai must concede. His inclusion of the port city of Sidon within the borders of Asher brings the border to the sea just as effectively as does our inclusion of Tyre.

#### 3.2.6.1. Definition.

angle. It indicates a corner rather than a retracing of one's steps or a return to the original point of departure. Though etymology is often a treacherous guide to meaning, in this case the use of other derivatives of bid in the sense "to surround" is suggestive of the sort of circular motion that is intended, as contrasted with the complete change of direction with bid.

3.2.6.2. Examples.

3.2.6.2.1. 19:14 A(8)-7-6. Perhaps the clearest example

of the use of lib (which in our lists always occurs in the Nip al in this technical usage) to indicate a corner in a boundary is the point where the border of Zebulun, following the Iphtahel north to Rimmon (1795-2435, A7) turns west to pass to the north of Hannathon (1743-2435, A6). The verb here takes a direct object pronoun, wenasab oto, referring either to Rimmon, or to the linguistically and geographically obscure site of meto ar ne an would lie somewhere toward the middle or north of the Beth Netopha valley. More probably (as the use of the article suggests), meto ar ne an is simply a phrase descriptive of Rimmon, which is the turning point. We can render the expression idiomatically: "the border rounds Rimmon."

3.2.6.2.2. 16:6 B27-29-31. The verse is most readily understood if Michmethath (which we have put at 1792-1784, B29, for reasons discussed at 2.3.1.4.2.) is seen as the pivotal point of the border. First it is mentioned as the point on the north of which the border goes out westward. The details of this western border given in 16:8 and 17:7-9 show that this westward extent actually begins with a run south (17:7) from Michmethath to Tappuah (B27), before it joins the Qana (Bd) for its long journey west to the sea. The second part of the border, moving east from Michmethath, begins, wenasab haggebûl mizrāhāh ta anat silōh. Since the last leg of the western half of the border is oriented generally north-south, the eastern half, which goes due east

from Michmethath to Taanath Shiloh (B31) before descending to the Jordan Valley, joins it at an acute angle, close to 90°. And the verb used to describe this juncture is 330.

- 3.2.6.2.3. 18:14 C57. The borders of Benjamin are distinctive among the border descriptions by their consistent use of פאה (18:12,14,14,20) to summarize the four major parts of the border. Elsewhere in the boundary lists, the term occurs only once, in 15:5, probably under the influence of Num 34:3. Conceptually, the tribe is described as four-sided, with northern, southern, eastern, and western edges or quarters. The western half of the northern quarter descends from the mountains by way of the ridge along which the Beth Horon road runs. Just before reaching the lower Beth Horon (C57), the border crosses the saddle to the south of the city and lands "on the mountain which is to the south of the lower Beth Horon" (18:13). From here the west quarter is viewed as beginning. The actual course of the border follows the Nahal Beth Horon south-west (as the use of מצאות later in the verse suggests), so the actual bend in the border is only on the order of 45°. But the use of פאה in the section shows that this particular junction is conceived of as the corner between the north and west quarters. And the verb used to describe the juncture is סננ.
- 3.2.6.2.4. 15:10 C(69)-68-67. After descending from Givat Shaoul by way of the Roman road, the northern border of Judah probably does not follow the modern highway to reach Kiryat Yearim . Such a course would include Mozah

(probably at Qastil, or another of the hilltops surrounding hill 791, at 1634-1332, C(69); see, provisionally, Avigad 1972: 5 for a further suggestion) in Judah, while it was understood rather to lie in Benjamin (18:26). The use of אצי for the border in 15:9 suggests that it follows the Soreq to the south-east of hill 791, before crossing the saddle between it and hill 788 (161-131) in a north-westerly direction to reach Kiryat Yearim (C68). Upon reaching that point, the border then turns (בוס) to the west, along the Saris (C67) and Beth Meir ridge (to the north of Naḥal Kesalon), and slightly south of due west. Albright (1925: 4) suggested that Saris on this ridge preserves a variant form of the MT Seir. Thus the border turns through about 90°. 3.2.7.

3.2.7.1. Definition.

This root is attested only 23 times in the Hebrew OT. 15 times it appears as a noun, meaning, in a general way, "form, appearance." The  $Pi^{c}el$  is used twice in Isa 44:13, of a craftsman forming an idol, and the  $Pu^{c}al$  occurs as the participle in the obscure Josh 19:13 (not included in our analysis). All five of the Qal uses of the verb are contained in the boundary lists.

The verb might simply mean, in these places, "the border goes along, is described," etc., as a sort of idler verb when no other would fit. But the other verbs have shown a specificity that makes such a general interpretation unattractive.

Aharoni (1967: 228) renders the verb, "[it] turned."

Dorsey (1976) suggests "a meaning 'to veer toward, to curve toward,' indicating a change in direction." On inspection, the uses of the verb reflect the same sort of right-angled corner that was described by בוס. In fact, in one verse (18:14), בוס seems used as a gloss for האר. (The opposite might also be true!) Our statistical analysis of the verbs shows that האר belongs to that group of verbs which characterize the boundaries of Judah, Joseph, Ephraim, Manasseh, and Benjamin, while בוס is grouped with those characteristic of Zebulun, Issachar, Asher, and Naphthali (3.1.4.). We suggest that the difference between the verbs is simply one of the stylistic differences that entered, by whatever means, the two groups of tribes. Semantically, the verbs seem to be the same.

- 3.2.7.2. Examples.
- 3.2.7.2.1. 15:9a D46-45-44. After Judah's northern boundary climbs up the Hinnom (Dn) from the Kidron, it proceeds to the head of the hill which lies north of Emeq Refaim (Do) and west of the Hinnom. We propose to identify this hill with the area within the 800 meter contour just north-west of the head of the Hinnom (now Independence Garden), with its crest presently at the northern extreme of that area, on Jaffa Road, 1703-1325 (D45). The border reaches this hill at its southern end and moves northward to the summit. Then  $t\bar{a}$  ar haggebûl mērō's hāhār 'el-ma'yan mê neptôah, which lies to the west-north-west (D44). Thus

the border, which has been moving roughly northward ever since it left the Kidron, turns to the west. And that turn is marked by אח.

3.2.7.2.2. 15:9b C44-(69)-68. After following the Soreq to the southwest, along the south-west side of Mount Ephron (C(69)), ta ar haggebul ba atah hi qiryat ye arim. The most likely route to Kiryat Yearim (C68) is across the saddle at 1625-1315, between ancient and modern Sobah, and then up the branch of the Kesalon which crosses the main highway just west of the overpass at Beth Neqofa. This branch leads up to the saddle between the twin hilltops of Kiryat Yearim from the east, just as Naḥal Yitlah does from the west. In moving from a south-west course along the Soreq to the horth-west traverse just described, the border turns roughly through 90°, as we have suggested.

3.2.7.2.3. 15:11 C(64)-62-61. After reaching Ekron (C62) from the south-east, the border is carried by אחר to Shikkeron, Tel el-Fûl, 1325-1366, C61, on the other side of Mount Baalah (C60, the ridge extending to the north-east from 130-139) from Yabneel (C59). This region is almost due north of Ekron, and the border would turn through about  $45^{\circ}$  in going from Ekron to Shikkeron.

3.2.7.2.4. 18:17 Dn-48-f. En Rogel (D48) lies close to the intersection of the Hinnom (Dn) and the Kidron (Df), and it is reasonable to describe the border as "turning" when it arrives there from the Hinnom, before continuing south down the Kidron. The description is

simply, weta ar missapôn. missapôn is puzzling. It probably does not mean, "from the north," i.e., toward the south. The border has not been running to the north immediately before this, and the concept of "toward the south" in these lists would more regularly be indicated with directive  $-\bar{a}h$ . Usually, nouns of direction with -in indicate the side of the point in question toward that direction (in the idiom discussed in 2.3.1.3., and conceivably in abbreviations of that formula). Then the description here would be that the border turns on the north side of En Rogel, thus including it in Judah. Compare the syntax with in at 19:14. Perhaps the intent of the list is to divide the two springs named, En Shemesh and En Rogel, one to Judah and one to Benjamin. At any event, the notion of a turn suits the context well.

3.2.7.2.5. 18:14 C57. At the juncture of the northern quarter of Benjamin and its western quarter (C57), we read, weta ar haggebûl wenasab... Unlike its other occurrences, han here bears neither place nor directive nouns. The border would be complete without it, to all appearances. The two verbs may be combined to suggest the double turn which the border executes to complete the western side of Benjamin--once from the mountain south of Beth Horon to the upper branch of the Ayyalon (C57), and again, to the south-east, up the branch of the Ayyalon which reaches to Kiryat Yearim (C58-C68). But probably one of the verbs is simply a gloss for the other: "and the border turns, that is, it bends . . . "

עבר .8. 3.2.8

3.238.1. Definition.

Sometimes, the more common a verb is, the harder it is to determine its precise usage. Words proliferate their occurrences precisely by developing from their basic meanings to suit a wide diversity of contexts. But this diversification makes it difficult to retrace the logical steps by which the ramified senses of a word develop.

In our study of pip, the use of the verb technically in the boundary lists is of considerably more help in seeing the general meaning inherent in the more common uses of the verb, than those four hundred plus uses are in discovering the technical sense. But the unifying sense is there, none the less. A brief survey of any lexicon article on the verb will confirm that it emphasizes, not simply movement from point A to point B, but that there is intervening territory which must be passed over or through in order to make that move. As a verb of motion, it does not take us from one point to another conceived to be adjacent to the first. Rather, it acknowledges that some things are being left out of the description, between the two points in question.

We propose that hay describes a segment of border which "bulges," or is diverted from what might otherwise seem the more straightforward route between two points.

It advises the reader to be on the lookout for a more circuitous route than he would otherwise follow, when the

writer either has no convenient border points to describe the bulge in more detail, or else does not wish to spend the time going into those details. It is thus a verb of detour.

When the object of the verb occurs in the accusative, it is viewed as being encircled, or "passed" by the border segment, which terminates on either side of it. On the other hand, when the object is introduced by אל, it is the distant terminus of the segment being discussed, and the bulge encompasses an area preceding that site.

# 3.2.8.2. Examples.

3.2.8.2.1. 18:13 B37-38-39. The segment of border described reaches from the wilderness of Beth Aven (Tel Maryam, 175-142, B43) to Bethel (Beitin, 1733-1475, B39). The previous segment makes it clear that the wilderness concerned lies at the upper reaches of the Wadi Makkuk, which enters the Arabah to the north of Jabal Quarantal. There, an area almost nine kilometers long and from one to 3.5 km. wide stretches from coordinates 180-140 to 185-147 (Be-e-e). The region, which is distinguished by its Mediterranean brown mountain limey soils from the rich Terra Rosa of higher altitudes and also from the brown desert skeletal soils below it, is continued to the west of its south-western end by the region between the arms of the Suweinit in the area of Muchmas, where Terra Rosa soils are mingled with the brown mountain soil. This area takes its name from Beth Aven, at its western extremity (Aharoni and Loewenstamm 1962: 750). The border enters the wilderness near its north-east end along the Wadi Makkuk (ca. 182-144) and from there "passes" to Bethel. The most direct route from this wilderness to Bethel is the one taken by the Israelites in Josh 7,8, by way of Ai (175-147, B40). But the border of Benjamin, at least as understood by the final editor of this list, did not take that route. One of the cities included in Benjamin's tribal boundaries, Ophrah (18:23), is to be located at et-Tayibeh, 1785-1512, B38, by the well known phenomenon of "tayibetism" (Aharoni 1967: 110). This site can only be included in the area of Benjamin if the border follows the watershed route between the Makkuk and the Auja wadi systems, north to Baal Hazor, and then south again to Bethel, along the present road.

The terminus of the border segment is "the shoulder of Luz, southward," 1725-1472, the lower slopes of the promontory on which Bethel stands, where the uppermost branch of the Suweinit turns direction from north-south to east-west. Luz occurs once in the verse in the accusative before its use to describe the terminus of the segment. The border could terminate at the foot of Bethel's tell without enclosing Bethel, conceivably. But the reference in the accusative emphasizes that Luz is not only at the end of the border bulge, but also is included within it.

3.2.8.2.2. 16:2 B39-41. After the border "goes out" (אצא) from Bethel-Luz (along a wadi, here the Suweinit east and south for a kilometer or so), it "passes to the border of the Archite, Ataroth." If our identification of Ataroth with el-Bira (B41, see 3.2.1.3.4.) is correct,

the border must turn north from its sweep south along the Suweinit. Topographically, the bulge in the border is probably marked by the two branches of the Suweinit which join at 173-144. The border travels south until it meets this juncture, then north-west along the other branch of the wadi, and continues beyond the end of the wadi until it reaches the border at Ataroth. Because the border at Ataroth turns back to the west, after touching the boundary of the town, Ataroth seems to be left out of the border of Benjamin, and indeed is not named among the towns listed in 18:21-28 (though of course border towns often are not anyway).

3.2.8.2.3. 16:6 B28-31-32-34. The border of Ephraim, proceeding eastward from Shechem, passes Taanath Shiloh (1851-1758, B31), on the east side of Yanoah (184-174, B32), before descending to Ataroth (191-161, B34). Topographically, the reasonable route for the border to take from the region of Yanoah to Ataroth is down the watershed between the wadi that passes just to the north of Ataroth, and the larger system which reaches to the area directly east of Taanath and Ataroth. But to circumvent the western reaches of this second system, the border must, after passing to the east of Taanath and Yanoah, move back west, at least to modern Aqrabeh (183-170, B33), and then descend along the ridge to Ataroth. The border thus "bulges" eastward from its expected relatively straight path from Shechem to Ataroth, in order to accommodate Taanath and Yanoah.

3.2.8.2.4. 15:7 D51-49. Our reconstruction of the

northern border of Judah suggests strongly that it approaches Jerusalem from the south-east, along the watershed between the Kidron (Df) and the upper branches of the Og (Dg). Gilgal/Gililah (D(51), perhaps descriptive of some topographical feature rather than a proper name, thus leading to the variants) must be somewhere near the hilltop at 178-128, since the geological conditions for a "red ascent," which must be across a wadi to the south of Gilgal, are met in this area only at 1785-1255, just south of the Kidron. From Gilgal the border "passes" to En Shemesh (176-131). border need not reach all the way to the spring (D50), but to the village which bore its name (3.2.1.3.5.), uphill from the spring, perhaps in the vicinity of present el-Eizaria (D49). For the border to reach from Gilgal to this settlement by En Shemesh, it must circumvent the numerous small valleys formed by the upper reaches of the Og, bulging out to the west and then returning to the east to meet the settlement. (The border as we reconstruct it follows an ancient track from the Jordan to Jerusalem: Cross 1973: 109-110 n. 57,)

3.2.8.2.5. 15:6; 18:19 B Dead Sea-55-53. The verb is used in describing the segment between Beth Hoglah (B55) and the shoulder overlooking the Arabah (B53), in both directions (15:6; 18:19). An intermediate location is mentioned only in 15:6, Beth Arabah. The name is preserved at En el-Gharabeh (197-139), to the north of Beth Hoglah (in the vicinity of Deir Hagla, 1976-1365, and En Hagla, 1985-1373). Thus the border, in passing from Beth Hoglah, to the north

of Beth Arabah (15:6), and then back down to the cliffs (1925-1314) that drop from the Buqeiah into the Arabah, would bulge northward. Such a path explains why the border, in coming from the cliffs in the south to Beth Hoglah north of them, would meet the northern shoulder of Beth Hoglah's tell (18:19), rather than the southern or western shoulder. It also permits identification of the stone of Bohen with the semantically equivalent Hajar el-Asba (DeVaux 1953: 541) by answering Simons' objection (1959: 139) that the stone lies too far south.

Beth Hoglah presents no problem. After meeting its northern shoulder, the border must skirt it on either the west or the east in order to continue to the northern end of the Dead Sea. The town list of 18:21-22 simply means that the border skirts the tell on the west side. But it would seem that if the border (here, the northern border of Judah and the southern border of Benjamin) passed to the north of Beth Arabah, then Beth Arabah would be included in Judah.

There are at least two intermediate witnesses to the place name "Beth Arabah" that stand between the accounts in Joshua and the present Arab place name. Both concern the activities of John the Baptist in the NT. John 1:28 records that the Baptist was baptizing ἐν Βηθανίαι . . . πέραν τοῦ 'Ιορδάνου. But a respectable distribution of manuscripts and versional evidence substitutes the place name Βηθαραβαῖ, a clear metathesis of Βηθαραβαῖ (which in fact occurs in the margin of the Harclean Syriac; a corrector to Sinaiticus; and the writings of Origen). The second witness is the Madeba

map, which locates Βεθαβαρα το του αγιου ιωαννου του βαπτισματος along the Jordan, to the north-west of ΒΗΘΑΓΛΑ, but still on the west of Jordan. These two traditions relate the place to John's baptising activities, which must have taken place at the river itself. The fact that they differ as to which side of the river is in view further emphasizes the proximity of the place to the water. If Beth Arabah is this close to the Jordan, 15:6 could not mean that the border bulge encompassed the place, but only that it went north until it passed Beth Arabah (B54), before returning to the south. The resulting picture is that Benjamin controlled the Zor as far as the Dead Sea, including such riverside settlements as Beth Arabah, while Judah's hegemony included the area between the hills, the edge of the Zor, and the Dead Sea, a bit further north than Beth Arabah.

3.2.8.2.6. 15:10a C68-67-66. After approaching Kiryat Yearim (C68) from the south-east (3.2.7.2.2.), the border turns a corner of approximately 90° (3.2.6.2.4.) toward the west, terminating (15:10) on Har Seir. ענר then connects Har Seir with the northern slopes of Kesalon, whose name has been preserved at Kesla (155-132, C66).

Baalah (Kiryat Yearim, C68) and Kesalon (C66) lie on two parallel east-west ridges of hills, with Baalah on the northern ridge, separating the Soreq and Ayyalon wadi systems. The shortest route from Baalah to Kesalon would lie along the Nahal Kesalon, which extends a short branch up to Baalah. But the text insists rather on the "high road" 'el hār śē'ar, which lies westward (yāmmāh) of Baalah.

The border goes, not down the valley, but to a mountain—and that, to a mountain on the west rather than to the south of the city. Thus far, the border remains on the Baalah ridge.

Only then does it "pass [٦]y] to the north side of the shoulder of Yearim, which is Kesalon." Apparently, some settlements on the Baalah ridge were to be included in Judah, before the border skipped the valley to continue its descent toward Beth Shemesh along the southern, Kesalon ridge (following the present back road from Jerusalem to the Shephelah).

And following to the pattern which we have perceived elsewhere, hay is the verb used to describe this deviation of the border from its simplest route.

3.2.8.2.7. 15:10b C65-(64)-62, or C65-63-62. Later in the same verse, the border passes Timnah. The starting point is Beth Shemesh (C65), and the ending point is one from which the border can "go out" (YX) to the northern shoulder of Ekron. Ekron is now identified as Khirbet el-Muqannah, 136-132, C62 (Naveh 1958), and no refers consistently to a city mound, or the slopes of a hill plainly associated with it (2.2.2.2. above). Thus the border, after passing Timnah, approaches Ekron along the Naḥal Timnah. This wadi passes just to the north of the tell of Ekron, offering a suitable approach to "the shoulder north of Ekron." The western end of the wadi is at about 143-128, and it is in this area that we should expect the terminus of the segment of border that "passes" Timnah.

The presence of suitable archaeological remains at Tel el-Batashi (1416-1325, C63), which lies along the Soreq to the north-west of Beth Shemesh, has made it in recent discussions the favored candidate for Timnah. But the name seems to be preserved at Khirbet Tibna (144-127), though reports differ on the presence of suitable archaeological remains. It is not impossible that surface surveys to date have missed evidence of biblical occupation either at or near Khirbet Tibna, presumably in the hills to the south of the Sorek. Either site would introduce a fair "bulge" into the border.

3.2.8.3. Difficulties.

3.2.8.3.1. 19:13 A10-9-(8). The ascent from Daberath to Yaphia (19:12) probably followed the watershed ridge along a course north-north-west of Mt. Tabor (3.2.1.3.7.).

Jerome's directions to the town of Gath Hepher favor an identification at Khirbet ez-Zarra, to the south-west of Mišhad (1802-2383, A9). At least an Iron Age, and perhaps a Bronze Age settlement occupied the tell. Eth Qaşin is quite lost. Rimmon is recalled in modern Rummaneh, 1795-2435, and the border approaches it by the Iphtahel (described by אצי). Thus we have to trace the border from the top of the ascent from Daberath (near hill 532, about 185-137) to some point along the course of the Iphtahel south-east of Rimmon.

If Mishad is indeed on the border, there must be a bulge of some sort, since the most direct route from hill

532 to the Iphtahel would leave Mishad well to the interior. But there is no guarantee that Mishad is Gath Hepher. As a town on the main road to Tiberias, it might well have attracted the tradition of being Jonah's birthplace from some lesseasily visited settlement in the area. In fact, one might identify Mishad as being either Yaphia or Eth Qaşin.

If Mishad is not one of the towns named, then we have no means to trace the border. The best that can be said is that if three border points were needed between hill 532 and the wadi five kilometers to the north, the border must have been quite intricate, and yet is likely to have been used in describing it.

What if Mishad is in fact Gath Hepher? Then the border bulges toward it. 'ābar qēdmāh misrāhāh gittāh hēper 'ittāh qāṣîn. The double use of the directional nouns is unique to Zebulun in the border lists. By their location in the sentence and the similar use in 19:12, we would expect them to indicate the direction of the verbal action, rather than the side of the villages on which the border passes. But a bulge from hill 532, to (or encompassing) Mishad, and then moving to the wadi, moves first west and then north. The directional nouns, which by their repetition demand special attention here, do not seem to fit.

We propose that Mishad is Yaphia. The border moves to it from Daberath by a very natural route, up the watershed to hill 532, then west along the ridge of hills to about 182-237, finally descending a short distance to the north-west to

Mišhad. The change in elevation between Daberath (1868–2335, 225 m) to Mišhad (412 m at the tell) certainly justifies the use of ללה, while the watershed route would preclude the need for any more complicated verb. At this point the border bulges back toward the east, toward Gath Hepher and Eth Kazin, which would lie somewhere toward Kafr Kanna. This eastward bulge, after a decided westerly movement of the border to Mišhad, motivates the use of the double directional element, and ends by impinging on the wadi. Likely Eth Qaşin was close enough to the wadi to make the point of juncture clear (A(8)).

- 3.2.8.3.2. 15:11 C61-59. Shikkeron (1325-1366, C61) is north of the Soreq, and separated from Yabneel by a long line of hills running north-east from 130-139. We propose that this line of hills is the "Mount Baalah" of the text. From Shikkeron, the border bulges south-west to skirt the ridge, and then continues to Yabneel.
- 3.2.8.3.3. 18:18 B52-53. The most straightforward course for the border to take would be a direct descent to the floor of the Arabah down the cliff at the stone of Bohan (B52). But this is not done. First the border "passes" to a place where the cliffs (the and) present their north side to the lowland. The present track descends the escarpment about a kilometer to the north-west of the stone. At any point between the stone and the present descent, the cliff runs north-west to south-east, while beyond these two extremes it is nearly north-south. Thus, somewhere in this region

where the cliff faces at least partly north (B53), the border (following perhaps an ancient path) descended. The displacement of the border descent from the point of first approach to the cliff, at the area of the stone, to a more convenient site north-west of there, was described by the standard verb for such detours, "">ULT TO BE STANDARD OF THE STANDARD OF THE

#### 3.2.9. הלר

#### 3.2.9.1. Definition.

Unfortunately, this verb occurs in the lists only twice.

In both cases, the notion of "stepping-stone movement" along
a series of hilltops seems to fit. But the inductive resources
are too limited to be sure.

# 3.2.9.2. Examples.

3.2.9.2.2. 17:7 B29-27. The border from Michmethath (B29) south to Tappuah is also described by לה. The border may move along the level, flat terrain. But if the idea of "stepping" from hilltop to hilltop is intrinsic to the verb, we should rather trace the border down the crests of the mountains that lie just to the west of the valley extending south from Shechem, thus leaving the arable land in the valley entirely in the territory of Ephraim. Such an arrangement might explain why the fields in the immediate vicinity of Tappuah were allotted to Manasseh(17:8).

## APPENDIX: Sketch Maps

The following sketch maps are intentionally highly schematic, to highlight the salient features of the boundaries. For more detail, consult Iercel: 1:100,000 (Survey of Ierael, 1962ff) and Jeruselem: 1:10,000 (Survey of Palestine, 1946). Sketch maps A, B, and C are 1:250,000. Map D is 1:40,000. The sketch maps follow the following key.

description	EXAMPLE	MEANING
Straight lines		Wadis
Dotted lines	***********	Tribal boundaries
Enclosed curves		Bills, ridges, mountains
Hatched areas		Bodies of water .
Arebic numerals	51, 38	Settlements, mountains, noteworthy places
Lower case letters	a, b, c	Wadis and regions
Parantheses	(8)	Approximate location of an unidentified site

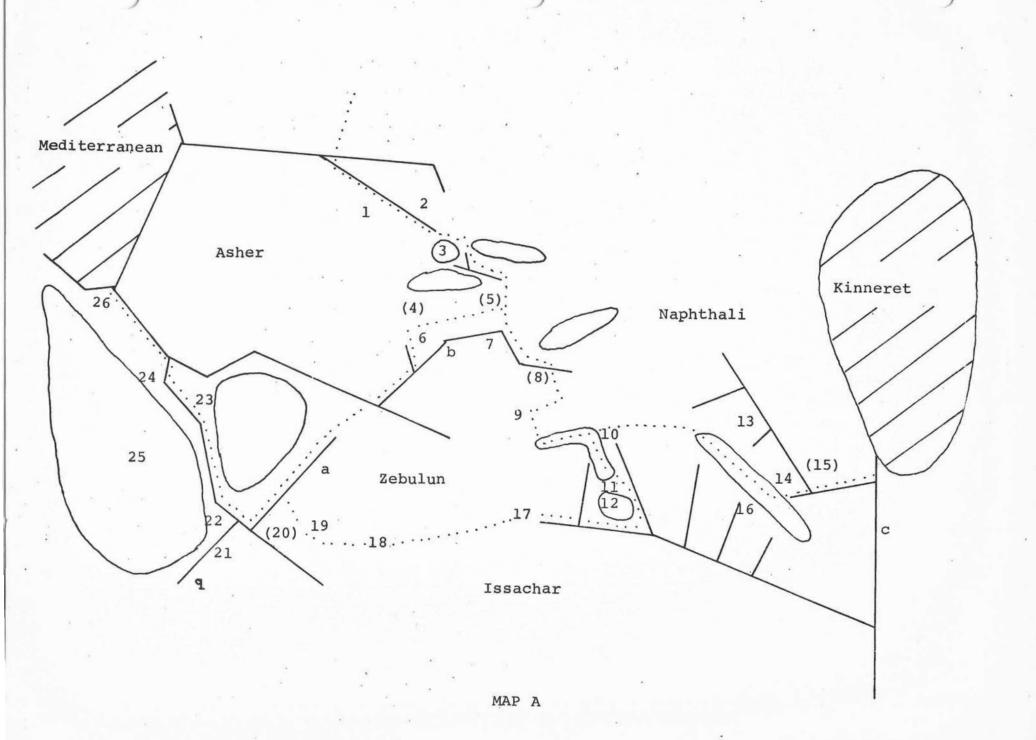
## KEY

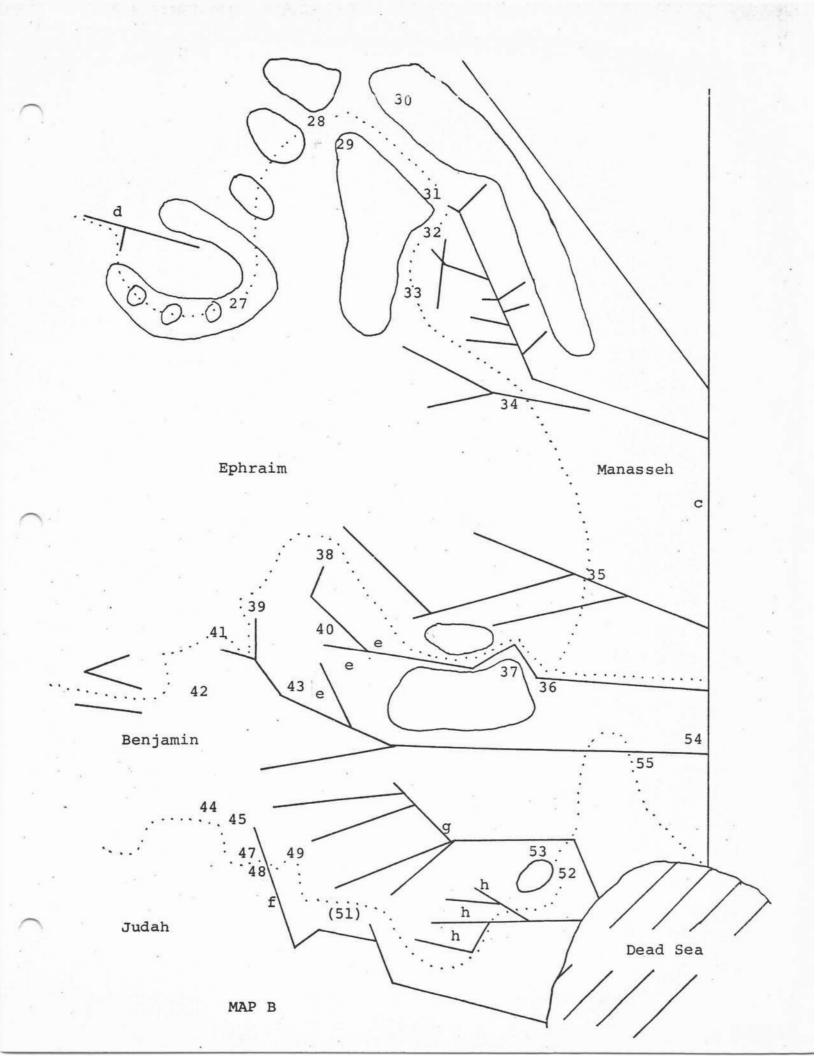
Each letter or number refers to the same location, regardless of which map it appears on. For instance, B47 = C47 = D47 = the shoulder of the Jebusite. Ancient names are in normal type, modern names in italics.

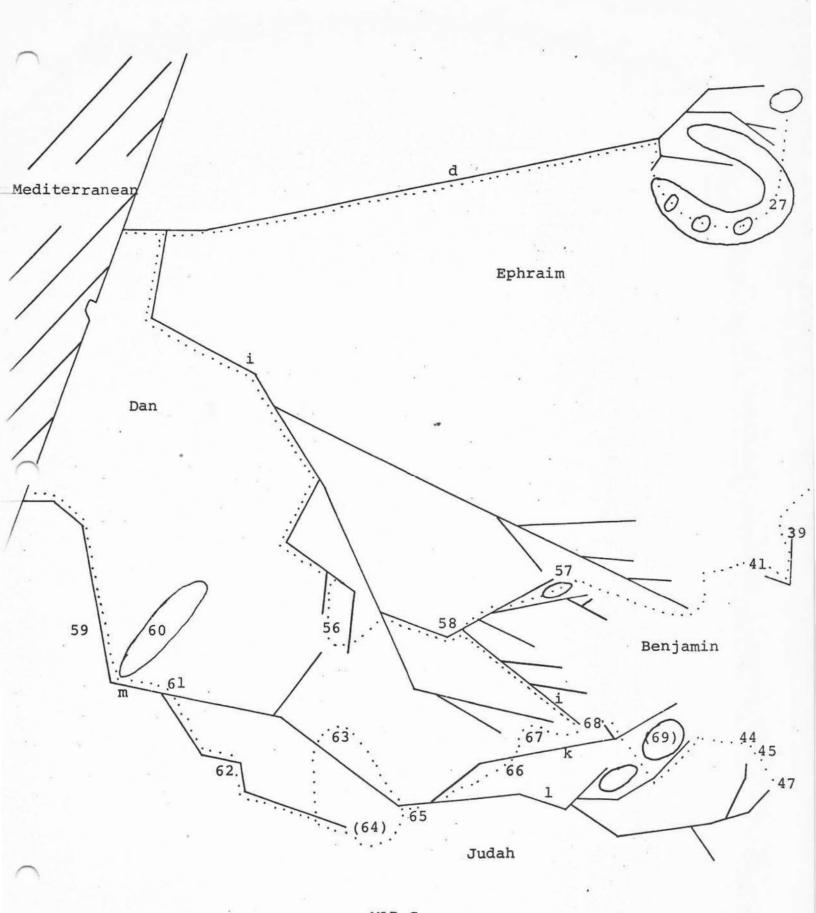
cyp	e, modern names in traites	•	
1.	Cabul	25.	Carmel
2.	Huqqoq	26.	Shihor Libnath
3.	Yodphat	27.	Tappuah
4.	Beth Emek?	28.	Shechem
5.	Neiel?	29.	Michmethath
6.	Hannathon	30.	Jabal el-Kabbir
7.	Rimmon	31.	Taanath Shiloh
8.	Eth Qasin?	32.	Yanoah
9.	Yaphia? (Mishad)	33.	Aqrabeh
10.	Aznoth Tabor	34.	Ataroth
11.	Daberath	35.	Naarah
12.	Tabor	36.	Jericho
13.	Adami Nekeb	37.	Mt. west of Jericho
14.	Beth Shemesh (Galilee)	38.	Ophra
15.	Laqqum	39.	Bethel (Luz)
16.	En Haddah	40.	Ai
17.	Chesuloth	41.	Ataroth Addar
18.	Sarid	42.	Atarot
19.	Maralah	43.	Beth Aven
20.	Dabbesheth	44.	Waters of Neptoah
21.	Yoqneam	45.	Head of the hill
22.	Tel Qasis	46.	Extremity of the hill
<b>23.</b>	Beth Dagon	47.	Shoulder of the Jebusite
24.	Nesher	48.	En Rogel

- 49. el-Eizaria
- 50. En Shemesh
- 51. Gilgal/Gelilot
- 52. Stone of Bohan
- 53. Shoulder overlooking Ar.
- 54. Beth Arabah
- 55. Beth Hoglah
- 56. Gezer
- 57. Lower Beth Horon
- 58. Shaalabbin
- 59. Yabneel
- 60. Mt. Baalah
- 61. Shikkeron
- 62. Ekron
- 63. Timnah? (el-Batashi)
- 64. Timnah? (Kh. Tibna)
- 65. Beth Shemesh
- 66. Kesalon
- 67. Saris
- 68. Kiryat Yearim
- 69. Mt. Ephron; Mozah?
- a. Wadi before Yoqneam
- b. Iphtahel
- c. Jordan
- d. Qana
- e. Wilderness of Beth Aven
- f. Kidron

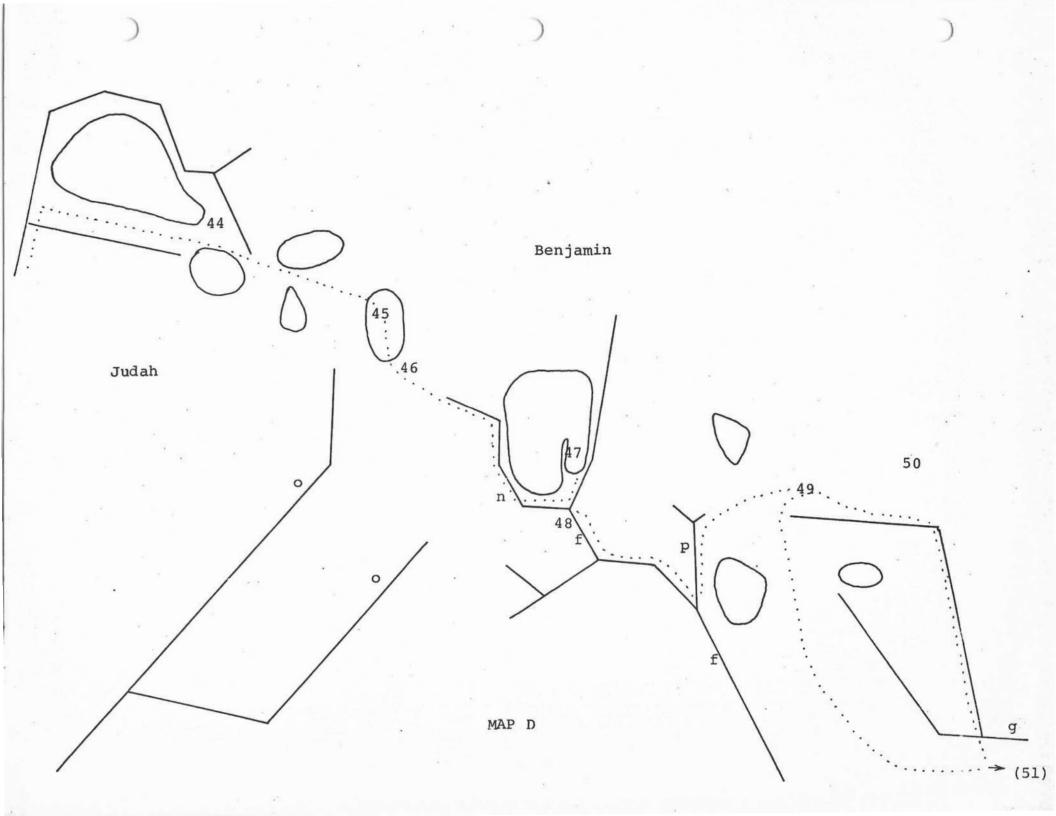
- g. 0g
- h. Valley of Achor
- i. Ayyalon
- j. Yitlah
- k. Kesalon
- 1. Soreq
- m. Soreq
- n. Hinnom
- o. Rephaim
- p. Qaddum
- q. Yoqneam







MAP C



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