## PROCEEDINGS

of the

LINGUISTIC CIRCLE
of

MANITOBA AND NORTH DAKOTA

## OFFICERS 1970-1971

President: Louis Palanca, University of North Dakota
Vice-President: J.B. Rudnyckyj, University of Manitoba Secretary-Treasurer: Richard F. Hampsten, University of North Dakota Editor of Proceedings: H.D. Wiebe, University of Manitoba

THIRTEENTH ANNUAL CONFERENCE, 1970

From Shoebox to Computer:
Some Comments on Concordances
Peter M. Daly
Marie de France, Le Chaitivel:
Translation and Commentary
Foster Y. St. Clair
Yiddish in Canada
Jack Thiessen
Rhythm and Birth of Rhyme
Louis Palanca
The Odyssey of Margaret Laurence
Walter Swayze
The Coalescence of Past and Present
in Thomas McGrath's Letter to an Imaginary Friend
Joseph F.S. Smeall
The Origins of the Names of the Straits
Hellespont and Bosporus
Demetrius J. Georgacas
The Eskimo Verb: A Transformational
Study of Obligatory Components Thomas C. Correll

## PROGRAMME

The following papers, presented here in abstract form only, were delivered and discussed at the Thirteenth Annual Conference of the Linguistic Circle of Manitoba and North Dakota, held on October 23-24, 1970 at University College, University of Manitoba.

The Annual Dinner was held in the Senior Common Room of University College and the banquet address was given by Professor Walter Swayze of the University of Winnipeg. His subject: The Odyssey of Margaret Laurence, a Manitoba novelist with an international reputation, was chosen partly to draw the attention of the visitors to the Centenary Celebrations of the Province of Manitoba, 1870-1970.

The present volume of Proceedings was compiled and edited by Professor H.D. Wiebe, University of Manitoba.

FROM SHOEBOX TO COMPUTER: SOME COMMENTS ON CONCORDANCES Peter M. Daly, University of Manitoba

The word concordance normally denotes the alphabetical listing of words in context, although some editors entitle their indices concordances, and vice-versa. Scholars have been making concordances, as we all know, since the middle ages when monastic labour was cheap and it was efficient to set a hundred monks to work concording a patristic or biblical text. The more modern equivalent of this was the team of graduate students slaving away under their professorial master, a system which used to be fairly efficient. In the age of the computer it is inefficient to work in this way. Just as the quill has been replaced by the typewriter, so the old shoebox filled with slips of paper, laboriously sorted by hand, has been replaced by the computer.

Before the advent of the machine, concordances were produced entirely by hand. The computer can make the task easier, quicker and more reliable, but some manual editing is still necessary. Pattern recognition techniques, by means of which the computer would recognize the function of any word in any context, are not yet sufficiently sophisticated to enable the computer to make an alphabetical concordance which would also take into account the problems of homographs and inflected forms. In the absence of a complete and systematic program for automatic pattern recognition involving disambiguation routines, the
ediver of amputergenerated concordance is obliged to do some editing, If Ah moncordmoe is to be a sophisticated and flexible reference work. Concordnace programs are readily available which will produce an mbhabetcal listing of words in context. However, the result is always woverhat unsatisfactory, since all languages have such a large stock of homoyraphs, inflected and conjugated word forms. In German the word whe may be a noun, a verb (infinitive form, in older German a present hndloatwe plutal, or contracted imperative), a possessive adjective and poweserve pronoun. These six possible functions of the word sein should he sorted out that the reader finds the complete group of words he is जawhing for, this will spare him the chore of thumbing through ten or twenty times the amount of material for relevant citations.

Three basic features are standard to all concordances: the alphabeticel listing of token words, citation of context, and reference to text quoted. Some editors centre their key words, others do not. We are aware of at least four different ways of determining the amount of context to be primted with a key word. The first method is to take the printed line of text; this seems especially appropriate when dealing with verse forms. A whond method is to pre-edit the whole text for units of sense, that is, the minimum amount of context required to make the meaning of the word inmediately recognizable. A third way is to use the author's punctuation. And a fourth method is to determine the amount of context arbitrarily by mopowint mathematical limits; for example, the computer can be inWheted either to print out a given number of words, or a fixed number of units, b, e. spaces and characters.

With these few introductory remarks behind me I should like to describe the Schiller concordance that Dr. Lappe and I are working on. Not being computer scientists ourselves, we rely upon the ingenuity of a programmer to use our ideas to modify an existing program, Tricon, dethed at Berksley and Yale for the analysis of linguistic texts. However, before talking about the program it would appear logical to begin with the text.

At the rigk of stressing the obvious one must use the best critical gdtion available, In the case of Schiller it is the Nationalausgabe, Bơhlau Verlig. Weimar, which will appear in forty-two volumes. It is not complete, and this is probably one of the reasons why no one has yet attempted to produce a concordance to the works of Schiller. A number of schiller's plays already exist in this excellent edition, and we are boginning with his first play Die Râuber. As far as the text is concerned
the primary question is: will the editor interfere in any way with the text? There are likely to be inaccuracies in any text. The works of authors of earlier centuries frequently present problems, often acute problems, of inconsistent spelling. We have decided in principle against normalizing spellings and we alter the text only where an obvious compositor's error exists. Occasionally such an error is found by comparing the text with the critical apparatus. However, even here we feel that editors should acknowledge corrections. The second question concerns the presence of variant texts, or variant forms to a single text. What does the editor do? Should he select one basic text, or attempt to collate the versions? We believe that any concordance purporting to be systematic and complete must take all variants into account. This is one of the factors that complicate the production of a concordance to Die Räuber, which exists in two major forms: the Schauspiel and the Trauerspiel. There is also a Mannheim prompter's copy of the Schauspiel with some variants, and a second edition of the Trauerspiel.

Having decided on text and treatment of variants, the next question concems the manual editing of the text prior to input. As I noted earlier some editors prefer to determine context by the minimum unit of sense, which will require the marking of the text with signs to indicate context limits. We prefer to determine arbitrarily the context by a fixed number of 136 units, which has the advantage of consistency and simplicity, and will also provide for a unit of sense within these wider parameters. In this decision we are also guided by another consideration: frequently the reader is interested in word patterns that may have nothing to do with the unit of sense enclosing the key word. For example, the relationship of pronouns to verb forms may very well extend beyond the unit of sense required for the understanding of either word. This is even more likely to be the case with image structures and associational patterns, which may have nothing to do with the grammar of key words.

There is a great deal of manual pre-editing to be done if grammatical and homographic problems are to be solved. We are engaged in a grammatical analysis of the complete text. To take but two examples, this entails reducing conjugated verbs to their infinitive forms and inflected nominal forms to singular nominative forms. There are too many homographs to report on in this short, introductory paper. In his book Elektronische Syntaxanalyse der deutschen Gegenwartssprache, which is a computerized analysis of the contemporary German language, Eggers works with fifty classes of homographs, which we have considerably
pedured in mumber for practical purposes. Eggers' ten classes of noun honoseaphs could be omitted because German capitalization identifies the won it any case. I might give one example: zu functions as a preposition, 4. particle introducing the infinitive, as a particle contained in certain intivitives and participles, as a separable verb prefix, as a comparative. We wewign to each of these functions of $z u$ a different number so that the computer can collect them into their respective groups.

The text is now ready for key-punching. Since English key-punch-machines do not normally have an umlaut, or $\beta$, and usually only pint out in upper case, we have to make three alterations in the typing of the German, We use /ae for $a, \$$, $\$$ for $\beta$, and * to indicate capital letters. Schiller's text is typed on IBM computer cards and each line of text is assighed a reference to identify the version, page number and line number; we also add T for text The grammatical analysis is likewise typed on computer cards and given exactly the same reference, with the substitution of A(analysis) for 7 (text). The following example shows the treatment of one printed line of Schiller text:
$5171 T{ }^{*}{ }^{*} *_{Z}{ }^{*}$ WIE VIELE *TAUSENDE, DIE VOLL SICH SESOFGEN HABEN
$51 \%$ IA \% WIEO3 VIEL60 TAUSEND, DIE42 VOLL +SAUFEN STE SAUFEN + VOLL HABENOO
$\$ 1717$ VOM \%
S 171 A VONDER30
${ }^{3} \mathrm{~F}^{*}$ 2: Franz Moor, the speaker of these lines

* capital letter
\% : word added or omitted in other line
7 : separable verb
In order to produce the concordance, the computer carries out a number of sorting sequences. It takes line A, i,e the grammatical analysis, *s the active line and prints out the key word as a heading. It then compares this with the Schiller text and prints out all the examples of the tey word in T. In this way the problem of homographs and confusing endingy ts overcome. The citations for any given word are printed out from the line of Schiller text in the chronological sequence in which they appear. Thus it is possible to collect under the heading word or all the lorms of that pronoun, which include er, ihm, ihn and sich and, what is mort, in separate groups. This procedure is used for separable verb forms and all homographs.

A complete and systematic concordance, in the full sense of those three words, would record all instances of the use of every word of a poet's vocabulary. In reality it seems that this is impractical, since there are some relatively unimportant words which occur too frequently to list them all. Articles, conjunctions, pronouns might fall into this category. In our view a concordance should at least list these words and preferably offer an index of their occurence. One of the attractive features of a computer concordance is that, as a by-product, statistics and tables of every kind can be produced. Apart from the most obvious statistics concerning the frequency of words, stated relatively and absolutely, many other tables can be of interest to the reader. In the case of dramas it is useful to have a table or index of the vocabulary of different characters and different versions of the play. A further by-product, of course, is the availability of these works in machine-readable form. At minimal cost copies of the magnetic tape can be produced and sent on request to other researchers who may wish to use this data for further research.

## MARIE DE FRANCE, LE CHAITIVEL: TRANSLATION AND COMMENTARY

 Foster Y. St. Clair, University of North DakotaMarie begins by declaring her eagerness to tell about a lay that she has often heard, and to prove that it should be entitled The Wretched One rather than The Four Woes.

There lived at Nantes, she says, a lady renowned for beauty, breeding, and education, with whom every worthy knight in Brittany fell in love at first sight. Though she could not love them all, she shrank from killing them with an outright rejection; for-

One might more wisely, I aver,
Court all the ladies in a land
Than snatch a dainty from the hand
Of one poor fool, for he'd repay
By striking back without delay!
No, to such men a lady's kind,
Being of charitable mind,
And if she will not hear their suit,
At least she will not play the brute And wound their feelings with a sneer.

Inemod, whe will bonor therx, and thank them, and treat them well; and What, moded, , how the lady of Nantes treated her suitors.

The leading contenders for her hand were four young nobles famed for bauty, whor, and generosity, and so equal in merit that she could not thoose among them. What made her choice the more difficult was that in tuiny one, she must relinquish the three others! Naturally, then,

Being a person of great sense,
She kept her lovers in suspense
While she strove hard to learn and prove
Which man it would be best to love.
And so to each of them she sent Love-tokens for encouragement, And secret notes, with this effect:
None of the lovers could suspect
That the three other lords' endeavor Was being met with equal favor.
*

$$
*
$$

* 

Each suitor thought she was his love; Each bore her gift, fair proof thereof: A sleeve, a pennon, or a ring.

Dy giving a tournament at Nantes she hoped, no doubt, to learn which was the worthiest to be her mate. Of the two thousand knights who took part in the toumament, the four lovers proved to be the best, but they were so evenly matched that a choice among them was impossible. Fate, however, intervened: by accident, three of the four were killed, and tho fourth was desperately wounded.

Plunged into grief, she gave the dead a sumptuous burial, lodged the lywny man in her own house, and saw to it that his wound was healed. But even yet, though her decision had been made for her, she could not make tuy her mind to wed the survivor.

One summer day, when both had dined,
They chatted for a little space,
And then, with lowered head and face,
The dame recalled her grief, and wholly
Surrendered to her melancholy.
Fixing on her a steady glance,
He noted in her countenance

The tokens of her pensiveness.
"Madam, some fear or deep distress
Moves you," he told her, tactfully.
"Why do you grieve? Confide in me!
Be of good cheer, abandon grief,
And look for solace and relief."
"Dear friend," she said, "my griefs (not fears)
Are only for your dead compeers.
Never will lady of my birth,
Great though her beauty, sense, and worth,
Love four such men and in this way
Lose all upon a single day
-Save you, so wounded in the strife,
You must have then despaired of life.
"And since my love for you was great,
My sorrows I'll commemorate.
About you four I will compose
A lay, and call it The Four Woes."
The listening chevalier demurred,
And answered quickly, when he heard:
"Madam, when your new lay is done,
Entitle it The Wretched One,
And I will show by reason's light Just why the second name is right.
As for those others you lament,
Their share of earthly life was spent
Some time ago - their anguish cured,
Which for your sake they had endured.
But I who am escaped alive,
Behold, how wretchedly I thrive,
How dizzily my brain is whirled!
One I love most in all the world
Will talk to me both eve and morn,
Yet am I utterly forlorn.
I often see her come and go,
But little joy of her I know
-No lover's kiss, no warm embrace,
But only talking, in their place!
A hundred woes you make me bear.
Better that death should end my care

And from misfortune set me free
Your lay, then, should be named for me
The Wrotched One, and all of those
Who call the story The Four Woes
Will rob it of the proper name
By which it should be known to fame."
"Faith," she replied, "I like it well.
We'll call the lay Le Chaitivel."
Thum the story received the title now most in use, and the true one; but Mande confesses that both titles are suitable for the tale. At this point she breaks off:
"Tis ended; there's no more to say. No more I've heard or ever knew; No more shall I recount for you.

## Commentary

1. The author and her writings. Marie de France, a French lady, lived and wrote at the English court during the reign (1154-1189) of Henry II. She produced three works, all in octosyllabic couplets: the Lais; her Aesopean Fables, translated from an English version which she ascribes to Alfred the Great; and L'Espurgatoire S. Patrice, translated from the Latin of Henry of Salisbury. The Lais, according to Denys Pyramus, a contemporary clerk, were extremely popular among the knights and ladies of Henry's court. The canon, established by MS. H (Harleian Manuscript 978), comprises twelve of these chivalric romances, ranging in length from 116 to 1184 lines and totaling 5774 - about the length of an average romance of Chrétien de Troyes. In her general prologue Marie declares her reasons for writing and publishing, and dedicates her work to a "noble king," very possibly Henry II himself.
2. The title. Chaitivel, the OF diminutive of chaitif, is derived from lat. captivus. It lacked in the twelfth century the connotation of baseness which attends its modern descendant, NF. chétif.

Maxie often makes a great point of getting her titles right. Denys Pyratus had remarked that her stories are mere fictions - "not at all true" -. and her pedantry about titles may be an attempt to display a sholarly regard for the truth.
3. The toumament. The figure of two thousand combatants is by no means fantastic or improbable. We know of at least one tournament, held
in France during Henry's reign, in which three thousand knights took part. Such contests were mimic battles fought by groups of participants, each with its leader, and because the numbers were so great, the action took place in the open countryside rather than in a walled enclosure.

Toumaments provided exciting entertainment for their combatants, and also a means of winning fortune and renown. The monetary object was to unhorse and subdue one's opponent, take his horse and armor, and hold them for ransom. Since no ransom could be collected from the dead, any killings must have been accidental.

The wounding of the four nobles in Le Chaitivel would probably have been impossible if they had wom the heavy plate armor used in later times. What they did wear was a hauberk (a long coat of mail extending to the knees) and a steel helmet with a nose-piece (nasal) and a chin-piece (ventail) fastened with a lace. The spear-wound suffered by the fourth lover of Marie's lay must have been caused by the spear-head's slipping under the skirt of the hauberk.
4. The interpretation of lines $19-32$ has given great difficulty to scholars and translators, since the word pan, in line 21 , is usually taken to mean coat-tail, shirt-tail, or skirt (of a hauberk). Basically, according to Godefroy, the meaning is morceau (a bit or part of something). I have translated it as "dainty," referring to the sweet and gentle treatment accorded by a perfect lady to the suitors she rejects: treatment due in part to kindness but in part to fear of giving offence.
5. The author's purpose. The lay Le Chaitivel should be viewed mainly as an ironical character sketch of the lady of Nantes. The four lovers are indistinguishable from one another; only the lady is fully drawn and individualized. She is complex: soft, kindly, gifted, but also indecisive, sentimental, and self-centered. Because she cannot make up her mind, good men die, and her response to the tragedy is to feel sorry for herself. The best she can do for the dead suitors and for the survivor is to write a poem about her sorrow.

In describing her as "a person of great sense," Marie is of course ironical. The lady has brilliance, perhaps, but little sense, and the brilliance is only a matter of fine talk. Being in love with herself, she camnot give herself to any man. Richly endowed in many ways, as a woman she fails.
6. Le Chaitivel is representative of Marie's lays in subject, in style, and in narrative technique. The material is the stuff of romance: love and

Whentut The style, straightorward and almost laconic, deliberately botds 解etorical flourishes. The narrative method is economical of dewription, moralizing, dialogue, and psychological analysis, so that the Why thay move "with all deliberate speed" to its conclusion.

Matte is a good story-teller and an excellent entertainer. But she is more: a werious and thoughtful writer with her own vision of life. That nition is by no means optimistic; happiness and gaiety are encountered in her pages far less often than pathos and irony. But she is not so much a persimist as a realist; in the words of Foster Damon, "a sort of medieval hane Austen."

Close study of her Lais reveals to the reader the mind, the heart, and the personality of Marie herself, and these add greatly to our enjoyment of her charming romances. It is hoped that through the publication of my complete verse translation many readers may come to share the pleasure which I have taken in the poems and in the unconscious self-portrait of their author.

## Y WDISH IN CANADA

Jack Thiessen, University of Winnipeg

Of the three Germanic languages still alive in Canada (the Low Coman of the Mennonites, the Upper German of the Hutterites, and Widdish), Yiddish is the most prominent and is the oldest Germanic dialect to have assumed the status of a standard language.

Since the destruction of European Jewry, the U.S.A. has assumed the Jewish intellectual leadership of the countries of the Diaspora. There are some $6,000,000$ Jews in the U.S.A. representing about $50 \%$ of World Jewry. About 220,000 Jews live in Canada. Their religious life centres about the synagogue or temple, whose rituals and observances follow one of three major Jewish "denominations": orthodox, conservative and reformed. From the synagogue, the Jews of Canada have deweloped a network of institutions to help maintain their religious and cultural identiry (ruch as Hebrew and Yiddish schools; daily, weekly and monthly newspapers). Fund raising and social welfare are actively carried on to support the Jewish community and are backed by such committees as the Jewish Immigrant Aid Society of Canada, the National Council of Jewish women, the Canadian Jewish Congress, the Zionist Organization of Canada, etc. These organizations are also instrumental in supporting Jewish poets, authors, musicians, composers and painters. It can be stated
that the contribution of world Jewry to the field of culture has been completely out of proportion to its numbers during the course of its history.

Because anti-Semitism in the form of social and economic discrimination is still a factor, co-operation on the interreligious level by Catholics, Protestants and Jews is sought by the Canadian Council of Christians and Jews, on whose behalf the Prime Minister proclaims an annual Brotherhood Week. The Human Relations committees of the Canadian Congress of Labour and the Canadian Trades and Labour Congress have fought against anti-Semitism as part of the task of fostering amicable group relations.

The origin of Yiddish goes back to Old High German times (10th cent.), although the oldest Yiddish literary document is dated much later, 1396. That Yiddish assumed the status of an independent language at all is explained by three factors:
a) Jews lived in sufficient social and psychological proximity to their non-Jewish neighbours to attain familiarity with the language current in their environment.
b) Jews settling in the upper Rhine region brought with them certain pre-Germanic speech habits that immediately rendered their German somewhat different from that of their nonJewish neighbours.
c) Jews also brought with them certain religious-cultural habits that were either not encodable in the language of the non-Jewish environment, or were not as unambiguously or felicitously encodable in that language. ${ }^{1}$

The chronological phases in the development of "Yiddish", as it came into being by adoption, loaning and absorbing the Germanic dialect to its Hebrew base, and the emergence of a language used by Jews to create spiritual values and to communicate on all levels, is explained by Dr. Nathan Suesskind as follows:

| 1) Juden-Deutsch | 900-1100 A.D. |
| :--- | ---: |
| 2) Juedisch-Deutsch | $1150-1350$ A.D. |
| 3) Alt-Deutsch | $1400-1500$ A.D. |

A questionnaire was prepared in which sociological considerations were taken into account. The questionnaires were distributed throughout

Cruath. Since they were sent out much too sparingly, another method of dytulution was devised. Space was purchased in the leading Jewish whemeryer in Montreal, Toronto and Wimnipeg and the entire questionWhete war published, together with a request that it be filled out and netemed to the author. The response was highly encouraging, not only in wems of numbers retumed (1284) but also in widespread and representa4we toveraye. Completed questionnaires were returned by individuals, by 17 turferent clubs, schools and societies, by families from remote towns and whages and even by farmers. Answers came mainly from metropolitan Whtes but also from every province, and from the N.W.T. The interest dwhlyyed and the effort taken manifested and paralleled the proud and tange history of Yiddish. The tone of the answer to the question: "What is the (tuture of Yiddish?"' was almost invariably one of sadness, nostalgia and melancholy. And yet the letters reflected just as frequently the pain of matar resignation. The overriding conclusion of the research is that the Jewish people sense that Yiddish is doomed, greatly regret the gradual loss but are not certain or agreed on the measures that can be taken to reverse the trend.

Most of the Jews, over a period of a thousand years, have expressed in Viddish their happiness and sorrows, their hopes and disappointments, their strengths and weaknesses, their poverty and prosperity, their deep deste and their loneliness, and their etemal hope of returning to their futherland. During the periods of its ascendancy, Yiddish, as the vemacular, was spoken by both men and women, by rich and poor, by scholars and illiterates, by merchants and artisans.

It was used during a thousand years as the faithful guard of Hebrew, the holy language, in order not to profane its holiness in everyday conversation. Up to the previous generation the children of Israel commonly believed that the Lord and Moses spoke Yiddish on week days and Hebrew, the holy language, on the Sabbath. Hebrew was to the Jews what Latin was to pre-Reformation Christianity.

The last chapter in the development of Yiddish, namely that of the atoption of English, - almost en masse - seems also to be the knell of this remarkable, if not unique, language. Of course, this has been said of Yiddish several times over the last thousand years and with similar finality. But there are other ominous factors at work during this crisis and the language is threatened by factors over and above the previous agents. The previous ones were, in addition to general indifference and lack of
awareness of the advantages of polylingualism, a complete incomprehension of the nature of original languages, i.e. dialects.

Dialects, particularly in North America, are often regarded as corrupted, bastardized and pejorative forms of the High language. Lack of linguistic awareness, even the most elementary, and inadequate philological training, accounts for this misunderstanding. People in the main simply do not realize that dialects are the truer and more original form of communication. Then there is the urbanization trend which, as far as Jewry is concerned, has been completed; $98 \%$ of Canadian Jewry lives in cities. Urban life has a levelling effect and recent non-conformism in cities, for all its popularity, is hardly more than a flashing fad with no impact on the retention of minority languages.

While some critical and supercilious attitudes towards Jewry and Yiddish persist, there is today a general acceptance of all minority groups in Canada. The result is a paradox that is as old as it is true; creativity is not encouraged by approval but, rather, flourishes in an atmosphere of tension and disapproval.

Furthermore, the age of secularization is now upon us and the children of Israel are no longer existent who commonly believed that God and Moses spoke Yiddish on the week-days and Hebrew on the Sabbath with the implicit moral that this is something good to emulate.

The most decisive reason may be the displacement of the Jewish corner shops and neighbourhood stores, where random conversation, peddling, and haggling in Yiddish flourished. Speedy supermarkets and mass assembly lines are not conducive to the processes of language retention, much less to the retention of minority vernaculars. In short, languages follow the coin and hardly the flag.

A final reason is a speculative one: languages develop organically in some geographic locales and not in others. Yiddish developed and flourished in Central and Eastern Europe; with the horrible holocaust, its speakers were severed from these historically and organically fostered roots for all time. After a thousand years of growth and development, Yiddish now finds itself without the European heartland that gave birth to it and nurtured it (Fishman ${ }^{2}$ ). Man, and particularly North American man, lives not by nostalgia or reminiscing about the glories of an age gone by; the results are a termination of Mosaics and a stirring of the homogenous melting pot. For all its recent accommodation of lesser languages, the Canadian scene is just as conducive to assimilation as the

American wes. The difference is one of time only. Furthermore, a predominantly Anglosaxon society has never distinguished itself in the encouragement or practice of polylingualism. There can be no doubt that the speed of wholesale acceptance of English vocabulary and Englishisms is bused on the simple fact that English is a singularly easy language to learn. Thes trond is coupled with ready accessibility to T.V. and its exclusive emphasis on spoken language.

Formerky, loan words, for example from Slavic languages, were for the most part confined to objects and ideas for which there was no exact oguvalont in Cemanic or Semitic sources. (Up to the last world war Yiddish consisted of: $85 \%$ Germanic origin, $10 \%$ Hebrew, $5 \%$ Slavonic).

In Canada, as in North America, newcomers were thrown into the rushing American life with its wealth of unfamiliar objects, surroundings, conditions and ideas for which they had no ready terms. Their adjustments to these novel scenes necessitated the adoption of new designations together with the objects of such designation. In many instances, the "path of least resistance" and the desire not to be dubbed "greenhorns" caused English words to elbow out deeply rooted Yiddish terms.

Many immigrants exchanged their homes for freedom and, in the course of the transition, attempted to pull out their roots as well. These are the new citizens who attempt to sever contact with European tradition and who often exchange culture for civilisation. They provide the inside help for the deterioration of a language.

1. Joshua A. Wishman: Yiddish in America; Mouton and Co, The Hague, 1965; pp. ,2

RHYTHM AND BIRTH OF RHYME
Louis Palanca, University of North Dakota
Attempts at evaluating Greek and Roman literary artistry have brought to light, among other matters, the ancients' discovery that all our senses set certain peculiar limits within which the desired standards are comprehended. There is no doubt now that they knew how to please the sense of hearing by applying, while speaking or writing, appropriate sounds, proper cadences or rhythms.

Thrasymachus of Chalcedon, a Sophist of the fifth century B.C., appears to have been the first to introduce cadences into prose in order to
produce a rhetorical effect. ${ }^{1}$ Gorgias of Leontini, a contemporary of Thrasymachus, contributed or at least discovered the potentialities ${ }^{2}$ of the figures of rhetoric parison, homoioteleuton, and antithesis - devices which bear his name. Isocrates united the prose rhythms and the Gorgianic figures of his predecessors ${ }^{3}$ in order to harmonize cadences with structurally balanced cola (parison), at times ending with the same sounds (homoioteleuton), at others having contrasting meanings (antithesis). The grandeur of this style would arrest attention and stimulate interest. This style, especially the combination of rhythm and homoioteleuton, was tried again and used to excess by the Christian Fathers. St. Zeno, however, varied and ordered the homoioteleuton so as to suggest, if not to start, several forms of rhyme.

Rhythmic clausulae, i.e. the two or three words ending a sentence, a clause, or a phrase having a certain rhythm, continued to be employed by later Greek and Roman authors; but, notwithstanding the rules for the practice of this art given by the ancient theorists Aristotle (Ars Rhet. T.8, 1408b), Cicero (Or. 57, 191ff.; De Or. 46, 181ff.), and Quintilian (9.4), no definite system was ever organized and followed. There are, however, a few cadences that are consistently employed by all authors.

The clausulae that Cicero employs most often are:
cretic spondee nulla debetur or publicam posses etc.
$\therefore$ - - -
double cretic castra pervenerit or publica sentiat etc.

- v- - - -
cretic dichoree
-u-iv-u
1st peon spondee esse videatur
-uvuミ-
These cadences were later employed most often by Latin writers. During the third and fourth centuries syllabic length was neglected or confused and these preferred metrical forms became accentual clausulae or cursus known as the cursus planus ( $\sim-\underline{\sim} \underline{\sim}$ - sine timore),
 fuerit genitalis), and trispondaicus ( $-\ldots-1$ flammae blandientes). ${ }^{4}$ If read according to the rules of Latin accentuation, these cursus
and Cicero's preferred metrical clausulae have the same cadence. Thus, for example, the cretic dichoree civium perditorum as an accentual clausula is a cursus velox that is not better than fuerit genitalis which, metrically, can only be framed into a dactyl spondee (heroic ending - not for prose), and only if the first two syllables (fu e) be disregarded.

After St. Gregory the Great (sixth century) the rhythm was neglected until it was revived by the Roman Curia in the eleventh century, when Cregory VIII finally published the rules for the cursus. In spite of the fact that it was conspicuously followed by Dante and Petrarch, it was banished by most of the scholars of the Renaissance. Yet an inborn lendency to pursue certain cadences is sensibly felt in modern languages, and we camot dismiss as unfounded Cicero's statements that human beings have the ability to measure and to appreciate rhythm to such an extent as to seek and require it in oral expressions (cf. Or. 168, 177, 200, 208, 221).

In Or. 38, De Or. 197, etc. Cicero recommends to prose writers also arrangements of similar sounds especially at the end of consecutive sentences so as to create a sort of harmony of rhythm and sounds. Indeed, even the elegiac poets of the Golden Age sought this harmony. In their works the rhythm of the elegiac couplet is at times accompanied by like sounds, especially at the end of the cola of the second line. E.g., Catullus 65.1.4:

Etsi me assiduo confectum cura dolore sevocata doctis, Ortale, virginibus
nec potis est dulcis Musarum expromere fetus mens animi, tantis fluctuat ipsa malis:
(cf, also Tibullus 1.3.13-16; Propertius 1.19.1-4; etc.).
To avoid monotony, classical poets employed these homoioteleuta only sparingly. The Christian Fathers, instead, in their prose writings maintained rhythm only in clausulae and used sound equality at the end of cola very conspicuously, as in:
quod spica structum,
et aristis vallatum,
et folliculis decussum,
et in farina comminutum,
et in spica coactum,
et in cibum sumptum.
(St. Hilary of Poitiers, Trin. 5.3).

St. Zeno, however, ordered and mellowed this exaggerated use of the homoioteleuton by combining it with the isocolon, as in 514A2-3:

> aquam de terra bibisti
> manna de coelo gustasti;
or by disposing the same sounds in ABAB arrangement, as in 285C1-2:
maledicitur
et benedicit:
creditur et gratias agit;
or by employing also homoiteleuta of inner words (cf. Quintilian, 9.3.77, the second example of homoioteleuton), as in:

## caecos videre

surdos audire
mutos loqui claudos currere;
or by combining his refined innovations, as in 273B1-2:
bella premit,
lites tollit,
jura evacuat,
fora compescit,
ora eradicat,
iras exstinguit.
Here the first two cola constitute a simple homoioteleuton of the endrhyme kind, while the inner rhyme follows through jura . . . fora . . . ora. From the inner words the rhyme extends forward to the words ending the cola. But now it becomes alternate and is prompted by the lack in the last line of a word rhyming with ora. In fact, the hearer, perceiving the lack of a word rhyming with ora and retaining the sounds of compescit and eradicat, welcomes the last word exstinguit when sounded. He connects it with compescit and thus appreciates the alternatively re-echoing sound of eradicat and evacuat.

It is a well known fact that Dante took from the Patristic writers the use of the cursus for his prose writings, but to me it seems that in contriving his "rime" he capitalized even more from the variations of the homoioteleuton of St. Zeno.

[^0]$2_{\mathrm{JMM}}$. Campbell, The influence of the Second Sophistic on the Style of the Sermons of St. Basil the Great (CUA Patr. Stud. Washington, 1922) 81.
$3_{\text {A.C. Clark, The Cursus in Mediaeval and Vulgar Latin (Oxford, 1910). }}$
${ }^{4}$ E. Norden, in Die Antike Kunstprosa 2 (1898, 5 ed. reprint 1958), 951, observed that the cursus planus, tardus, and velox were accentuai abstractions from the cretic spondee, double cretic and cretic dichorse respectively in that order.

## THE ODYSSEY OF MARGARET LAURENCE*

Water Swayze, University of Winnipeg
Margaret Laurence has not been concerned with themes or theses to be illustrated, but with people whose stories must be told. Still, in spite of the variety of characters, experiences, settings, and techniques that her works exhibit, certain common features emerge that create a pattern for which Homer's Odyssey provides a meaningful metaphor.

The Odyssey is about a man - a restless man, a wanderer, who in his strange, protracted adventures, suffers more than most men, but who also learns more than most men about human nature, and about himself. In the face of almost incalculable odds he stoops to almost any subterfuge to escape and survive, not only for his own sake, but for the sake of his company, of his wife and his son, and of the body politic. His victories are limited and temporary, but the mood of the poem is one of limited optimism. Human nature has not changed; human effort is not always successful; the monsters and seducers, whatever they may symbolize, are still there, as are the human feuds and the inevitability of death; but Odysseus has endured, and in his enduring he has learned much - not only about other men's minds, but about his own. In hearing of his own deeds through the words of other men and in discovering for himself what he has done and can do, he is capable of recognizing a superhuman order in human affairs, and in his knowledge he is able to make heroic decisions and to carry them out, achieving a much-desired though limited victory in terms of immediate responsibilities.

In her experiences in Somaliland and emergent Chana, Margaret Laurence was able, like Odysseus, to "learn the minds" of other people, and having been able, as an outsider, to view their beliefs in the context of the circumstances of their daily lives, she is able at a later stage of her own experience to view with sufficient detachment for effective artistry the beliefs of her parents and grandparents and neighbours - and of herself and to present the various shaping forces of a legacy such as that of Scotch Presbyterian Calvinism in her prairie novels and stories in a way that she
might not have done had she known only the people of her childhood and their beliefs.

The reader who shares the insights of Margaret Laurence's early works is prepared for those of the later ones. The encounter with the decline of white supremacy and the challenge to European so-called Christian and commercial values expressed in the experiences of Johnny Kestoe and his Anglo-Sazon colleagues in This Side Jordan, mirrored by the loss of African tribal religious and social patterns expressed in the experiences of Nathaniel Amegbe, leaving both white and black struggling to find themselves "between yesterday and today" (TSJ, 106), a situation echoed in different ways in each of the stories of The Tomorrow-Tamer and re-echoed throughout the pages of Long Drums and Cannons, prepares one for the experiences of Hagar Shipley, and Rachel Cameron, and her sister, Stacey MacAindra - and of course, Nick Kazlik and Mac MacAindra - and Vanessa MacLeod.

Mrs. Laurence's most recent book, Jason's Quest, is a delightful book for children, and a wise book for children and adults. The insight that the Jamaican cat Spice gives to Jason - "[Strine] means no battle is fought once and for all. . . You fight your battle here and now, one by one. Nothing going to get settled for all time, you know" (JO, 190) - is the realization that comes in different ways and after much grimmer struggles to Johnny Kestoe and Nathaniel Amegbe, to Hagar Shipley, to Rachel Cameron, to Stacey MacAindra, and to Vanessa MacLeod. And it is a realization that emerges from the experience of Odysseus.

The conclusion of The Stone Angel is ambiguous. Hagar has begun to see her life in a new perspective, which is brought into sharp focus in the midst of Mr. Troy's singing of Old Hundredth. There is joy in the knowledge that she has always wanted to rejoice, freedom in the knowledge that she has been misled and enslaved by pride and fear, remorse in the knowledge that she has shackled all that she has touched, and despair in the frightening awareness that in spite of the new realization, the past cannot be undone - "Nothing can take away those years" (SA, 292).

In the remaining moments of her ninety-year life she performs at last two acts that might be called truly free: she gets the bedpan for Sandra Wong, and she speaks the heart's truth by telling a lie, telling Marvin that he's been a better son than John, but the reward, in hearing Marvin say, "She's a holy terror," is more than she could now have "reasonably
expected out of life" (SA, 304.05). Is she still the proud, unregenerate Hagar, or has she recognized a meaningful authority whose will she will accept? In seizing the glass of water is she still stubbornly insisting on taking all responsibility herself, or has she suddenly, in the moment of death, laid claim to the water of life which is hers for the taking? The victory may be alloyed and ironically contradictory. But it is victory. The possibility of hope leaves hope for all.

In A Jest of God, Rachel Cameron's victory, while still ironically flawed and limited, is clearer. Rachel is still a middle-aged spinster with a dependent mother. She is still physically and intellectually undistinguished. But in realizing the potent forces of heredity and social enviromment, in feeling the identification in herself with the elements of her parents ${ }^{7}$ personalities and problems that she loathes most, in realizing that the major forces of life and death are beyond her control, that "in the end it's in other hands" (JG, 194), there is relief, there is freedom to go and take the chances of life. In the realization that God, whom she had scomed because she had shallowly misconceived Him, is involved in His own tragic jest, that the folly that she feared and resisted is the means of grace, she can end the novel with a meaningful prayer that the title and the dimensions of the movie version totally missed.

The Fire-Dwellers, with, in a sense, more commonplace characters grappling with even less dramatic problems in a wider, more complex, more nightmarishly frightening universe, also has its limited victory. As the news programmes on the T.V. indicate, humanity is still being starved to death, shot down, burned with napalm bombs. Friends can turn out to be perverts who get smashed up on the highways or attempt suicide. Middle-aged husbands, to earn a living, are forced, in a dehumanizing rat race, to go on peddling commodities that they really don't believe in, and over-sexed wives, while regretfully wishing that they could have been great courtesans, can lack the will power to start a diet, let alone stay on one. But Stacey and Mac have established real communication, even in a limited way, for the first time in years. "Then they make love after all, but gently, as though consoling one another for everything that neither of them can help nor alter" (FD, 307).

Stacey says at the very end of the novel, speaking of her family, "Temporarily, they are all more or less okay" (FD, 308).

At the conclusion of the final story in A Bird in the House, Vanessa revisits Manawaka twenty years after Grandfather Comnor's funeral.

I went to the cemetery and looked at the granite and the names. I realized from the dates on the stone that my father had died when he was the same age as I was now. I remembered saying things to my children that my mother had said to me, the clichés of affection, perhaps inherited from her mother. (BH, 207) Looking at Grandfather Connor's house, she muses: "I had feared and fought the old man, yet he proclaimed himself in my veins" (BH, 207).

In this recognition of identity, which involves a recognition of the continuation of struggle from generation to generation and the apparent insolubility of the human problems that as young people we want to do most about - in this recognition are pride, forgiveness, and apology, but above all, freedom - even if it be the freedom to continue to strive and struggle.

The TV-news sections of The Fire-Dwellers (as well as the title of the novel itself), the "Open Letter to the Mother of Joe Bass," and many of her short stories, both African and Canadian, all attest to Margaret Laurence's awareness of the monsters and traps that beset mankind and her concern for mankind's fate. But in this world of monsters and traps her characters struggle, and in an Odyssean sense, in the name of all of us, they win their limited victories.

If Nathaniel Amegbe and Hagar Shipley and Rachel Cameron and Stacey MacAindra - and a host of other characters, some of them even animal - can have their moments of vision, their awareness of freedom and responsibility, their chance to survive even momentarily with knowledge of who they are and how they relate to the order of things, freedom and hope remain. As long as humanity has its Homers and Margaret Laurences to help individuals, in some measure, to see themselves as capable of responsibly winning the limited, immediate victory required for survival, freedom and hope will not disappear.

It is for these reasons and in this sense that I call the world and work of Margaret Laurence "Odyssean."

[^1]
## THE COALESCENCE OF PAST AND PRESENT IN THOMAS

 McGRATH'S LETTER TO AN IMAGINARY FRIEND Joseph F. S. Smeall, University of North DakotaThomas McGrath's Letter to an Imaginary Friend may be viewed as a long, narrative poem, that presents a culturally significant hero. As such a poem, the Letter may be related to the effort to create a modern, American epic. If this effort envisages that only a comic epic is now feasible, then McGrath's Letter presents a hero who is "far from Laughter," who is "writing . . . toward laughter." If the effort envisages that only an Artist is feasible as a modern epic hero, then the Letter gives us the "pseudo-autobiography" of a poet. If the effort postulates that an American epic must be structured as an emigrative journey, then the Letter is so structured. If the effort proposes to use the techniques of prose fiction developed by stream-of-consciousness writers, which tend to produce a poetic prose, then it may be noted that the Letter is a narrative using such techniques. It is the narrative of a pseudo-ego reporting an emigrative journey along chains of association through a gallery of characters and landscapes toward laughter, tolerance, identity, and song.

Given such a poem, I have asked: what might be the stylistic structures used? Clearly a variety of structures connecting points along the joumey of associations might be expected, and these connecting structures might be expected to associate past and present points. I reproduced three passages from the poem which I read with comment. You may yourselves judge of the structures that appear and of their interest.

## THE ORIGINS OF THE NAMES OF THE STRAITS HELLESPONT AND BOSPORUS Demetrius J. Georgacas, University of North Dakota

The geographical configuration of Southeast Europe includes the waterways or straits of the Hellespont, the Propontis, and the Bosporus, which constitute the only access to the large landlocked Black Sea. Geologically, both the Hellespont and the Bosporus are maritime rivers, originally erosion yalleys which once were inundated by the sea and submerged. In geography and history, these straits have also been the traditional boundary lines between the two continents Europe and Asia and played a highly important role throughout the past, both as the channel connecting the Black Sea with the Mediterranean and as a bridge between Anterior Asia and SE Europe.

The names Hellespontos and Bosporos have been etymologized by various scholars.

## I.

The ancient names for the first were Hellespontos (in the lliad) and Hella's poros (in Pindar and later). The former, surviving through centuries, is a hypostasized compound from the syntagma Hella's póntos 'Helle's sea'. The name Hella or Hélle represents the well known mythical figure of a young girl who with her brother Phrixos, fleeing from their vicious stepmother and riding on the back of a golden ram, fell off the flying sheep in the area of the entrance to the strait, which thus received its name. In fact, Hell ${ }^{*}$ is the name of a cape on the Thracian (and European) side of the same Aegean entrance to the strait. The ultimate origin of that name still remains unknown and many a scholar calls it pre-Hellenic, which constitutes no explanation.

More recent attempts at explanation of the name Hélle have failed: By L. Deroy from hypothetical pre-Hellenic *hella 'north', whence also Hélla nes is explained through *Hellane 'Nordic people'. By V. Georgiev as Phrygian *Helg's from Indo-European *seleswents 'swampy': Helle's póros 'swampy river' and Helle's pontos 'swampy sea'. Both theories are refuted by this writer in detail.

The late medieval name ta Jarłanelya 'the Dardanelles' (also Stenón ton dardanelion 'Strait of the Dardanelles') is, in my opinion, derived from the name of the homonymous town on the Asiatic coast (midway in the strait) in the same way as the Strait of Gallipoli, also called 'Hellespont', derives its name from the city name Kallipolis (actually Kalliou pólis) at the Thracian, north end of the same strait. Furthermore,
 ancient city located some 10 km south of the town called Dardanelya.

## II.

The interpretation of the name Bosporos also involves the mythical element, but presents a more complex situation.

First of all, the name Bosporos designated actually not one, but three straits: (1) the one at Byzantium, called Thracian Bosporus, in late Greek called Stenón 'Strait', and in Turkish Bogazz; (2) the Hellespont or Dardanelles or Strait of Gallipoli; and (3) the Strait of Kerch, the Cimmerian Bosporus.

Three main explanations have been so far attempted: a Thracian, a Phrygian, and a Greek. The Greek explanation proved to be the true one, especially after my interpretation of a crucial detail involved in it.
(a) Bósporos has been linked with a name Bóspara (6th cent. A.D.) designating an inland place in Thrace. However, since the Thracian term -para occurs in some 41 Thracian compounded place names and does not carry the sense 'strait' or 'crossing-point, ford', the explanation has been abandoned by serious scholars.
(b) According to V. Georgiev the Phrygian term poros with the meaning 'river' derives from IE *boro- 'river' and the first component bos- in Bósporos is explained from IE bhos- 'light' (cf. Greek pho's). Thus Bosporos meant 'light river', and can be compared with the form Phosporos 'light-bringer'. The truth, however, is that the latter name is the result of a folketymological connection and that the explanation has raised more questions than it answers. The word póros is Greek, but without producing any evidence, Georgiev takes it in this case to have been Phrygian.
(c) The Greek derivation of Bosporos 'ox-strait' from boòs póros (cf. Oxford, Ochsenfurt) has been traditional, though questioned by scholars chiefly on account of the difficult task of discovering how Boósporos could become in ancient Greek Bósporos. Karl Brugmann's ad hoc reconstructed IE form $g^{W}{ }^{W}$ Wos for bos- is impossible and was virtually abandoned by its author, though it is still followed by some later critics, e.g. by H. Hirt. The so-called hyphaeresis or surreptitious loss of one of the two o-vowels in Boosporos $\longrightarrow$ Bosporos does not satisfactorily explain the phenomenon.

I suggest that ancient Greek dialectal and, still further back, Mycenaean Greek phonology will help us toward the solution. Byzantion was founded by Dorians in the early 7th Cent. B.C. and the Doric dialect retained the digamma fiw/. Thus, the earliest form of the name must have been Bowósporos. This form became early Bósporos by syllabic dissimilation or haplology, as e.g. boa thówos $\rightarrow$ boa thós, boe thós, 'hasting to the cry for help, aiding': Polúbowos $\rightarrow$ Polubos (personal name: 'having many oxen').

If the name was originally geographic, it would convey the notion of a poros, a 'seaway from sea to sea' and as such could be applied to the three Bospori, the Thracian, the Hellespont, and the Cimmerian. The
naming could have occurred at Byzantion, in whose area the headland he-Boûs on the Asiatic side NE of Byzantion might have pre-existed. Since that place was called Bous, the seaway could take the descriptive name Bowòs póros. So Bósporos signified the channel (póros) at the promontory Boûs, i.e., the narrow seaway from the Propontis to the Black Sea. In chronological order, the name Bósporos at Byzantion could have been the first and then the name could have been transferred and applied to the Hellespont and the Cimmerian isthmus.

The appellative noun bosporos, according to my reasoning, could have applied originally at crossing-points of rivers and only then could it have been transferred to channels of seaways. Otherwise, one has to assume that cattle were really able to swim across the strait, which is impossible. ${ }^{1}$ While, the original meaning of the term bosporos was 'ox crossing-point' of a river and simply 'river-crossing', the meaning applied in our case was 'strait, channel' along its whole length. This assumption, which makes sense to me, will, I hope, appeal to others also on the ground that the two channels, the Hellespont and the Bosporus, are called Stenon (and Stená) 'narrow, strait' and by the Turks Bogaze (=the Bosporos) and Çanakkale Bog̀za (=the Hellespont). These names, in fact, apply to the narrow seaway, not to an 'ox-crosssing, ox-ford'.

The mythological association of the name Bósporos (in the Byzantion area) with Io was, I suggest, a rather late additive as an aetiological explanation of the name. The mythical element had, in fact, nothing to do with the actual etymon of the name except for the lexical element (boûs) used also in the post factum popular explanations. ${ }^{2}$

## FOOTNOTES

1 I enquired about the possibility of cattle crossing waterways. My colleague, Professor Paul Kanowski, chairman of the Department of Biology at the University of North Dakota, has established the fact that cattle can swim in flooded areas for a quarter of a mile or 370.5 m . As the narrowest point in the Bosporos is about 560 m . and has steep shores, and the narrowest point in the Hellespont is 1200 m . and the depth of the water is several tens of meters, the crossing of oxen in these areas is virtually precluded. The term bosporos 'ox-ford' was applied earlier to fordable rivers and later to the three channels. The common point of reference in both, rivers and channels, is the narrowness of the waterways.
2 The full text of this study with full documentation is to appear in Names 19 June, 1971, p.p. 65-131.

THE ESKIMO VERB: A TRANSFORMATIONAL STUDY

## OF OBLIGATORY COMPONENTS

Thomas C. Correll, University of Manitoba

I: Introduction
"No man has ever worked out the number of possible different ways in which a single Eskimo verb may be used, but it is undoubtedly up in the tens of thousands, if not in the hundreds of thousands." ${ }^{1}$

The aim of this paper is, in part, to indicate that there is at least one man working on the problem of the Eskimo verb. The objective is to sketch a synchronic analysis of the obligatory components of the Eskimo verb. The explanation is generative and transformational. The description is based on data collected from speakers of the so-called Caribou Eskimo dialects in the central Arctic. ${ }^{2}$
"Eskimo" constitutes a New World ${ }^{3}$ language group of a variety described as agglutinative and polysynthetic. Its dialects are spoken by something more than 70,000 persons. The family is called Eskaleut. The Aleut language, though related, is notably more divergent than any of the warieties of Eskimoan proper. Swadesh and others have demonstrated lexicostatically a major west-east division in the language, the so-called Yupik and Inupik dialect groups or languages.

Swanton (1952) lists over 125 local groups of Eskimos. In each case these aggregations are identified by a name which corresponds to some unique aspect of the environment or the people. To each such name is then appended a common suffix/-miut/signifying "the inhabitants of". There is evidence that each of these groups uniquely expresses a dialect of its own.

Despite phonology and lexical variations between groups, the structure of the grammar appears to be largely monolithic. Suffixation is the sole morphological process. English concepts of pattern and process in grammar are not readily applicable. Suffixes are added to roots and to each other in a highly complex but systematic fashion. The structures and dynamics of suffixation are crucial to the notion of grammar in this language.

The syntax of Eskimo is relatively simple. Word order is highly arbitrary. The relationships of words are developed in terms of what has
normally been termed inflection; the nature of the suffizes determine the function of a word in an utterance.

In order to establish empirically the structure and function of verbs in Eskimo discourse, a short text is included. It was elicited from Tattuinee, an Eskimo from the Rankin Inlet area. The informant is unilingual. The text is recorded in phonemic script. Translations are inlcuded and verbs are underlined. No attempt has been made to translate on a morpheme for morpheme basis. The verbs are all considered of equal relevance. Sentences were identified primarily on the basis of phonological criteria: falling intonation, breath groups and pause.

Text

1. aqraani upippaaqqut puisiughta natsiqsiuq/uta.

Last year during spring (we) hunting seeking seals ukjuksiuqhuta.
seeking "Squareflippers".
2. Ilaa qajariap anuraaliqtualugmat sanututhalukhuni.

Indeed canoe because it was very windy it meandered much.
3. qapiasulauqpuya aksualuk qajariap maunalaugmat

I was much afraid very much canoe when it was going atausiraluagruni.
being just one.
4. imanmit tatattauqasalauqpug sikumi uqquaqaarasuktuinaquta. With water it was almost filled by ice we only found shelter.
5. iniqralaurapta aivinitlu maqruuk usipluta natsinmikiu ukjuklu Then we went on and walrus two loading and seal and "squareflipper"
tiriqlu.
and young barbed seal.
6. taipkua kisiani usijatualuavut anuraaqtualulinmat
Those only they surely only the load because the wind was
then
aksualuk sanuttuquni sikulu aktiraqtualuk
blowing very much constantly turning and the ice breaking up
qapianaqtuq
it was fearful.

## II: Verbs

In Eskimo at least one verb is required for any sentence to be complete. Chart I includes information concerning the numbers of verbs, other words and sentences in four texts.
CHARTI

PERCENTAGE OF VERBS IN THE TEXTS

| Text | Sentences | All words | Verbs | Other words Percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 6 | 34 | 16 | 18 | $47 \%$ |
| 2 | 12 | 58 | 26 | 32 | $47 \%$ |
| 3 | 12 | 100 | 47 | 53 | $47 \%$ |
| 4 | 16 | 130 | 58 | 72 | $45 \%$ |
| 4 | 63 | 322 | 147 | 175 | $46.5 \%$ |

Note that the number of all words in the texts which are identified as verbs is significantly near half the total number. It is also interesting that in each case the verbs constitute approximately the same percentage of the stock of words used. The average number of verbs per sentence is more than two.

However interesting the study of the relationships of verbs to other sentence constituents might be, the concern of this paper is with the nature of the relationships of the constituent units within the verb. It is undoubtedly true that there are at least two levels of structural relevance that verbs participate in: outer or syntactic and inner or morphological. It is also true that there are interrelationships between these levels. It is the inner level only that is described in the following sections.

Verbs in Eskimo are individuated and identified in terms of the special classes of obligatory pronomial person suffixes that occur in several moods. The suffixes are divided into two groups: the descriptive and the mood-person forms. These are appended to roots.

A: Roots.
Verb roots are of three types. Bound roots never occur without further modification. This is indicated with the use of a hyphen following the form. Ambivalent roots are those which may occur in their simplest
form without further modification. Free roots need to be formally verbalized before they can accept any of the particularly verbal suffixes.

## B: Descriptive Suffixes

The descriptive suffixes are non-obligatory forms that modify and expand the meaning of roots. The suffixes may be either terminal or non-terminal, that is, they may either complete a word or not.

## C: Mood-Person Suffixes

Crucial to the definition of the concept verb in Eskimo are the obligatory sets of forms that combine what is here called Mood with intransitive or transitive person. These sets constitute a complex system of pronominal reference. The indicator of mood is normally a consonantvowel sequence occurring initially in each lexeme. The person endings may be intransitive (subject person only) or transitive (subject and object persons both indicated). First (1), second (2), third (3), and sometimes fourth (4) person are characterized. The fourth person is a reflexive third or second third person. Both intransitive and transitive forms provide for singular, dual and plural subject and object. There is some merger of forms in the transitive sets.

The structure and function of Mood-Person suffixes
The complex sets of mood and person marking suffixes are multidimensional. One dimension is that of the moods themselves. The choice of the term "mood" to describe this dimension is arbitrary and ambiguous. What is clear is that each of the mood forms, characteristically a CV sequence, has its own semantic and structural value. That value may not translate efficiently into English meaning and form. Although it is not the structure of sentences which is attempted in this study, it is apparent that any such analysis would have to describe systematically the hierarchical relations between verbal moods. A grammar of the verb as a word type, however, requires merely the identification of the forms in strings and the translation of their lexical significances. The meanings are generally as follows:
a. Indicative- $/-v u-/$. Simple indicative or active.
b. Interrogative- $/$-va-, -vi-/. Simple questions.
c. Optative - /-lac,-li $/$. Translates "let . . .".
d. Imperative- /-9/ Commands and directives.
e. Causative- $/-\mathrm{ga}-\mathrm{gm} / \mathrm{g}$. Sometimes called the relative preterite, the significance of this is such that the verb condition is established, as contrasting with pending. It translates: because, when, then, therefore, etc.
f. Conditional $/ \mathrm{gu}$ - $\mathrm{kp} /$. The so-called relative future form has its significance in that the verb condition is pending rather than establiched. It translates: if, when, then, etc.
g. Infintive- $/$ hu- . Referred to by some as appositional, this form occurs statistically quite frequently and translates often like an English infinitive: to ..., ...ing. However, it sometimes also is used as the indicative.
h. Negative- $/$ na $\%$. Occurring with or without the formal negation morpheme $/ \mathrm{giit} / \mathrm{\%}$, this form always translates with a form of negation.
i. Participial-/-ju-,ja-, -gi-, -ga-\% A complex subset with a wide range of uses and meanings that frequently overlap with the above. It may translate: he who..., the one that..., that he..., etc.
The mood-person suffixes can be further classified on the basis of their expression of third and fourth person. Such an analysis results in three higher level groupings of the moods. Those which never enumerate the fourth person are primary: indicative, optative, interrogative, and imperative. Those which enumerate all forms of fourth person subject and object are secondary: causative and conditional. Finally, the infinitive and participial moods comprise a third group called auxilliary on the basis of limited or specialized use of fourth person.

The person-marking morphemes which control the indication of subject and/or object in an Eskimo utterance constitute several sets of highly complex suffixes. The variables which combine to effect the actual forms of person are: mood; transitivity vs. intransitivity; number; and first, second, third and fourth persons.

## III: Grammar

This grammar is partial in that it relates essentially to the structure of the verbs in a set of specific texts. It deals with the syntactic component of a generative and transformational grammar of Eskimo verbs. The verb is described as a verb phrase. Two levels of structure are
represented in the form of rules: phrase structure and transformations. The morphophonemic rules that would be required to map the strings created by the phrase structure and the transformational rules into concrete verbalizations are not included. The rules that are provided are presented in symbol form and then explained. Examples are included where relevant.

## A. Phrase structure rules.

## Given: \#VP

Because this grammar deals only with the structure of Eskimo verbs, it does not start with a description of a set of sentences, as is traditional in grammars of this type. However, to remain as much as possible within the accepted rubric of the paradigm, a set of verb phrases (VP) is established as given. These verb phrases obviously function within larger units, ostensibly sentences and clauses. They interact with other verb phrases and with other syntactic units not identified here. It turns out that in the Eskimo language a VP is a single word with elaborate means for prediction.

| (1) | PS Rule 1. VP $\longrightarrow$ Core + Plot |
| :---: | :---: |
| (2) | PS Rule 2. Core $\longrightarrow$ Base + Margin |
| (3) | PS Rule 3. Base $\longrightarrow$ $\longrightarrow$ ( $\left.\mathrm{Rb}, \mathrm{Ba}, \mathrm{Rf}_{\mathrm{y}}\right)$ |
| (4) | PS Rule 4. Margin $\longrightarrow$ Null; Act; Sta; Man; Asp; Neg; Deg; Conj, |
| (5) | PS Rule 5. Act $\longrightarrow$ Suff100 |
| (6) | PS Rule 6. Sta $\longrightarrow$ Suff200 |
| (7) | PS Rule 7. Man $\longrightarrow$ Suff300 |
| (8) | PS Rule 8. Ti $\longrightarrow$ Suff 400 |
| (9) | PS Rule 9. Asp $\longrightarrow$ Suff500 |
| (10) | PS Rule 10. $\mathrm{Neg} \longrightarrow$ Suff600 |
| (11) | PS Rule 11. Deg $\longrightarrow$ Suff700 |
| (12) | PS Rule 12. Conj $\longrightarrow$ Suff800 |
| (13) | PS Rule 13. Plot $\longrightarrow$ Theme + Cast |
| (14) | PS Rule 14. Theme $\longrightarrow$ Mood + (Intr., Trans.) |
| (15) | PS Rule 15. Mood $\longrightarrow$ (Ind, Int. Opt, Imp, Cau, Con, Inf, Neg, Par) |
| (16) | PS Rule 16. Cast $\longrightarrow$ No + Pers |
| (17) | PS Rule 17. No $\longrightarrow$ (Sg, D1, P1) |
| (18) | PS Rule 18. Pers $\longrightarrow(1,2,3,4$. |
| (19) | The Phrase-Structure tree |

The entire set of phrase structure rules will generate the generalized tree diagram of Chart III.


## B. Transformational Rules.

Rules for transformations are conceptualized as operating on the Phrase Structure tree. T-rules may be either optional or obligatory. Each rule is prefaced as to type (deletion, permutation, etc.). In each case a structural description is given followed by a structural change. As with PS rules, the T-rules are ordered.

It is recognized that a generative grammar ought to generate all of the grammatical utterances of Eskimo verbs and only those which are grammatical. The texts which have provided the corpus for this paper do not, however, contain verbs which illustrate all of the forms which may be generated by the Margin and Plot as they are presented. However, the evidence is strong to suggest that such forms might reasonably and simply be found. The T-rule (9) included here treats only the generative potential of certain categories dominated by the Plot node. It would be simple enough, by means of transformations of the kind that follows, to limit this grammar to the generation of the specific forms in any text.
(9) T-Rule 15. Obligatory reduction of any transitive Mood, No, IS, No and 10.
Structure: $\left(\right.$ Ind $\left.^{t}, \ldots\right)+\mathrm{No}+\mathrm{IS}+\mathrm{No}+\mathrm{IO}$.
Change: $a+b+c+b+d=e$
This rule combines any transitive Mood with Number, Internal Subject, Number and Internal Object. A bracketed convention (6) is employed: given two clusters of vertical and horizontal sets, choices are made within the brackets in a left to right order. Each symbol dominates each symbol to the right. For example:
(N) $\begin{aligned} & \mathrm{X} \\ & \underset{Z}{X}\end{aligned}+[a, b, c]+,\frac{X}{Y}+[a, b, c$,

| d, e, f | $\mathrm{d}^{\prime}, \mathrm{e}^{\prime}, \mathrm{f}^{\prime}$ | d" $\mathrm{e}^{\prime \prime}$, $\mathrm{f}^{\prime \prime}$ |
| :---: | :---: | :---: |
| $\mathrm{g}, \mathrm{h}, \mathrm{i}$ | $\mathrm{g}^{\prime}, \mathrm{h}^{\prime}, \mathrm{i}^{\prime}$ | $\mathrm{g}^{\prime \prime}, \mathrm{h}^{\prime \prime}$, $\mathrm{i}^{\prime \prime}$ |
| j, k, l | $\mathrm{j}^{\prime}, \mathrm{k}^{\prime}, \mathrm{l}^{\prime}$ | $j^{\prime \prime}, k^{\prime \prime}, l^{\prime \prime}$ |
| m, $\mathrm{n}, \mathrm{o}$ | $\mathrm{m}^{\prime}, \mathrm{n}^{\prime}, \mathrm{o}^{\prime}$ | $m^{\prime \prime}, n^{\prime \prime}, 0^{\prime \prime}$ |
| $\mathrm{p}, \mathrm{q}, \mathrm{r}$ | $\mathrm{p}^{\prime}, \mathrm{q}^{\prime}, \mathrm{r}^{\prime}$ | $\mathrm{p}^{\prime \prime}, \mathrm{q}^{\prime \prime}, \mathrm{r}^{\prime \prime}$ |
| s, t, u | $\mathrm{s}^{\prime}, \mathrm{t}^{\prime}, \mathrm{u}^{\prime}$ | $\mathrm{s}^{\prime \prime}, \mathrm{t}^{\prime \prime}, \mathrm{u}^{\prime \prime}$ |
| v, w, \% | $v^{\prime}, w^{\prime}, x^{\prime}$ | $\mathrm{y}^{\prime \prime}, \mathrm{w}^{\prime \prime}, \mathrm{x}^{\prime \prime}$ |
| $y, z, a^{\prime \prime}$ | $y^{\prime}, z^{\prime}, \mathrm{a}^{\prime}$ | $y^{\prime \prime}, z^{\prime \prime}, a^{\prime \prime}$ |
| b, c, d | $\mathrm{b}^{3}, \mathrm{c}^{3}, \mathrm{~d}^{\text {d }}$ | $b^{\prime \prime}, c^{\prime \prime}, d^{\prime \prime}$ |

The specific form of the rule for this grammar is:

| $\left(\right.$ Ind $\left.{ }^{t}\right)+\left[\begin{array}{l}S g \\ \mathrm{D} 1 \\ \mathrm{Pl}\end{array}\right]+[1,2,3]+\left[\begin{array}{c}\mathrm{Sg} \\ \mathrm{D} 1 \\ \mathrm{Pl}\end{array}\right]+[1,2,3]$ |  |
| :--- | :--- |
| $2-1,2-2,2-3$ |  |
| wa $-1-1,1-2,1-3$ |  |
| $1-11,1-22,1-33$ | $2-11,2-22,2-33$ |
| $1-111,1-222,1-333$ | $2-111,2-222,2-333$ |
|  | $22-1,22-2,22-3$ |
| $11-1,11-2,11-3$ | $22-11,22-22,22-33$ |
| $11-11,11-22,11-33$ | $22-111,22-222,22-333$ |
| $11-111,11-222,11-333$ | $222-1,222-2,222-3$ |
| $111-1,111-2,111-3$ | $222-11,222-22,222-33$ |
| $111-11,111-22,111-33$ | $222-111,222-222,222-333$ |

$$
\begin{aligned}
& 3-1,3-2,3-3 \\
& 3-11,3-22,3-33 \\
& 3-111,3-222,3-333 \\
& 33-1,33-2,33-3 \\
& 33-11,33-22,33-33 \\
& 33-111,33-222,33-333 \\
& \\
& 333-1,333-2,333-3 \\
& 333-11,333-22,333-33 \\
& 333-111,333-222,333-333
\end{aligned}
$$

This reduction rule transfixes the specific Mood with Number and both Internal Subject and Internal Object. The resultant matrix reflects information in the lexicon. Morphophonemic rules would be employed to realize the phonetic forms from the lexicon. For those Moods which enumerate fourth person, the matrix is enlarged to incorporate them too. The rule must be applied to each of the remaining transitive Moods. However, even though the rule will generate the general matrix that characterizes the Eskimo transitive forms, it remains ambiguous at this stage for any single Mood and further T-rules are required.

## IV. Conclusion

We may have to conclude that Stefansson's guess was perhaps a bit too ambitious! This fragment of a grammar of Eskimo, however, provides ample basis upon which to suggest that a most complex calculus of linguistic units is evinced in Eskimo speech. When the grammar of Eskimo verbs is complete - inclusive of categories from the Base and Margin - the total number of specifiable combinations may in fact be closer to his "hundreds of thousands".

As a type of agglutinative language, closely related to similar Paleo-Asiatic and other Siberian languages, Eskimo may provide us with new insights into the character of both grammatical pattern and process.

Specifically, however, it is suggested that native speakers of the Eskimo language have the ability to discriminate among vast arrays of grammatical sequences in verbs. This combinatorial competence can be characterized in a finite and formal way by providing a recursive device which enumerates the complete set of verbs. A generative and transformational fragment of a grammar of Eskimo is the result.

## Footnotes

1. V. Stefannson, My Life with the Eskimo, 1919, p. 356 .
2. Although aspects of this paper relate to many earlier experiences with the language, much was gained through the field and library research supported by language, much was gained through the field and hibrary research supported by again in 1970.
3. It is interesting to point out, however, that the study of Eskimo prehistory points to an Old World Mesolithic origin. A literature exists to suggest affinities between proto-Eskimo and some early variant of Indo-European.
4. My data includes only one prefix / ta-/ best handled as a clitic.
5. Earlier outlined in my "Dramatis Personae in the Eskimo Language". Proceedings of the Linguistic Circle of Manitoba and North Dakota, 1968.
6. This Bracketing Convention was originally suggested by Gary Prideaux, in an unpublished paper, entitled: "The Sanskrit Present Tense System: A Transformational Sketch", (1965).

[^0]:    ${ }^{1}$ Cicero, Or. 175.

[^1]:    * The full text of this paper, in slightly different versions, may be found in the Curriculum Bulletin, Manitoba Department of Youth and Education, Vol, 5, No. 1 (October, 1970), pp. 15-19, and in The English Quarterly, Vol. 3, No. 3 (Fall, 1970), pp. 7-17.
    Parenthetical references, using self-evident abbreviations, are to the original editions published in Toronto by Mcclelland and Stewart.

