

Geographic Ordering, Subgrouping, and Olympic Salish

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0.1. In his 1950 classification of the Salish languages, Swadesh set up an Olympic branch as the southernmost of five coordinate branches of the Coast Salish division of the stock.^{1/} This Olympic branch included five linguistic units in southwestern Washington, which Swadesh found to show specially close lexicostatistic relations to one another. The units were Quinault, Lower Chehalis, Satsop, Upper Chehalis, and Cowlitz.

More recently (1962) Dyen has suggested that Swadesh's Olympic branch units do not form a natural subgrouping within Salish, and that as a corollary these units are not derived from a private proto-language separate from the proto-languages which gave rise to other Salish subgroupings.^{2/} In this view, there was no proto-Olympic language, reflexes of which appear exclusively in the present units named above, and consequently no justification for setting up a single subgroup to include just these units, as in the Swadesh classification.

Dyen arrives at this conclusion through manipulation of Swadesh's lexicostatistic figures for Salish, according to an original set of interpretive criteria. In particular, he is struck by an apparent relative closeness of the Olympic languages to two other Coast Salish branches, represented by Twana and the Puget Sound dialects.

6.2. It is the purpose of the present paper to reexamine Dyen's conclusions with regard to the Salish units in question, and, by again employing Swadesh's relationship figures with criteria similar to Dyen's, to see whether an alternative conclusion may be arrived at. Since Dyen's method of analysis of such data have general relevance and applicability, this reinterpretation may also contribute to our understanding of linguistic relationships in a wider context than that of the Salish stock.

1.1. Swadesh's (1950) figures for interrelationship of the five Olympic branch units are shown in Table 1. Here numbers express percentages of shared cognates in the test list used. Abbreviations are: Qui, Quinault; LCh, Lower Chehalis; Sat, Satsop; UCh, Upper Chehalis; Cow, Cowlitz.

	LCh	Sat	UCh	Cow
Qui	57	43	41	36
LCh		51	50	43
Sat			83	59
UCh				66

Table 1.

Cognate percent relations
of Olympic branch units.

These figures suggest certain orderly numerical progressions, which appear to accord with relative territorial placement of the speech communities involved. Generally, for any unit its closest relations appear to be with territorially adjacent units, its most distant relations with territorially separated units. This is seen in Fig. 1, in which the Olympic units are positioned in rough accord with the centers of speech-community territories (left is "west" and top is "north" in this diagram). Solid lines connect units of adjoining

territories; broken lines connect those not in direct territorial contact. Numbers next to each line indicate linguistic distance (l.d.) between the pair of units connected. This is here represented by the percentage of shared cognates in the test vocabulary, for simplicity. L.d. should be thought of, however, as the converse of the cognate figure since it would be directly represented by the test-list percentage of noncognates. L.d., in other words, varies inversely with the percent of shared cognates.

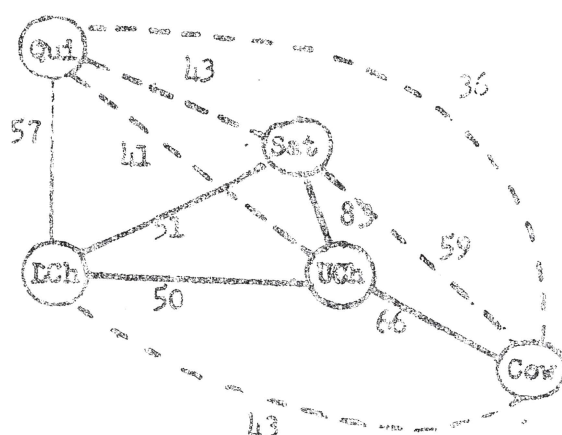


Fig. 1. Olympic branch units: geographic placement and l.d. relations (as cognate percentages).

From the values presented in this diagram we could construct a chain, a linear series of units arranged by smallest l.d.'s. Such a chain would run: Qui-LCh-Sat-UCh-Cow. However, this particular arrangement would depend on a difference of only 1 percent in the cognate relation between LCh-Sat (51) and that between LCh-UCh (50). Further, the relations of Sat and UCh to Qui (43, 41) differ by only 2 percent, which suggests that in their relations to other units

Sat and UCh are virtually equivalent. This is confirmed by the closeness of their mutual relation (83), amounting to probably not more than dialect separation between the two.

In these five units we seem, therefore, to be dealing with only four languages: Qui, LCh, Sat-UCh, and Cow. Omitting the Sat dialect, the remaining four units show a more consistent chain arrangement, as diagrammed in Fig. 2.

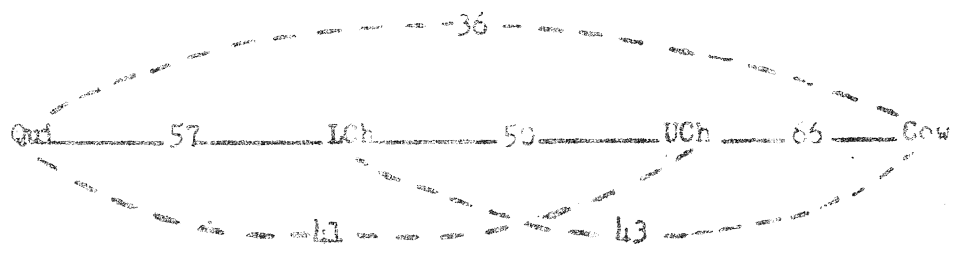


Fig. 2. Chain relations (in cognate percentages) of the four Olympic languages (with UCh dialect of Sat-UCh).

Substituting Sat for UCh makes no essential difference in the chain relations. In this case, Sat and Cow, not in territorial contact, show an l.d. (59) greater by 7 than that between UCh and Cow (66), which are in contact. Other differences from Fig. 2 are inconsiderable.

We thus find that Swadesh's Olympic branch of Coast Salish consists of four languages, Qui, LCh, Sat-UCh, and Cow; further, that the lexical relations among these are consistent with a chain arrangement in accord with geographic locations. The spacial extremes in this chain, Qui and Cow, are likewise the members least closely related lexicostatistically.

2.0. Two remaining questions to be investigated are: (1) Do the Olympic languages fall into any natural subgroupings, or are there simply four coordinate language units within this group? (2) Are the Olympic languages a natural subgrouping within Salish? To these questions Dyen has supplied answers at variance with those I have arrived at. Some explicit detailing of the present analytic method and criteria of interpretation is therefore in order.

In considering these problems of internal and external relationships of Olympic, Dyen's "rule of thumb" figure of 9.5 percent is used to indicate significant difference between two cognate percentage figures.^{3/} Further, we should note Dyen's generalization that: "every significant difference between lexicostatistical percentages implies a historical event determinable from the configuration of percentages." It is here maintained that not only do significant percentage differences (as defined) imply historical events, but that also consistencies of differences within configurations point to historical factors, even when these differences do not reach the (statistically) significant value cited.^{4/}

2.1. If we were determined to separate the Olympic languages into internal subgroups the obvious division would fall between the western (and coastal) two languages Qui and LCh, on the one hand, and the eastern (and noncoastal) members of the chain, Sat, UCh, and Coi, on the other. But the cognate relationship Qui-LCh (57) is not significantly greater than the relations of LCh to the territorially adjacent Sat and UCh (51 and 50, respectively). True, the eastern group members show higher cognate figures among themselves than with either member of

the western group, but if it is assumed that the chain arrangement of the entire Olympic series reflects a really fundamental set of historic relations, then perhaps all we can say about the development of the Qui-ICh versus Sat-UCh-Cow subgrouping is that within this linguistic continuum a primary dialect split developed earliest between those sections which became the ICh and the Sat-UCh speech communities. ✓ 5

2.2. Implicit in the above treatment of Olympic internal arrangements is the assumption that Olympic is a natural subgroup within Salish, which in turn implies that all members of the Olympic chain are the exclusive descendants of a single parent language, proto-Olympic. Beside making this assumption explicit, how may we go about proving or disproving it? Obviously, the configuration of Olympic relationships to other members of the Salish stock will be crucial to this argument.

The following tabulation (Table 2) shows in condensed summary the cognate percentage relations of all other Salish units (from Swadesh op. cit., 1950) to Olympic branch members. Columns show units compared with Olympic members, arranged by branch, cognate percentage range for each unit in relation to Olympic, maximum difference within this range, Olympic member(s) with minimum, and with maximum cognate relation to unit in left-hand column. Starred rows are those where a significant difference appears between minima and maxima. Abbreviations are: BC, Bella Coola branch, BeCo, Bella Coola; NG, North Georgia branch, Pen, Pentlatch, Com, Comox, Sec, Sechelt; SG, South Georgia branch, Squ, Squamish, Nan, Nansam, Fra, Fraser, Koo, Kooksock, Son, Songish, Lum, Lummi, Kila, Klallam; EC, Hood Canal branch, Tea, Twana; PS, Puget Sound branch, Ska, Skagit, Sno, Snohomish, Mis, Misqually; Ore, Oregon branch, Till, Tillamook; Int, Interior branch, Lil, Lillooet, Tho, Thompson, Sha, Shuswap, Oka, Okanogan, Spo, Spokane, Kal, Kalispel, POr, Pend Oreille, Col, Columbia, Cda, Coeur d'Alene.

Unit compared with Olympic	Cognate percentage range	Maximum difference	Olympic member(s) minimally related	Olympic member(s) maximally related
<hr/>				
BC				
BeCo	12-15	3	Qui, UCh	Cow
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NG				
Pen	14-20	6	LCh	Sat, UCh
Com	17-25	8	LCh	UCh, Cow
Sec	16-23	7	Qui	Sat
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SG				
Squ	14-17	3	Qui	Sat, UCh
Nan	17-21	4	LCh	UCh
Fra	19-23	4	LCh	Sat, UCh
Noo	19-25	6	LCh, Cow	UCh
Son	18-21	3	Sat, Cow	Qui
Lum	20-22	2	LCh, Sat	Qui
Kla	18-22	4	LCh	Qui, UCh
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PS				
*Ska	20-32	12	LCh	UCh
*Sno	20-31	11	LCh	UCh
*Nis	21-32	11	LCh	UCh
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HC				
*Twa	22-39	17	Qui	UCh
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Ore				
Til	14-17	3	Sat	UCh
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Int				
Lil	17-21	4	Qui	Sat
Tho	17-21	4	LCh	Cow
Shu	17-19	2	Qui, LCh	Cow
Oka	17-18	1	Qui, LCh, UCh, Sat	Cow
Spo	13-18	5	Qui	Cow
Kal	14-17	3	LCh	Cow
Por	14-18	4	Qui, LCh	Cow
Col	16-20	4	Qui	Cow
Gda	16-19	3	UCh	Sat

Table 2.
External relations of Olympic units.

With the exception of Hood Canal and Puget Sound, no significant differences in the relations of other Salish languages to the various members of the Olympic group appear in the tabulation. However, there does appear to be a consistent difference in the distribution of minimum and maximum relationship figures to the two subgroups of Olympic suggested above. Members of the western subgroup (Qui, LCh) appear more often in the minimum column, and those of the eastern subgroup (Sat, UCh, Cow) more often in the maximum one. The difference appears strikingly in tabular form (Table 3):

Olympic member	Instances minimally related	Instances maximally related
Qui	10	3
LCh	15	0
Sat	4	6
UCh	3	12
Cow	2	9

Table 3.

Incidence of minimum and maximum relationships of Olympic members.

There is obviously a consistent difference here in the relationship of the two Olympic subgroups to other Salish languages, members of the eastern subgroup being much more often involved in maximum relations. True, the maximum-minimum differences are often only very small ones, but the consistency of the figures suggests that the Olympic dialect chain originally articulated with other Salish groups through what became its eastern members.

2.3. The Hood Canal (Twana) and Puget Sound figures, involving significant percentage differences, seem to require an additional

explanation. It is these figures which furnish the essential support for Dyan's argument that Olympic is not a natural subgrouping within Salish, and that the Olympic languages do not go back to an exclusive proto-language. I believe that another explanation is called for.

We should note three facts about the Hood Canal and Puget Sound relationships with Olympic: (1) These relations are consistently (as well as significantly) closer with the eastern Olympic subgroup members; (2) These two Salish branches (HC and PS) are the only ones in territorial contact with Olympic, the contact in both instances being with the eastern Olympic members Sat and UCh; ⁶ (3) The minimum intragroup relation of Olympic members (Qui-Cow 36) is not significantly less than the maximum extragroup relation of an Olympic member (UCh-Twa 39). These points can be seen from the following tabulation (Table 4) of relations among the three Salish groups, Puget Sound (Ska, Sno, Nis), Hood Canal (Twa), and Olympic:

	Qui	LCh	Sat	UCh	Cow
Ska	24	20	28	32	27
Sno	23	20	28	31	28
Nis	23	21	31	32	30
Twa	22	27	36	39	38

Table 4.

Cognate percentage relations of
PS and HC to Olympic members.

3. The data and considerations presented above suggest the following conclusions:

(1) The set of Salish speech forms termed the Olympic branch by Swadesh and comprising Qui-LCh-Sat-UCh-Cow form a chain-relationship

series in that order, which is in accord with their geographic relations. Within this chain, relative closeness of relationship of Sat and UCh, and their failure to differ significantly in relations with other units, enables them to be treated as a single speech form.

(2) Relative distances of linkages within the Olympic set define two primary internal subgroupings: Qul-LCh (western), and Sat-UCh-low (eastern).

(3) The two major subgroupings of Olympic show some differences in their relations to other Salish languages outside Olympic, but the differences are significant only in the case of two other Salish subgroups, the Puget Sound dialects and Twana. In both cases eastern Olympic members are consistently as well as significantly closer to Twana and Puget Sound than are the members of the western Olympic subgroup.

(4) The Hood Canal branch (represented by Twana) and the Puget Sound branch are the only other Salish groups in actual territorial contact with Olympic, the contact being with the eastern subgroup. We may conclude that contact influences from Twana and Puget Sound have produced the skewing of lexical relationships in the eastern Olympic subgroup.

(5) Since contact influence appears to have occurred, true genetic relationship is probably reflected more exactly, between the Olympic set and either Twana or Puget Sound, by minimum rather than maximum lexicostatistic figures. Thus the external lexical relations of Qul and LCh, which do not seem to have been disturbed by borrowing, more accurately reflect the genetic relation of the Olympic group to Twana

than do the presumably inflated lexical relations of Sat-UCh and Cow to Twana.

(6) No pressing objection appears, once we assign inflated external relation figures to contact influence, against considering Olympic to be a natural subgrouping within Coast Salish, with development from a private proto-language, derived from one of the primary dialect divisions within proto-Coast Salish. Dyen's contrary conclusion seems to rest not only on a different evaluation of cognate figures, but also on failure to consider Olympic linguistic relationships within a context of Salish geographic relationships.

NOTES AND REFERENCES

- 1 Morris Swadesh, Salish Internal Relationships, IJAL 16.157-167 (1950). In this scheme the other three divisions are: Bella Coola, Oregon, and Interior, each including a single branch. Bella Coola and Oregon are single-language units. Only the Coast division shows multiple branch subdivisions.
- 2 Isidore Dyen, The Lexicostatistically Determined Relationship of a Language Group, IJAL 28.153-161 (1962).
- 3 Isidore Dyen, Lexicostatistically Determined Borrowing and Taboo, Ig. 39.60-66 (1963), where justification for this measure of significance is discussed.
- 4 The chain relationship notion, central to the present argument, rests on configurational consistencies in relations between territorial locations and cognate sharings in sets of languages. For further explication and use of the concept, see Wayne Suttles and W. W. Elmendorf, Linguistic Evidence for Salish Prehistory, Amer. Ethnol. Soc., Proc. 1962 Annual Spring Meeting: Symposium on Language and Culture, pp. 40-52 (1963); also, W. W. Elmendorf, Linguistic and Geographic Relations in the Northern Plateau Area, SJA 21.63-78 (1965).
- 5 The order of subsequent splits within the Olympic chain would then be: (1) Between Qui and LCh; (2) between Sat-UCh and Cow; (3) between Sat and UCh, this last quite recently.
- 6 Twana appears, on a map of speech-community territories, to have been in contact with Quinault. Actually the region of apparent contact coincided with extremely rugged country in the southern Olympic mountains, and actual social contact appears to have been slight until well into the 19th century; Twana relations with Sat and UCh were intimate. The situation is detailed in W. W. Elmendorf, The Structure of Twana Culture, Wash. State U. Research Studies, Monographic Supplement No. 2 (1960); especially pp. 277-305 and map p. 285.