

Aspects of Conjunction in Kaigani Haida

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1.0 Introduction

While subordinate clauses are conjoined to main clauses in Kaigani Haida by marking them with an -s suffix (see Eastman & Edwards 1980), elements of equal syntactic rank are joined by coordinate conjunctions. It will be seen here that main clauses in Haida are linked by one of the following conjunctions: gyaan, daanu, dliu, gyaanaan, ikwaan or ilaa. Gapping occurs only in the first clause of a topic-marked utterance. Conjunction at the word level is accomplished by isgyaan. Some conjunctions link one main clause to another in a dependent/independent relationship (daanu, dliu) while others link other aspects of what is communicated in one clause to what is communicated in the second (gyaanaan, ikwaan, ilaa). Adverbial particles indicate whether

the subjects or the predicates of two clauses are being linked.

2.0 Coordinate conjunction with gyaan

Main clauses are commonly joined by gyaan as,

- (1) taanaay taau Guudaay iwaans tlaxuustgan gyaan tsaatagaay

bear food box big broke and bird

xiidang

flew

The bear broke the big food box and the bird flew away.

- (2) naak l kaatagan gyaan chlin l taagan

house she came and fish she ate

She came to my house and ate fish.

When the subject of the first main clause is topic-marked gapping may occur.

- (3) nang jaada uu kiiks taagan gyaan kaafii hans aadiitsii aa l

one woman T. cake ate and coffee too woods in she

xuutlaayaan

drank

It was a woman who ate cake and drank coffee in the woods.

Had the first clause in (3) occurred as an independent utterance, i.e., as

- (4) nang jaada uu kiiks l taagan

one woman T. cake she ate

It was a woman who ate cake.

the pronoun copy would still have occurred in order to assign subject syntactic function to the topic. Otherwise the topic nang jaada would be the syntactic object, a semantic anomaly.

What occurs, then, is that where topics occur in simple sentences with subject syntactic function, the subject role is marked by pronominally copying the subject before the verb. But, in coordinate constructions where an initial clause has a topic with subject function pronominal copying of the subject occurs in the second clause only (as long as the subjects of both clauses are semantically identical). Thus, in Kaigani Haida there appears to be a form of gapping taking place in conjunction with nominal reduction in coordinate constructions.

Sentence (3), then, conveys the communicatively important information that "It was a woman who" (topic) "ate cake and drank coffee in the woods" (comment). The syntactic structure of the utterance involves copying the topic ('a woman') as subject before the final verb in the utterance but gapping (i.e., deleting) it before the verb in the first clause. As an independent utterance, the first clause of (3), as (4), would appear with nominal reduction (i.e., pronominal copying) before the verb, i.e., no gapping would take place.

When gapping occurs Ross (1970: in Dik, 1980:199) feels its direction is conditioned by the underlying word order when it is applied: forward with (S)VO and backward with (S)OV. Haida, as a verb final language, applies gapping backwards as we have just seen here in (3).

In (3) the adverb hans 'too' relates to the conjoining of parallel predicates while a similar particle san 'also' shows semantic parallelism between subjects of conjoined clauses (see

(8) below). That is, hans relates "ate cake and (also) drank coffee in the woods" while san in (8) relates "I (gave)...and she also (gave)...".

Gapping cannot occur if the identity of the coreferent is in doubt. If a possible "filler" occurs between the "gap" and the actual "filler" there will be no gap.

(5) aadiit ga hl k'iigan gyaan l xyaahlsii hl kinggan  
woods to I looked and she dancing I saw  
I looked into the woods and saw her dancing.

The embedded subordinate clause 'she dancing' prevents the gapping of the main clause subject hl 'I'. Had gapping occurred we would get (5') \*aadiit ga k'iigan gyaan l xyaahlsii hl kinggan  
woods to looked and she dancing I saw  
With the intervening pronoun l 'she' as a possible filler for the subject gap in the first clause, interpretability is strained. On the other hand, in (3) the coreferent of the topic that is gapped is the only pronoun in the utterance so that what is syntactically gapped may be semantically interpreted.

When what is the subject of conjoined clauses is a possessed noun, it occurs as the equivalent possessive pronoun in the second clause. In (6) and (7) we have a pronominal copy of the subject noun phrase.

(6) Merigyaa hlgitgaay hlGahls gyaan laa janggan  
Mary's dress black and hers long is  
Mary's dress is black and long.

- (7) Meri kats hlGahls gyaan laangaa janggan  
 Mary hair black and hers long is  
 Mary's hair is black and long.

In (7) the juxtaposition of Meri and kats conveys inalienable possession and the corresponding possessive pronoun laangaa is used in distinction from the 'regular' or alienable form laa in (6) where the partitive form Merigyaa is required to convey possession. For gapping to occur in (6) and (7) it would have to take place in the first clause yielding \*black and Mary's dress long is and

\*black and Mary's hair long is

or

\*hers black and Mary's dress long is and

\*hers black and Mary's hair long is

Such sequences do not occur in Haida.

What is left out or 'gapped' generally, when gapping occurs in a language, must be identical in semantic function and parallel in syntactic function (Schachter 1977; Ross 1970; Dik 1980). In (3) the element gapped was a pronominal copy of a topic noun phrase rendering whole-utterance subjecthood undetermined until the second clause. In (6) and (7) noun phrase subjects are copied pronominally in the second clause but no actual gapping occurs.

So far we have seen gyaan to conjoin two main clauses (in (1)) that have no common elements of identical semantic and syntactic function and no possibility of gapping. In (2), a common syntactic subject l 'she' was present but no gapping occurred. In (3), however, where the common syntactic subject

was topic-marked, gapping occurred in the first clause. In (6) and (7) where the nominal with the common syntactic function was a noun phrase gapping did not occur but a pronoun substitution was made for the common element. In the following example, it is the verb that is identical in both clauses.

- (8) tluu diik l istgan uu gyaan hlaa san taau Guut laak istgan  
 canoe me to she gave T, and I too food box her to gave  
 She gave me a canoe and I gave her a food box.

- (8') \*tluu diik l (uu) gyaan hlaa san taau Guut laak istgan  
 canoe me to she and I too food box her to gave

It seems clear that the final verb in (8) must remain for the utterance to be complete given the verb-final nature of the language. It may be that clause final position prohibits gapping. At any rate, we have found no evidence for verb gapping in the language. There may be a relationship here with the fact that verbs are also never topics in the language - there can be no precedent ('remnant') of a gapped verb and, as a result, no clear way to interpret an utterance such as (8'). The preferred environment for gapping in Haida is coordinately conjoined clauses which have topics that are pronominally copied as subjects before the verb in the first clause (had the first clause stood alone). These copied reduced nominal reflexes of a topic are then gapped when two clauses are coordinately conjoined as in (3).

Kuno claims that members of coordinated pairs (terms/elements, i.e., the 'remnants' of a gapping rule) should be parallel in presenting new rather than given information. He states

"...only those elements that are contextually known can be gapped and only those elements that represent new, unpredictable information can be left behind after gapping".(1976:309). In Haida, as we have seen, this is the case with the gapping seen in (3) together with pronominal copying. What was given information (i.e., the nominal 'the woman') is gapped and copied (i.e., as old information). We saw in (6) and (7) that the possessive vs. deictic distinction among pronouns is preserved in copying as well. This "fits" with what Kuno has to say since possession and deixis are syntactically marked semantic aspects of the given information and will be carried over with the syntactic role. In Haida, then, given nominal information is subsequently pronominalized and pronominalization is sensitive to the syntactic nature of the nominal (possessed or not as in (6) and (7), subject or not as in (3)) since the syntactic function must remain as a 'remnant' of gapping for sentence interpretation to take place.

In constructions of the type we have been talking about here with elements coordinately conjoined by gyaan, either clause may contain a topic;

- (9) *chaocsalit hl kaagan gyaan qiidaay gaa uu l kaagan*  
 beach on I walked and trees in T. he walked  
 I walked on the beach and he walked among the trees.

The topic marker uu in (9) singles out the information 'among the trees' as contrastive with respect to 'on the beach' (see Eastman & Edwards, 1979) even though it is a constituent of the second of two syntactically equal clauses. Gapping does not take place

since there is no contextually known information common to both clauses except the verb.

When an entire clause is topic-marked it may be considered the 'point of departure' for the utterance, as

- (10) *tiibalgaay ank uu gintaajaay iijin uu gyaan Guudaay aakya iijin*  
 table on T. blanket is T. and box outside is  
 The blanket is on the table and the box is outside.

'The blanket is on the table' as a complete clause in (10) is topic marked information to which syntactically equal information 'the box is outside' is added in order to say something about it. In this case, contrastive information 'on the table' is a constituent of the initial clause that is itself contrastive and both are topic marked (hence, two uus in the utterance), i.e., 'On the table is where the blanket is and with reference to that I will tell you the box is outside'.

Subordinate clauses (marked -g) may also be conjoined to main clauses with gyaan,

- (11) *nang iitlingaa uu aanaa is gyaan xaatgaay q'alaast'aa adiit iijin*  
 one man T. house g and people rest woods are  
 A man is in the house and the rest of the people are in the woods.

In (11), 'A man is in the house' is a subordinate clause modifying the information in the succeeding clause 'the rest of the people are in the woods' (see Levine 1977:168). 'A man is in the house' conveys particular and definite information (hence it is marked with -g) that is necessary for the utterance to be interpreted. In addition, the contrastive information 'a man' versus 'the rest of the people'

is topic marked in the first clause. Main clauses that are topics of complex utterances may be marked as topic by uu as in (8) and (10) above or subordinate clauses may be marked by -s as in (11) before the coordinate conjunction gyaan. Consider also (12) from Levine (1977:201).

(12) hlaa gaade gyaan dii kinaagangaa

I run and I warn

When I run it makes me warn.

Following Eastman and Edwards (1980) we analyze this sentence as (12') with the first clause subordinate to the second.

(12') hlaa gaad (i)s gyaan dii kinaagangaa

I run -s and I warn

I run and I get warn.

The subordinate nature of the first clause allows for its interpretation as a condition of the second. The clause as a whole may still be syntactically coordinated by gyaan. That is, semantically the acts of running (hlaa gaad) and getting in a warn state (dii kiinaa) are coordinate. The subordination of the clause hlaa gaad has to do with the information made subordinate being 'responsible' for the state being claimed in the main, or second, predication. Levine (1977:200) claims a "tendency in Skidegate to conjoin clauses by subordinating one of them". Gyaan as a coordinating conjunction links the dependent and independent clauses as syntactically equivalent assertions.

### 3.0 Dependent Conjunction with daanu and dliu

When two clauses are contextually entailed they may be

conjoined either by the dependent conjunction daanu (durative) or by dliu (temporal) indicating how the information being conveyed in the paired syntactic units relates the units to the context of the discourse, e.g.,

(13) k'iium aa iik l gyuujuugan daanu sGalaan l guudanggan

door to at she listened while song she heard

While she listened at the door she heard a song.

(14) Lil aa hl staaajuugan dliu dii aan sablii l Gaalingan

Lil to I visit when me for bread she fries

When I visit Lil she fries bread for me.

Each of these dependent 'coordinators' consists of a topic marking particle (-uu) with either a durative (daan-) or temporal (dliu-) prefix. Levine (1977:200) analyzes dliu as translated variously as "if and when" referring to "...an event which has not occurred up to the present, without any distinction between potentiality and actual achievement" and goes on to note that it "...also exemplifies an infrequent form of signalling dependent clause structure" conjoining clauses "...in accord with the tendency in Skidegate to conjoin clauses by subordinating one of them, a characteristic feature of Haida discourse." Where Levine felt that "It is not possible to characterize the difference in function between these two adverbial *sic* with any precision" (1977:261) we assert that in Kaigani Haida dliu links a main clause with a preceding dependent clause anchoring the main clause in time. While gyaan conjoins two (or more) main clauses without regard to concurrence or consecutiveness of the action relative to the

context of discourse, daanu operates like dllu in a pragmatic as well as syntactic vein anchoring the time of the dependent clause as lasting throughout the time of the assertion of the main clause.

Daanu in (13) and dllu in (14) like gyaan in (8) conjoin clauses such that the information in the first that is either contemporaneous or lasting along with that of the second is intended by the speaker to be the point of departure for the second, i.e.,

(13) It was during the period that she listened at the door that she heard a song and that is all (of importance) that happened while she listened at the door.

(14) It is at the very time I visit Lil that she fries bread for me though other things may also occur when I visit Lil.

Here, then, durative and temporal topic marked clauses are marked by daanu and dllu as durative and temporal topics of the utterance as a whole and these particles also act as clausal conjoiners. The dependent conjunctions daanu and dllu conjoin clauses that refer to simultaneous actions either durative (daanu) or temporal (dllu).

In our analysis of Kaigani here we are distinguishing subordination as a primarily semantic function accomplished by -g marking from coordinate conjunction as syntactic in function. To further exemplify non-consecutive and temporally fixed dependent conjunction, consider

(15) atlin 1 is dluu dii aan sablii 1 Gaalinggank  
here she -g when me for bread she fries  
When she is here she fries bread for me.

(16) atlin 1 is dluus dluu uu dii aan sablii 1 Gaalinggank  
here she -g when when T. me for bread she fries  
When she is here is when she fries bread for me.

In (15) the clause 'She fries bread for me' is modified by the clause 'she is here' which is also marked as subordinate. Thus, in (15) it is when that is of more communicative importance; 'she is here' is incidental to what happens when, i.e., she fries bread for me. In (16), 'She fries bread for me' may be analyzed to be modified as follows:

a) atlin 1 is

she is here (subordinate clause)

b) atlin 1 is dluus

she is here (subordinate clause) is when it is (subordinate temporally simultaneous topic)

c) atlin 1 is dluus dluu

she is here is when it is when

d) atlin 1 is dluus dluu uu

it is when she is here is when it is

Thus, (16) is interpretable as 'It is when she is here is when it is that she fries bread for me'.

#### 4.0 Adversarial Correlative Conjunction with gyaanaan

When the Verbal constituent of the second clause is contrary to what is expected, conjunction itself must indicate this.

(17) gam 'laa dii gulaa'angs gyaanaan uu 'laa aa hl gyu'alaangsaan  
not him I like even though T. him to I listen will  
Even though I don't like him I will listen to him. (from Leer 1977:131)

In (17) gyaanaan (Leer's k'yaanaan) relates the clauses as "I don't like him" and "I will listen to him".

(18) tiibalgaay angk uu gintaajaay is gyaanaan aakya u Guudaay iijin  
 table on T. blanket -s but outside T. box is  
 The blanket is on the table but the box is outside.

In (18) gyaanaan relates clauses as 'The blanket is on the table and not the box--it's outside'. Thus gyaanaan acts as an adversarial correlative conjunction. Like 'but' in English it links main clauses such that if the first is positive the second is negative (as in (18)) and vice-versa (as in (17)). Gyaanaan indicates that the clause to follow contains information contrary to what the hearer might expect. Compare (18) to (10). In both, two syntactically equivalent clauses are conjoined; in (18) the second clause is contrary to expected information but in (10) it is not. So, in (18) gyaanaan is the appropriate conjunction while gyaan 'works' for (10) - even though the clauses are otherwise identical syntactically. The topic marking of aakya 'outside' in (18) and not in (10) has a contrastive function and does not interfere with the otherwise parallel nature of the second clauses in these two sentences.

Consider gyaanaan also in (19) where it does not follow an -s marked (subordinate) clause,

(19) lam tlawunhl sGuunaan uu hl nilgan gyaanaan uu tliijGuudaan  
 rum six only T. I drank but T. already  
 gin xiiningaa aak'aayaa hl kinggan  
 monsters I see

I only drank six drinks and already I am seeing monsters.

We may analyze (19) as;

a) lam tlawunhl sGuunaan uu

It is only six drinks

b) hl nilgan gyaanaan uu

I drank and unexpectedly

c) tliijGuudaan gin xiiningaa aak'aayaa hl kinggan

I am seeing monsters already.

Here the gyaanaan reverses the sense conveyed by 'only' in the first clause where in (17) it reverses the negation of the first clause and in (18) it shows that what is the case with the blanket's whereabouts is not being said of the box. This adversarial correlative conjunction gyaanaan coordinates clauses where information in one is contradicted by the other. In (17) gyaanaan reverses the negation of the first clause; in (18) it reverses or contrasts the location of two objects and in (19) it reverses the sense of the topic marked 'only' - i.e., six drinks is hardly 'only' if I'm seeing monsters!

#### 5.0 Conjunction with ikwaan and ilaa

In addition to coordinate conjunction with gyaan, dependent conjunction with daanu and dluu, and what we are calling adversarial correlative conjunction with gyaanaan, two main clauses in Kaigani Haida may also be joined with ikwaan or ilaa. Like gyaanaan, ikwaan is used to conjoin dissimilar or contrastive ideas; ilaa indicates a contradiction of fact in the second clause. Ikwaan lacks the correlative aspect of gyaanaan. It joins semantically

dissimilar ideas without requiring that what is communicated in the first clause be linked to any semantically marked information in the following clause. In this sense, ikwaan 'but' is a 'regular' conjunction such like gyaan - it conjoins dissimilar ideas, where gyaan links similar ones. Both gyaan and ikwaan are syntactic joiners while gyanaan, ilaa, daanu, and dliu relate semantic aspects of the joined clauses syntactically. Where gyanaan would reverse the sense of what is communicatively important (i.e., what is topic marked or negated) ilaa contradicts the whole first clause in a conjoined utterance.

(20) taanaay taau Guut liwaangan l tlaXuustgan ikwaan taau Guut  
 bear food box big she broke but food box  
 t'lang tlaaohlgan tl' xutidaayaan  
 we made they stole  
 The bear broke the big food box but the food box we made  
 was stolen.

(21) aadiit l isaang hl gundanggang ilaa aanaa l iijin  
 woods she be I thought but house she was  
 I thought she was in the woods but she was in the house.

In (20) something dissimilar happened to two particular food boxes; the bear broke one and the other was stolen. In (21) the second clause actually contradicts information presented in the first. What is conveyed in the first clause 'she was in the woods' turns out not to be true after all, 'she was in the house'. The verb of the first clause in (21) isaang (is 'be' + -aang) is marked for aspect by what Edwards (1978:24), 1982:121) calls an unverified

information suffix (-aang). This, along with ilaa is a further indication to the hearer that what 'I thought' in the first clause might turn out to be not the case. That is, 'I thought she might have been in the woods'. The clause conjoined by ilaa indicates that the verification turns out to be 'she was in the house (instead)'.

#### 6.0 Conjoined Lexical Items with igyaan

Where independent clauses are coordinately conjoined by gyaan, lexical items that appear semantically equivalent, are conjoined by igyaan as in (22)-(27).

(22) taau Guut aGits igyaan hlGahls uu taanaay tlaXuustgan  
 food box red and black T. bear broke  
 The bear broke the red and black food box.

(23) tluu igyaan taau Guut diik l istgan  
 canoe and food box me to she gave  
 She gave me a canoe and a food box.

(24) Carol igyaan Paul uu haaihlaan  
 Carol and Paul T. fight  
 Carol and Paul are fighting.

(25) sk'utlaangwaay igyaan edlaagwaaLaay (is) gyaagan uu iijin  
 cup and spoon -s mine T. are  
 The cup and the spoon are mine.

(26) Paul igyaan Carol hl qinggaan  
 Paul and Carol I see  
 I see Paul and Carol.



## HANDOUT

1. taansaay taau Guadaay liwaane tiawmstgan gyaan taatsgoay xiidang

The bear broke the big food box and the bird flew away.

Conjunction of two main clauses.

2. nang jaada uu kiike taagan gyaan kaafii hana aaditeii sa l xuutiayaan  
(3)

It was a woman who ate cake and drank coffee in the woods.

Conjunction of two main clauses where subject of first is topic-marked.

3. nang jaada uu kiike l taagan.  
(4)

It was a woman who ate cake.

Permissible form of first main clause in (2) when independent.

4. aadiit ga hl k'iigan gyaan l xyaahleii hl kinggan  
(5)

I looked into the woods and saw her dancing.

Here gapping may not occur. Thus \*aadiit ga k'iigan gyaan l xyaahleii hl kinggan.

5. Merigyaa higitgaay hlGahls gyaan laa janggan  
(6)

Mary's dress is black and long.

The subject of the second clause is the same as that of the first and appears as a possessive pronoun copy of the full subject NP. In this case the copy is of an NP of alienable possession. 6.(7) is an example where the copy is of an NP of inalienable possession.

6. Meri kate hlGahls gyaan laangaa janggan  
(7)

Mary's hair is black and long.

7. k'laa sa lsk l gyrujuugan daanuu sGaalean l guudanggan  
(13)

While she listened at the door she heard a song.

8. Lil sa hl atsojuugan dloa dii san sablii lGaalinggan  
(14)

When I visit Lil she likes bread for me

7.(13) and 8.(14) are examples of sentences conjoined by topic-marked durstative (daanu) and temporal (dium) particles respectively.

9. gam 'laa dii gulaa'angs gyaanaan uu 'laa aa hi gyu'alaangsaan  
(17)  
Even though I don't like him I will listen to him. (From Leer, 1977:131)

10. tiibalgaay angk uu gintajaay ia gyaanaan aakyaan uu Guudaay iijin  
(18)  
The blanket is on the table but the box is outside.

9.(17) and 10.(18) are examples of adversarial correlative conjunction; the clause following gyaanaan contains information contrary to hearer expectation. Compare 10.(18) to 11.(19):

11.  
(19) tiibalgaay ank uu gintajaay iijin uu gyaan Guudaay aakyaan iijin  
The blanket is on the table and the box is outside.

12. taanaay taau Guut liwangan i tlaaxustgan ikwaan taau Guut t'lang  
(20) tlaahigan ti' xutidaayaan  
The bear broke the big food box but the food box we made was stolen.

13.  
(21) aadit i isang hi guandangang ilaa senaa i iijin  
I thought she was in the woods but she was in the house.

Where gyaanaan in 9. and 10. contradicts what's communicatively important in the first clause (i.e., what's topic marked or negated), ilaa in 13. contradicts the whole first clause in a conjoined utterance. ikwaan like 'but' in English is a regular conjunction - one linking dissimilar rather than coordinate ideas.

14.  
(22) taau Guut afitte isgyaan hiGahis uu taanaay tlaaxustgan  
The bear broke the red and black food box.

isgyaan conjoins semantically equivalent lexical items.

(27) sabliigaay isgyaan chiinaay Lil ga st'hlgaaan uu iijin

bread and fish Lil want T. is

It is the bread and the fish that Lil wanted.

A possible explanation for isgyaan as opposed to gyaan as a term coordinator as in these examples lies in the interdependence of the paired lexical items as co-terms in the utterance - i.e., the conjoined items have a single syntactic function. This ties in with Levine's claim (above) that Skidegate Haida has a tendency to conjoin clauses by subordination. Just as 'when I run' is a condition for 'I get warm' in (12), 'red' is a condition for 'red and black' in (22). The conjunction of terms by g-marking implies semantic interdependence.

#### 7.0 Summary

Sentence elements may be conjoined in a number of ways in Kaigani Haida. Main clauses most commonly are conjoined syntactically by gyaan. A constituent in either clause may be topic marked to indicate contrast. A topic marked constituent in an initial clause that has a subject syntactic function may undergo a reduction process (nominal pronominal) and a gapping rule such that the subject syntactic function of the topic is not revealed until its pronominal copy appears in the second clause, immediately before the verb. This gapping in utterances consisting of conjoined main clauses extends the operation of the pronominal copy rule in simple sentences across conjoined clauses to pre-final verb position. In simple sentences, topics as subjects are copied immediately before the verb in order for syntactic interpretation to be possible.

Otherwise whatever immediately precedes the verb, whether pronominal or not, is interpreted as having a subject role. Thus, in (3), if clause one were independent (not conjoined) kiiks 'cake' would be the syntactic subject. But, as we see in (4), clause one of (3) as an independent utterance is ungrammatical, i.e., \*nang laada uu kiiks taagan. Non-topic marked constituents are not gapped but may occur copied (i.e., reduced) as pronouns in the second clause.

Adverbial particles in the second clause of a conjoined pair may indicate whether a semantic parallelism exists between the subjects of the clauses (san) or the predicates (hans). Ikwaan is an adversarial conjunction that operates much as 'but' does in English while contradictory clauses are conjoined by ilaa. In contrast to ikwaan, gyaanaan reverses the polarity of clauses such that if the first is positive, the second is negative. The conjunctions dliu and daanu conjoin syntactically equivalent clauses such as gyaan does but, further, pragmatically entail the clause that precedes them temporally and duratively with respect to the following clause. Finally, word level conjunction with isgyaan is seen as expressive of a subordinate relation within syntactic units.

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The Encoding of Spatial Relations in Lushootseed<sup>1</sup>

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1.0 Pieroe's (1932) classification of signs into icons, indexes and symbols reflects three different relationships between form (signum) and referent (signatum). The relation between form and referent in a symbol is arbitrary, or non-motivated, while in an icon or index it is motivated, or non-arbitrary. Motivation in an indexical relation is based on contiguity of form and referent, while in an iconic one it is based upon resemblance.

Pieroe distinguishes two types of icon, the image and the diagram. In an image the resemblance between form and referent can be perceived with less reliance on conventional or arbitrary rules than in a diagram. The form of imagic icons, such as photographs or onomopoeic words, has the same qualities as the referent. However, conventional rules play a part in the interpretation of images. People unused to photographs must learn how to see the forms in them, and onomopoeic words in one language may strike the non-speaker as being rather unnatural (as, for example, animal calls). The form of a diagrammatic icon, such as a blueprint, graph or mathematical formula, does not share the same qualities as its referent. Rather, both contain corresponding relations, and understanding that correspondence depends upon knowledge of conventional rules. Examples of diagrammatic iconicity in language are reduplication, to indicate plurality, distribution, intensification or diminution, and 'sequencing', the presentation of events in a sentence or text in an order which corresponds to their actual occurrence, or their felt importance. (see Jakobsen 1971).