Hol Sarmey QeD QulwI' ghlItlh: A typological analysis of Klingon

A thesis submitted in partial fulfilment of the requirements for the Degree of Master of Linguistics in the University of Canterbury by Nikita Sutrave

University of Canterbury

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Abstract

Klingon is a constructed language initially created solely for entertainment purposes by the linguist Dr. Marc Okrand. Klingon plays an important part in the popular science fiction franchise Star Trek as the language spoken by the militant Klingon race. This language has OVS (Object-Verb-Subject) as the basic word order, something that is rarely found in natural languages. On the topic of how he created Klingon, Okrand has mentioned that he tried his utmost to make Klingon as different from other languages as possible.

The goal of this thesis is to find out how ‘unique’ the features of Klingon really are. I use data obtained from various sources such as the Klingon Dictionary and actual speakers of Klingon and compare it to the universals that are proposed for languages with similar word order. Consulting the speakers was a particularly important here as there are no native speakers of Klingon, and there are very few people who can even speak it fluently.

For most of my thesis, I use generalisations based on the OV-VO typology. While I examine some general principles from works like Vennemann (1973), I also look at some typological generalisations about topic and focus, causative constructions, negation and comparative/superlative constructions in Klingon. I compare the characteristics of Klingon to those found in another OVS languages like Hixkaryana as well as ‘consistently OV’ languages like Japanese and Korean. I also mention briefly some typologies based on constituents other than the relative position of verb and object such as the VS-SV distinction and universals for subject-final languages, but these typologies fail to clearly answer the question of whether Klingon can be considered as a typical subject-final language or verb-intermediate language. This is because the generalisations based on subject-final languages turned out to actually mostly be about verb-initial languages, and in case of other typologies, Klingon could only partially answer the questions posed.

Despite discovering several interesting syntactic properties, I concluded that even though Klingon seems to have some features that are rarely found in other OV languages, it actually is very consistent with most of the generalisations I have used to test its OV nature. Thus, despite the many interesting features discovered, I could say that Klingon indeed is a ‘consistently OV language’.

My study also highlights some of the challenges associated with collecting data on Klingon as a relatively new language, especially given the occasional differences between the interpretation of an ambiguous rule by the speakers as opposed to what Dr. Okrand actually intended. I also talk about the ever-growing vocabulary and constantly evolving grammar rules in Klingon that could potentially make some parts of my thesis slightly outdated in just a few years.
Acknowledgements

I would like to thank my supervisor, Dr. Heidi Quinn, for her support and encouragement that led me to choose this rather unusual topic for my thesis. I appreciate all the help she gave me whenever I was stuck, no matter how busy she was. Her detailed feedback and also her support when I was worried that I might never finish my thesis were invaluable to my finally finishing the thesis.

Within the UC Linguistics department,

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ii. I thank Dr. Kevin Watson, the Head of Linguistics department in UC, for his help in organising my mess into something that actually started to resemble a thesis afterwards.

iii. Also, I am grateful to Jacq Jones, who introduced me to Joe Windsor and thus was indirectly instrumental in my gaining access to actual experts in Klingon.

Many thanks to Joe Windsor from the University of Calgary for telling me about this Facebook group dedicated solely to the Klingon language that just might help me.

I am immensely grateful to the members of the Learn Klingon facebook group, especially Alan Anderson, Andrew Miller, Brad Wilson, Chris Lipscombe, David Trimboli, David Yonge-Mallo, Doug Henning, Ed Bailey, Everett Flores, Felix Malmenbeck, Jeremy Cowan, John Harness, Lieven L. Litaer, and Robyn Stewart, for taking the time to answer my questions and responding whenever I needed a sentence translated. Discussing various aspects of Klingon syntax had never been more exciting and fun than when I was doing it within the group. Also, special thanks to Andrew Miller for helping me come up with the title of the thesis.

I thank my family for all the love and support, be it through phone-calls, Skype conversations or financial support. You have always been there cheering me on for all the major events in my life. I couldn’t have come so far without you.

Finally, I would like to thank my room-mates and friends, both here and back home, for being there and listening to me vent and giving me hugs and cookies (thanks, Stephen!) whenever I was stressed and homesick.
Abbreviations used.

Abbreviations used:

I 1st person
II 2nd person
III 3rd person
I+III 3rd person exclusive
ALT alternative
CAUS causative
COLL collective
COMPL completive
CONT continuous
DIST.PAST distant past
EMP emphasis
HSY hearsay
IMP imperative
IMM.PAST immediate past
INCL inclusive
INTENS intensifier
INTR interrogative
IO Indirect object
IS Indefinite subject
LOC locative
MSF misfortune
NEG negation
O object/direct object
ORD ordinal number marker
PERF perfective
REFL reflexive
REL relativiser
S subject
TOP Topic
1. Introduction:

The basic aim of my research is to examine the typological features of Klingon, a constructed language, against the various generalisations given for typologically similar languages. I have also looked at a few interesting syntactic features within Klingon and compared them to one of the very few relatively well-documented OVS languages, Hixkaryana in some cases. While creating this language, Marc Okrand wanted to make it as unique or rather, as “alien” as possible. My aim here, broadly speaking, is to determine to what extent he was able to succeed in the matter of making Klingon as unlike most other natural languages as possible.

Klingon is an artificial language spoken by the fictional extra-terrestrial race of Klingons in the Star Trek Universe. Linguist Marc Okrand created this language originally for some dialogues in Star Trek III in 1984, but the first few words of the language were coined by the actor James Doohan for Star Trek: The Motion Picture released in 1979. It is an agglutinating language with a phonological inventory of sounds that normally don’t all occur together in a phonological system. The standard word order of Klingon is Object Verb Subject (OVS), a feature found in very few languages of the world. The purpose behind this was that Okrand wanted the language to sound as different from human languages as possible, given that Klingon was meant for a fictional alien race rather than humans. However, the words couldn’t be too difficult to pronounce, as the actors who were supposed to deliver the dialogue were ultimately humans in real life (Skrewtape, n.d.).

Hixkaryana is a Carib language spoken by around 600 people in the Amazon in Brazil (Kalin, 2014). It has a basic OVS word order, a word order rarely found in languages throughout the world (Dryer, 2013). According to Kalin (2014), Hixkaryana, unlike other OVS languages, has plenty of research to show that OVS is indeed its basic word order, following the extensive fieldwork of Desmond C. Derbyshire (Derbyshire, 1977, 1979, 1985). Derbyshire’s work on Hixkaryana was a significant factor in making the linguistic community of the time acknowledge the possibility of languages with object preceding subject (VOS, OVS and OSV) as their basic word order, something that Greenberg initially dismissed as being virtually non-existent (see: Greenberg, 1963). Hixkaryana is also one of the relatively better documented natural OVS languages (Derbyshire, 1977, 1979, 1985; Kalin, 2014).

Language universals are generalisations that are, strictly speaking, true for all languages. However, this definition greatly restricts what could be called as ‘language universals’ since many generalisations could be seen as a tendency of most languages within a group, rather than an absolute rule. Universals are often based on the relative position of S (subject), V (verb) and O (direct object). There are 6 possible word orders in languages: SVO, SOV, VOS, VSO, OSV and OVS. WALS
online\textsuperscript{1} gives the following distribution of word orders within its own records of the languages of the world:

<table>
<thead>
<tr>
<th>Word order</th>
<th>No. of languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject-object-verb (SOV)</td>
<td>565</td>
</tr>
<tr>
<td>Subject-verb-object (SVO)</td>
<td>488</td>
</tr>
<tr>
<td>Verb-subject-object (VSO)</td>
<td>95</td>
</tr>
<tr>
<td>Verb-object-subject (VOS)</td>
<td>25</td>
</tr>
<tr>
<td>Object-verb-subject (OVS)</td>
<td>11</td>
</tr>
<tr>
<td>Object-subject-verb (OSV)</td>
<td>4</td>
</tr>
<tr>
<td>Lacking a dominant word order</td>
<td>189</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1377</strong></td>
</tr>
</tbody>
</table>

(From WALS online: Order of Subject, Object and Verb)

As seen in the above table, SOV and SVO form the majority of languages in the world while OVS and OSV are the least common languages. While there has plenty of research with regards to SOV and SVO languages, there is not much for OVS languages. Hence, I will be mostly using the alternative OV-VO typology which collapses SOV, OSV and OVS languages into OV type and SVO, VOS and VSO languages into VO type.

This thesis is divided into six chapters overall. Chapter 1 is an introduction. Chapter 2 reviews the previous work done in the field of language typology. 2.1 discusses the various generalisations and principles given for languages with specific word orders. 2.2 looks at the general trends within particular syntactic features that I discuss later on. Chapter 3 is devoted to the discussion of various data sources I used for this thesis, and also the steps I took to collect and analyse data. Chapter 4 is the analysis chapter, where I use OV-VO typology to examine some interesting syntactic features within Klingon and compare them to other OV languages in order to determine how unique these features are to Klingon and also in general. Chapter 5 is the discussion chapter. Here, I look into answering my research question by using the analysis from chapter 4. I also use some typologies other than OV-VO typology to see how well Klingon fits in with those typologies. I give my conclusions in chapter 6 along with some limitations of my research as well as some suggestions for potential future research that can be done within the field.

\textsuperscript{1}WALS online, also known as World Atlas of Language Structures Online, is a collection of structural properties of languages that are gathered from various sources. It can be found using the following link: \url{http://wals.info/}
2. Literature Review

2.1. Proposed word order typologies

Greenberg’s word order generalisations

Joseph Greenberg’s 1963 article ‘Some universals of grammar with particular reference to the order of meaningful elements’ is perhaps one of the most well-known papers written on language universals. In this paper, Greenberg has proposed 45 generalisations based on morphology and syntax of a 30 language sample. Greenberg has said that the sample languages used were chosen mostly because of convenience rather than anything else, as he either had some prior knowledge of the language in question or he could find an adequate source of grammar for it.

Greenberg looked at the word order of the languages in question using three criteria: 1) the presence of prepositions vs. presence of postpositions, 2) the relative order of the subject, verb and object in a sentence with nominal subject and object and 3) the position of adjective in comparison to the position of the noun it qualifies (i.e., does the adjective precede or succeed the qualifying noun?). Based on these criteria, he divides the 30-language sample into three categories based on their word order, two categories based on presence of preposition or postposition, and two more based on the position of the adjective. The table he gives for this is as follows:

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Po-A</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Po-N</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Pr-A</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Pr-N</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1: Division of the 30 language sample (Greenberg, 1963:61)

Here, ‘Po’ stands for languages with postpositions, ‘Pr’ for languages with prepositions, A for languages that have adjectives preceding the noun, and N for languages with noun preceding the adjective.

Greenberg also says that out of the six possible word orders in languages, three are exceedingly rare or aren’t found at all. They are OVS, OSV and VOS. He thus classifies the other three, most commonly found, types of word orders, i.e. VSO, SVO and SOV into the three categories mentioned in the above table, I, II and III respectively.

He has looked into classifying the languages in more detail in the appendix section of the article. He adds classifications such as position of the demonstrative vis-à-vis the noun and the position of
numeral in relation to the noun. He also classifies languages other than those in the 30 language sample he used for his generalisations before. He has a total of 24 possible categories for these languages, based on the combination of 4 factors which included the position of genitives (G) in relation to the noun (N) along with the other categories given above. These categories are:

1) VSO languages: I/Pr/NG/NA, I/Pr/NG/AN, I/Pr/GN/AN, I/Pr/GN/NA, I/Po/NG/NA, I/Po/NG/AN, I/Po/GN/AN, I/Po/GN/NA,

2) SVO languages: II/Pr/NG/NA, II/Pr/NG/AN, II/Pr/GN/AN, II/Pr/GN/NA, II/Po/NG/NA, II/Po/NG/AN, II/Po/GN/AN, II/Po/GN/NA,

3) SOV languages: III/Pr/NG/NA, III/Pr/NG/AN, III/Pr/GN/AN, III/Pr/GN/NA, III/Po/NG/NA, III/Po/NG/AN, III/Po/GN/AN, III/Po/GN/NA and III/Po/GN/NA.

In all, Greenberg (1963) proposed forty-five generalisations, seven of them regarding word order, eighteen related to syntax, and twenty related to morphology. This paper served as an inspiration for various other research on language typology, particularly word order typology (see Lehmann (1973, 1978), Vennemann (1974), Comrie (1989), etc.). I have also used Greenberg’s universals in this thesis as a means to compare the universals proposed and some of the syntactic features of Klingon and also Hixkaryana.

Lehmann (1973) and Vennemann (1974) based their proposed typology on Greenbergian universals as well. They were also some of the early supporters of the OV-VO distinction rather than Greenberg’s six-way typology.
Lehmann’s Fundamental Principle for Placement (FPP):

While Lehmann (1973) is based on the Greenberg (1963) article, it has one fundamental difference: instead of Greenberg’s VOS, SVO and SOV distinction, it proposes a dual OV/VO distinction based on the position of the verb in relation to the object. Lehmann proposed a principle for placement of verbal elements like negatives, causatives, reflexives and reciprocals within OV and VO languages. The principle said that verbal elements attach to the side of the verb root that is opposite to the object. Thus, according to Lehmann, the order of verbal modifiers in a VO language is:

Negative Causative V O

In case of an OV language, the order is as follows:

O V Causative Negative

Thus, Lehmann (1973) concludes that the elements precede the verb in case of a VO language while they follow the verb in case of an OV language. This principle includes other verbal modifiers as well, like interrogatives, conditionals, etc. For instance, consider the following list of constructions from Japanese, an OV language:

1. a. yomu ka V Int 'Does he read?'
   b. yoma-nai V Neg 'He does not read.'
   c. yoma-nai ka V Neg Int 'Does he not read?'
   d. yomi-tai V Desiderative 'He wants to read.'
   e. yomi-taku nai V Desid Neg 'He does not want to read.'
   f. yomi-taku nai ka V Desid Neg Int 'Does he not want to read?'
   g. yoma-reru      V Potential 'He can read.'
       yom-eru
   h. yoma-re-nai ka V Pot Neg Int 'Can he not read?'
   i. yoma-se-rareru V Causative Pot/Passive 'He is caused to read.'
   j. yoma-se-reba V Caus Conditional 'If he causes to read.'
   k. yoma-nake-reba V Neg Cond 'If he does not read.'
   l. yoma-se-nak-atta V Caus Neg Past 'He did not cause to read.' (Lehmann, 1973:52)
Following are some examples from Hebrew, a VO language:

2. a. ka:tab se:per  V (Perfective) 'He wrote a book.'
   b. yikto:b se:per  V (Imperfective) 'He will write a book.'
   c. mi: ka:tab se:per  Int V 'Who wrote a book?'
   d. haka:iab se:per  Int V 'Did he write a book?'
   e. lo: ka:rab  Neg V 'He did not write.'
   f. mi: lo: ka:tab  Int Neg V 'Who did not write?'
   g. hiki:b  Caus V 'He caused to write.'
   h. hilbi:s 'et ha-ko:he:n (hakko:he:n) 'et ha-beged (habbeged) Caus V
      'He-caused-to-dress the-priest the-garment' = 'He dressed the priest in the garment.'
   i. hitlabbe:s Refl V 'He dressed himself.'
   j. lo: hitlabbe:s Neg Refl V 'He did not dress himself'.  (Lehmann, 1973:54)

One advantage of the proposed VO-OV typology is that the less common word orders like VSO, OVS and OSV could also be divided into VO and OV languages (V(S)O, OV(S) and O(S)V). The positioning of the constituents given in the theory is also in line with what Greenberg (1963) has proposed. However, one of the major limitations of the FPP theory is the lack of empirical evidence that is featured prominently in Greenberg (1963).
Vennemann’s natural serialisation principle

Vennemann (1974) is also largely based on the Greenberg (1963) paper. He agrees with both Greenberg and Lehmann in that the languages with the same or similar word order show similar properties. Vennemann’s contribution to the theory is the two-part division of syntactic categories into ‘operator’ and ‘operand’.

The list of elements that come under the operator-operand categories are as follows:

<table>
<thead>
<tr>
<th>I. Operator</th>
<th>Operand</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)Object</td>
<td>Verb</td>
</tr>
<tr>
<td>b)Adverbial</td>
<td>Verb</td>
</tr>
<tr>
<td>c)Main verb</td>
<td>Auxiliary</td>
</tr>
<tr>
<td>d)Main verb</td>
<td>Modal</td>
</tr>
<tr>
<td>e)Main verb</td>
<td>Intensional verb</td>
</tr>
</tbody>
</table>

II.

<table>
<thead>
<tr>
<th>a) Adjective</th>
<th>Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Relative clause</td>
<td>Noun</td>
</tr>
<tr>
<td>c) Number marker</td>
<td>Noun</td>
</tr>
<tr>
<td>d) Genitive</td>
<td>Noun</td>
</tr>
<tr>
<td>e) Numeral</td>
<td>Noun</td>
</tr>
<tr>
<td>f) Determiner</td>
<td>Noun</td>
</tr>
</tbody>
</table>

III.

<table>
<thead>
<tr>
<th>a) Adjective stem</th>
<th>Comparison marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Standard (of comparison)</td>
<td>Comparative adjective</td>
</tr>
<tr>
<td>c) Adverbial</td>
<td>Adjective</td>
</tr>
</tbody>
</table>

IV.

| a) Noun phrase | Relation marker (adposition; i.e., postposition or preposition) |

V.
Table 1: The operators and operands (From Vennemann, 1974: 79)

<table>
<thead>
<tr>
<th>a) Indirect object</th>
<th>Direct object</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Temporal adverbial</td>
<td>Directional adverbial</td>
</tr>
</tbody>
</table>

Vennemann gives two generalisations with regards to the relationship between the operator and operand: 1) every operator-operand relationship is serialised in one direction, and 2) all the operator-operand relationships are serialised in the same direction, depending on the position of the object and the verb.

Thus, according to Vennemann (1974), the order of the constituents in OV and VO languages is as follows:

**VO languages** ——> [[operand] operator]

**OV languages** ——> [operator [operand]]

Thus Vennemann proposes that in case of OV languages, the verb, noun, etc. (the operators) should follow the object, adjective, relative marker, etc. (operands) while in VO languages the former categories precede the latter.

Vennemann uses historical evidence in order to answer the question of why some languages are not consistent with the characteristics that he has proposed. His theory, explained in detail in Vennemann (1972), is that there is a shift of the position of verb throughout the years, and the properties of the language thereby gradually shift as well. He proposes that the gradual shift first happen in main clause before moving on to the subordinate clause. Thus, when a language becomes SVO from SOV, only the main clause first shifts to the OV pattern and vice versa. Vennemann gives the example of Old English and contemporary German, where the verb has shifted in the main clause but not yet in subordinate clause.

There have been several criticisms of Vennemann’s natural serialisation principle, one of which being the lack of sufficient empirical evidence. Another criticism is that several languages are inconsistent with his claim. For instance, when Hawkins (1983) tested Vennemann’s generalisations on a 30-language sample, he got the following results:

<table>
<thead>
<tr>
<th>Consistency rate (%)</th>
<th>Language numbers</th>
<th>Total languages above the relevant consistency rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>90-99</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>
Table: Results from applying Vennemann’s principles to a 30-language sample (Hawkins, 1983:41)

<table>
<thead>
<tr>
<th>Consistency Range</th>
<th>Count</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-89</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>70-79</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>60-69</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>50-59</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

In the above table, anything close to 50% consistency would imply that the effect is mostly random rather than a result of the language being consistent to the proposed generalisations. Thus, if we consider 80% and above as solid consistency, only a little more than half of the languages examined are consistent with the generalisations. Even when the languages with upto 70% of consistency are considered, the number of languages increase to little more than two-thirds of the total. While a good majority of the languages is seen to at least somewhat follow the generalisations, a good one-third of the languages are not very consistent with Vennemann’s proposed principle.

Despite its limitations, Vennemann (1974) gave a relatively detailed typology based on the position of the verb and the object. That is why I have tested his principle against Klingon to see how it is consistent with what is proposed for OV languages in general (see section 4.1 for more details).

Despite the relative popularity of the OV-VO distinction, there have also been theories that suggest that the subject is an important component in determining the properties of a language. In the next section I will examine one of the earlier theories, that is, the generalisations given in Keenan (1978) and then Dryer’s proposed bipartite typology of OV vs. VO and VS vs. SV typology, as given in Dryer (1997).
Keenan’s theory on subject-final languages

Keenan (1978) uses the relative position of subject rather than the object and the verb in order to propose several generalisations regarding subject-final languages. He defines subject-final languages as languages where the nominal subject has to follow the nominal direct object in an unmarked sentence. He is thus talking about VOS languages, as SOV, SVO and VSO languages all fail to follow this condition, and he doesn’t mention either OSV or OVS languages, presumably because they are extremely rare. He also doesn’t take into consideration languages with flexible word order, like Tagalog (Scahchter and Otanes, 1972), Walbiri (Hale, 1967) and Ignaciano (Ott and Ott, 1967) as changing the order of the subject and object in this case doesn’t make much difference, pragmatically speaking.

While analysing the features of subject-final languages, Keenan discusses eight subject-final languages in particular before moving on to proposing his generalisations. They are: Malagasy (Madagascar, Malayo-polynesian, p.270), Batak (Toba Dialect, Northern Sumatra, Malayo-Polynesian, p.272), Fijian (Fiji, Malayo-Polynesian, p.275), Gilbertese (Gilbert Islands, Micronesia; Malayo-Polynesian), Tzeltal (Southern Mexico, Mayan family, Penutian Phylum, p.279), Otomi (Mezquital dialect, Hidalgo, Mexico; Oto-Manguean Phylum, p.281), Ineseno Chumash (Southern California, Chumash family, Hokan Phylum, p.282), and Baure (Bolivia, Arawakan Family, Andean-Equatorial Phylum, p.284). Keenan examines the least marked sentences within these languages in order to make some generalisations for subject-final languages in the next part of the article.

Keenan proposes a total of 20 generalisations for subject-final languages. These generalisations are as follows:

G-1: “Subject-final languages are always verb-initial.” (p.285)

G-2: “Subject-final languages normally occur in linguistic phyla in which verb-initial languages are common.” (p.286)

G-3: “SVO is a grammatical (although marked) word order in all VOS languages.” (p.288)

G-4: “If a language is subject-final then either transitive verbs of unmarked sentences agree with no full noun phrase in the sentence or they agree with two noun phrases.” (p.288)

G-5: “If transitive verbs in subject-final languages present any agreement at all, then they have a prefixal agreement with the subject noun phrase and a suffixal agreement with a nonsubject.” (p.288)

G-6: “Subject-final languages have relatively little nominal case marking.” (p.289)

G-7: “Subject-final languages are generally prepositional rather than postpositional.” (p.291)
G-8: “In subject-final languages noun phrase questions can always be formed by putting the question word, e.g., Who? What? etc. in a preverbal position, provided the question word is not a bound morpheme.” (p.292)

G-9: “All subject-final languages present morphemically independent subordinate conjunctions which precede a finite subordinate clause.” (p.294)

G-10: “In possessive constructions subject-final languages always present full noun phrase possessors after the head (the possessed) noun phrase.” (p.295)

G-11: “In subject-final languages relative clauses always present head noun to the left of the restricting clause.” (p.296)

G-12: “Subject-final languages do not have relative pronouns.” (p.296)

G-13a: “All subject-final languages possess articles.” (p.297)

G-13b: “With more than a chance frequency subject-final languages have definite articles (distinct from the ordinary demonstrative adjectives).” (p.297)

G-14: “With much greater than chance frequency numerical expressions precede the noun they modify.” (p.298)

G-15: “With much greater than chance frequency articles precede nouns.” (p.298)

G-16: “Negative elements precede the verb in subject-final languages.” (p.299)

G-17: “A causative element precedes the root of the causativised verb in subject-final languages.” (p.299)

G-18: “All subject-final languages have passive forms of verbs.” (p.300)

G-19: “Passive is generally marked in the verbal morphology in subject-final languages.” (p.300)

G-20: “Subject-final languages generally do not have overt copulas.” (p.300)

Limitations: One of the problems with these generalisations however is that they are not strictly associated with subject-final languages. For instance, both generalisations 1 and 2 talk about the positions of verbs. In case of generalisation number 7, I compare it to Greenberg’s universal 3: “Languages with dominant VSO order are always prepositional” (Greenberg, 1963:62). Vennemann (1974) also suggests prepositions/postpositions as a feature of VO/OV languages. Thus, the presence of prepositions in subject-final languages that Keenan examines is due to them being verb-initial, and not because they are subject-final.
I examined the generalisations individually with the help of the universals archive and came up with the following generalisations that are not overtly associated with the VO/OV typology:

G-4: “If a language is subject-final then either transitive verbs of unmarked sentences agree with no full noun phrase in the sentence or they agree with two noun phrases.” (p.288)

G-5: “If transitive verbs in subject-final languages present any agreement at all, then they have a prefixal agreement with the subject noun phrase and a suffixal agreement with a nonsubject.” (p.288)

G-12: “Subject-final languages do not have relative pronouns.” (p.296)

G-13a: “All subject-final languages possess articles.” (p.297)

G-13b: “With more than a chance frequency subject-final languages have definite articles (distinct from the ordinary demonstrative adjectives).” (p.297)

Other than the works I have already previously mentioned, the universal archive was useful in pointing me toward other works that propose generalisations similar to ones that Keenan provides, expect that these works showed how factors other than just the subject-position could be responsible for the characteristics that Keenan associated with subject-final languages. One such work was Payne (1990) which actually used some data from the unpublished papers of Keenan himself. The theory she proposed was called ‘verb initial norm (VIN)’ and it showed that the characteristics that Keenan (1978) said was for subject-final languages could also be associated with verb-initial languages. This, however, is not very surprising as Keenan himself mentions in a postscript of the 1978 paper that he intended the languages on which the proposed generalisations to apply to be verb-initial.

Another work that had a generalisation similar to that of Keenan (1978) was Kozinsky (1981). Kozinsky (1981) is, however, written in Russian, and I was unable to find an English translation of that work. Language Typology and Language Universals: An International Handbook, Volume 1 does have some mention of this work, and it seems that it was based on Greenberg’s universals. Kozinsky uses his own 200-language sample to test Greenberg’s universals and he also develops his own generalisations regarding word order. Based on what is written in the handbook though, my conclusion is that these generalisations focus more on verb than the subject, making the proposed typology another one that is based on the position of the verb.

Another limitation of Keenan’s generalisations is that they do not take into account the OVS languages as subject-final languages. Looking at the first two generalisations, it is obvious that the first generalisation will never apply to a language with OVS as its canonical word order. As for the

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2 The universals archive, hosted by Universität Konstanz, can be found using the following link: https://typo.uni-konstanz.de/archive/intro/index.php
second generalisation, an OVS language will have an OV typology, which means that it will have more in common with features of verb-final languages rather than verb-initial languages. As Keenan himself has already noted in the post-script of the article, Hixkaryana, one of the very few natural languages with a confirmed basic OVS word order (see Derbyshire, 1977, 1985 and Kalin, 2014), has a typology similar to verb-final languages.

In 1997, Matthew Dryer published a paper that looked at the benefits of a new typology which, like Keenan (1978), also compared the relative position of subject with that of the verb. In the next section, I will be looking at the features of the typology proposed in Dryer (1997).
Dryer’s OV/VO and SV/VS typology

Dryer (1997) proposes a typology based on two distinctions rather than just OV-VO or subject-initial or subject-final distinction. He suggests a typology in which languages could be classified into 2 binary types: VO vs. OV and SV vs. VS. Thus, the four possible classifications for languages include VS and VO, VS and OV, SV and VO, and SV and OV. The traditional VSO and VOS types correspond to the verb-initial VS and VO type, SVO is the equivalent of SV and VO, the OVS is VS and OV and finally, SVO falls into the verb-final or SV and OV type.

In this paper, Dryer produces eight arguments in favour of the proposed typology. His arguments could be summarised by the following points:

1) **The proposed typology is useful for classifying those languages that are indeterminably VOS/VSO and also those languages that are not classifiable by the traditional typology.**

Here, Dryer gives the example of the Fijian language (Dixon, 1988:242) where both VOS and VSO word orders are common. This language cannot be classified by the traditional typology unless it is described by using a new VSO/VOS combined type. However, the proposed typology can very easily classify Fijian into a VS and VO language.

Hanis Coos, an extinct language of the Oregon coast, is another language with even more flexible word order than Fijian. Dryer gives the following table to illustrate the advantage of the proposed typology over the traditional one:

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO 6 (38%)</td>
<td>SV 30 (23%)</td>
</tr>
<tr>
<td>VOS 4 (25%)</td>
<td>VS 98 (77%)</td>
</tr>
<tr>
<td>VSO 3 (19%)</td>
<td></td>
</tr>
<tr>
<td>OVS 3 (19%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Word order in Hanis Coos  (Dryer, 1996:81)

It is clear from the above table that Hanis Coos could be easily classified as VS and VO language as these word orders are in distinct majority. On the other hand, looking at the traditional classifications, it is difficult to call Hanis Coos as an SVO language as this type of word order occurs only 38% of the time, which while more than others, is still not a large percentage that is needed to classify Hanis Coos as a SVO language.
2) The proposed typology collapses both VOS and VSO languages into one type: VS and VO. There are very few significant differences between VOS and VSO languages, but there are various similar properties between the two word orders. Thus, it makes sense to have a single VS and VO type rather than two different VOS and VSO types.

In the following table, Dryer compares the presence and absence of various features within VOS languages as compared to VSO languages:

<table>
<thead>
<tr>
<th></th>
<th>VSO</th>
<th>VOS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With property</td>
<td>With opposite property</td>
</tr>
<tr>
<td>Prep</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>NGen</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>NRel</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>ArtN</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>NumN</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>V-PP</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Neg V</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Aux V</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Initial Q</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Initial wh</td>
<td>19</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3: Word order characteristics typical of VSO and VOS languages (Dryer, 1996:77)

Here, the features are prepositions (PREP), noun before genitive (NGen), head noun before relative clause (NRel), article before noun (ArtN), numeral before noun (NumN), verb before PP (V-PP), negative before verb (Neg V), auxiliary verb before main verb (Aux V), question particle in sentence-initial position in yes/no questions (Initial Q), and wh-words words in sentence initial position (Initial wh).

It is quite obvious from the above table that a majority of VSO languages listed actually have similar properties as compared to the listed VOS languages. This combined with the languages that have both VOS and VSO word orders make the idea of combining the two word orders in one category quite feasible.

3) The proposed typology does not depend solely on the order of the nominal subject and nominal object. One of the limitations of the traditional typology is that it only takes into account the clauses with nominal subject and nominal object while classifying it into one of the six types when these types of sentences are shown to be one of the more uncommon types of sentences in actual usage. Dryer gives the examples such as Payne (1990: 222) reporting just 3% transitive clauses in the
Yaguan text, Weber (1989: 15-16) reporting 8% of the clauses in his Huallaga Quechua texts, Du Bois (1987:818) reporting only 1% in a Sacapultec corpus and several other instances to demonstrate the paucity of transitive sentences in general in corpuses. On the other hand, the chances of finding sentences with either subject or object in these texts is much higher (35% of sentences in Yagua, 55% in Huallaga Quechua and 54% in Sacapultec contained at least one subject or object). Because of this, it is also easier to determine whether the language is an OV or VO language, or SV as opposed to VS language without having to look through a large amount of text. Thus, Dryer’s typology has the advantage of being quicker and relatively easier to use.

5) The proposed typology also looks at intransitive clauses along with the transitive ones, something that is completely overlooked by the traditional typology. The traditional typology uses the order of the subject, verb and object from transitive constructions in a language in order to classify it into one of the six types. However, there are certain languages where the order of subject and verb or object and verb is different in case of a large number of intransitive constructions.

For instance, Dryer gives the statistics for an extinct language from California called Salinan.

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO</td>
<td>17</td>
<td>81%</td>
</tr>
<tr>
<td>VSO</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>VOS</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>SOV</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>S,V</td>
<td>24</td>
<td>69%</td>
</tr>
<tr>
<td>VS</td>
<td>11</td>
<td>31%</td>
</tr>
<tr>
<td>VS,</td>
<td>147</td>
<td>89%</td>
</tr>
</tbody>
</table>

Table 4: Word order in Salinan (From Dryer, 1997:88)

Examining the above data using the traditional typology, the SVO word order is overwhelmingly dominant overall. However, looking at the SV vs. VS data for both transitive and intransitive subjects, although the number of SV sentences remain more than the number of VS sentences for transitive subjects, the lead is not that overwhelming as it is in case of SVO sentences. Also, in case of intransitive subjects, VS sentences are more than 8 times as many as SV sentences. Such a big gap between transitive and intransitive sentences in Salinan shows that the traditional typology is insufficient to cover a wider range of constructions within a language, as compared to Dryer’s proposed theory.

6) The proposed typology can isolate the verb and object order, which is an important factor for word order generalisations.

There have been several criticisms of Lehmann and Vennemann’s OV and VO distinction, one of which being that it groups the SVO word order along with VSO even though it is supposedly an intermediate between the verb-initial (VOS, VSO) and verb-final (SOV, OSV) languages. However, Dryer disagrees with this assertion, providing evidence from Dryer (1991) to substantiate his claim.
that SVO languages have very similar properties to the verb-initial languages. For instance, that paper shows that the majority of both SVO and verb-initial languages have prepositions and rarely have prenominal relative clauses, unlike verb-final languages. Thus, Dryer proposes that rather than considering SVO languages as an intermediary between verb-final and verb-initial languages, the relative positioning of verb and object should be taken into consideration while classifying languages.

One of the advantages of Dryer’s proposed typology is that like Vennemann and Lehmann, it does examine the characteristics of languages based on the position of object and verb. As the other part of the typology is the position of subject and verb, it is possible to compare the two classifications to see which is more relevant. Dryer concludes by saying that while there are certain characteristics of language that find both the OV-VO and VS-SV distinction relevant (for instance, the relative positioning of noun and genitive), there are characteristics where only the order of verb and object is relevant. As Dryer considers the VO-OV distinction to be the more important of the two parameters, his proposed typology clearly marks the distinction between them.
2.2. Specific features discussed in Analysis

2.2.1. Causative constructions

According to Song (2001), the typology of causative constructions is based on the relationship between the predicate of cause and effect. Song gives three types of languages based on this kind of relationship: 1) isolating or analytic, 2) agglutinating, and 3) fusional or inflectional.

Isolating languages, the morphemes are usually independent, so much so that they are equivalent to a word, and vice versa. In agglutinating languages, a word can have multiple morphemes and thus can allow a morpheme-to-morpheme analysis. In an inflectional language, one morpheme can have several different functions within the language.

There are also three types of causative constructions: 1) lexical, 2) morphological, and 3) syntactic.

A lexical causative involves suppletion as the basic verb and its causative equivalent doesn’t have much in common. Thus the fusion of cause and effect in this type of construction is maximum and there is no way to separately analyse the individual morphemes. For instance, in Russian ‘to die’ is umeret, whereas ‘to kill’ is ubit. Another example is the Japanese sin- ‘to die’ and koros- ‘to kill’ and the English die vs. kill (Song, 2001:260)

In the morphological causative type, the cause predicate is actually an affix or a derivational morpheme and the effect predicate is the verb to which the affix is attached. The causative morpheme can also be separated into two individual morphemes. Thus, the causative morpheme in this case can also be called as the agglutinating type. Causative morphemes can be found in the form suffixes, prefixes, infixes and circumfixes.

In the syntactic causative, the cause and effect predicates are separate verbs. The fusion of cause and effect predicates in a syntactic causative construction is minimal, unlike the lexical causative.

From the types of causative constructions mentioned above, Klingon clearly falls under the languages that have morphological causatives, as the main verb within the causative construction has to have the causative suffix {-moH} attached to it.

1. HI- Qoy -moH

   Imp.you-me-hear-CAUS

   ‘Let me hear (something)’ (Okrand, 1992:38)

   It is also used as a replacement for certain verbs that are not otherwise available in Klingon vocabulary.
2. pIn-Daj-vaD tlhIngan Hol ghoj-moH
   
   boss-her-IO  Klingon language  learn-CAUS

‘She teaches her boss Klingon’ (lit. ‘She causes her boss to learn Klingon’) (Andrew Miller, p.c.)

Song (2001) mentions that while there doesn’t seem to be much information about the overall distribution of causative affixes within the languages globally. However, he mentions several studies such as Hawkins & Gilligan (1988) and Bybee et al (1990) which discuss the possibility of causative suffixes being the most common type of causative affix.

I further compare the Klingon causatives and indirect object marker to the causatives in Japanese and Hixkaryana in section 4.3.
2.2.2. Topic and Focus:

The papers that I primarily refer to in my analysis in the section 4.3.1 are Gundel (1988) and Li & Thompson (1976). I also discuss Klingon’s topic and focus marking in detail in section 4.3.2 using Hedberg (2006)’s definitions of topic and focus.

Both Gundel (1988) and Li & Thompson (1976) discuss the features that distinguish languages with a strong topic-comment structure from languages that don’t possess a strong topic-comment structure. While Gundel’s paper mentions Li & Thompson (1976) multiple times and some of the generalisations in Gundel (1988) are also based on those given in Li & Thompson (1976), Gundel (1988) gives following generalisations for languages with topic-comment structure:

a. In all languages, an expression which refers to the topic of a sentence is typically definite or generic. (Gundel, 1988:)

b. If a language has topic markers, then these will always be postpositional and basic word order in the language will almost always be SOV.

c. If a language has topic markers then it will be highly topic-prominent, (according to the criteria established in Li and Thompson, 1976)

d. Every language has syntactic topic constructions in which an expression which refers to the topic of the sentence is adjoined to the left of a full sentence comment.

e. Every language has syntactic topic constructions in which an expression which refers to the topic is adjoined to the right of a full sentence comment.

f. Every language has cleft constructions, either wh-clefts or it-clefts or both.

g. Every language has 'double-subject' constructions.

h. All languages have constructions whose function it is to place topic, both old and new, before comment; all languages have constructions whose primary function is to place new or contrastive topics at the beginning of the sentence; and all languages have constructions whose function is to place focus at the beginning of the sentence and old, already established topics at the end. However, no language has constructions whose function is to place new topics at the end of the sentence.

i. The more topic-prominent a language, the less restricted the distribution of zero anaphora in that language.
j. The more topic-prominent a language, the fewer subject-creating constructions it will have.³

(Gundel, 1988: 231)

Li and Thompson (1976) have given the following characteristics for a topic-prominent language:

a. Surface coding (Li and Thompson, 1976:466). The topic in a topic-prominent language will have a surface coding (fronting of the topic, use of topic markers, etc.) but that’s not necessarily true for the subject.

b. The passive construction (Li and Thompson, 1976: 467). In case of topic-prominent languages, passivization either doesn’t occur at all, or appears as a marginal construction, or it may carry a special meaning.

c. “Dummy” subjects (Li and Thompson, 1976:467) Topic-prominent languages generally do not have constructions with dummy subjects such as the English it or German es.

d. “Double subject” (Li and Thompson, 1976:468). “Double subject” constructions are an important feature in topic prominent languages.

e. Controlling co-reference (Li and Thompson, 1976:469). The topic, not the subject, usually controls co-referential constituent deletion in a topic-prominent language.


g. Constraints on topic constituent (Li and Thompson, 1976:470). There are no constraints on what might be the topic in a topic-prominent language.

h. Basicness of topic-comment structure (Li and Thompson, 1976:471). To a great extent, the topic-comment structure is considered to be a part of basic sentence types in a topic-prominent language.

Types of Topic and focus constructions:

Hedberg (2006) proposes two types of topic and focus, based on their characteristics.

Hedberg gives two types of topic and focus: relational and contrastive. In her classification, the topic tends to given or familiar information, while the focus is new and unfamiliar information that has not

³ The generalisations in Gundel (1988) also have additional 2 points that aren’t mentioned here as they are irrelevant to my research.
been mentioned in previous discourse. Hedberg also discusses the topic markers in Japanese and Korean and how they can also be used to mark certain types of focus as well as topics.

Particles meant specifically for marking focus are not very rare overall. According to Haspelmath (2001), there are many languages that have particles that are specifically meant for marking focus. Consider the following example from Boni, a Sam language family member.

3a. an biyóo ajik-a
   I   water drink
   ‘I drink water’    (Haspelmath, 2001:1096)

3b. an biyóo-é ajik-a
   I water   drink
   ‘I drink WATER’    (Haspelmath, 2001:1096)

3c. an biyóo á-ajik-a
   I water    drink
   ‘I DRINK water’    (Haspelmath, 2001:1096)

Here, the verbal constituent can become the focus by attaching the prefix á- while the other constituents can be focussed by attaching the suffix -é.

I discuss the topic-focus constructions in detail in section 4.3.
3 Data collection:

3.1. Data Sources

I used various sources for Klingon data collection, chief among which were The Klingon Dictionary, Klingon for the Galactic Traveler and a Facebook group called Learn Klingon. Other sources also include The Klingon Hamlet and HolQeD.

3.1.1 The Klingon Dictionary and Klingon for Galactic Traveler

Okrand first published The Klingon Dictionary (generally abbreviated as TKD) in 1985. A second edition with several modifications and addendums came out in 1992. Klingon for the Galactic Traveler (KGT) came out several years after that, in September 1997. These two books contain most of the general information available on the Klingon syntax, barring some issues of HolQeD.

Advantages of this source: Both TKD and KGT are very useful as tools for learning the rules of the language. The vocabulary list in the last section of the books proved to be very useful while translating the sentences. The explanations given in the books were meant for a non-linguist audience and hence were relatively easy to understand in a short time.

Limitations: The flipside of the contents of the books being targeted at a non-linguist audience is that the explanations were often too brief for my needs, and using simpler terms to discuss a relatively complex phenomena meant that sometimes the books were not completely accurate, linguistically speaking. This meant that I had to spend a while looking at the examples that were supposed to demonstrate certain ideas and try and relate them to the more complex linguistic theories.

3.1.2. Learn Klingon

I first came to know about Learn Klingon from Joey Windsor, a doctoral student in the University of Calgary, Canada and an avid Klingon enthusiast. He suggested joining Learn Klingon when we were discussing how Klingon being a relatively new language doesn’t have a whole lot of resources when it comes to actual academic research. Learn Klingon is a Facebook group consisting of people of varying Klingon language proficiency, from beginners who barely know a few words, to people who have designed the online Klingon learning courses for KLI (Klingon Language Institute).

Advantages of this source: Learn Klingon has been invaluable for my research. Thanks to this group, I was able to find and talk people who know a lot more Klingon than I do. I could elicit various examples in order to illustrate the points I make in my thesis by asking them to translate certain
English sentences into Klingon. I was able to make sure that the translations I used were in fact grammatically correct and natural. I was also able to clarify various points when the books I had were vague or ambiguous. Due to a large number of people in the group, diversity in Klingon proficiency and also very diverse range of first languages spoken by the people, I got a chance to see several different views on the topics I introduced within the group. Discussing Klingon with actual Klingon speakers has given me a new perspective on the language, something that wouldn’t have been possible with just written material as a guideline.

Limitations: For most part, Learn Klingon has had very few limitations. One of the major ones was the time difference. The people in the group live in various parts of the world, so I would have to wait for atleast a few days after posting a question/example before I could be sure that I have gotten as much data as possible. If I made any error in my first elicitation, it was even more time consuming since then I would then have to correct myself and other participants would see and reply hours after.

Another, smaller limitation was that as most of the people in the group didn’t have a background in linguistics, I would sometimes need to make sure that my questions were easily understood.

3.1.3 The Klingon Hamlet

The Klingon Hamlet is a translation into Klingon of one of Shakespeare’s most popular plays Hamlet. It was a result of the collective effort of a team of people associated with the Klingon Language Institute. The idea of translating Hamlet into Klingon was apparently inspired by Chancellor Gorkon’s line in Star Trek VI: The Undiscovered Country: “You have not experienced Shakespeare, until you have read him in the original Klingon” (Nicholas and Strader, 1996: Foreword).

Advantages of the source: The Klingon Hamlet gave me the largest corpus of sentences in Klingon that I could find. I could find examples that illustrate a specific point if I couldn’t for whatever reason find enough data in TKD, KGT or Learn Klingon.

Limitations: The play is written in verse form, and it is obvious that the writer of the Klingon version has also attempted to do so with the Klingon portion. The Klingon translation introduces Klingon equivalents and Klingon version of ideas that are initially expressed in English. This meant that the sentences in English that I thought would be good for illustrating my point were not always useful when I looked at their Klingon translations. For instance, while looking at the role of topic marker in Klingon, I came across the following lines:

4. pav-mo’ Qu’ -wlj, ghe’’or, QI’tu’ je vl- SaH -Ha’.

us-due to duty-my netherworld, paradise and I-it-concerned-undo
Due to us, I am unconcerned about my duty, hell and paradise.

5. bliQ’a’-Daq ’oH-taH ‘etlh-’e’.
   ocean-loc. it-cont. sword-top.
   ‘The sword is in the ocean.’ (Hamlet, Act 4, Scene 5:137)

Despite getting a good example of topic-marker usage, I couldn’t use the example in my thesis as it is difficult to determine the context in which the marked word appears, or if the whole idiom could be considered as a piece of new/familiar information.

Another, rather unexpected limitation was the nature of the play itself. For instance, when Ophelia is driven mad from grief over her father’s death, she says some rather incoherent lines, the context of which is hard to pinpoint.

6. HoD puqbe’ thu’-moH qalmoH-bogh lagh-’e’.
   captain daughter be tempted-cause corrupt-which ensign-top.
   ‘It is the corrupt ensign that tempted the captain’s daughter.’ (Hamlet, Act 4, Scene 5:141)

While the above example looks like a cleft sentence in English, it is disjointed from the previous and succeeding lines, making it difficult again to conclude whether “lagh’e’” is a topic or a focus in the sentence.

3.1.4. HolQeD

HolQeD is the quarterly journal published by KLI since it was founded in 1992. The first issue was published in March 1992. Though the issues were initially published in print format, HolQeD became an online magazine since 2005. It is meant to serve as an academic journal, and hence is registered with the US Library of Congress. HolQeD is also catalogued by the Modern Language Association.

Advantages of this source: HolQeD contains certain new words that weren’t published in either TKD or KGT. I was also able to find transcriptions of Klingon dialogues from the movie Star Trek V (1989), which were a tremendous help to me.

Limitations: It is difficult to get a hold of a particular issue of HolQeD online, particularly the pre-2005 ones, unless you are a paid member of the KLI. While there are some very interesting interviews with Dr. Okrand about usage of certain affixes or words in various contexts, for most part it is much
more convenient to ask the members of Learn Klingon who have read these magazines several times rather than try and get data from reading nearly 25 years’ worth of quarterly magazines.
3.2. Methodology:

The process of data collection for my thesis could be summed up in three stages:

1) Initial research: TKD has been very useful for understanding some basic features of Klingon. Initially, I read through TKD to pick out the features that seemed interesting. After deciding on one feature, I then looked through the generalisations or articles that discussed those features in other OV languages and the predictions that were made regarding those features in certain languages. The process of finding interesting features and generalisations related to the features went hand in hand. I also tried using the Klingon Hamlet initially as a data source, but I soon realised that it won’t be a very feasible task in the long term (I elaborate on the limitations of the Klingon Hamlet in 3.1.3.)

2) Eliciting data from Learn Klingon: I was introduced to Joe Windsor, a PhD student from Canada and a fellow Klingon enthusiast, and he in turn pointed me towards the Learn Klingon group. The majority of the Klingon data I use within my thesis is thanks to the members of the Learn Klingon group. My data collection process included examining the generalisations given by various linguists on word order typology, especially that of OV languages, and forming English sentences that I would then ask the community to translate into Klingon. This way, along with Klingon examples to illustrate my point, I would also get to see the opinions of people of varying levels of expertise and also what the community in general thinks about the use of a certain feature in Klingon. This also gave me an in-depth knowledge of how a certain feature works, and why it may be seen differently by different people. Due to several people contributing their own translations, I was able to get a more rounded view on each feature than I could have ordinarily have had using just the written material like TKD or KGT.

3) Analysing data from other sources: Later on, along with the data elicited from the Learn Klingon community, I also got transcripts of Klingon dialogues used in Star Trek movies and Klingon lines written by Okrand from other sources. This gave some more authenticity to my claims wherever possible as these lines were from ‘canon’ sources and thus almost guaranteed to be correct.
4. Analysis:

4.1 Vennemann’s natural serialisation principle.

In this section, I will be applying the principles given by Vennemann (1974) to examples in Klingon in order to examine how well it adheres to the universals meant for OV languages.

Vennemann modified Greenberg’s three-part VOS-SVO-SOV distinction into a dual OV/VO distinction and proposed a ‘natural serialisation principle’ in order to better explain Greenberg’s rather descriptive universals. He took the ‘meaningful elements’ from Greenberg (1963) such as nouns, adjectives, genitives, verbs and direct objects, and divided them into the categories of Operator-Operand. His theory argued that in languages with a certain word order, there will be a specific order in arrangement of the operators and operands in relation to each other.

According to Vennemann, the operator follows the operand in OV languages while the opposite is true for VO languages. Thus, the generalisation that applies for Klingon specifically is as follows:

OV languages → [operator [operand]]

I will analyse most of the operator-operand functions within the context of Klingon to see how much Klingon adheres to generalisations meant for most OV languages.

1) Object and verb.

In Klingon, the object is always before the verb, even when it is not necessarily in the sentence-initial position. For instance,

7. puq  legh yaS
   child  see  officer

‘The officer sees the child’ (Okrand, 1992:59)

8. bong yaS vI-HoH-pu’
   accidentally officer  I-kill-PERF

‘I accidentally killed the officer’ (Okrand, 1992:56)

Thus, we can see that the object-verb pairing is consistent with Vennemann’s predictions.

2) Adverbial and verb.
Okrand (1992) mentions that an adverbial always comes before the typical object-verb-subject construction in Klingon. Consider the example 8 I have previously mentioned:

8. bong yaS vI-HoH-pu’
   accidentally officer I-kill-PERF

‘I accidentally killed the officer’ (Okrand, 1992:56)

Thus, the order of adverbial and verb is consistent with Vennemann’s predictions.

3) Main verb and auxiliary/modal verb.

Klingon has only one verb in each clause. Most functions of auxiliary or modal verbs are performed by one of the nine types of verb suffixes present in Klingon.

9. nu- Qaw’ -laH
   he-us destroy can

‘He can destroy us’. (Okrand, 1992:39)

10. Da- legh -pu
    you-it see PERF.

‘You have seen it’. (Okrand, 1992:41)

As the verb stem always comes before its suffixes, the order is as predicted by Vennemann.

4) Main verb and intensional verb.

According to the entry on Intensional transitive verbs in the Encyclopedia of Philosophy, the verbs of wanting, seeking or expectation tend to show intensionality effect. The examples given below demonstrate the use of verbs that mean ‘to want’, ‘to desire’ and ‘to expect’ in Klingon:

11. rojmab lu -qI’ lu -neH tlhIngan-pu’
    peace treaty they-it-sign they-it-wish Klingon-PLU.

‘The Klingons want to sign the peace treaty’ (Andrew Miller, p.c.)

12. juH-Daq Huch Sam’ ’e’ pIH be’

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4 While I did try and construct the above examples, Andrew Miller had to do some extensive corrections there, and hence I have cited him as the source.
home-LOC. money find expect woman

‘The woman expects to find money in the house’.\(^5\) (Andrew Miller, p.c.)

13. jegh jagh-pu' neH yaS

surrender enemy-PLU want officer

‘The officer wants the enemies to surrender’. (Andrew Miller, p.c.)

Some difference in the word order is seen in case of 13 as compared to both examples 11 and 12. This is because the agent for the embedded clause is ‘enemies’ and not the subject of the main clause in example 13, while the main clauses in 11 and 12 have the subject also acting as the agent for the embedded clause. As seen from the above examples, the verbs like ‘wish’ or ‘expect’ are usually found very close to the main clause subject. Hence, the order of intensional verb and main verb adheres to Vennemann’s principle.

5) Adjective and noun.

Stative verbs most commonly work as adjectives in Klingon. They come after the noun they modify.

14. Duj Hosghaj -'e' nom wI- Qaw'  

ship powerful-TOP quickly we-it-destroy

‘As for the powerful ship, we will quickly destroy it’\(^6\)

Thus, the relative order of adjective and noun is inconsistent with Vennemann’s generalisations.

6) Relative clause and noun.

Consider the following three examples from Okrand (1992):

15a. (qlp-pu’-bogh yaS) vI-legh

hit-PERF-REL officer I-him-see

‘I see the officer who hit him’

15b. (yaS qlp-pu’-bogh) vI-legh

officer hit-PERF-REL I-him-see

\(^5\) I chose \{juH\} when I meant ‘house’ as this was the nearest equivalent I could find. I was later told that a house is actually \{juH qach\} lit. ‘a home building’. However, I decided to keep the word as it doesn’t make much difference in this context.

\(^6\) Brad Wilson (p.c.) was very helpful in checking over the sentence and correcting my mistake.
‘I see the officer whom he hit’

15c. mu-legh (qIp-pu’-bogh yaS)

he-me-see hit-PERF.-REL officer

‘The officer who hit him saw me’ (Okrand, 1992: 64)

Looking at the examples above, it is clear that Klingon has internally-headed relative clauses, as the head noun is within the relative clause. In this case, it is difficult to determine the position of relative clause vis a vis the head noun as the latter is usually positioned in situ within the relative clause. Thus, the proposed generalisation doesn’t seem to cover examples of internally-headed relative clauses. A different person, however, describes having internally headed relative clauses as a feature of “many OV languages” (Payne, 1997:328).

7) Number marker and noun.

There are three number marking suffixes in Klingon. {–pu’} is used to mark beings capable of using language, {–Du’} is for marking plural body parts and {–mey} is a general plural marking suffix. {–mey} can also be used with beings capable of language in order to mean something like them being scattered about. Certain nouns are inherently plural, and while their singular form can take the suffix {–mey}, the implication here would again be the sense of being scattered around.

16. qama’ -pu’ vi- jon -ta’ vi -neH

prisoner-PLU I-them-capture-accomplished I-them-want

‘I wanted to capture prisoners’ (Okrand, 1992:74)

17. qam -Du’ -wIj -Daq

foot -PLU-my -LOC

‘At my feet’ (Okrand, 1992:30)

18. jagh -pu’ yuQ -mey -Daq

enemy-PLU planet -PLU -LOC

‘At/to the enemies’ planets’ (Okrand, 1992:31)
Thus, the order of number marker and noun is inconsistent with Vennemann’s generalisation.

8) **Genitive and noun.**

Though there is no genitive marking on noun, the possessor usually precedes the possessed noun.

20. *jagh-pu*’ *yuQ-mey-Daq*

enemy-PLU. planet-PLU-LOC

‘At the enemies’ planets’ (Okrand, 1992:31)

However, there are possessive suffixes that can convey the possession of the noun it is attached to.

21. *puq-wI’ qam-Du’*

child-my foot-PLU.

‘My child’s feet’ (Okrand, 1992:31)

Thus the order is consistent with Vennemann’s prediction.

9) **Numeral and noun.**

Numerals generally precede the nouns they modify.

22. *wa’ DuS*

one torpedo tube

‘one torpedo tube’ (Okrand, 1992:54)

The exception to this is when the numerals are used for numbering the objects or as ordinal numbers.

23. *DuS wa’*

 torpedo tube one

‘torpedo tube number 1’ (Okrand, 1992:54)

24. *meb cha’-Dich*

guest two-ORD
‘second guest’ (Okrand, 1992:54)

10) Determiner and noun.

As there are no articles in Klingon, the determiners are suffixes like {-vam} ‘this/those’ or {-vetlh} ‘that’. They are attached to the noun they qualify.

25. qetlh qoH-vam qan
    tedious fool-those be old

‘Those tedious old fools!’ (Nicholas & Strader, 2000:60)

Thus the order of determiners and noun is not consistent with the proposed principle.

11a) Standard of comparison and comparative adjective.

Consider the following sentence:

26. la’ jaq law’ yaS jaq puS
    commander be bold be many officer be bold be few

‘The commander is bolder than the officer.’ (Okrand, 1992: 71)

Klingon has what Stassen (1985) calls the ‘conjoined comparatives’ (see section 4.6 for more details on comparatives and superlatives in Klingon). This means that it does not have an overt standard of comparison. It also does not possess a standard of comparison or comparative adjective.

11b) Adjective stem and comparison marker.

Let’s look at example 26 again:

26. la’ jaq law’ yaS jaq puS
    commander be bold be many officer be bold be few

‘The commander is bolder than the officer.’ (Okrand, 1992: 71)

Looking at the example given above, the gloss beneath the example might make it look like the meaning of the above sentence is ‘bold commanders are many, bold officers are few’. However, Okrand specifies in Okrand (1992) that in this case, the words {law’} and {puS} serve to mark the adjective itself, and not the noun it is modifying. Thus, example 26 literally means ‘the commander is much bold, the officer is less bold’. Thus, the adjective stem in this example is {jaq} and the
comparison markers are \{law\'} and \{puS\}. The comparison markers thus follow the adjective stem, which is in line with Vennemann’s predictions.

12) Adverbial and Adjective.

The verbal suffix \{-qu\'} usually only emphasises the verb. However, when \{-qu\'} comes after a verb acting as an adjective, it can be translated as ‘very’.

27. Duj-mey tl\-n-qu’

ship-PLU big-EMP

‘very big ships’

Hence, the order of adverbial and adjective in this case doesn’t adhere to the generalisation proposed.

13) Noun phrase and relation marker.

The major relation marker in Klingon is the locative nominal suffix \{-Daq\}.

28. pa‘-\-Daq jIH-taH

room-LOC I-CONT

‘I am in my room’ (Okrand, 1992:27)

Thus, the relative order of NP and relation marker is consistent with the generalisation.

14) Indirect object and direct object.

As observed in the example below, the indirect object precedes the direct object in Klingon:

29. chaH-vaD Soj qem yaS

they-IO food bring officer

‘The officer brings them food’ (Okrand, 1992:180)

15) Temporal adverbial and Directional adverbial.

There is some ambiguity in Klingon when it comes to ordering the adverbials. For instance, there is no specific rule about the ordering of multiple “true” adverbs in one sentence. David Trimboli (p.c.)
suggests that several people, including him, tend to simply follow the order found in English. Here is an example from paqbatlh⁷, pointed out to me by Trimboli:

30. chaq batlh bl-vang-qa’-laH

perhaps with honour you-act-resume-can

‘You might have a chance to make amends’ (lit., ‘perhaps you can act honourably again’)

There is however a rule regarding time expressions. Also called ‘time-stamps’ or ‘time elements’, these words (most often nouns or phrases) are placed always before other adverbials. This makes the time adverbials almost always sentence-initial if they are present in a sentence. For instance,

31. DaHjaj nom Sop-pu’

today quickly eat-PERF

‘Today they ate quickly’.

Thus, the temporal adverbial in this case would always be before any other adverbial. However, there is no proper directional adverbial found in Klingon, as the locative marker {-Daq} and the suffix {-vo’) (used to denote the direction away from the attached noun) is generally used to denote the direction in (or away from) which the action is happening. As these suffixes are generally attached to the subject or the object nouns, they tend to come after the temporal adverbials. Consider the following example:

32. wa’leS nom juH-Daq qet ghaH

tomorrow quickly home-LOC run he

‘He will quickly run towards the house tomorrow’

In the above example, {wa’leS} is the temporal adverbial while {juHDaq} is the directional adverbial.

Thus, the generalisation in this case holds true for Klingon.

Excluding those that don’t apply at all to Klingon, there are only four generalisations (generalisations 5, 7, 10 and 12) out of a total of fourteen where it is evident that Klingon deviates from the norm proposed by Vennemann for OV languages. This makes Klingon little less than 72% consistent with

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⁷ paqbatlh is a book in Klingon detailing the epic saga of Kahless, the mythical founder and first ruler of the Klingon empire. It was published in 2011. The Klingon translation here is by Okrand himself, and the editors are Floris Schönfeld and Kees Ligtelijn.
Vennemann’s generalisations. Seeing as some inconsistency on the part of certain languages is one of the criticisms that Hawkins (1983) makes against Vennemann’s generalisations, the fact that Klingon still remains somewhat consistent definitely shows that Klingon could be considered as an OV language by Vennemann’s standards.
4.2. Hixkaryana and Klingon- A comparison with universals and other OV languages

In this section, I will be comparing some characteristics of Hixkaryana’s syntax and Klingon syntax with some typological universals in order to examine what characteristics do each of the two typologically similar languages, one natural and one constructed, have in common with each other and also with OV languages in general. The points of comparison and the data for Hixkaryana are taken from Derbyshire (1985) while the data for Klingon is from various sources.

1) Adpositions and genitives

There are 2 Greenberg universals that are very relevant to this discussion:

Universal 4: With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional. (Greenberg, 1963:62)

Universal 2: In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes. (Greenberg, 1963:62)

Adpositions.

Both Klingon and Hixkaryana are very much postpositional. This is a common characteristic of OV languages. In Hixkaryana, Derbyshire refers to postpositions as ‘relators’.

33. omin yawohra wahko (yawo-hira)

your-house not-in I-was

‘I was not in your house’ (Derbyshire, 1985:16)

In Klingon, there isn’t a specific adpositional category. The location of a person or an object is conveyed using context and the locative suffix ‘-Daq’. For example,

34. pa'-wlj-Daq jIH-taH

room-my-LOC I-CONT

‘I am in my quarters’ (Okrand, 1992:68)

Depending on the function of the adposition to be conveyed in the construction, the meaning could be conveyed using verb and verbal suffixes instead of the adposition in the sentence. For instance,
35. ghay-chuq-meH rItlh lu-lo’

spray-one another-for paint they-it-use

‘They spray one another with paint’ (John Harness, p.c.)

36. jup -wI’ vl- tlhej -taH-vIS, Daq vl- jaH-pu’

friend-my I-him-accompany-CONT-while, place I-it-go-PERF

‘I went to a place with my friend.’ (John Harness, p.c.)

There is no Klingon equivalent for ‘with’. The literal translation for example 35 would something akin to ‘They use paint for spraying one another’. The verb {lu’} meaning ‘use’ is often used while using ‘with’ with an inanimate object. As for example 36, here ‘with’ is used in context of going somewhere with a person. In sentences like this, often the verb {tlhej} ‘accompany’ is used. The sentence here literally means something like ‘While I was accompanying my friend, I went to a place’.

In case of adpositions, a major difference between Hixkaryana and Klingon lies in the fact that despite Derbyshire’s reluctance to term them as ‘adpositions’, Hixkaryana does have specific words for its postpositions, unlike Klingon.

Genitives

In Hixkaryana, the order in which genitives are presented is possessor-possessed (head noun). This is similar to Klingon, the one difference being that the head noun has morphological marking while in case of Klingon there is no morpheme that signifies possession (Okrand, 1992).

37. toto yowa-ni

man chest-his

‘man’s chest’ (Derbyshire, 1985:110)

38. jagh nuH

enemy weapon
‘enemy’s weapon’ (Okrand, 1992: 25)

2) Suffixation:

Greenberg universal no. 27 states that “If a language is exclusively suffixing, it is postpositional; if it is exclusively prefixing, it is prepositional.” (Greenberg, 1963: 73)

Hixkaryana is almost exclusively suffixing, with a few exceptions like detransitivizing prefix that also functions as reciprocal and reflexive. Inflectional morphemes, excepting notably the person-marking prefixes, are also suffixes.

39. wato  hak amna nexe,  omini  (n- e- xe)

   shelter IMP I+III  make-it your-house   (III-make-IMP)

‘Let us (EXCL) build a shelter, (to be) your house.   (Derbyshire, 1985: 65)

As seen above, the verb ‘nexe’ over here is made of a person-marking prefix, the verb and an imperative suffix.

We find a somewhat similar case in Klingon, where the person marking affixes to the verb are prefixes that also mark the subject and the object. However, the reciprocal as well as reflexive are both suffixes in Klingon (1992: 35). There are separate set of prefixes for imperative sentences as the object is always ‘you’, singular or plural.

40. vI-  tlhap-nIS  -pu’

I-him/her- take –need -PERF

‘I needed to take him/her’   (p.45)

41. yI-  ghoS-taH

IMP.you- proceed –CONT

‘maintain this course!’   (p.42)

However, Klingon doesn’t seem to have any prefixes other than those than mark the person, the subject and the object on a verb. Thus, like Hixkaryana, Klingon is also almost exclusively suffixing.

3) Numerals:
According to Derbyshire (1985), there is one common characteristic between Hixkaryana and Japanese that is not very common in OV languages in general. It is that in Hixkaryana, numerals as used as prenominal modifiers, nouns or adverbs.

Following are the examples of the numeral ‘asako’ (two) acting as a prenominal modifier, noun and adverb respectively:

42. asako Wayway komo wenko
   two Waiwai COLL I-saw-them
   ‘I saw two Waiwai’ (Derbyshire, 1985:111)

43. Wayway komo wenko, asakon(o) komo
   Waiwai COLL I-saw-them, two-NOMLZN COLL
   ‘I saw Waiwai, two of them’ (Derbyshire, 1985:112)

44. Wayway komo wenko, asako
    Waiwai COLL I-saw-them, two
    ‘I saw Waiwai, two’ (Derbyshire, 1985:112)

In Klingon, numerals have most of the characteristics of nouns. They can stand independently as subjects or objects, or they can be used as modifiers for other nouns (Okrand, 1992). However, there is no evidence of numerals being used as adverbs.

45. mu- legh cha’
   they-me- see two
   ‘two (of them) see me’ (Okrand, 1992:54)

46. wa’ yl- HoH
    one IMP. you-him/her kill
‘Kill one (of them)’  (Okrand,1992:54)

47. loS puq-pu’

four child-pl.

‘four children’  (Okrand,1992:54)

4) Nominal modifiers:

Hixkaryana diverges from what is generally predicted for verb-final languages in case of nominal modifiers. Derbyshire (1985) says that a number of Greenberg universals are related to the question, but none of them can predict the position of the modifier in relation to the noun. Greenberg’s statistics show that SOV and postpositional languages are in fact about equally divided between those that have modifiers after the noun and those that have modifiers before the noun. Even so, Lehmann has developed a principle stating that any modifier is “placed between the modified constituent and sentence boundary”, which leads to the conclusion that, “In VO languages, nominal modifiers … follow nouns; in OV languages they precede nouns” (Lehmann, 1973:48).

According to Derbyshire (1985), discussing nominal modifiers in Hixkaryana is somewhat complicated due to the lack of NPs in which simple adjectives occur as modifiers. Numerals are an exception, they do occur before a noun, but they occur more frequently as adverbial adjuncts. Noun can be modified by another nominal that is derived from a verb stem or an adverb. These modifiers mostly follow the noun they modify in a paratactic construction. Derbyshire defines paratactic construction as “a sequence of phrases, clauses or sentences in juxtaposition.” (Derbyshire, 1985:129)

48. iwahathiyamo, aknyohnyenhiyamo tho, oske nketxkoni

his-killers ones-who-had-burned-him DEVLD thus they-said-it

‘His killers, the ones who burned him, said thus.’  (Derbyshire, 1985:130)

This is one of the few left-dislocated paratactic constructions. These types of constructions occur when “heavy” constituents are fronted for emphasis and dislocated as well.

The position of nominal modifiers is thus the opposite of genitives, both of them being relative to the head noun, and is inconsistent with Greenberg’s universal number 5: “If a language has dominant SOV order and the genitive follows the governing noun, then the adjective likewise follows the noun’ (Greenberg, 1963:62).
Klingon is similar in that there isn’t a separate class of adjectives and the nominal modifiers are derived primarily from verbs. These verbs modify the head noun by immediately following the noun.

49. Soj meQ -ta’ -bogh yI -Sop

food be burnt-accomplished-which IMP.you eat

‘Eat burnt food’ \(^8\) (Greene, 2013)

Numbers are also used as nominal modifiers. Unlike Hixkaryana, but like most other OV languages, they usually come before the noun they are modifying. However, strangely enough, the ordinal numbers follow rather than precede the noun.

50. meb cha’-Dich

guest two-ORD

‘second guest’ (Okrand, 1992:54)

Thus, despite being different from Hixkaryana in terms of the position of the nominal modifier with respect to the noun, Klingon is actually more similar to other OV languages.

5) Subordinate verb forms and auxiliary verbs

Derbyshire discusses two Greenberg universals regarding verb-final languages that can be seen in Hixkaryana. They are:

Universal 13. If a nominal object always precedes the verb then verb forms subordinate to the main verb also precede it. (Greenberg, 1963:66)

Universal 16. In languages with dominant order SOV, an inflected auxiliary always follows the main verb. (Greenberg, 1963:67)

In Hixkaryana, an “auxiliary” could only be found in the copula (if its complement is taken as desentential). In case of copular sentences, the copula is inflected and follows the “main verb” though syntactically speaking, Derbyshire classifies it as a subordinate derived form of noun or adverb rather than a verb. However, Derbyshire says that the structure is a *semantic* main verb. For instance, consider the negative example no. 19b as compared to its affirmative equivalent 19a:

51a. namrekyako Mahxawa oroke

\(^8\) This is considered to be an insult in Klingon. It is inadvisable to say this to a Klingon or a human fluent in Klingon.
he-went-hunting Mahxawa yesterday

‘Mahxawa went hunting yesterday’

51b. amryekhira nehxako Mahxawa oroke

not-hunting he-was Mahxawa yesterday

‘Mahxawa did not go hunting yesterday’ (Derbyshire, 1985:113)

In example 51b, even though the only syntactic verb is ‘nehxako’, not considering ‘amryekhira’ as the main verb on some level would make it very hard to relate the sentence to its affirmative equivalent.

Another construction in Hixkaryana that follows the universal 13 is the construction where the main verb is an inflected form of –e(rye) (meaning ‘make/do/fix’) and it is preceded by a subordinate form with the general nominaliser ‘-no’. For instance,

52. ahxmtono yeryeye Waraka

feeding-of-people he-did-it Waraka

‘Waraka provided a feast for the people’. (Derbyshire, 1985:114)

According to Derbyshire, whether the subordinate verb-derived forms precede or follow the main verb depends on their syntactic function as subject, direct object or adjunct. Those that usually follow the verb in case of an unmarked order i.e. the subject and adjunct, can be moved to sentence-initial position by considering the Emphasis Fronting rule or by being a “heavy” construction.

Klingon has nine different types of verbal suffixes that can perform a range of functions such as expressing modality, tense, aspect and also voice, to the extent they are already present in the language. Due to this, there isn’t much evidence of auxiliary verb forms to be found in Klingon. In case of copular sentences, as there is no Klingon equivalent of ‘to be’, the pronoun seems to take the verbal suffixes instead. For example,

53. pa’-wIj-Daq jIH-taH

room-my-LOC I-CONT

‘I am in my quarters’ (Okrand,1992:68)
However, as there isn’t a verb that can convey ‘to be’, the pronoun in the above case will be considered a main verb rather than an auxiliary. Thus, Hixkaryana and Klingon doesn’t have much in common where auxiliary verbal forms are concerned.

6) Question-word preposing

Greenberg’s absolute claim for verb-final languages is the universal number 12.

Universal 12: If a language has a dominant order VSO in declarative sentences, it always puts interrogative words or phrases first in interrogative word questions; if it has dominant order SOV in declarative sentences, there is never such an invariant rule. (Greenberg, 1963: )

Hixkaryana always has question words in the sentence-initial position. If the question word is inside a PP, the postposition is also moved to the sentence-initial position so that the entire phrase is sentence-initial.

54. onoki wya itoko omin yaka mikano

who to go your-house to you-said-it

‘To whom did you say, “Go home”?’ (Derbyshire, 1985:60)

Klingon, on the other hand, has the question words in place of where the answer is supposed to be in the sentence, making it consistent with Greenberg’s universal.

55. Duj ghoS-taH nuq

ship approach-CONT what

‘What is coming toward the ship? (Okrand, 1992:69)

7) Passivization

Lehmann (1978) states that passivisation is quite frequent in VO languages, but not so much OV languages. This seems to be the case for both Hixkaryana and Klingon as neither of them has proper passive forms.

Hixkaryana doesn’t have true passives. Instead, it shows what Derbyshire calls ‘pseudopassives’(Derbyshire, 1985:90). It is to be noted that these pseudopassives occur only in the constructions where the subject of the transitive verb isn’t overtly expressed.
The process of pseudopassivisation can be done by using three forms of derivations to the transitive stem:

a) Addition of the detransitivising prefix e-, os-, ot-, as-, at-

56. Waraka ramano yaskomo

Waraka he-turned-him-round shaman

‘The shaman turned Waraka around’ (Derbyshire, 1985:91)

b) Creation of the ‘action adverbial’ by adding ti-…so to the stem (an adverbial form is derived). For instance, in case of the verb ‘ono’ (to eat):

57. tonoso naha kyokyo

can-be-eaten it-is parrot

‘Parrot can be eaten’. (Derbyshire, 1985:91)

c) By nominalising the derived adverbial form by adding suffix –mi (tonosomi ‘thing to be eaten’), the resulting nominal form has pseudopassive properties. The negative form of the nominal, created by adding the negation suffix ‘–hini’ is also pseudopassive. For instance, tonohni ‘thing that is not eaten’. However, negation of the adverbial form (done using -hira) rather than nominal does not count as pseudopassive, as seen through following examples:

58. tonohni mokro okoye

not-to-be-eaten that-one snake

‘Snake is not eaten’ (Derbyshire, 1985:91)

59. okoye yonohra tehxatxhe

snake not-eating we (INCL)-are

‘We do not eat snake’ (Derbyshire, 1985:91)
Klingon also doesn’t have true passives. The closest it comes to a passive construction is with one of the verb suffixes, -lu’. When used in conjunction with verb, this suffix does give a passive translation. For instance,

60. Da- qaw -lu’
     you-them remember

‘You are remembered’ (Okrand, 1992:39)

However, this suffix is used to mark indirect subjects, thus the above example could also be translated as ‘Someone remembers you’. Despite the implied rather than overt subject similar to Hixkaryana’s pseudopassives, the indirect subject constructions in Klingon can’t really be seen as passive constructions.

8) Interrogative particle

In Greenberg (1963), the universal 9 talks about the position of question affixes/particles in prepositional languages as opposed to their position in postpositional languages. The universal 10 also claims that in OV languages the question particle/affix that is positioned with reference to a specific word almost always succeeds it while in VO languages, it is not present at all.

In Hixkaryana, there is only one specifically interrogative particle, ‘kati’ which is used to give alternatives. For instance,

61. isok kati weryano owoti. iyen kati. urhuryan kati. ikanyhoryan kati.
     how ALT I-fix-it your-meat I-boil-it ALT I-smoke-it ALT I-slow-roast-it ALT

‘How shall I fix your meat? Shall I boil it? Or shall I smoke it? Or shall I slow-roast it?’ (Derbyshire, 1985:59)

Despite being an OV language, Hixkaryana does not refer to the sentence as a whole while positioning the interrogative particle, making it different from other OV languages such as Japanese, Korean, etc. However, the particle ‘kati’ does follow the phrase it is attached to, so Hixkaryana does not completely go against the universals mentioned above.

According to Okrand (1992), there is also only one interrogative affix in Klingon. The interrogative suffix {-’a’} is present in only yes/no questions, and is always present on the verb. For example,

62. tlhIngan jech Da- tuQ -’a’?
Klingon costume you-it-wear-INTR

‘Will you wear a Klingon costume?’ (Jeremy Cowan, p.c.)

By its very definition, a suffix always follows the sentence constituent it is attached to. Thus, unlike Hixkaryana, Klingon follows both the abovementioned universals.

9) Sentence negation

Following are two sentences in Hixkaryana, 32b being the negative form of 31a:

63a. apaytara yariye wekoko
    chicken he-took-it hawk
    (y- ari- ye)
    (IIISIIIO-take-DIST. PAST COMPL)

‘The hawk took the chicken’. (Derbyshire, 1985:138)

63b. apaytara yarhira nexeye wekoko
    chicken not-taking it-was hawk
    (y- ari- hira n- exe-ye)
    (III-take-NEG IIS-be-DIST. PAST COMPL)

‘The hawk didn’t take the chicken’ (Derbyshire, 1985:138)

In 63b, the verb -ari- ‘take’ becomes a derived adverb with a nominal 3rd person prefix y- and the derivational negative suffix ‘–hira’. The finite elements go to the inflected copula ‘nexeye’, and the derived adverb and its object ‘apaytara’ become its complement. Derbyshire remarks that this is the only way of forming negative sentences.

Thus, even though Hixkaryana contains negative suffixes rather than particles, the negative suffix has to attach itself to non-finite verb, creating the need for copula that takes on the finite elements and functions as a dummy auxiliary. Hixkaryana’s pattern of sentence negation is unlike most other OV languages.

In Klingon, the verb can take two types of suffixes depending on the type of the sentence and the context. {–be’} is a general negation suffix that can be used in most assertive sentences. {–Qo’} on the
other hand is used in imperative sentences and to denote refusal in case of assertive sentences (see the section 4.5 for more on how negation works in Klingon and how it fits with the universals proposed).

64. taH pagh taH-be’

to continue or to continue-NEG

‘To be or not to be’ (Nicholas & Strader, 2000:81)

65. jI- ghoS -taH -Qo’

I proceed CONT. NEG

‘I’ll go no further’ (Nicholas & Strader, 2000:35)
4.3. Topic-focus structure

4.3.1. Topic-comment structure and topic-prominence in Klingon

Klingon has a topic suffix (‘-e’) which is used fairly often in sentences (Okrand, 1992). My aim here is to analyse in detail the topic-comment structure in Klingon in order to see how many of its features support the generalisations made for other languages. In order to do so, I will be using the universals proposed in two papers: Gundel (1988) and Li & Thompson (1976). I have divided this section into 2 parts; after examining Gundel’s generalisations in part 1, I will also look at the characteristics of a topic-prominent language as proposed by Li and Thompson (1976) in relation to Klingon in part 2.

Part 1: Universals for languages with topic-comment structure

Gundel (1988) gives following generalisations for languages with topic-comment structure:

1.1 In all languages, an expression which refers to the topic of a sentence is typically definite or generic. (Gundel, 1988:231)

There is no definite article in Klingon, but when a topic suffix is used, the noun is almost always definite. For example,

66. Hov vI -legh jIH-‘e’

star I-it -see I-top.

‘It is I who sees the star’. (David Trimboli, p.c.)

Thus, Klingon seems to obey this generalisation.

1.2 If a language has topic markers, then these will always be postpositional and basic word order in the language will almost always be SOV. (Gundel, 1988: 231)

While Gundel refers to SOV word order in languages with topic markers, it seems she is focused more on OV aspect of the languages, similar to Li and Thompson (1976)’s characteristics of topic prominent languages (see 2.6). As Klingon is also an OV language, it fits with this generalisation.
1.3 If a language has topic markers then it will be highly topic-prominent, (according to the criteria established in Li and Thompson, 1976) (Gundel, 1988: 231)

I examine the characteristics of a topic-prominent languages laid down by Li and Thompson in relation to Klingon in part 2.

1.4 Every language has syntactic topic constructions in which an expression which refers to the topic of the sentence is adjoined to the left of a full sentence comment. (Gundel, 1988: 231)

Fronting of the noun with the topic marker is entirely possible in Klingon, as we can see from the following example:

67. qIrq-'e’ loD-vetlh HoH-I'.

Kirk-TOP man-that kill-CONT.

‘As for Kirk, he is killing that man.’ (Felix Malmenbeck, p.c.)

1.5 Every language has syntactic topic constructions in which an expression which refers to the topic is adjoined to the right of a full sentence comment. (Gundel, 1988: 231)

While fronting of a topic is entirely natural in Klingon, it is to be noted that fronting is not a necessary process for Topicalisation in general. Both subjects and objects can contain topic markers without having to change their positions in the sentence. In case of the subject serving as a topic, the position of topic is to the right of the comment.

68. loD-vetlh HoH-I' qIrq-'e'.

man that kill CONT. Kirk TOP.

‘As for Kirk, he is killing that man.’ (Felix Malmenbeck, p.c.)

While examples 67 and 68 mean the same, there doesn’t seem to be a proper consensus on which construction is more natural and appropriate.

1.6 Every language has cleft constructions, either wh-clefts or it-clefts or both. (Gundel, 1988: 231)

Cleft sentences in Klingon are made using the topic marker. For instance,
69. 'epIl   naH Sop A'-'e'  
    apple fruit eat A-top.  

'It is A who eats an Apple’  (David Trimboli, p.c.)

1.7 Every language has 'double-subject' constructions. (Gundel, 1988: 231)
While not exceedingly common, double subject constructions are nevertheless not unnatural in Klingon. For instance,

70. Hoch ghotI'-mey-'e'-'ey               salmon
    all   fish   -plu -top be delicious  salmon

"Among all fish, salmon is delicious."  (David Trimboli, p.c.)

1.8 All languages have constructions whose function it is to place topic, both old and new, before comment; all languages have constructions whose primary function is to place new or contrastive topics at the beginning of the sentence; and all languages have constructions whose function is to place focus at the beginning of the sentence and old, already established topics at the end. However, no language has constructions whose function is to place new topics at the end of the sentence. (Gundel, 1988: 231)

Currently, there is no preference or aversion to fronting in Klingon. Despite the availability of devices through which topic can be placed initially in the sentence, it is equally possible to just leave it in the place it originally occupied. Contrast in Klingon also works in a similar way; for instance, the sentence ‘the tree (as opposed to something else) has big leaves’ can be

71. por-mey  tIn       ghaj Sor-'e'
    leaf-PLU possess big tree-TOP. (Chris Lipscombe, p.c.)

or,

72. Sor'e',   pormey   tIn  ghaj
    tree-TOP., leaf-PLU. big possess  (Andrew Miller, p.c.)

(See 1.4 for topic fronting and 1.5 for topic at the end of the sentence)
1.9 The more topic-prominent a language, the less restricted the distribution of zero anaphora in that language. (Gundel, 1988: 231)

In Klingon, pronouns are often found in the form of prefixes on the verb. While there is a list of pronouns as separate words, pronouns are often considered largely redundant, except when they are needed for emphasis, some ‘to be’ constructions or for the sake of resolving ambiguity (Okrand, 1992: 51, 67). It is hard to find anaphora in general without the presence of separate pronouns in most of the sentences, so there is insufficient evidence to suggest whether or not zero anaphora is restricted in Klingon.

1.10 The more topic-prominent a language, the fewer subject-creating constructions it will have. (Gundel, 1988: 231)

I have not been able to find any evidence of subject-creating constructions within Klingon. This leads me to consider the possibility of there being slim to no chances of such constructions existing in the language in the first place. While I can’t definitively rule out any chance of finding subject-creating constructions in Klingon, the fact that they are so difficult to find implies that there are not many such devices in Klingon if indeed there are any.

Part 2: Klingon as a topic-prominent language

Li and Thompson (1976) have given the following characteristics of a topic-prominent language:

2.1 Surface coding: The topic in a topic-prominent language will have a surface coding (fronting of the topic, use of topic markers, etc.) but that’s not necessarily true for the subject.

Klingon uses the suffix –‘e’ after a noun to indicate that the said noun is the topic of the sentence, a very overt surface coding of the topic. There is also a mechanism for fronting of the topic.

2.2 The passive construction: In case of topic-prominent languages, passivization either doesn’t occur at all, or appears as a marginal construction, or it may carry a special meaning.

There are no true passives in Klingon at all. The closest Klingon comes to a passive construction is with the indefinite subject suffix ‘-lu’, the use of which translates into an English passive sentence
(Okrand, 1992), but even the sentence in Klingon that uses this suffix cannot be considered as a passive form by any stretch of imagination.

2.3 “Dummy subjects”: Topic-prominent languages generally do not have constructions with dummy subjects such as the English it or German es.

Klingon also doesn’t seem to have any dummy subjects. The ‘it-cleft’ construction which generally uses the dummy subject ‘it’ in English is translated into Klingon by using topic marker (refer to example 4).

2.4 “Double subject”: “Double subject” constructions are an important feature in topic prominent languages.

These constructions are definitely present in Klingon. See 1.7 for more details.

2.5 Controlling co-reference: The topic, not the subject, usually controls co-referential constituent deletion in a topic-prominent language.

As Klingon relies heavily on pronominal prefixes on verbs and rarely needs any separate pronouns (see 1.9), it is hard to find evidence with regards to this claim. Here are a few instances of usage of topic in Klingon:

73. 'otlhQeD'e' QulwI' po' ghaH-mo' wI- QaH  
quantum physics researcher be expert she-due to we-her help  
‘Where quantum physics is concerned, she is a talented researcher, so we should help her’ (Chris Lipscombe, p.c.)

74. por-mey tIn ghaj -mo' Sor-'e' vI- par  
leaf-plu. big possess due to tree-top. I-it dislike  
‘As for the tree, it has big leaves so I don’t like it.’ (Chris Lipscombe, p.c.)
2.6 Verb-final language: Topic-prominent languages tend to be verb-final.

Since I believe that the authors are referencing the OV nature of topic-prominent languages rather than making a claim that only SOV or OSV languages can be topic-prominent, Klingon as an OVS language can still satisfy this characteristic.

2.7 Constraints on topic constituent: There are no constraints on what might be the topic in a topic-prominent language.

In Klingon, both the subject and the object can become the topic. The topic could also be an entirely different noun from either the subject or the object. In other words, virtually any noun can be the topic in a Klingon sentence. For instance,

75. moQ-‘e’ lu-parHa’ puq -pu’.  
   sphere-TOP. they-it-like child-PLU.

‘As for the ball, the children like it’ (David Trimboli, p.c.)

76. DaHjaj Hegh-pu’ loDpu’-‘e’  
   today to die-PERF. man-PLU.-TOP.

‘Men have died today’ or ‘As for men, they have died today’ (David Trimboli, p.c.)

77. ‘otlhQeD-‘e’ QulwI’ po’ ghaH.  
   quantum physics-TOP researcher be expert she/he

‘Where quantum physics is concerned, she/he is a talented researcher’ (Felix Malmenbeck, p.c.)

In 75, the topic is derived the object of the sentence, in 76 it is from the subject and 77, it is neither subject nor object of the sentence.

2.8 Basicness of topic-comment structure: To a great extent, the topic-comment structure is considered to be a part of basic sentence types in a topic-prominent language.

Topic-comment structure is considered to be a very natural part of Klingon; such structures have also been used for dialogues in the Star Trek movies. For instance,
As seen above, Klingon has several characteristics that are common for topic-prominent languages. It has a separate, prominent and postpositional topic marker that is used frequently, clefts are possible, and there are virtually no dummy subjects. Double subject constructions while unlikely are nevertheless not impossible. Several speakers of Klingon have their own opinions on the appropriateness of fronting of the topic but everyone agrees that it is not an unnatural construction.

After examining the examples collected from various Klingon speakers of varying proficiency in Klingon, I would like to conclude that Klingon is indeed a topic-prominent language that obeys many of the universals proposed by Gundel and Li and Thompson. In case of topic-marking, Klingon is not very different from other topic-prominent languages.
4.3.2. Topic/Focus marking

In this section, I will first discuss the types of topic and foci observed in Japanese and Korean, two highly topic-prominent OV languages. I will also be looking at topic and focus in Hixkaryana, an OVS language. After this, I will demonstrate the similarities and between topic and focus in Japanese, Korean, and Klingon by applying the topic-focus classifications seen in Japanese and Klingon to the Klingon dialogues from two Star Trek movies. I will also compare Hixkaryana and Klingon to see if there are any similarities between their topics and foci.

1) Topic and Focus in Japanese and Korean:

Hedberg (2006) has discussed the topic markers in Japanese and Korean. In her paper, Hedberg says that the Japanese topic marker *wa* can have two functions- thematic and contrastive. Thematic *wa* marks a topic in relational sense. Thus, following the familiarity property of topic marking in Gundel (1985), it cannot be used to mark an unfamiliar NP. For example,

79.

*Ame wa hutte imasu.*

rain falling is

‘*Speaking of rain, it is falling’ [i.e. ‘It is raining’, without previous discussion of the rain]*

However, *wa* can have another, contrastive function that can be used to show contrast even among unfamiliar NPs. For example,

80.

*Ame wa hutte imasu ga, taisita koto wa arimasen.*

rain falling is but serious matter not.exist

‘It is raining, but it is not much.’

The above example can be taken as marking relational contrastive foci rather than contrastive topic. Hedberg mentions that *wa* can be used to mark contrastive relational topics as well.
In case of Korean, Hedberg reports that Lee (1999) concludes that the topic marker –nun, when used in contrastive sense, also marks contrastive focus. She is unsure as to whether the contrastive wa/-nun despite marking contrastive foci in some cases can also mark relational foci as well as relational topic. Even so, the conclusion I can draw from her paper is that the topic-markers -wa and -nun in Japanese and Korean respectively can be used as either topic or contrastive focus markers.

Both Kuno (1972) and Laleko & Polinsky (2016) have mentioned another way of classifying topic, which is anaphoric and generic topic. A generic topic is usually seen in generic constructions or factual sentences. For example,

81. **Kuzira-wa** honyuu-doobutu desu. (Japanese)

    whale    mammal      is

    'A whale is a mammal.' (Kuno, 1972:270)

82a. **Watasi-wa** sengetsu hazimete tyuugoku-o otozure-mas-ita. (Japanese)

    1sg-TOP last month first time China-ACC visit-POLITE-PST.DECL

    ‘I visited China for the first time last month.’

    Ima tyuugoku-wa itiban sukina kuni-desu.

    now China-TOP first favorite country-be.PRS.DECL

    ‘Now, China is my favorite country.’

b. **Na-nun** cinan tal-cheumulo cwungkwuk-ul pangmwunhay-ss-ta. (Korean)

    1sg-TOP last month first time China-ACC visit-PST-DECL

    ‘I visited China for the first time last month.’

    Cikum cwungkwuk-un kacang cohaha-nun nala-ita.

    now China-TOP first like-ADN country-be.DECL (Laleko & Polinsky, 2016:407)

The bolded constituents are examples of generic topics. These topics are new and do not have a coreferential relationship with the previous sentence. While generic topics generally tend to be in
generic statements, that doesn’t always have to be the case. Schütze (2001) gives following examples of generic topic construction:

83. Enehak-i chwuycik-i elyepta.

linguistics-NOM employment-NOM difficult

‘As for linguistics, getting a job is difficult.’ (Lee, 1990: 207)

84. Kkoch-i cangmi-ka mwul-i mani philyohata.

flower-NOM rose-NOM water-NOM much need

‘As for flowers, roses need a lot of water.’ (Schütze, 2001:218)

Here, the topic does not seem to share an anaphoric relation with preceding lines nor does it appear in a factual statement like example 3. Thus, it is evident from examples 5 and 6 that generic topic construction is possible in case of multiple nominative NPs in a sentence that don’t have a part-whole or inalienable possession relationship.

2) Topic and Focus in Hixkaryana:

In Hixkaryana, the focus, both relational and contrastive, is fronted to the initial position in the sentence. For instance,

85.

[kurum me] xah ti (/)-to-txowni ha

king.vulture as MISF HSY III-go-IMMPST.COLL INTENS

‘It was in the form of vultures that they went (it is said).’ (Kalin, 2014:1093)

The particle ha is what Derbyshire defines as ‘intensifier’ though it is not clear as to what exactly the function of the particle is. Derbyshire lists it as a discourse particle that accompanies a focused constituent but it is possible to find ha even without any of the constituents in the sentence being focussed.

86a. n-omok-ye ha-ti, owto hona
III-come-DISTPST.COMPL INTENS-HSY village to

‘He came to the village (it is said).’ (Kalin, 2014:1093)

In this case, two separate particles are combined into one. However, when the locative PP in above sentence is focused, the particles are separated and go to two different positions:

86b.

[owto hona] ti n-omok-ye ha

village to HSY III-come-DISTPST.COMPL INTENS

‘It is to the village that he came (it is said).’ (Kalin, 2014:1093)

Thus, the particle ha seems to always be in strictly post-verbal position, unlike most other particles that immediately follow a fronted constituent.

Derbyshire (1985) establishes that Hixkaryana is not a topic-prominent language, and that most of the sentence constructions involve subject, object and adjunct without a separate syntactic topic-comment category. However, he mentions that some sentences in Hixkaryana do have what he calls the ‘frame-of-reference’ topic.

87.

txokororowe, txokororowe kekon hati,
stomach-gurgling stomach-gurgling it-did-it HSY

kamarayana hosoti, uhutwanir hati

jaguar-person stomach-of knowing-it HSY

‘(As an indicator of their) knowing (the fact that someone was around), the jaguar people’s stomachs were gurgling.’ (The ‘knowing of it’ is the topic established in the preceding discourse, and the rest of the sentence tells how the knowledge is expressed.) (Derbyshire, 1985:155)

The above example also shows that double-subject construction is possible in Hixkaryana. A double-subject construction generally contains 2 or more subjects, some or all of which are also topics in the sentence. In this case, the ‘knowing’ and ‘jaguar person’s stomach’ are the two subjects while ‘the knowing’ is also the topic. It is interesting to see such a construction in Hixkaryana as double-subject constructions are generally a characteristic of topic-prominent languages while Hixkaryana has already been explicitly stated as not a topic-prominent language.
3) Topic and Focus in Klingon

There has been some debate about Topicalisation and topic marker {-e'} in Klingon. Despite calling it a topic marker, most examples that employ the suffix use it a way to emphasise the noun it is attached to. Okrand himself points out the emphatic property of the suffix by comparing it to “stressing the noun” or saying it emphatically in English (Okrand, 1992:29).

There isn’t a consensus in the community regarding the fronting of topic constituents. What the community calls ‘fronting’ of the topic is actually from addendum added in the second edition of TKD where Okrand says that while adverbials generally precede the object-verb-subject word order, they could follow a topicalised object verb. For instance,

88.

HaqwI’ e’ DaH yI- Sam

surgeon-TOP. now IMP. you-find

‘Find the surgeon now!’ (Okrand, 1992:180)

This addendum has led to several speakers fronting all topics. Fronting of a topic is generally considered acceptable in the community currently, though some people prefer not to do so unless it is absolutely required.

3.1) -'e' as a Topic or Focus marker:

When given a sentence and asked how it will be translated within a context where the subject is familiar, unfamiliar and used in a contrastive way, Jeremy Cowan (p.c.) said that while it is fine to use a topic marker to introduce a relational topic and also to refer back to the previously mentioned topic, he would generally use it the most to identify a contrast between the marked topic and something else. He also referred to an interview with Okrand published in HolQeD issue 4:2 where Okrand himself admits that despite his calling {-e'} a topic marker, it actually functions more like a focus marker. He is referring to the fact that it tends to mark prominent new information more than given information.
Here are some instances where -'e' is used. The sentences below are dialogues from the movie Star Trek V (1989)⁹.

The topic marker in the example below is attached to the pronoun ‘we’ in the sentence. The conversation is about the people in a spaceship entering something called as the Great Barrier and how the action is very dangerous. In this context, the word ‘we’ is familiar information. Thus, it is observed that -'e' can mark relational topics.

89.

He  pagh-pagh-vagh-jav-pagh-jav yI-nab

course zero-zero-five-six-zero-six  IMP. you-plan

Plan course zero-zero-five-six-zero-six.

'ach, HoD, He¹⁰-vethl  wI-  ghoS-chugh veH tIn wI-'el  maH-'e'.

but captain course-that we-it-go  -if  Great Barrier we-it-enter we-TOP.

But captain, if we go that course, we will enter the Great Barrier.

ma-Hegh-bej-qu'

we die-certainly-emphatic

We will certainly die.

Klaa: Plot course 0.0.5.6.0.6.

Vixis: But, Captain, that course will take (us) into the Barrier as well. It's certain death.

(Star Trek V, Scene 174)

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⁹ The examples for this part are taken from the transcripts found in HolQeD issue no. 8:4. The entire transcript can be found here: [http://klingonska.org/canon/1999-12-holqed-08-4-b.txt](http://klingonska.org/canon/1999-12-holqed-08-4-b.txt)

¹⁰ The original word used here was <Hev> (receive), but it doesn't fit in the sentence. Also, the accompanying suffix -veth is used exclusively for a noun, which leads me to believe that this is a typo and the intended word was <He> (course). I have made changes to the line accordingly.
The discussion in the example below is centred around the people who were taken hostages. They are mentioned initially, and then the race of each hostage is revealed.

90.

tlh’a’ HoD, nIm-buS wej yI -ghoS. vub-pu’ jon -ta’ HeSwI’.

Klaa captain Nimbus three IMP.you-go. hostage-plu. capture-accomplish criminal
‘Captain Klaa, proceed to Nimbus III. A criminal has succeeded in taking hostages.

wa’ vub ghaH tlhI-ngaH gharwI’-’e’.  

one hostage him/her Klingon diplomat-TOP.

One hostage is a Klingon diplomat.

wa’ ghaH tera’ngan-’e’. mIm-Qo’.  

one he/she Terran-TOP. delay-neg.

One is a Terran. Do not delay.

DaH He-raj yI- choH.  

now course-your(plu.) IMP.you-change.

Alter your course now.

batlh tlhI-ngaH Segh yI -Hub. Qap-la’.  

honor Klingon race IMP.you-defend. success.

Defend the Klingon race with honor. Success (May you be successful).’

Translation:

Klingon Commander: Captain Klaa, proceed to Nimbus III. A criminal has succeeded in taking hostages. One hostage is a **Klingon diplomat**. One is a **Terran**. One is a Romulan.11 Do not delay. Alter your course now. Defend the Klingon race with honor. Success. (Star Trek V, Scene 48)

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11 It seems that even though the discussion was about three types of hostages, Klingon, Terran and Romulan, the Klingon dialogue for some reason doesn’t mention the Romulan hostage in this line.
The hostages in this conversation are familiar information to the participants of the discussion. However, the topic marker is attached to ‘Klingon diplomat’ and ‘Terran’, both of which is new information introduced in the conversation. ‘Klingon’ and ‘Terran’ are also used in a contrastive way as they refer to different types of hostages in this instance. Thus, the {–'e'} in this case is attached to contrastive foci in the lines.

In the lines below, Klaa is talking about his wish to defeat Kirk, and Vixis informs him that doing so will make him the greatest warrior in the galaxy.

91.

jemS tIy qIrq. loD-Hom  jIH-DI' qIrq qun  vI- qIm   -choH.


‘James T. Kirk. I have paid attention to Kirk’s history since I was a boy (lit. a small man).

ghot-vam  Ho' -lu'.  'ej muS-lu'.

person-this admire-indef.sub and hate-indef.sub

This person is someone to admire. And hate.

qIrq vI-jey-laH-chugh...

Kirk I-him-defeat-able-if

If I am able to defeat Kirk...

qlb-Daq  Suvw|'-e'  SoH Dun  law’  Hoch Dun puS

galaxy-loc. warrior-TOP. you great be many all  great be less

‘You would be the greatest warrior in the galaxy.’

Translation:

Klaa: James T. Kirk. I've followed his history since I was a boy. A man to admire... and hate. If I could defeat Kirk...

Vixis: You would be the greatest **warrior** in the galaxy. (Star Trek V, scene 64)
The last line of the dialogue literally means ‘As for warriors, you would be the greatest in the galaxy’. The sentence structure here is very similar to the examples 5 and 6 from Schütze (2001) mentioned earlier. Hence, the word ‘warrior’ can be seen as a generic topic in the above example.

Ed Bailey (p.c.) also mentioned the following sentence:

92.
De’ qeng-pu’ jagh Duj w1- jon-ta’-bogh.

The enemy ship which we captured carried information.

Potlh-be’ Duj ‘ach De’-e’ vi-tlhap-nIS-pu’

The ship was not an important thing, but I needed to take the information.

Translation:

The enemy ship we captured carried information. The ship was unimportant, but as for the information, I needed to take it.

In this example, the word ‘information’ acts as a topic, as the presence of ‘information’ in the enemy ship was already established in the first line, making it familiar information and the need to obtain this ‘information’ makes it prominent as well. The contrast between ‘information’ and ‘ship’ can be easily observed, making ‘information’ a contrastive topic in this instance.

In the example below, the Klingon ship is under attack. The attackers seem to be from the Starfleet, the then-enemy of the Klingon Empire. Gorkon, the Klingon chancellor, calls for his chief of staff whose name is Chang. He hasn’t been mentioned immediately before this.
93. **cheng’e’**  DaH Sam\(^{12}\)!

Chang-TOP, now locate

Gorkon: Find Chang now. (Star Trek VI)

In this instance, the order is to ‘find Chang’ where ‘Chang’ is a new rather than given information. It is also a prominent part of the sentence. No contrast can be seen here as Gorkon’s intention is talk to his aide, and he doesn’t contrast this person with anyone else. Thus, ‘e’ in this case marks **relational focus**.

It is clear from the above examples that ‘e’, like the –wa or –nun in other topic-prominent OV languages (Japanese and Korean respectively), could mark either topic or focus. Also, while focus tends to be fronted in Hixkaryana the topic doesn’t, unlike Klingon where both topic and focus can be fronted. There aren’t all that many similarities between Hixkaryana and Klingon when it comes to topic-focus structures.

\(^{12}\) This is an example of an abbreviated form of Klingon Okrand calls ‘Clipped Klingon’. In the “proper” Klingon, the verb would be <yI Sam>. However, commands in clipped Klingon can strip the imperative prefix off the verb, leaving the bare form of the verb in its place. Hence, <yI Sam> becomes <Sam> in clipped Klingon.
4.4. Causative constructions and the marking of secondary agent.

In this section, I will be comparing the causative constructions in three languages primarily: Japanese, a prominent OV language, Hixkaryana, a natural OVS language and Klingon, a constructed OV language. My aim here is to look at features of the three languages and find out how much do the three have in common seeing as they have similar typology, and in case of Hixkaryana and Klingon, similar word order as well.

In Japanese, the dative marker ni is used to mark the secondary agent in passives and causatives. For example,

94. Taroo ga sensei ni sikar-are-ta.
    teacher by scold-Passive-Past

‘Taroo was scolded by the teacher’. (Kuno,1978:109)

95. Taroo wa Hanako ni hon o yom-ase-ta
    to book read-caus-Past

‘Taroo caused Hanako to read a book.’ (Kuno,1978:113)

According to Kuno (1978), the Japanese causatives can behave in different ways, depending on the type of the verb and the particle on the subject of the embedded clause. For example, consider the following two intransitive sentences containing the verb ‘cry’.

96a. Kantoku was sono siin de haiyuu o nak-ase-ta.
    director that scene at actor Acc. cry-caus-Past

96b. Kantoku wa sono siin de haiyuu ni nak-ase-ta.
    Dat.

‘The director made the actor cry in that scene.’ (Kuno,1978:110)

Kuno proposes two different interpretations for each of the above statements: 96a implies that the director must have treated the actor harshly so he started to cry, while 96b implies that the director must have asked the actor to cry for that particular scene. Thus, Kuno argues that the dative particle ni
in intransitive causative constructions can only be used in presence of unergative verbs. Other examples that Kuno gives in defense of his argument are as follows:

97. **Yasai o kusar-ase-te simatta.**

vegetables spoil-cause-Cont. ended-up

(Lit., ‘I have had vegetables spoil’)

‘Vegetables have been spoiled.’ (Kuno, 1978:111)

98. **Yamada-san wa kazi de kodomo o sin-ase-te simatta**

         Mr. fire by child die-cause-Cont. ended-up

(Lit., ‘Mr. Yamada had his child die because of a fire.’)

‘Mr. Yamada lost his child in a fire.’ (Kuno, 1978:111)

Both of the above examples can only have o-causative because the underlying verbs are unaccusative rather than unergative.

Kuno also mentions that the ni particle can be used with a subject of transitive embedded clause, such as the example 2 that was mentioned at the beginning:

99. **Taroo wa Hanako ni hon o yom-ase-ta**

         to book read-caus-Past

‘Taroo caused Hanako to read a book.’ (Kuno, 1978:113)

The use of Japanese ni is comparable to the use of the indirect object marker ‘wya’ in Hixkaryana.

100. **yawaka yimyako biryekomo rowya**

         axe he-gave-it boy to-me

‘The boy gave the axe to me.’ (Derbyshire, 1985:35)

This marker is also used to express causee function when transitive stems are made causative, similar to Japanese.

101. **biryekomo yotahahono wosi tinyo wya**

         boy she-caused-to-hit-him woman her(REFL)-husband by
‘The woman caused her husband to hit the boy’. (Derbyshire, 1985:89)

However, unlike Japanese, it can never be used when an intransitive stem forms the causative. In this case, the subject of intransitive verb always becomes the object of verb stem after causativisation, which is similar to the other pattern of intransitive-causative construction in Japanese. For instance, 5b is the causative equivalent of the non-causative sentence 5a in the examples below. The intransitive verb stem ‘horymami’ (to grow up) in 5a becomes transitive when causativised in 5b.

102a. horymamyeyebiryekomo (∅-horymami-ye)
   he-grew-up boy (IIIS-grow up-DIST.PAST COMPL)
   ‘The boy grew up.’

b. biryekomohorymamnohye wosi 
   boy she-caused-him-to-grow-up woman
   (∅-horymami-noh -ye)
   (IIISIIIIO- grow up -CAUS-DIST.PAST COMPL )
   ‘The woman raised the boy.’ (Derbyshire, 1985:88-89)

Klingon has a somewhat similar structure where the suffix {–vaD} marks the indirect object, or the beneficiary of an action.

103. yaS-vaD taj nob-pu’ qama’
   officer-IO knife give-PERF. prisoner
   ‘The prisoner gave the officer the knife.’ (Okrand,1992:180)

The suffix {–moH} on the other hand causativises the verb stem.

104. tljwI’ -ghom vl- chen -moH
   boarder-group I-it- take form-CAUS
‘I form a boarding party’ (Lit., ‘I cause a boarding party to take shape’)  (Okrand,1992:38)

There has been some debate about whether {-vaD} can mark a secondary agent along with the beneficiary of the verb since Okrand has called {-vaD} an indirect object marker that marks the beneficiary but he hasn’t specified whether it can also work as an agent. While this issue has been pointed out before as well (Andrew Miller, p.c.), Alan Anderson (p.c.) argues that “Anyone identifying as fluent in Klingon ought to recognize and understand it without difficulty.”

Consider the following example that David Yonge-Mallo (p.c.) has pointed out from the SkyBox card13 no. 20 in support of {-vaD} as an agent marker:

105. wo'rIv-vaD       quH -Daj qaw -moH Ha'quj
                       Worf -IO     heritage-his   remember-CAUS  sash

‘The sash reminds Worf of his heritage’  (lit. ‘the sash makes Worf remember his heritage’)

The argument here is that Worf is clearly an agent as his heritage cannot perform the action of remembering. However, verbs such as ‘remember’, ‘learn’, ‘know’, ‘believe’, ‘like’, etc. express the mental state of a person and are hence called cognitive verbs. The person who is affected by the verb in case of cognitive verbs is an ‘experiencer’ and not an ‘agent’ (Talmy, 1985).

Another example with a cognitive verb was given as follows:

106. pIn-Daj-vaD       tlhIngan Hol          ghoj-moH
                     boss-her-IO  Klingon language  learn-CAUS

‘She teaches her boss Klingon’  (lit. ‘She causes her boss to learn Klingon’)  (Andrew Miller, p.c.)

Out of the three examples that the speakers introduced in the conversation, two involved cognitive verbs. While this is by no means a very definitive evidence, it can potentially mean that the speakers seem to be more comfortable in using {-vaD} in sentences containing cognitive verbs than in sentences with other verbs.

Another problem with using {-vaD} in a causative construction is the ambiguity in meaning it creates. Consider for example the following sentence:

107. puq-vaD targh wam-moH yaS

13 The SkyBox cards are Star Trek trading cards, some of which include Klingon text. As the Klingon in these cards is written by Okrand himself, the KLI considers them as legit sources of Klingon.
The officer causes the child to hunt the targh.’ (Doug Henning, p.c.)

According to Andrew Miller (p.c.), the above sentence could also be interpreted as ‘The officer causes the targh to hunt for (on behalf of) the child’. As the verbal prefix in case of both the interpretations (i.e. the one where ‘he’ is the subject and ‘it’ is the object), is the same, it is difficult to make out which version of the translation is appropriate without sufficient context. This is why Andrew prefers the following construction rather than the one mentioned above:

108. targh wam puq ’e’ qaS -moH yaS

targh hunt child that happen-cause officer

‘The officer causes it to happen that the child hunts the targh’

We encounter a similar difficulty in case of example 106 mentioned above.

106. pIn-Daj-vaD tlhIngan Hol ghoj-moH

boss-her-IO Klingon language learn-CAUS

‘She teaches her boss Klingon’ (lit. ‘She causes her boss to learn Klingon’) (Andrew Miller, p.c.)

Putting aside the fact that ‘the boss’ in this case is an experiencer rather than an agent, it should be noted that Okrand (1992) specifies the receiver of the { -vaD} suffix as the ‘beneficiary’. Thus, example 109 can also mean ‘she taught Klingon on behalf of her boss’. Unlike example 13, the set of verbal prefixes needed for each interpretation are different. The first interpretation will have ‘she-him/her’ as the prefix while the other alternative interpretation will have the ‘she-it’ prefix. However, as Klingon has the same null prefix for intransitive ‘he/she/it/they’, ‘he/she/it-him/her/it’ and ‘he/she/it/they-them’ the ambiguity is impossible to resolve on the sole basis of verbal prefixes.

Andrew also gives the following, more unambiguous sentence:

109. pIn-Daj-vaD tlhIngan Hol mu- ghoj-moH

boss-her-IO Klingon language she-me-learn-CAUS

‘She teaches me Klingon for her boss’ (Lit. ‘She causes me to learn Klingon for her boss’)

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14 Targ (targh in Klingon) is a fictional boar-like animal seen in the Star Trek: The Next Generation episode ‘Where No One Has Gone Before’ as the pet of a Klingon character named Lt. Worf.
The sentence here is much more unambiguous as compared to 106 or 107, since the ‘-mu’ prefix can only mean that subject is ‘he/she/it’ and the object is ‘me’.

The one point of similarity between Hixkaryana and Klingon is that both of them can’t have indirect object markers in a sentence with intransitive verb stem (while it is not strictly forbidden in Klingon, Alan Anderson (p.c.) calls it redundant at best). This point also marks a difference between the two languages and Japanese, as Japanese does permit the use of the dative ni in intransitive causative sentences (see example 3b). It is also evident from the above discussion that while OV languages like Japanese and Hixkaryana have a fairly clear system of causatives and the function of indirect object marking within said causatives, this is not the case for Klingon. While there is some consensus about regarding {-vaD} as an agent marker along with it being the indirect object marker, not everyone agrees with this idea and there is also not much in the way of definitive evidence from Okrand to support it. Even when it is considered as an agent marker, use of {-vaD} in a sentence could be called unambiguous at best.
4.5. Negation in Klingon

In this section, I will be analysing the two negation markers present in Klingon—{-be’} and {-Qo’}. I will also try to find out how well the negative markers in Klingon fit in with the universals that have been proposed about other, natural languages.

Negation markers in Klingon are verbal suffixes, and they fall under a category called ‘Rovers’.

According to Okrand (1992), the verbal suffixes in Klingon are generally divided into 9 ‘types’ and the order in which a suffix attaches to the verb in case of multiple suffixes is dependent on its type number. For instance, if a type 1 suffix is present, it will almost always be directly attached to the verb stem, followed by the type number closest to 1. Thus, the structure of a typical verb will be as follows:

PREFIX--VERB--1--2--3--4--5--6--7--8—9

Rovers, however, are an exception to this rule. They are a category of verbal suffixes that can come after any suffix/the verb stem, except for the type 9 suffixes. The negative markers negate any suffix/verb immediately preceding them. For instance,

110. cho- HoH -vIp
     you-me kill afraid

‘you are afraid to kill me’ (Okrand, 1992:46)

111. cho- HoH -vIp -be'
     you-me kill afraid not

‘you are not afraid to kill me’ (Okrand, 1992:46)

112. cho- HoH -be’ -vIp
     you-me kill not afraid

‘you are afraid to not kill me’ (Okrand, 1992:46)

The {-be’} suffix is normally used for general negation while {-Qo’} is used to denote refusal (Okrand, 1992). For example,
113. wa'leS pa'-wIj-Daq jIH-taH-be'

tomorrow room-my-LOC I-CONT-not

‘I will not be in my room’ (Jeremy Cowan, p.c.)

114. pa'-wIj vl- ‘el -Qo'

room-my-I-it- go –not

‘I will not go into my room’ (Jeremy Cowan, p.c.)

While both examples 4 and 5 seem to convey a similar meaning, 4 sounds more like a factual statement which is why the suffix used is { -be’} while example 5 seems more of a refusal, thus requiring the use of { -Qo’}

{ -Qo’} is often used in an imperative sentence as the meaning generally translates to refusal. For example,

115. pa’ -wIj-Daq yI'- el -Qo'

room-my-LOC you(imp.)- enter-not

‘Don’t enter my room.’ (Jeremy Cowan, p.c.)

The primary difference between the two suffixes seem to be the intent of the speaker. Using { -be’} could be an equivalent of the English ‘not’, while { -Qo’} is meant to show clear refusal on the part of the speaker. Another instance where the same sentence is translated using different suffixes is as follows (Jeremy Cowan, p.c.):

The translation of the sentence ‘I won’t be a Klingon’. Let’s suppose that the diplomatic corps is having a costume party and has requested everyone dress as an alien race other than their own. The Klingon ambassador walks up to the human ambassador and says,

116. tlhIngan jech Da -tuQ’ -a’?

Klingon disguise you-it wear INT.

"Will you wear a Klingon costume?"
The human might answer,

117. tlhIngan jIH-be'

Klingon I -not

"I won't be a Klingon."

This is just a statement of fact - he has chosen some other costume. Or he might answer,

118. tlhIngan jIH-Qo'

Klingon I -not

"I won't be a Klingon."

This version says something about the will of the human and means that the human refuses to be a Klingon (Jeremy Cowan, p.c.).

Thus, despite being translated as the same English sentence, 8 and 9 differ vastly within the above context.

Another rather interesting characteristic of negative markers is that you can also use both suffixes at once. For instance,

119. jeS -be' -Qo'

participate-not -not

‘They refuse not to participate.’

120. jeS -Qo' -be'

participate not not

‘They do not refuse to participate.’ (Andrew Miller, p.c.)

Usually, you cannot use two suffixes from the same category, but as both these suffixes are classified as ‘rovers’, they are an exception to this rule as well.

Until very recently, it wasn’t quite clear whether both {-be’} and {-Qo’} could be used for negation in an imperative sentence. While The Klingon Dictionary does say “The suffix {-be’} cannot be used with imperative verbs” (Okrand, 1992: 47), apparently this actually means that {-be’} can’t be used to negate the command, as negating a command/request denotes refusal (David Trimboli, p.c.). Okrand
made the clarification in the most recent qep’a\(^\text{15}\), that \{-be’\} could be used in an imperative sentence, so long as it doesn’t negate the implicit command/request. Consider the following sentences:

121. HI- legh-be’-moH

you-me.IMP.-see-not-CAUS

‘Make me not see’ \hspace{1cm} (David Trimboli, p.c.)

122. HI- legh-moH-Qo'

you-me.IMP.-see-CAUS-don’t

‘Don’t make me see’ \hspace{1cm} (David Trimboli, p.c.)

123. *HI- legh-moH-be’

you-me.IMP.-see-CAUS-not

Example 123 is ungrammatical as \{-be’\} can’t be used to denote any kind of refusal, but 121 is acceptable as the negation is on the actual act of seeing and the subject or the object don’t have to show any sort of refusal to do something.

Miestamo (2007) recognises imperatives, existentials and nonverbal clauses as “the most common environments for nonstandard negative constructions” (p.553). However, use of the non-standard verbal suffix -Qo’ in any environment other than imperatives in Klingon depends strictly upon the context and intention of the user. All of the Klingon speakers I asked are unanimous on this point.

Even so, there is an interesting point in Miestamo (2007) regarding the origin of negation markers. He states that “elements that serve to reinforce negation are reanalysed as negative markers” (p.566).

Givon (2001) agrees with this assertion, saying that one of the origins of negation-marking morphemes is from “inherently negative modality verbs” such as ‘fail’, ‘lack’, ‘refuse’, ‘decline’ and ‘avoid’. For instance, in the language Bemba (Bantu), the verb uku-bula (‘avoid’) is in the process of being grammaticalized as negation marker (Givon, 2001:168).

Thus, even though Klingon is somewhat unusual in the sense that it doesn’t have a non-standard negation dependent on a type of sentence other than imperative, it is not alone in deriving one of its negative markers from a negative modality verb. Despite some uniqueness in how negation works in

\(^{15}\text{qep’a’ is an annual meeting held by the KLI. This year’s qep’a’ was called (qep’a’ cha’maH losDich) and it was held in Chicago on July 27-29.}\)
Klingon, it still follows some universals in how one of the negative markers is derived in the first place.
4.6. Comparatives and Superlatives:

In this section, I will be examining how comparative and superlative degrees work in Klingon, and I will try to establish a link between comparison in Klingon and what has already been said in the literature regarding universals associated with comparison.

In Klingon, a comparative and superlative sentence is formed using two terms: {law’} and {puS}. {law’} means ‘be many’ while {puS} means ‘be few’. Following is an example of a typical comparative and superlative construction:

124. la’ jaq law’ yaS jaq puS
   commander be bold be many officer be bold be few

‘The commander is bolder than the officer.’(lit. ‘The commander is much bold, the officer is less bold) (Okrand, 1992:71)

125. qIb-Daq SuvwI’-e’ SoH Dun law’ Hoch Dun puS
   galaxy-loc. warrior-TOP. you great be many all great be less

‘You would be the greatest warrior in the galaxy.’ (lit., ‘You would a much greater warrior, everyone else will be less great warriors.) (From Star Trek V)

Stassen (1985) classifies this type of comparative as ‘The Conjoined Comparative’. He also give two sub-types within this classification: clauses containing antonymous predicates and clauses that contain positive-negative polarity (Stassen, 1985:44). Antonymous predicates include comparison between opposites such as ‘big’ and ‘small’, while positive-negative polarity involves an adjective with its negation, such as ‘tall’ and ‘not tall’.

As most of the comparatives in Klingon involve ‘be many’ and ‘be few’, it falls under the category of comparatives with clauses that have antonymous predicates.

According to Stassen, the languages containing conjoined comparative show some geographical grouping. He mentions Australian, Papuan and Polynesian languages as the ones that primarily exhibit this structure. However, he is unable to establish a link between conjoined comparatives and the word orders of the languages that have this type of comparison.
Out of the 20 languages which Stassen mentions in this chapter that show this type of comparative structure, 12 are OV languages while 8 are VO. While this might look as if there are more OV than VO languages that have conjoined comparative, the author explicitly states that “all major word order patterns are represented in this category and, what is more, they occur in proportions which do not differ greatly from those which one would expect to find in a random selection of languages” (Stassen, 1985:45) Thus, it is hard to establish any tangible connection between word order universals and comparatives in Klingon.

However, it is worth noting that 10 of 20 languages Stassen lists are Native American while the rest are Pacific languages. Thus, even though there is no apparent link between the word order and comparative construction, this does provide some evidence that Dr. Okrand, whose PhD dissertation was on an extinct Native American language, might have used a few of the characteristics of Native American languages while making Klingon. While not relevant to the topic at hand, this is quite interesting nevertheless, as Okrand has at one point said that he consciously tried not to make Klingon similar to Mutsun (the language of his dissertation) in any way.
5. Discussion:

In this section, I will try to answer my original research question by examining the results from the analysis section. I will also look at those generalisations from Keenan (1978) on subject-final languages that have not previously been associated with the VO-OV distinction or the position of the verb within a clause, to the best of my knowledge. I will also examine Klingon's syntax structure to see whether having the verb in a medial position affects the features of a language, as proposed by Dryer (1991) for SVO languages.

5.1. Other typologies:

5.1.1. Keenan’s selected generalisations

I have already mentioned Keenan (1978), its features and also various drawbacks in the literature review. However, the other article that proposes a typology (partially) based on the subject position is Dryer (1997). Despite Dryer making some valid claims in this paper, he doesn’t expound upon the exact features of the languages that are included in the classifications proposed, i.e., the SV&OV languages, SV&VO languages, VS&OV languages, and VS&VO languages. Hence, I was unable to use this paper to test the uniqueness of the Klingon syntax, and Keenan’s generalisations seem to be the most feasible one for my purpose of examining Klingon as a subject-final language.

In the following lines, I go through the list of generalisations that seem to fit the criteria of not being obviously associated with OV/VO languages and whether Klingon has evidence to agrees with or disprove the claim:

G-12: “Subject-final languages do not have relative pronouns.” (Keenan, 1978:296)

As mentioned before in section 4.1, Klingon has an internally headed relative clause and thus it doesn’t have a relative pronoun as well.

G-13a: “All subject-final languages possess articles.” (Keenan, 1978:297)

There are no articles present in Klingon, despite the presence of other types of determiners.

G-13b: “With more than a chance frequency subject-final languages have definite articles (distinct from the ordinary demonstrative adjectives).” (Keenan, 1978:297)

As Klingon doesn’t have articles in general, the definite article also doesn’t exist in Klingon.
Another paper that I found some reference to the classification of languages using VS-SV distinction is Herring (1990). I will be examining the generalisations she makes in the next sub-section.
5.1.2. The topic-comment structure and VS-SV classification

Herring (1990) gives four principles that have been said to affect the topic-focus order. She uses a sample size of 36 languages to put forward her theory, and her principles have also been influenced by Gundel (1988), a paper that I also refer to frequently in the topic-comment structure section of my analysis chapter. Herring classifies the languages on the basis of the relative order of subject and verb (VS and SV languages) rather than the more commonly found OV:VO distinction. Herring (1990) proposes the following four principles:

Principle 1: “Given information before old information” (p.164) In discourse, what is known comes first, before the new information.

Principle 2: “First things first.” (p.164) The most important, or unexpected, part of the conversation comes first in a discourse, with less important information following at the end.

Principle 3: “Discourse iconicity” (p.164). Ideally, the information that relates to a certain part of the discourse is placed closer to that part of the discourse. Thus, the conversation start with what is already familiar knowledge and end with what the next sentence will be about.

Principle 4: “Word order type” (p.164). According to this principle, the information structure is associated with the basic word order of a language.

I do not go into much detail for each of the principles mentioned above for the one that I will be discussing the most in this sub-section is the principle number 4 as it particularly relates to the basic word order of the language.

For this article, Herring examines two types of topics and foci: continuous and shifted topics and contrastive and presentational foci.

Continuous topic is generally familiar information that has already been mentioned in the previous discourse. Shifted topic, however, is new information and it can be identified complete NPs as well as topicalising phrases like ‘as for…’, etc.

Of the two types of focus, contrastive focus generally emphasises a part of the comment portion of the discourse, usually in order to contradict it with something already mentioned in the previous utterance or something that is implied. For example, consider the English it-cleft, “It is A (as opposed to B) that I like.” Thus ‘A’ is the contrastive focus in the given sentence. In case of presentational focus, there is an addition of a referent to a discourse. The example Herring cites is, “Once upon a time, there was a princess’(p.164). Following example is something similar in Klingon:
years ago many warrior find-IS

‘Many years ago, there was a warrior’ (David Trimboli, p.c.)

Thus, in case of presentational focus, the marker {‘e’} can be left out, as the new information here doesn’t need much emphasis. Whether there is any evidence for using {‘e’} after a presentational focus constituent is something that is still unclear. In example 126, the focus constituent {SuvwI’} doesn’t have the marker {‘e’}, and it simply occupies the preverbal position that is typical of an object.

Herring (1990) claims that the principles proposed can predict the position of topics and focus; that is, whether they will be preposed to the beginning of the sentence or postposed to the end. Herring gives the following predictions on the basis of the four proposed principles:

<table>
<thead>
<tr>
<th></th>
<th>Principle 1</th>
<th>Principle 2</th>
<th>Principle 3</th>
<th>Principle 4</th>
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</thead>
<tbody>
<tr>
<td>contin. topic</td>
<td>pre-</td>
<td>post-</td>
<td>pre-</td>
<td>pre-/post</td>
</tr>
<tr>
<td>shifted topic</td>
<td>post-</td>
<td>pre-</td>
<td>[pre-]</td>
<td>pre-/post</td>
</tr>
<tr>
<td>contr. focus</td>
<td>pre-</td>
<td>pre-</td>
<td>pre-</td>
<td>post-/pre-</td>
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<tr>
<td>present. focus</td>
<td>post-</td>
<td>[post-]</td>
<td>post-</td>
<td>post-/pre-</td>
</tr>
</tbody>
</table>

Table 1: Predictions made in Herring (1990) (Herring, 1990:165)

While the predictions made by the first three principles differ among the types of topic and focus, in principle 4, the two types of topic and focus seem to have the same property among themselves. Thus, according to Herring (1990), the topics generally come in the end of the sentence in VS languages while the focus comes at the beginning of the sentence.

As I have mentioned before, the marker {‘e’} in Klingon can be used to mark both focus and topic (see section 4.3). While it is common knowledge within the Klingon language community that fronting of a topic and/or focus is generally permissible, there are also several speakers who prefer not to front at all, if possible. For instance, consider the following example:

127. Duj Hosghaj-e' nom wI-Qaw’

ship powerful-TOP. quickly we-it-destroy

‘We will quickly destroy the POWERFUL SHIP.’

Here, the phrase {Duj Hosghaj’e’} has been fronted. While this sentence was deemed acceptable in general, when asked, Okrand said that “fronted nouns are marked and it should only be used in
extreme situations when the extra level of emphasis is really needed” (Lipscombe, p.c.). He also added that while it was acceptable, grammatically speaking, to front the topicalised element, it wasn’t pragmatically ideal to do so since it will be akin to “speaking in Shakespearian English all the time” (Lipscombe, p.c.).

Thus, some Klingon speakers like Chris Lipscombe would prefer the following sentence instead, if there isn’t a lot of emphasis on the word:

128. nom Duj Hosghaj-‘e’ wI-Qaw’

quickly ship powerful-TOP. we-it-destroy

‘We will quickly destroy the powerful ship’.

This rule seems to apply to both the topic and focus, depending on what is being emphasised in the sentence. However, there is one exception that I can think of in this case:

129. ‘otlhQeD ‘e’ QulwI’ po’ ghaH.

quantum physics-TOP researcher be expert she/he

‘Where quantum physics is concerned, she/he is a talented researcher’ (Felix Malmenbeck, p.c.)

This sentence seems to presumably be a continuation of a dialogue where the field of quantum physics has been mentioned before. Thus, on the basis of the definitions given in Herring (1990), ‘otlhQeD’ is actually a continuous topic. In this case, since the word ‘otlhQeD’ does not function as a subject or an object within the sentence, it is fronted in accordance to the rules that are given in Okrand (1992). This leads me to surmise that the only consistent reason for fronting of discourse functions is when the word that is marked with the topic marker is not working as a subject or an object within the sentence.

However, Okrand’s clarification on the matter of fronting is a very recent one. There have several people who actually did prefer fronting their topics and focus, no matter the level of emphasis. Even so, as observed in examples 89 to 91 of the section 4.3.2, even the actual dialogues from Star Trek movies do not seem to have many instances of fronting.

Thus, for most part, the position of topics and focus in Klingon sentences depends upon their function within the sentence. For instance, a topicalised object remains in the object position unless it is given a lot of emphasis, something like:

130. De-‘e’ vl-thlap-nIS-pu’

information-TOP. I-it-take-need-PERF
‘I needed to get the INFORMATION’ (Okrand, 1992: 29)

Here, the line conveys the urgency of finding a specific bit of information. In this case, {De’e’ nom v1thlapnISpu’} ‘I needed to get the information quickly’ will also be acceptable, though Okrand seems to very rarely front the topic/focus constituents in general.

Hence, as Klingon neither preposes nor postposes the discourse functions in many cases, it is difficult to say for certain whether Klingon adheres to Herring’s principles. The only consistent application of fronting is due to a high level of emphasis, but this can be equally applied to both focus and topic. Thus, at best, some topic/focus preposing can be found in Klingon, which supports Herring generalisation for focus in VS languages, but not the generalisation for topic.

In the next sub-section, I will be examining Dryer (1991)’s theory on SVO as an intermediate language between VO and OV languages in order to see whether a similar claim can be made for Klingon, an OVS language.
5.1.3. Does Klingon have properties that are intermediate between OV and VO languages?

Dryer (1991) looks at reasons why there have been criticisms against collapsing SVO languages along with verb-initial word orders like VSO and VOS into a single category of VO languages. One of the criticisms was that SVO languages, due to the position of the verb, are intermediate between V-initial and V-final languages, and thus cannot be put into the same category as the V-initial languages. While Dryer is overall very supportive of the OV:VO typology, he also points out the following three characteristics that support the theory of SVO languages being an intermediate between V-final and V-initial languages:

1) The order of genitive in relation to noun

In verb-initial or VO languages, the genitive comes after the noun. Thus, VO languages have a preference for the NGen structure. Verb-final or OV languages on the other hand demonstrate a preference for the GenN structure. However, Dryer notes that in SVO languages, “the two orders of noun and genitive are about equally common” (Dryer, 1991:464). He does later on point out some slight preference for the NGen order among SVO languages, but he puts it down to the large number of languages from African genera having that particular preference.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-final &amp; GenN</td>
<td>102</td>
</tr>
<tr>
<td>V-final &amp; NGen</td>
<td>11</td>
</tr>
<tr>
<td>Proportion GenN</td>
<td>Avg 0.89</td>
</tr>
<tr>
<td>SVO &amp; GenN</td>
<td>22</td>
</tr>
<tr>
<td>SVO &amp; NGen</td>
<td>34</td>
</tr>
<tr>
<td>Proportion GenN</td>
<td>Avg 0.59</td>
</tr>
<tr>
<td>V-initial &amp; GenN</td>
<td>7</td>
</tr>
<tr>
<td>V-initial &amp; NGen</td>
<td>33</td>
</tr>
<tr>
<td>Proportion GenN</td>
<td>Avg 0.28</td>
</tr>
</tbody>
</table>

Order of Genitives and Nouns (from Dryer, 1991:464)

2) The position of question particles
In VO languages, the question particles come before the sentence, that is, in sentence-initial or QS position. OV languages show a trend of having question particles after the sentence, thus the question particles are in SQ or sentence-final position. In case of SVO languages, while there isn’t a large difference between the number of languages showing either of the orders, there is some preference for the SQ word order, unlike most VO languages into which SVO languages are generally classified.

<table>
<thead>
<tr>
<th>Position of question particles (from Dryer, 1991:465)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-final &amp; SQ</td>
</tr>
<tr>
<td>V-final &amp; QS</td>
</tr>
<tr>
<td>Proportion SQ</td>
</tr>
<tr>
<td>SVO &amp; SQ</td>
</tr>
<tr>
<td>SVO &amp; QS</td>
</tr>
<tr>
<td>Proportion SQ</td>
</tr>
<tr>
<td>V-initial &amp; SQ</td>
</tr>
<tr>
<td>V-initial &amp; QS</td>
</tr>
<tr>
<td>Proportion SQ</td>
</tr>
</tbody>
</table>

3) The position of Wh-words or question words

In VO languages, the wh-question word tends to be sentence-initial, or Wh-initial. In OV languages, the wh-word is mostly found in situ, also called Wh-in situ. In SVO languages, there is also some preference for the in situ placement of wh-words.

<table>
<thead>
<tr>
<th>Position of Wh-words (from Dryer, 1991:465)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-final &amp; Wh-in situ</td>
</tr>
<tr>
<td>V-final &amp; Initial-Wh</td>
</tr>
<tr>
<td>Proportion Wh-in situ</td>
</tr>
<tr>
<td>SVO &amp; Wh-in situ</td>
</tr>
<tr>
<td>SVO &amp; Initial-Wh</td>
</tr>
<tr>
<td>Proportion Wh-in situ</td>
</tr>
<tr>
<td>V-initial &amp; Wh-in situ</td>
</tr>
<tr>
<td>V-initial &amp; Initial-Wh</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Proportion Wh-in situ</td>
</tr>
</tbody>
</table>

Position of Wh-words (from Dryer, 1991: 466)

However, Dryer (1991) focused primarily on SVO languages for the analysis of languages with verb in the medial position. While SVO languages are by far much more in number than OVS languages, it is to be noted that the verb is between the subject and object in OVS languages as well, potentially making them intermediate languages as well. As Dryer (1991) shows that SVO languages tend to prefer a few of the OV language characteristics as well, it is logical to surmise that if OVS languages are also intermediate between OV and VO languages, they might also prefer the characteristics mentioned above as those preferred by VO languages. Thus, in case of OVS languages, I make the following prediction:

For the GenN order,

OV languages prefer GenN.
VO languages prefer NGen.

Thus, OVS languages might prefer NGen.

For the position of question particles,

OV languages prefer SQ order.
VO languages prefer QS order.

Thus, OVS languages might prefer QS order.

For the position of wh-words,

OV languages prefer Wh-in situ.
VO languages prefer Initial-Wh.

Thus, OVS languages might prefer Initial-Wh.

As Klingon does have a fairly rigid OVS word order, I will analyse examples from Klingon to see if Klingon exhibits any of the properties of an intermediate language.

1) Order of genitive and noun:
In Klingon, the possessor generally precedes the possessed noun. For example,

131. puq-wI’ qam-Du’

    child-my foot-PLU.

‘My child’s feet’ (Okrand, 1992:31)

Thus, the order of genitive and noun in Klingon is GenN which is typically found in OV languages.

2) Position of question particles:

The interrogative affix {-‘a’} in Klingon is a suffix for the verb. As Klingon often uses pronominal prefixes to denote the subject and object and rarely uses the pronouns as separate words, we often find one-word sentences in Klingon in absence of an actual nominal subject or verb. Thus, sentences similar to the following examples are often found in Klingon:

132. cho-legh-’a’

    you-me-see-INTR

‘Do you see me?’ (Okrand, 1992:44)

133. tlhIngan  Hol        Da-  jatlh-’a’

    Klingon language you-it-say -INTR

‘Do you speak Klingon?’ (Okrand, 1992:170)

Thus, Klingon shows the SQ structure which is most often found in OV languages.

3) Position of wh-words:

Wh-question words in Klingon are generally found in situ:

134a. yaS    legh ’Iv

    officer see who

‘Who sees the officer?’ (Okrand, 1992:69)

134b. nuq legh yaS
what see officer

‘What does the officer see?’ (Okrand, 1992:69)

Thus Klingon shows the characteristics most commonly found in OV languages once again.

It is clear from the above discussion that Klingon indeed doesn’t seem to show any intermediate properties. It is thus unequivocally an OV language.
5.2. Overall findings:

Keenan’s generalisations don’t seem to apply to Klingon. However, as I have already demonstrated, most of his generalisations seem to be for verb-initial languages rather than subject-final languages. Herring (1990)’s generalisations with regard to the relationship between SV-VS word order and topic-comment structure also seem to be, at best, partially consistent with what is observed in Klingon. There are, unfortunately, not many typologies that make generalisation with regards to the relative position of the subject within the sentence. Thus, the data I could get from comparing Klingon examples to generalisations regarding subject-final generalisations is inconclusive at best. However, comparing Klingon examples with Dryer (1991)’s generalisations regarding verb in an intermediate position leads me to believe that Klingon doesn’t exhibit the properties that seem to be typical of several SVO languages. Thus, Klingon is consistently an OV language, though whether it is also a VS type is unknown.

In the analysis section, I looked at generalisations based on OV languages in general in order to see how much of Klingon can be classified as a ‘typical OV language’ and how much is indeed ‘alien’, or different and unique from other languages. In the earlier part of the discussion section, I proceeded to also check the features of Klingon against articles that gave generalisations based on other typologies (relative position of subject, the position of verb in general rather than just in relation to the object). Most of my analysis seems to point towards Klingon being almost overwhelmingly typical OV language. That is not to say that Klingon doesn’t have any unique or interesting features; it is more of a combination of some of the most interesting characteristics from various OV languages that makes Klingon so different and rather unique in itself.

For instance, consider the comparatives and superlatives in Klingon. The conjoined comparative is a rather unique way of showing comparison (see section 4.6). As I mentioned before, this might be one of the points of similarities between Klingon and some Native American languages. Hixkaryana also shows similar sort of comparative constructions. However, another OV language, say Japanese, has a different way of creating comparatives. But then when we look at the topic-focus constructions in Klingon (section 4.3), there are several similarities as compared to Japanese but not so much with Hixkaryana. In section 4.1, I have demonstrated how Klingon has showed the characteristics opposite of those that are typical of an OV language, which, considering Vennemann’s generalisation, are in fact implied to be VO language properties. While I will not say that this has any potential for changing the fact that Klingon is an obviously OV language, it nevertheless shows that like most other (natural) languages, Klingon is also not 100% consistent with any one of the proposed generalisation.
This simply serves to make Klingon less ‘alien’ or unique than ever. It also reminds us that though it is meant to be the language of aliens, it is humans who speak it.

When I first started research, I was sceptical of the claim that Klingon indeed has some very unique features that are not seen in many natural languages. As I found evidence that indicated that Klingon had several properties in common with other OV languages, I also noticed that Klingon had many interesting properties even when they were not completely unique. Even though the focus of this thesis is mostly Klingon, I also learnt about the behaviour of other OV languages, particularly Japanese, Korean and Hixkaryana.

6.1. Limitations of the study.

One, rather obvious, limitation of this thesis is the tiny number of features examined in detail. Given the choice between quality and quantity, I chose to examine a few features in as much detail as I can rather than going through all the features of Klingon syntax which was an impossible task for a Master’s thesis anyway. When I go through a syntactic feature in a very brief manner, as I often do in 4.1 and 4.2, it is not because all these features are not worthy of further examination. Due to time and space constraints, I had to discuss these features only in the context of checking whether they act according to the predictions made or not.

Another limitation is due to the nature of Klingon itself. Being a relatively new language, Klingon is constantly evolving by adding new terms and resolving various ambiguities every year. A good example of this is my entire discussion on topic-markers. When I wrote that particular section months ago, it was debateable whether fronting was allowed every time an object/subject is topicalised. Because of this, there are several examples in which the topicalised subject/object is indeed fronted. However, very recently, Okrand confirmed that fronting is only used in case of a lot of emphasis. While I tried to incorporate this change as much as possible, it wasn’t possible to elicit new examples and rewrite the entire section in such a short time. There is a chance that the discussions and examples I have used in my thesis may become somewhat outdated within just a few years.

6.2. Scope for future research:

Much can be done for future studies in Klingon. I would like to see a study on a bigger scale that looks at more of the syntactic features of Klingon, particularly the major ones such as nouns, verbs, adjectives, etc. Features such as nominal tense markers and pronominal prefixes also deserve more attention than I could give in my thesis.

There is also a lot of potential in the research of Klingon phonology as Okrand has mentioned that several phonemes within Klingon generally do not occur together in the same language, making it
unique as compared to other languages. Also, all of the Klingon speakers speak Klingon as a second language. I already noticed some influence of English when there is ambiguity in rules within Klingon, such as when it came to ordering of adverbs. It will be interesting to see the influence of English or any other first language on speech production in Klingon.

As Klingon is such a vastly understudied language, there is a lot to be gained with more research on the language. Such a research could also help us in understanding the other, less well-documented OVS languages in a better way, and also contribute to fields where there is still not much known about OVS languages in general.
References.


