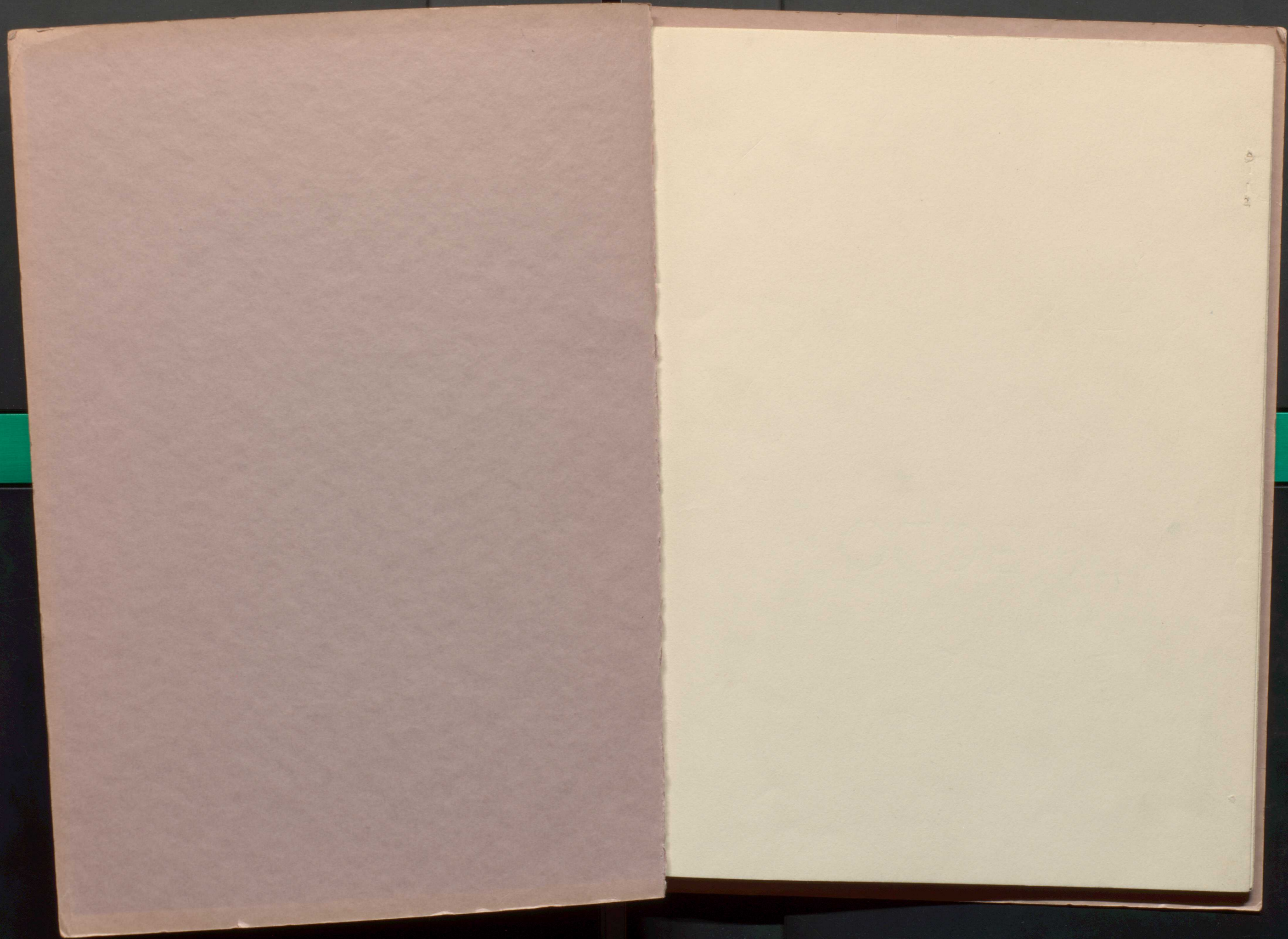
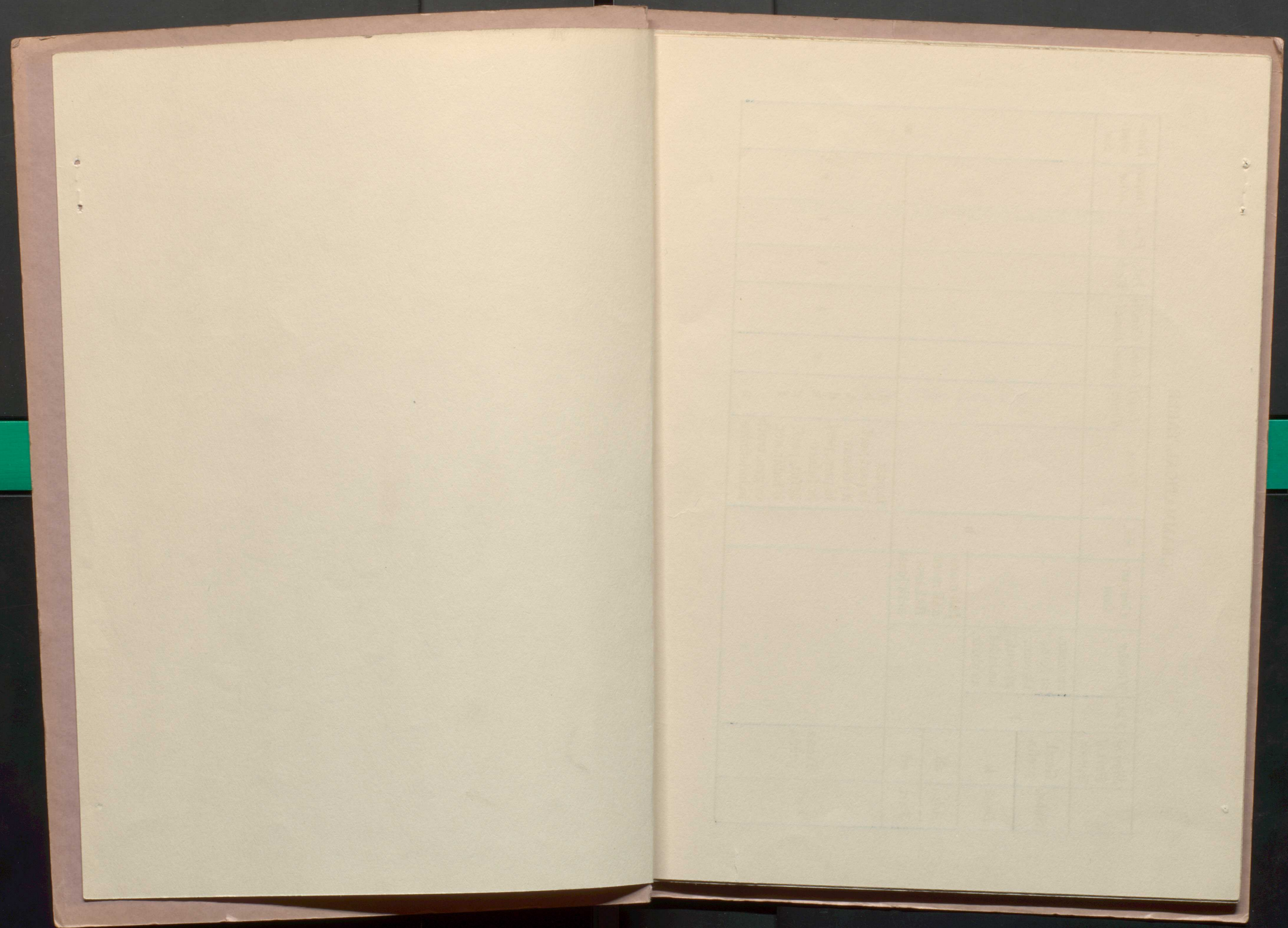


**THE CASE FOR
AN A PRIORI LANGUAGE**

CHARLES MILTON ELAM

**THE OPEN SESAME PRESS
CINNATI**





GRAMMATICAL TABLE

	Sign of Part of Speech	Plu.	Gender	Comparison	Rel.	Tense	Dep't Tense	Dur-ative	Condi-tional	Inf. Verb	Pas-sive	Imper-ative	Inter-rogative
Subst.	Gend. prefix	y	ap masc. at fem. ak com. af neut. an indef. as abstr.										
Dep't	k				h								
Adj.	ab			fAk more sAk most fIAk less sIAk least									
Part.	ad												
Verb	Tense prefix					ip past ib past perf. it present id pres. perf. ik future ig fut. perf. if habit. act. or gen. truth in indefinite	p b t d k g f n	s	l	l	l	r	w

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by
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*this book is
affectionately dedicated to
MY FATHER
whose interest in the science of language
has been my inspiration*

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*Lex plus laudatur,
quando ratione probatur.*

INTRODUCTION

A strictly neutral language can be constructed only on the *a priori* basis and this theory should not be carelessly thrown aside until its possibilities have been thoroughly investigated.

A misapprehension under which the opponents of the *a priori* method of language construction labor is that an *a priori* language can be constructed only on the principle of Bishop Wilkins' Real Character or Foster's Ro. An examination of this book will thoroughly demonstrate the fallacy of this assumption. The construction of Oz is similar to that of Esperanto, Idiom Neutral, and Ido, and it has every advantage possessed by these languages (except a perverted familiarity with some of their stems by a small percentage of the total population of the earth) and the further and infinitely greater advantage of the *a priori* method of stem construction with its accompanying advantage of a flexible and accurate system of derivation and grammatical accidence.

This book is not offered as a solution of the Auxiliary International Language problem, but is intended merely to present the case for the *a priori* method of language construction.

It is possible that the Auxiliary International Language problem may be solved by the *a priori* method founded on an arbitrary, phonetic, or other basis of stem formation, but the plan as worked out in this book is founded on the philosophical basis of Roget's *Thesaurus of English Words and Phrases*. It is not contended that Roget's classification of ideas is the best possible basis for language construction. In fact the author prefers that of Ch. Bally as presented in his *Traité de Stylistique française* but Roget's classification has been more completely worked out and at this stage of the work is the best system available.

The following quotation is from Roget's Introduction to his *Thesaurus*:

"Metaphysicians engaged in the more profound investigation of the Philosophy of Language will be materially assisted by having the ground thus prepared for them, in a previous analysis and classification of our ideas; for such classification of ideas is the true basis on which words, which are their symbols, should be classified. It is by such analyses alone that we can arrive at a clear perception of the relation which these symbols bear to their corresponding ideas, or can obtain a correct knowledge of the elements which enter into the formation of compound ideas, and of the exclusions by which we arrive at the abstractions so perpetually resorted to in the process of reasoning, and in the communication of our thoughts.

"Lastly, such analyses alone can determine the principles on which a strictly *Philosophical Language* might be constructed. The probable result of the construction of such a language would be its eventual adoption by every civilized nation; thus realizing that splendid aspiration of philanthropists,—the establishment of a Universal Language. However utopian such a project may appear to the present generation, and however abortive may have been the former endeavors of Bishop Wilkins and others to realize it, its accomplishment is surely not beset with greater difficulties than have impeded the progress to many other beneficial objects, which in former times appeared to be no less visionary, and which yet were successfully achieved, in later ages, by the continued and persevering exertions of the human intellect. Is there at the present day, then, any ground for despair, that at some future stage of that higher civilization to which we trust the world is gradually tending, some new and bolder effort of genius toward the solution of this great problem may be crowned with success, and compass an object of such vast and paramount utility? Nothing, indeed, would conduce more directly to bring about a golden age of union and harmony among the several nations and races of mankind than the removal of that barrier to the interchange of thought and mutual good understanding between man and man, which is now interposed by the diversity of their respective languages."

The words of Oz may consist of three parts:—stems, prefixes, and suffixes. The stems are founded on the categories of Roget's

Thesaurus and are given in the vocabulary of this book. The manner in which the phonetic system indicates the categorical relations of the stems may be best understood by a study of the vocabulary together with the outline immediately preceding it. The numbers in the vocabulary refer to the numbers in Roget's *Thesaurus* and a very convenient English-Oz word book may be made by placing the Oz stems at the respective numbers in the *Thesaurus*. The numbers not given are derivative words in Oz. Stems are formed from the first ten vowels and the first ten consonants (see page 8) and consist of a vowel followed by a consonant; as, *ut*; or of a consonant, vowel, and consonant; as *put*. It will be noted that stems always end with a consonant. Combined consonants may precede or follow the stem vowel in the order shown on page 8. In writing such syllables may be set off by hyphens where there is danger of ambiguity; as, *ut-spUd*; *uts-pUd*.

Grammatical relationships are denoted by the prefixes, which are of two classes: [1] formed from the vowels *a* and *i* with the consonants; as, *ad*; *if*. A study of the Grammatical Table will make clear the use of this class of prefixes. The Pronominals (the name by which we shall call the words formed from the vowel *e*) are shown in this Table for convenience of reference but they are really stems rather than prefixes. [2] The second class of prefixes consists of the Grammatical Consonants (all the consonants except the first ten). For their use see Explanation of Grammatical Consonants.

Orthography and Pronunciation

Oz has thirty-three letters—twenty consonants and thirteen vowels. The following list gives their linear order, phonetic name, and pronunciation.

Consonants			Vowels		
Letter	Name	As in	Letter	Name	As in
p	pI	pin, cup	A	A	alms, part, ma
t	tI	ten, bet	E	E	age, late, may
k	kI	come, back	I	I	ease, seat, me
f	ef	fan, safe	Q	Q	awed, naught
s	es	seal, race	O	O	open, tone, show
b	bI	bin, cub	U	U	fool, shoe
d	dI	den, bed	ai	ai	aisle, pint, my
g	gI	gun, leg	oi	oi	oil, point, toy
v	ev	van, save	au	au	out, power, now
z	ez	zeal, raise	u	ut	up, ton, turn
c	ec	choke, rich	a	at	am, pat, pair
j	ej	joke, ridge	e	et	edge, let
m	em	met, him	i	it	is, sit, army
n	en	net, thin	Combined consonants (preceding)		
N	eN	ink, sing	sp, st, sk, sf, sm, zb, zd, zg, zv, zm		
l	lE	lay, deal	Combined consonants (following)		
r	rE	raid, ear	ps, ts, ks, fs, ms, bz, dz, gz, vz, mz		
w	wE	wet, quit	sp, st, sk, sf, sm, zb, zd, zg, zv, zm		
y	yE	yet, you	pt, mt, kt, ft, bd, md, gd, vd		
h	hE	hat, who			

This alphabet is founded on that of the Simplified Spelling Board (which is based on the Revised Scientific Alphabet, used as Key 1 of the New Standard Dictionary, and originally based on the 1877 alphabet of the American Philological Association) with certain arbitrary changes in order that Oz may be written on an ordinary typewriter or printed from the characters found in an ordinary print shop. The long vowels are denoted by the capital letters, the short vowels by the small letters, and the diphthongs by two small letters. As Oz has six long vowels and a typewriter has only five capital vowels, Q has been used to represent the

vowel sound in "awed, naught." The second vowel sound in "sing" is represented by capital N. It will be noted that the voiceless and voiced consonants are grouped separately.

For purposes of identification we shall refer to the first ten consonants as "stem consonants," that is, consonants used in forming the stems of the language. The other ten consonants we shall call "grammatical consonants." The first ten vowels will be called "stem vowels" and the three remaining "prefix vowels." The formation of prefixes is similar to that of stems except that the vowels a, e, and i form prefixes. Prefixes may be used either as independent words or as prefixes to the stems. Stems must be preceded by a prefix or by a grammatical consonant except when there can be no possibility of ambiguity.

Explanation of Grammatical Consonants

c signifies "total," as, can all; adcEn always; adcIp everywhere. j immediately following a vowel indicates a suffix and is used when the final vowel of the suffix together with the initial consonant of a following syllable might otherwise be mistaken for a regular stem, as, pokEjfat (pokE-fot, not pok-Ef-ot).

m is employed to avoid the use of double consonants. It is usually more euphonic to substitute m for the first consonant. When a word ends with a vowel and the next word begins with a vowel, m may be suffixed to the first word in order to make the pronunciation more euphonic. It is usually preferable to use the m sound in speaking but the double letters in writing. When two vowels come together in a suffix, m must be inserted between them.

n indicates the indefinite meaning of the stem; as, Ak great; nAk quantity. When it is desired to express the indefinite meaning of the stems denoted by the voiced consonants, N is used instead of n; thus, Qn sense in general, one of the five senses; QN color.

l and r. The meaning of l before the stem vowel is "opposite" or "complementary" and of r is "not" or "neutral," as, inplv move; inprlv stop; inprlv be still. This use of l and r is indicated in the vocabulary of this book, but in other positions they have various uses. For their use to denote relationship, see Table of Relationship. l after the vowel of the stem denotes the passive voice; as, ep itQks yaf I see them; yaf itQks ep they are seen by me. Placed

before the vowel of the tense sign, **l** denotes the infinite verb (infinitive or participle); as, **linQks inoit** to see is pleasant (pleases); **slinQks inoit** seeing is pleasant. **l** after the vowel of the tense sign denotes the conditional mood; as, **ap iltblUk** if he were ill. Syllabic **l** gives the collective sense; as, **anupl** crowd.

r before the vowel of the tense sign denotes the imperative; as, **ritQks apevus** look at that man. **r** following a vowel distinguishes a three- or four-letter suffix from a stem; thus, **fEz** is a stem, but **fErz** is a suffix; **fEza** is a stem with **a** as suffix, but **fErza** is all one suffix.

w is the sign of interrogation; as, **wap** who? what male person?
y is the sign of the plural; as, **yep** we, us; **yak** they, them; **yup** persons.

h gives the relative signification; as, **up han et itQks if kep** peg the man whom you see is my father. **ep iplv hEv ipkailt** I came because I was invited.

Derivation

Formation of words by means of the grammatical consonants and prefixes is termed direct derivation. By means of the proper grammatical prefixes, substantives, adjectives, verbs, and particles are readily formed from the stems; as, **afUt** good thing, **as-Ut** goodness, **abUt** good, **itUt** is good.

The second method of derivation may be called supplementary. This is effected by means of suffixes, which do not have any fixed meaning within themselves, but bear a categorical relation to the stems to which they are suffixed. This is indicated by giving each letter the rank in suffixes which it has in the **Oz** alphabet. This may be considered analogous to the use of the digits in the Arabic notation. The value or rank of the letters in suffixes is as follows: **A** 1, **E** 2, **I** 3, **Q** 4, **O** 5, **U** 6, **ai** 7, **oi** 8, **au** 9, **u** 0 or zero, **a** plural, **e** total, **i** indefinite, **p** 1, **t** 2, **k** 3, **f** 4, **s** 5, **b** 6, **d** 7, **g** 8, **v** 9, **z** 10, **l** 0 or zero, **y** plural, **d** total, **n** indefinite. If a suffix consists of only one letter, it must be a vowel, but if it contains more than one letter, the first is always a consonant. When the suffix consists of a consonant, vowel, and consonant, **r** precedes the second consonant to distinguish the suffix from a stem or prefix. For examples of supplementary derivation see various Tables at end of book.

Indirect derivation (third method) is accomplished by joining two or more stems with or without suffixes. Any stem of the Language may be used for this purpose. The following list includes the stems most frequently used in indirect derivation. It will be noted that in illustrating the use of verbs in **Oz**, **in** is used instead of the infinitive form as in English; thus, **intAstlUs** (to) fall asleep. This does not mean that **intAstlUs** is the literal translation of "to fall asleep," but is an idiomatic use of **in**, just as the use of the infinitive is an idiomatic English usage. In the same way, **an** may be used with noun stems in **Oz** where English would use one of the usual forms denoting gender.

A list of stems most frequently used
in forming compound words

At relating to, belonging to; as, **abAtspOk** rational; **abAtag** sexual; **abAtup** human.

pAt with a transitive verb stem marks the object of the action expressed by the verb; as, **anpAtsklv** food; **anpAtskrlv** drink, what is drunk; **anpAtEg** thing changed; **anpAtEz** thing produced. With an intransitive verb stem, it marks the subject of the action; as, **anpAtlEv** result, what results; **anpAtklUt** thing relinquished. By extension, it expresses "act of;" as, **anpAtoid** friendly act, act of a friend; **anpAtup** human act.

plAt denotes the indirect object (with "to" or "from" expressed or understood) of a verb; as, **akplAttOv** person spoken to.

flAt reverse; as, **inflAtlv** to return, to go back.

bAt like, similar to, -ish; as, **abbAtQb** reddish; **abdAtfQf** sweetish.

fAk pre-eminent; as, **anfAkpaub** archangel.

pAf (with numerals) multiplying prefix; as, **adpAftAb** double.

klAf separation, dissemination; as, **inUsklAf** to separate.

dAf (before other stems) full of, rich in; as, **abdAfglg** porous; **abdAftloif** courageous; **abdAfoib** famous. (After other stems) -ful; as, **anglpdAf** liter measure full; **anskutoijpAf** mouthful.

tAs to begin to; as, **intAstlUs** fall asleep. Also see **tEg** to become.

kAs sign of ordinals; as, **adkAstAb** second.

sAs generic; as, **ansAsup** mankind.

bAs distributive; as, **adbAsfAb** in fours, four at a time; **adbAs-lAk** little by little; **abbAstAb** two apiece.

tAz repeat; as, **intAzOv** say again, repeat.

kEn pre-, ante-, fore-; as, **inkEnOv** foretell, predict.

pEg continue, persist, go on; as, **akpEgtIvut** traveler.

tEg become, change to; as, **intEgQb** turn red; **intEglQfs** vanish, disappear from view; **intEgQp** materialize.

Ev (with a verbal stem) to make, to cause to; as, **inEvtIUs** send to sleep, put to sleep. (With a non-verbal stem) to cause to be; as, **inEvoik** beautify.

IEv marks the concrete result of the action expressed by the verb; as, **anIEvkOb** a painting; **anIEvdOp** an imitation (made).

tEv (with active) able to, capable of doing; as, **abtEvgOs** instructive; **abtEvOs** suggestive; **antEvlIt** an astringent. (With passive) -able, that can be, capable of being; as, **abtEvfIlv** portable; **abtEvQlks** visible; **abtEvsOlk** credible; **abtEvpOld** legible.

Ez to produce, to generate; as, **inEzuvA** to bloom. Also used to indicate manufacture of tools, etc.; as, **inEzdIzdUt** to make hammers. As a noun, it means -maker; as, **afEzdIzdUt** hammer-maker.

kEz inclined to, tending to; as, **adkEzploiz** revengeful; **adkEzOv** talkative; **adkEzfUs** industrious.

tIp establishment where something is made or done; as, **aftIppaidn** mint; **aftIpgOsn** school.

kIp place (room) devoted to some object or action; as, **efkIpskIv** dining room; **afkIpgOsn** schoolroom; **afkIpaib** store.

fIlp devoid of, lacking, with added idea of never having had; as, **apfIlplep** bachelor; **adfIlpnun** inanimate.

pIt denotes largeness, usually with a change in the idea of the stem; as, **akpItfQt** river; **inpltoit** to laugh.

plIt opposite of **pIt**; as, **akplItsOt** brook; **itplIttoit** to smile.

Qfs having the appearance or color of; as, **abQfsQz** purple colored; **abQfsQb** rosy, pink.

gOp holder; as, **afgOpkOvdUt** pen-holder. Also who or what bears or is characterized by; as, **akgOpANE** millionaire. However, if a person is referred to, **ut** is usually preferable.

Ot (with passive) that can be, capable of being (also see **tEv**); as, **abOtQlks** visible; **abOtsOlk** credible.

Ok science, belief, -ism, doctrine, theory, system, practice, field, territory; as, **afOkTqPl** geography; **afOkQt** chemistry.

vIOk mis-, wrongly; as, **invIOkpOs** misunderstand.

dUt instrument; as, **afdIzdUt** hammer; **afdIgdUt** plow.
spUt supply, provide, cover with, garnish; as, **inspUtbaip** to crown; **inspUtzUd** to arm (with weapons); **inspUtsIf** to limit (fix a boundary); **inspUtOb** to address (write address on).

Us act, do, make use of, wield (as an instrument or weapon); as, **inUsdlzdUt** to hammer.

srUd warding off; as, **afsrUdpQtA** umbrella; **afsrUdpQp** parasol.

Ug completely; as, **inUgpOd** to read through; **inUgskrIv** to drink up; **inUggOs** to learn thoroughly.

aif having; as, **adaif:loif** courageous; **abaiflUf** dangerous; **abaif:foif** ambitious; **abaifoit** joyous. Also see **zUt**.

pais privative; as, **abpaisQks** blind; **atpaislep** widow; **akpaispeg** orphan; **abpaisnun** dead. Note distinction between **pais** and **fIlp**.

kauk discreditable, pejorative; as, **akkaukkait** beggar; **ankauk:upl** mob; **inkaukpItoit** guffaw; **inkaukplItoit** grin.

up member of a community, country, town, or body; as, **Ohioup** Ohioan; **Cincinnatiup** Cincinnati.

ut one who habitually does something, an amateur; as, **akpEg:tIvut** traveler.

uk one whose profession has to do with; as, **akEvbUkuk** physician; **akgOsuk** teacher.

uf head of, chief of; as, **akdQtuf** mayor.

Arbitraries

Words formed from the vowels **a**, **e**, and **i** are called arbitraries. Those not given in the Grammatical Table are contained in the following list.

tad direct object; **sad** to, indirect object; **kad** of, partitive genitive; **fad** or; **flad** nor; **pad** indeterminate particle (preposition); **ag** sex; **av** and; **az** the; **nab** adjective; **nad** particle; **kab** dependent; **nan** part of speech; **aN** substantive.

ep I; **et** you; **ek** reflexive; **ef** it (expletive); **es** there (expletive); **eb** one, they, people; **ed** that (expletive); **eg** this, the former; **egz** next before **eg**; **legz** next before **egz**; **egd** next after **eg**; **legd** next after **egd**; **ev** that, the latter; **ez** yes, also used as a prefix with the grammatical consonants when they can not be directly combined with the stem; **lez** no, not; **en** pronominal.

iN verb; **liN** infinitive or participle; **niN** arbitrary.

The Substantive

The substantive may usually be known by the gender sign. The "arbitrariness" in **a**, **e**, and **i** are the only words that may be used without the sign of the part of speech, except words containing **h**.

The stem of the substantive has the concrete distributive meaning unless otherwise indicated.

Abstract nouns are indicated by the prefix **as**. Abstract nouns are of two kinds—static and dynamic. Static nouns denote (1) relation; **as**, **asplAs** sequence (in order); **asklEn** sequence (in time); (2) quality; **as**, **asaug** piety; (3) condition; **as**, **asfoit** cheerfulness; (4) state; **as**, **aspaisnum** death. In this class belong abstract nouns denoting the state or affection of a person or thing acting; **as**, **asfoid** love; **aspoip** ardor; **asvlOk** error. Dynamic nouns denote action; **as**, **asnlv** motion; **asblvn** velocity. It will be noted that the **as** distinguishes abstract nouns from all other nouns, but when there is a distinction between static and dynamic nouns; **as**, **asElz** (state of) construction; **asEz** (act of) construction, the distinction is inherent in the stems and an element having the sense "state, condition, quality" is not necessary in **Oz** as in a recent *a posteriori* language. Abstract nouns should be carefully distinguished from participles and infinitives used as nouns. From the sentence **ap itfloip asfoifA** (he endures hunger) we get **litfloip kad asfoifA** (the act of enduring hunger); but from **ap it adfloip** (he is enduring), we get **asfloip kad ap** (the endurance of him). **asfloip** is therefore the quality of being enduring, just as clemency is the quality of being clement.

Syllabic **l** denotes a collective term which applies to an aggregate of individuals comprising a whole but which will not apply to any one of the individuals alone; **as**, **anupl** crowd of people; **ankaukupl** mob. The distributive (stem) form and the collective form are contrasted in such sentences as the following:— All the angles **cantlbl** of a triangle are equal to two right angles. All the angles **cantlb** of a triangle are less than two right angles. The two propositions in English seem contradictory, but the first taken collectively in the subject is true and the second taken distributively in the subject is true. "All **canl** the trees in the forest produce a thick shade" means that all together produce one thick shade, but "all **can** the trees in the forest produce a thick shade" means that each

tree separately produces its own thick shade. "The trees **yafubA** (when **l** can not be made syllabic, it is placed in the gender sign) are beautiful" means that all the trees together are beautiful but this may or may not be true of each individual tree. This use of **l** may be employed with other parts of speech. "He and **av** I can lift the stone" means that each one individually can lift the stone, but "he and **avl** I can lift the stone" means that together we can lift the stone, which may or may not be true of each one individually.

In addition to this distinction between the distributive and the collective application of words, especial attention should be given to the distinction between the collective and the generic use; **as**, **anupl** crowd (collective); **ansAsup** mankind (generic). This latter distinction has been overlooked by the eminent authors of the *a priori* language referred to above.

The plural is indicated by **y** which is preferably placed immediately before the stem vowel, but if it is not easily pronounced in that position (as when the vowel is preceded by **l** or **r**), it should be placed in the most euphonious position possible, which may be in any syllable of the word (often preferably before the gender sign).

The masculine prefix is **ap**; **as**, **appeg** father; feminine **at**; **as**, **atpeg** mother; common (either masculine or feminine, or both) **ak**; **as**, **akpeg** parent; **akpyeg** parents; **akup** person; neuter (having no sex) **af**; **as**, **afbQtl** stone; indefinite (used when the gender is not determined or specified, and which may be either masculine, feminine, or neuter, or any two, or all) **an**; **as**, **ep itQks an** I see somebody or something. The stem itself in many cases indicates the sex (or lack of sex), or it may not be necessary or desired to call attention to the sex; in either case **an** may be used.

The gender sign used with a verbal stem expressing action denotes the doer; **as**, **akOv** the speaker, the person speaking; **apOlv** the man spoken to; **ataip** the woman having authority. Used with a verbal stem expressing being or state, it indicates a person or thing which is or is in such a state; **as**, **afzlk** the thing which stands; **aktlUs** the person sleeping.

The gender sign used with an adjective stem indicates a person or thing having the quality expressed by the stem; **as**, **aklEd** old person; **applk** tall man; **akaiftloif** courageous person.

The English personal pronouns are expressed by the Arbitraries (see the Grammatical Table and page 13) and those denoting gender refer to persons unless the context clearly indicates the contrary.

The Dependent (possessive and genitive) is indicated by prefixing **k** to the gender sign or to the pronominals, or by the Particle **kad**. These are used as the "s" and "of" are used in English; as, **kep appeg** my father; **apev kad kap appeg** son of his father; **apup kad astaid** a man of wealth. The prefix is preferable except when the dependent is modified by separate adjectives or another dependent. The thing possessed may be omitted as in English; as, **at ipIv kek kappeg** she went to her father's (house); **ap ipIv kek kakEvbUkuk** he went to his doctor's (office).

There is no variation in the form of the Substantive to distinguish the nominative and the accusative. The usual word order is subject, verb, object, but if the order is transposed or it is desired for any reason to distinguish the accusative, it may be preceded by the Particle **tad**.

The indirect object may be used either with or without the preposition as in English. When expressed, the particle **sad** is used,

The adverbial objective (which expresses time, distance, measure, number, weight, value, etc.) is used as in English, but may also be used with the preposition which expresses the thought intended; as, **ap ipsIpbAbEk** he lived here six months; **ap ipsIp adEn anbAbEk** he lived here during six months.

The Arbitraries formed from the vowel **e** we shall call Pronominals. **ep** I, me; **yep** we, us; **kep** my, mine; **kyep** our, ours; **et** you (singular); **yet** you (plural); **ek** is a reflexive pronoun referring only to the subject of the proposition in which it is used; as, **Mary ipQks kek** (Mary's) **atpeg ev kat atepA** (Mary's mother's sister or the sister of some other person denoted by the context, but not Mary's sister). English "it" is denoted by **ef** when used (1) as the grammatical subject of a verb followed by the logical subject; as, It is human to err. It is evident that he is mistaken. I wish it to be understood that I did my best. (2) To denote natural phenomena and time; as, It thunders. It froze last night. It is growing late. It is nine o'clock. (3) In such sentences as "It is I." (4) When

used to refer to an indeterminate object; as, You will go, I desire it. (5) When used with an adjective stem to denote the indeterminate sense: as, The Good, the True, the Beautiful. **es** is equivalent to "there" in such sentences as "There were giants in those days." **eb** (indeterminate person) we, you, one, they, people (French *on*); as, As we know (*comme on sait*); you never can tell (*on ne saurait le dire*); one would think he was mad (*on dirait au'il est fou*); they say (people say) that he is mad (*on dit qu'il est fou*). **ed** that (expletive—usually incorrectly called a conjunction) introducing the substantive clause (see complete discussion under heading "Use of **ed**"). **eg** this, the former, on the one hand. **ev** the latter, on the other hand. **ez** is used when the grammatical consonants can not be inserted into the word so as to be pronounceable; as, **kezhak** whose (possessive relative). However note that **hwak** whose (interrogative relative) is pronounceable (pronounced like "whack" in English).

The interrogative pronoun is formed by prefixing **w**; as, **wak ipQks ep** who saw me? **wap ipQks ep** what male person saw me? **wat ipQks ep** what female person saw me? In questions the word order is usually subject, verb, object, as in declarative sentences, but the order may be reversed by using **tad** with the accusative; as, **tad wak itQks ep** whom do I see? **w** may be used with any word in the sentence (see discussion under the verb). The question mark (?) is not used in **Oz** as the **w** is a sufficient sign of interrogation.

The indirect interrogative is used not directly to ask, but to imply, a question. The indirect interrogative is always used in a substantive clause and is introduced by the expletive **ed**. The English sentence "I know who saw me" is ambiguous. If the intention is simply to state that I am acquainted with the person who saw me, for example, some one in the room all of whom I know, then the sentence is translated **ep itgOk han ipQks ep**. Here **han** is a relative pronoun and the subordinate clause is not a substantive clause but an adjective clause. "Who" is here equivalent to "the person that" and the expanded clause "that saw me" is an adjective clause belonging to "person," and therefore is not introduced by the expletive **ed**. On the other hand, if "I know who saw me" means "I know which one of the persons in the room saw me, then "who" is an indirect interrogative and the sentence is translated **ep itgOk**

han ipQks ep. Here han is a relative pronoun and the subordinate clause is not a substantive clause but an adjective clause. "Who" is here equivalent to "the person that" and the expanded clause "that saw me" is an adjective clause belonging to "person," and therefore is not introduced by the expletive ed. On the other hand, if "I know who saw me" means "I know which one of the persons in the room saw me," then "who" is an indirect interrogative and the sentence is translated ep itgOk ed wan ipQks ep. "I know what you have in your hand" is an example of an indirect interrogative if the meaning is that I know the answer to the question "What is in my hand?" as when one holds out the closed hand and asks the question. This answer may indicate that I have accidentally caught a glimpse of the article, or I think I can guess what it is, or can identify it by some of the circumstances. On the other hand if the article in question is in plain view and its name or use is in dispute, then "what" is a double relative translated by han. In an indirect question, "whether" is translated wed.

A relative pronoun joins to its antecedent a limiting clause. As this clause has the force of an adjective, it is never introduced by the expletive ed; as, apus han ipkIp if kep appeg the man who was here is my father. han is the usual relative pronoun unless it is desired to call attention to the sex by means of the relative, in which case h may be used with any of the gender roots. The h may also be used with the reflexive. As noted above, the double relative is translated by han, and this is true whether the contracted or expanded form is used in English; as, ep itgOk han ap itfoif I know what he wants. I know the thing which he wants. Many English expressions which can not be contracted are translated by han; as, ep itQks han et iptOv I see the person to whom you spoke.

The Adjective

The prefix ab is the sign of the adjective. Every adjective stem may be used as a substantive or verb, and may be combined with other stems or roots to form such, in which case ab is not used. With simple adjective stems, it is usually preferable to form these combinations when possible.

The ascending comparison is formed by prefixing fAk for the comparative and sAk for the superlative; as, abfAkpOt more probable; absAkpOt most probable; and the descending comparison is formed by prefixing flAk for the comparative and slAk for the superlative; as, abflAkpOt less probable; absflAkpOt least probable. These values may also be expressed wholly in the ascending comparison with the positive and negative stems as in English; thus, abfAkflit longer; absAkflit longest; abpAkflit shorter; absAkflit shortest.

"As — as" as in "She is as tall as he" is translated by the h form; thus, at it habpkn ap, or better at hitpkn. He walked as far as I did ap ipzlv hezItm ep ipkIv.

"More — than," "less — than," "—er than," as in "He is taller than she" are translated by the h with the comparative; as, ap it habfAkplk it, or ap hitfAkplk it.

The superlatives "most of," "least of," "—est of," are also translated by h; as, ap hitbAkplkn yapus he is the tallest of the men.

Translate such expressions as "as good as possible" thus: absAkOtUt. In such expressions as "I prefer this to that," the comparison is expressed by means of hez; thus, ep itbUp eg hez ev.

Adjectives are used as in English:—

(a) A direct adjective modifies a noun directly and usually precedes the noun, but long derivative adjectives may follow their noun. However it is usually preferable to combine the adjective stem with the noun stem when not too cumbersome.

(b) A predicate adjective completes the predicate and modifies the subject; as, ap ip adUt he is good. As with the direct adjective, the combined form is more idiomatic Oz, in this case with the verb; thus, ap ifUt.

(c) A resultant or factitive adjective modifies the object of the verb in such a way as to express the result of the verb's action; as, He painted the fence red. In Oz the word order may be the same as in English, but in many cases the resultant adjective may be combined with the verb to good advantage, thus making an expression equivalent to "He red-painted the fence." Resultant or factitive nouns may be used as in English; as, They crowned Victoria queen yak ipspUthaip Victoria ataip.

The Verb

The verb predicates the relation of an attribute to a substantive. In Oz the stem expressing the attribute may be combined with the verb in a manner impossible in English; thus, "He is good" may be written (1) **ap ifAp adUt**; (2) **ap if adUt**; (3) **ap ifUt**. (1) is equivalent to the English expression. (2) is practically equivalent to (1). (3) has no English equivalent. The meaning is something like "he goods" would be if "goods" were a verb simply predicating "good" of "he." (2) and (3) are more idiomatic Oz than (1). (3) is preferable. Adverbial elements should also be combined with the verb when possible; as, He came quickly **ap iplIvbIv**. He seldom studies **ap ifblEnvOs**.

The verb has no sign except that every proposition must be expressed as occurring at some time, hence the tense sign may be considered as the sign of the verb.

The signs of the tenses are as follows:—

ip past, denotes indefinitely the relation of a subject to an attribute in any past time; as, **ep ipQks ap I** saw him. The time may be definitely expressed by some other element of the sentence.

ib past perfect, which denotes the time of a past relation as completed before the occurrence of some other past relation; as, **ep ibQks ap hEn ap ifQks ep I** had seen him when he saw me. **ep ibQks ap hevtEn ap ipQks ep I** had seen him before he saw me. The two expressions are exactly the same in meaning.

it present; as, **ep itQks ap I** see him (now).

id present perfect, which may denote relationship in any period of past time that extends up to and ends with the present; as, **ep idQks ap I** have seen him.

ik future, which denotes indefinitely relation in future time; as, **ep ikQks ap I** see him.

ig future perfect, which denotes the time of any future event as completed before some other specified future event; as, **ep igQks ap hEn ap ikQks ep I** shall have seen him when (by the time that) he shall see me.

if habitual action or general truth. **tOpI ifkId** states the general truth that the earth is spherical. **ap ifUt** states that he is habitually good, but **ap itUt** simply states that he is good now with the inference that he was probably not good at some former time (i. e., he has reformed), or that he may perhaps lapse from that exalted state in the future.

in any time, indefinite time—used when no particular time is referred to, i. e., when an attribute is predicated of a subject without calling attention to the time at all; as, **ep inQks ap** (simply stating the fact of my seeing him, which may be in past, present, or future time).

The tense sign may be used as an independent verb. These verbs have no meaning except to predicate an attribute of a subject; as, **ap if adUt** he is good. As previously stated, **ap ifUt** is preferable.

I between the **i** and the consonant of the tense sign denotes the conditional (subjunctive); as, **ep ilftaib** if he is rich.

r before the tense sign denotes the imperative; as, **ritQks** look.

l after the vowel of the verb stem is the sign of the passive; as, **ep ipQks ap I** was seen by him. In Oz a preposition is not required after the passive verb. The passive verbal stem preceded by **ab** denotes a passive adjective; as, **abOtQlks** visible. With the gender sign, the passive verb stem denotes a passive substantive; as, **akQlks** person seen; **aksOlp** examinee, person questioned.

w may be prefixed to any element of the word or sentence which it is desired to make interrogative.

(a) When the question is as to the time of the action, the **w** is prefixed to the tense sign; as, **et winQks ap** do you see him now, or did you see him in the past, or will you see him in the future?

(b) If the question is as to the kind of action, the **w** is placed in the stem of the verb; as, **itwQks ap** do you see him (not hear, etc.)?

(c) When the question is as to the occurrence of the action, the **w** is used with **ed**; as, **wed et itQks ap** whether you see him?

w may be used to make any stem of a word interrogative; thus, **ap ifsAkWotUt** is he as good as he can possibly be? Is it possible for him to be better?

w is most often used with the verb or with an interrogative pronoun or adverb, but it may be used with any element of the sentence. The following examples will make this clear.

wed et ipIfkIv afbQt adpegzEf (whether you walked into the city yesterday—the whole expression is interrogative) *did* you walk into the city yesterday? No, I staid at home.

wet ipIfkIv akbQt adpegzEf *did you* walk into the city yesterday? No, my brother went.

et ipIfkwIv akbQt adpegzEf *did you walk* into the city yesterday? No, I rode.

et ipwIfkIv akbQt adkegzEf *did you walk into* the city yesterday? No, I went only to the edge of the city.

et ipIfkIv wafbQt adpegzEf *did you walk into the city* yesterday? No, I went into the country.

et ipifpIv afbQt wadpegzEf *did you walk into the city yesterday?* No, I went last week.

et ipIfkIv afbQt adpwegzEf *did you walk into the city yesterday?* No, I went the day before.

et ipIfkIv afbQt adpegzWef *did you walk into the city yesterday?* No, I went yester-evening.

“Whether (if)” as in “I do not know whether (if) he is here” is **wed** introducing the substantive clause; thus, **ep itlezgOk wed ap itfIp**.

dOs (indeed) denotes emphasis and its use is similar to that of **w**. It precedes the syllable it modifies and may be used with any element of the sentence; thus, **ep dOsitQks ap** means that I see him now; I am now looking at him. **ep itdOsQf ap** means that I see him (as distinguished from hear, etc.). **ep ipIfdOskIv akbQt** I walked into the city (I did not ride). **ep ipIfkIv akdOsbQt** I walked into the city (not into the country).

Duration (the progressive form of the verb) is denoted by **s** before the tense sign; as, **ep sitvOs** I am studying. **ep itpOp ed ap stipvOs** I thought he was studying.

Dependent Tenses

The signs of the dependent tenses contain two series of consonants. The consonant preceding the **i** denotes the relation of the time of the dependent verb to that of the principal verb; thus, **ep ipOv ed ek tinroid at** he said (that) he loved her. The **t** in **tinroid** denotes the time of his loving as synchronous with the time of his speaking. As related to the time indicated by the principal verb, **p** before the **i** denotes the past tense; **b** past perfect; **t** present; **d** present perfect; **k** future; **g** future perfect; **f** habitual action or general truth; and **n** indefinite time, just as with the regular tenses. **ap ipOp ed ek pinroid at** is indirect discourse corresponding to “He said, ‘I love her.’” **ap ipOv ed ek binroid at** indirect discourse for “He said, ‘I will love her.’” **ap itOv ed ek titroid at** he says that he loves her. **ap itOv ed ek kitroid at** he says that he will love her. **ap ikOv ed ek pinroid at** corresponding to “He will say, ‘I loved her.’” **ap ikOv ed ek tinroid at** corresponding to “He will say, ‘I love her.’” **ap ikOv ed ek kinroid at** corresponding to “He will say, ‘I will love her.’” **ap ipQn ed at tipsQs** he found (perceived) that she was tired. **ep ippOp en ef tipskOt** I thought it was raining (I thought, “It is raining”).

The consonant following the **i** indicates the time of the dependent verb as related to the time the statement is made. Usually it is not necessary to indicate this relation and **n** is used, but English “He will say that he loves her” is ambiguous. The two meanings may be definitely expressed in **Oz**— **ap ikOv ed ek tikroid at** he will say that he loves her (at the time he says it). **ap ikOv ed ek pitroid et** he will say (in future) that he loves her (now). **ap ipOv ed ek kitfIp** he said (in the past) he would be here (now).

The Infinite Verb

Strictly speaking, all verbs in **Oz** are infinite verbs, that is, their form is not modified by the person and number of the subject; but for convenience those **Oz** verbs corresponding to infinitives and participles are called infinite verbs and all others finite verbs.

Infinite verbs are denoted by **l** before the vowel of the tense sign.

Infinitives and participles are not distinguished from each other in Oz as in English. When duration is the distinction, it is indicated by s; as, **linQks** in **linsOk** to see is to believe. **slinQks** in **slinsOk** seeing is believing.

When the time expressed by the infinite verb has no reference to that of the finite verb, I is used with the usual tense signs; as, **az afbIp liklaib ipAkaid adslEn** the house to be sold was once valuable.

When the time of the infinite verb is dependent on that of the finite verb, the tense signs are used as explained under "Dependent Tenses" except that **ed** is not used. **ep itfoit ap tlifvOs** I wish him to study (now). **ep itfoif ap klifvOs** I desire him to study (in the future). **ep ikfoif ap kikvOs** I shall desire (tomorrow) him to study (day after tomorrow). **ap iptOf plipvIOk** he believed (yesterday) me to have been mistaken (day before yesterday).

When the subject of the finite verb is also the subject of the infinite verb, they may usually be united to advantage if the time is the same; as, **ap itfoifvOs** I desire to study; but **ep itfoif klikvOs** I desire (now) to study (in the future).

The infinite verb may be used much more extensively in Oz than in English as it is usually optional with the speaker whether to use a subordinate sentence or an infinite verb.

The Particle

In other languages adverbs, prepositions, conjunctions, and interjections are treated as four distinct parts of speech; the difference between them being thus put on a par with that between substantives, adjectives, and verbs.

There is an exact parallel between (1) He plays; He plays the piano; Troy was; Troy was a town; and (2) Put your hat on; Put your hat on your head; He fell down; He fell down the steps. In spite of the differences in (1), no one thinks of assigning them to different parts of speech, nor is there any better reason for distinguishing adverbs, prepositions, and conjunctions. Notice the

For a fuller discussion of the Particle, see "The Philosophy of Grammar," by Otto Jespersen, page 87 ff.

complete parallelism between (a) I believe your words. I believe in you. I believe you are right. (b) They have lived happily ever since. They have lived happily since their marriage. They have lived happily since they were married. (c) I came then **ep ipllv adEn**. I came during his absence **ep ipllv adEn asflIp**. I came while he was absent **ipllv adEn ap ipflIp**. The examples in (b) show the same word in English used as an adverb, as a preposition, and as a conjunction. There is even a difference of opinion about the last example, some grammarians classifying "while" as a conjunctive adverb and some as a conjunction. (I came after he left—is "after" a conjunctive adverb, conjunction, or preposition?) In some cases in English we have slight differences as in "because of his absence" and "because he was absent." In other cases English has different words for the three uses as in (c) above, but in Oz the same word is used in the three instance, the difference in construction being indicated by the uses in the sentence just as "believe" in (c) is a verb in all three sentences but intransitive in one, transitive governing a single word in another, and transitive governing a subordinate clause in the third.

The sign of the particle is **ad** but particles taking the prefix **h** do not take the **ad** if the stem begins with a vowel.

When a stem denoting place is incorporated in the verb, the verb simply predicates place; as, **ep lplf az afbQt** I was in the city, **ep ipflkIv az afbQt** I walked in the city; I walked around inside of the city. But when **ad** is used with the place stem, action in the direction indicated by the place stem is denoted; as, **ep ipkIv adIf az afbQt** I walked into the city.

ep ipIv adglv az afbQt I came to the city. **ep ipIv adglIv az afblQt** I came from the country. **ep ipllv adglv az afblQt** I went to the country. **ep ipllv adglIv az afbQt** I went from the city. **ep iptlv adIf az afbQt** I entered the city. **ep iptlv adIf az afbQt** I left the city; I departed from the city.

It will be noted that **Iv** and **Ilv** denote motion toward or away from the location of the speaker at the time of the speaking, but **tlv** denotes motion from one place to another without reference to the location of the speaker at the time the statement is made.

Use of ed

The subordinate sentence used substantively is preceded by the expletive **ed**.

The substantive clause may be used as (1) subject; as, That he should act so is humiliating to his friends. For him to act so is not honorable. That France is a great nation is admitted by all. (2) attribute complement; as, Our hope is that you may succeed. His rule was that all should work. (3) object of verb; as, Even Germans admit that France is a great nation. (4) object of a particle (preposition); as, He came before I left **ap ipIv adkEn ed ep ipIv**. Note that **ed** introduces the substantive clause although English does not employ the expletive "that." (5) apposition; as, His rule that all should work was a good one. The belief that the world is round is universal.

The subordinate clause used as a factitive complement is treated by some grammarians as a substantive clause; as, Ruskin's constant study of the Scriptures made his style what it was. Name him what you think best. However a reference to the discussion of "what" on page 18 will show that "what" is here equivalent to "the thing that" and should be translated by **han**; thus, Call me what you will **ritfOd ep han et itUp**.

Direct discourse does not require the **ed**, but directly follows (or precedes) the verb as in English—He said, "I love her **ap ipOv**, "ep itfoid at." However indirect discourse takes **ed**; as, He said he loved her **ap ipOv ed ek pinfoid at**.

Numerals

The numerals are formed from the stems **Ab, Ad, Ag**. The cardinal numerals answer the question **wAN** how many? The following table names all the cardinals up to one thousand and shows the vowel suffixes naming the cardinals from thousands to octillions.

0 rAb			
1 pAb	10 pAd	100 pAg	<i>Suffizes</i>
2 tAb	20 tAd	200 tAg	A thousand
3 kAb	30 kAd	300 kAg	E million
4 fAb	40 fAd	400 fAg	I billion
5 sAb	50 sAd	500 sAg	Q trillion
6 bAb	60 bAd	600 bAg	O quadrillion
7 dAb	70 dAd	700 dAg	U quintillion
8 gAb	80 gAd	800 gAg	ai sextillion
9 vAb	90 vAd	900 vAg	oi septillion
10 zAb	100 zAd	1000 zAg	au octillion
			u nonillion

Numbers below one thousand are written by means of the stems alone; thus, **tAg sAd kAb** two-hundred fifty-three. Thousands, millions, etc., are denoted by the suffixes, using the letters as in the Arabic notation (see page 10) and attaching the suffix to the stem naming the lowest numeral in the period; thus, **tAgE kAg pAfA fAg** two-hundred million three-hundred ten thousand four hundred. By using two-letter suffixes, names may be given to all numbers above nonillions up to the three-hundredth place; thus, **vAbvau** is 9 followed by 99 times 3 naughts. By using a three-letter suffix (with **r** to distinguish it from a stem), numbers may be named up to 1,000 followed by three times 999 (i. e., by 2,997) naughts; thus, **zAgvaurv**.

Numerals may be designated (as when dictating) by simply naming the initial consonant; thus, **b, t, r, f, k, d, p** is 6,204,371.

The ordinal numerals answer the question **kwAs** which in the series? which-th? what-th? (if there were such words in English), and are formed from the cardinal numerals by prefixing **kAs** (series); as, **kAspAb** first.

The multiplicatives answer the question **pWaf** (how many fold?) and are formed by prefixing **pAf** (multiply) to the cardinal; thus, **pAftAb** double; **pAfpAz** many fold.

Distributives answer the question **bwAs** (how many apiece? how many to each?) and are formed by prefixing **bAs** to the cardinals; as, **bAspAb** one apiece, one by one, one each.

Iteratives answer the questions **twAz** (how many times?) and **kwAstAz** (for the which-th time? for the what-th time?) and are

formed by prefixing **tAz** and **tAzpAb** once; **tAzAb** twice; **kAstAzAb** for the second time. The iterative prefix may be used with any stem or combination of stems with which it will make the sense intended; as, **tAzpAz** many times; **kAstAztlAs** for the last time.

Fractions are named by using a cardinal for the numerator and a cardinal with **l** for the denominator; as. **pAbtlAb** one-half; **tAd sAb klAg blAd** twenty-five three hundred sixtieths.

Time Words

The year contains thirteen calendar months of twenty-eight days each. The calendar months in consecutive order are:— **pEk**, **tEk**, **kEk**, **fEk**, **sEk**, **bEk**, **dEk**, **gEk**, **vEk**, **zEk**, **spEk**, **stEk**, **skEk**. **Ek** is any twenty-eight consecutive days and **nEk** is a (any) calendar month.

Each **nEk** has four **nEf** named as follows:— **pEf**, **tEf**, **kEf**, **fEf**. Any seven consecutive days is **Ef**.

Es is twenty-four consecutive hours and a **nEf** has seven **nEs**:— **pEs**, **tEs**, **kEs**, **fEs**, **sEs**, **bEs**, **dEs**.

New Year's Day is **gEs** which is to be a holiday and is not considered as being a day of any week or as being in any month. The extra day of leap year **vEs** is placed between the second and third weeks of **dEk** and, like **gEf**, is an intercalary holiday.

By this system every month and week begins on Sunday.

Eb is hour, time of day; **pEb** is hour, sixty minutes; **tEb** is minute; **kEb** is second; **fEb** is year.

EsE A. M.; **IEsE** P. M.; **EspA** noon; **IEspA** midnight; **EsI** morning; **IEsI** evening; **EsA** daylight; **IEsA** night.

Time of day is indicated thus: **EboifOpu** forty-five minutes ten seconds past 8 A. M. **EbtE** ten thirty P. M. (twenty-second hour).

Dating is as follows: **fEk** 21, 1914 (4th month, 21st day, 1914).

egEf today, **egzEf** yesterday; **legzEf** day before yesterday; **egdEf** tomorrow; **legdEf** day after tomorrow; **egEb** this year; **egzEb** last year; **egdEb** next year; etc.

This calendar was devised in 1914 before the author had seen any other scheme and is here presented as then worked out.

Periodic Table of the Chemical Elements

Qt		l	p	t	k	f	s	b	d	g	v	z
		O	I	II	III	IV	V	VI	VII	VIII		
A	O		H									
E	I	He	Li	Be	B	C	N	O	F			
I	II	Ne	Na	Mg	Al	Si	P	S	Cl			
Q	III	A	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni
			Cu	Zn	Ga	Ge	As	Se	Br			
O	IV	Kr	Rb	Sr	Y	Zr	Cb	Mo	Ma	Ru	Rh	Pd
			Ag	Cd	In	Sn	Sb	Te	I			
U	V	Xe	Cs	Ba	RE	Hf	Ta	W	Re	Os	Ir	Pt
			Au	Hg	Tl	Pb	Bi	Po	?			
ai	VI	Rn	?	Ra	Ac	Th	UX	U				

Qt is the stem on which the names of the chemical elements are based. The horizontal rows are denoted by suffixing the vowels and the perpendicular columns by the consonants before these vowels; thus, **Qtbl** sulphur; **QtgQ** iron. The lower rows of periods III, IV, and V are indicated by placing **s** (or **z**) before the suffix; thus, **QtspO** silver; **QtzdQ** bromine. The rare earth metals, indicated by **QtkU** above, do not fit into the periodic table. The table at the right names these elements in the same manner as the other elements above are named; as, **Qt-poi** lanthanum; **Qttau** (pronounced **Qmtau**) gadolinium.

Qt	p	t	k	f	s	b
oi	La	Ce	Pr	Nd	Il	Sa
au	Eu	Gd	Tb	Dy	Ho	Er
u	Tm	Yb	Lu			

formed by prefixing **tAzpAb** once; **tAzAb** twice; **kAstAzAb** for the second time. The iterative prefix may be used with any stem or combination of stems with which it will make the sense intended; as, **tAzpAz** many times; **kAstAztlAs** for the last time.

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The year contains thirteen calendar months of twenty-eight days each. The calendar months in consecutive order are:— **pEk**, **tEk**, **kEk**, **fEk**, **sEk**, **bEk**, **dEk**, **gEk**, **vEk**, **zEk**, **spEk**, **stEk**, **skEk**. **Ek** is any twenty-eight consecutive days and **nEk** is a (any) calendar month.

Each **nEk** has four **nEf** named as follows:— **pEf**, **tEf**, **kEf**, **fEf**. Any seven consecutive days is **Ef**.

Es is twenty-four consecutive hours and a **nEf** has seven **nEs**:— **pEs**, **tEs**, **kEs**, **fEs**, **sEs**, **bEs**, **dEs**.

New Year's Day is **gEs** which is to be a holiday and is not considered as being a day of any week or as being in any month. The extra day of leap year **vEs** is placed between the second and third weeks of **dEk** and, like **gEf**, is an intercalary holiday.

By this system every month and week begins on Sunday.

Eb is hour, time of day; **pEb** is hour, sixty minutes; **tEb** is minute; **kEb** is second; **fEb** is year.

EsE A. M.; **lEsE** P. M.; **EspA** noon; **lEspA** midnight; **EsI** morning; **lEsI** evening; **EsA** daylight; **lEsA** night.

Time of day is indicated thus: **EboifOpu** forty-five minutes ten seconds past 8 A. M. **EbtE** ten thirty P. M. (twenty-second hour).

Dating is as follows: **fEk** 21, 1914 (4th month, 21st day, 1914).

egEf today, **egzEf** yesterday; **legzEf** day before yesterday; **egdEf** tomorrow; **legdEf** day after tomorrow; **egEb** this year; **egzEb** last year; **egdEb** next year; etc.

This calendar was devised in 1914 before the author had seen any other scheme and is here presented as then worked out.

Qt		l	p	t	k	f	s	b	d	g	v	z
		O	I	II	III	IV	V	VI	VII	VIII		
A	O		H									
E	I	He	Li	Be	B	C	N	O	F			
I	II	Ne	Na	Mg	Al	Si	P	S	Cl			
Q	III	A	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni
			Cu	Zn	Ga	Ge	As	Se	Br			
O	IV	Kr	Rb	Sr	Y	Zr	Cb	Mo	Ma	Ru	Rh	Pd
			Ag	Cd	In	Sn	Sb	Te	I			
U	V	Xe	Cs	Ba	RE	Hf	Ta	W	Re	Os	Ir	Pt
			Au	Hg	Tl	Pb	Bi	Po	?			
ai	VI	Rn	?	Ra	Ac	Th	UX	U				

Qt is the stem on which the names of the chemical elements are based. The horizontal rows are denoted by suffixing the vowels and the perpendicular columns by the consonants before these vowels; thus, **QtbI** sulphur; **QtgQ** iron. The lower rows of periods III, IV, and V are indicated by placing **s** (or **z**) before the suffix; thus, **QtspO** silver; **QtzdQ** bromine. The rare earth metals, indicated by **QtkU** above, do not fit into the periodic table. The table at the right names these elements in

Qt	p	t	k	f	s	b
oi	La	Ce	Pr	Nd	Il	Sa
au	Eu	Gd	Tb	Dy	Ho	Er
u	Tm	Yb	Lu			

the same manner as the other elements above are named; as, **Qt-poi** lanthanum; **Qttau** (pronounced **Qmtau**) gadolinium.

formed by prefixing tAz and kAstAz to the respective cardinals; as, tAzpAb once; tAzAb twice; kAstAzAb for the second time. The iterative prefix may be used with any stem or combination of stems with which it will make the sense intended; as, tAzpAz many times; kAstAzlAs for the last time.

Fractions are named by using a cardinal for the numerator and a cardinal with l for the denominator; as. pAbtlAb one-half; tAd sAb klAg blAd twenty-five three hundred sixtieths.

Time Words

The year contains thirteen calendar months of twenty-eight days each. The calendar months in consecutive order are:— pEk, tEk, kEk, fEk, sEk, bEk, dEk, gEk, vEk, zEk, spEk, stEk, skEk. Ek is any twenty-eight consecutive days and nEk is a (any) calendar month.

Each nEk has four nEf named as follows:— pEf, tEf, kEf, fEf. Any seven consecutive days is Ef.

Es is twenty-four consecutive hours and a nEf has seven nEs:— pEs, tEs, kEs, fEs, sEs, bEs, dEs.

New Year's Day is gEs which is to be a holiday and is not considered as being a day of any week or as being in any month. The extra day of leap year vEs is placed between the second and third weeks of dEk and, like gEf, is an intercalary holiday.

By this system every month and week begins on Sunday.

Eb is hour, time of day; pEb is hour, sixty minutes; tEb is minute; kEb is second; fEb is year.

EsE A. M.; IESE P. M.; EspA noon; IEspA midnight; EsI morning; IEsI evening; EsA daylight; IEsA night.

Time of day is indicated thus: EboifOpu forty-five minutes ten seconds past 8 A. M. EbtE ten thirty P. M. (twenty-second hour).

Dating is as follows: fEk 21, 1914 (4th month, 21st day. 1914).

egEf today, egzEf yesterday; legzEf day before yesterday; egdEf tomorrow; legdEf day after tomorrow; egEb this year; egzEb last year; egdEb next year; etc.

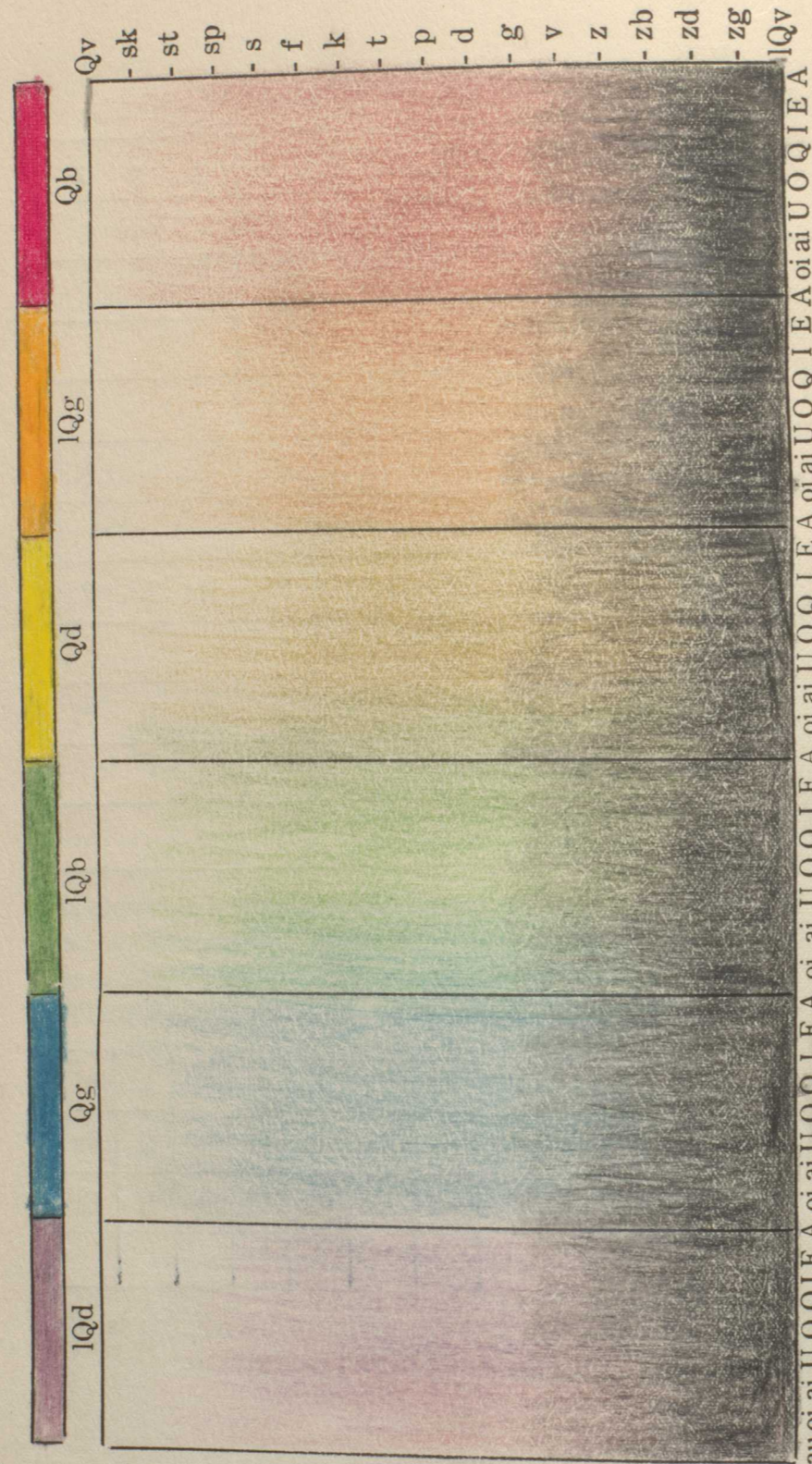
This calendar was devised in 1914 before the author had seen any other scheme and is here presented as then worked out.

Periodic Table of the Chemical Elements

Qt		l	p	t	k	f	s	b	d	g	v	z
		O	I	II	III	IV	V	VI	VII	VIII		
A	O		H									
E	I	He	Li	Be	B	C	N	O	F			
I	II	Ne	Na	Mg	Al	Si	P	S	Cl			
Q	III	A	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni
			Cu	Zn	Ga	Ge	As	Se	Br			
O	IV	Kr	Rb	Sr	Y	Zr	Cb	Mo	Ma	Ru	Rh	Pd
			Ag	Cd	In	Sn	Sb	Te	I			
U	V	Xe	Cs	Ba	RE	Hf	Ta	W	Re	Os	Ir	Pt
			Au	Hg	Tl	Pb	Bi	Po	?			
ai	VI	Rn	?	Ra	Ac	Th	UX	U				

Qt is the stem on which the names of the chemical elements are based. The horizontal rows are denoted by suffixing the vowels and the perpendicular columns by the consonants before these vowels; thus, QtbI sulphur; QtgQ iron. The lower rows of periods III, IV, and V are indicated by placing s (or z) before the suffix; thus, QtspO silver; QtzdQ bromine. The rare earth metals, indicated by QtkU above, do not fit into the periodic table. The table at the right names these elements in the same manner as the other elements above are named; as, Qt-poi lanthanum; Qttau (pronounced Qmtau) gadolinium.

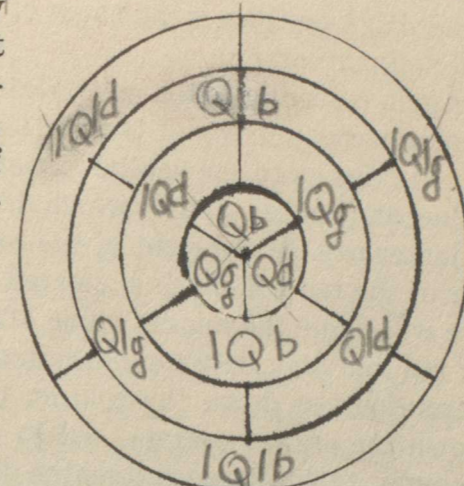
Qt	p	t	k	f	s	b
oi	La	Ce	Pr	Nd	Il	Sa
au	Eu	Gd	Tb	Dy	Ho	Er
u	Tm	Yb	Lu			



The color plate looks dull because it is the middle step of chroma but the maximum chroma is shown in the little squares at the top. The names are **kQbzvO**, **gIQgzbO**, **plQbzvO**, **plQgzvO**, **kIQgO**, **klQgO**.

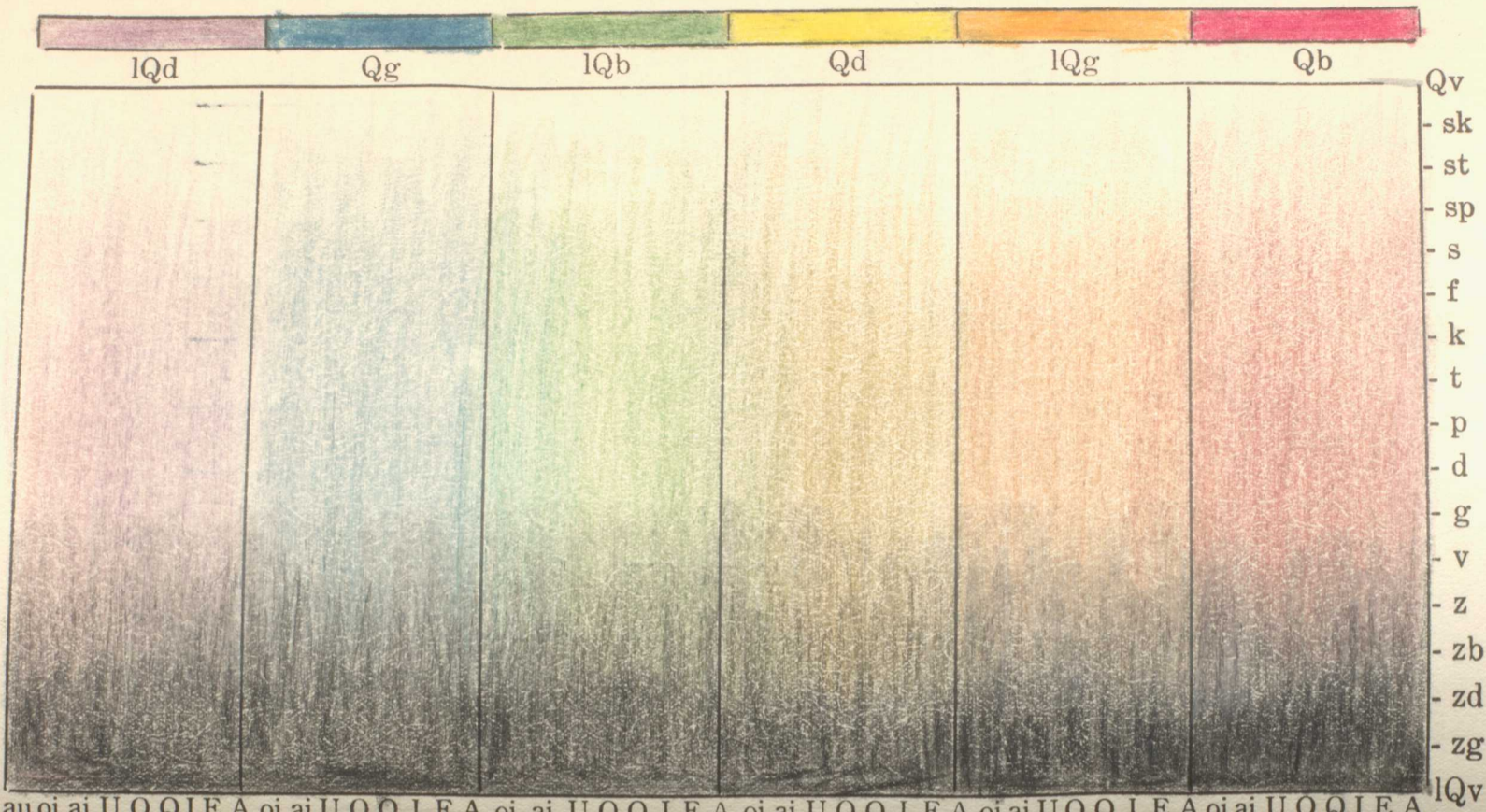
A Color Notation

The primary colors are **Qb** red, **Qd** yellow, **Qg** blue (see figure at right). The names of the secondary colors are derived from the names of the primary colors by the use of initial **I** denoting that the secondary color is the complement of the primary color; as, **IQg** orange, the complement of blue. Each tertiary color is a compound of the three primary colors; thus, **QIb** is two parts red, one part yellow, and one part blue. It is named by placing **I** after the vowel of **Qb**, the primary color to which it is most closely related. The quaternary colors are complementary to the tertiary colors and are named by placing **I** before the vowel of the tertiary color: as, **IQIb**, the complement of **QIb**.



In order to develop a color notation it will be necessary to explain the three dimensions of color. There is nothing perplexing or mysterious about the three dimensions of color and they are as readily comprehended as the three dimensions of a box. Hue is the quality which distinguishes one color from another, as a red from a yellow, a green, or a blue. Referring to the color plate on the opposite page, we note that it is divided into six perpendicular columns. The third column to the left is yellow gradually merging toward the right through all the intermediate hues of yellow and orange to pure red at the middle of the first column at the right. This yellow column also merges to the left through green to pure blue at the middle of the fifth column of the left.

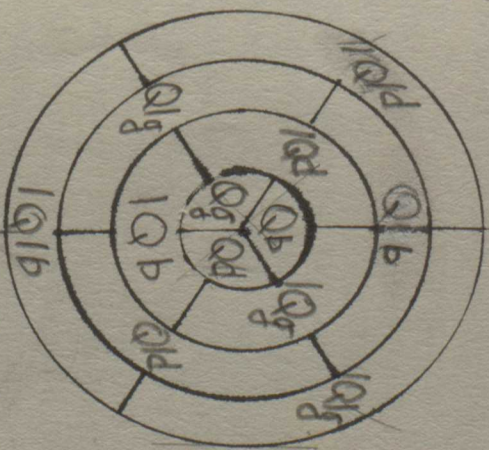
O at the bottom of column **Qd** indicates a line up through the center of this column; thus, **QdO** means pure yellow; **QbO** pure red; **IQgO** pure orange (half way between **QbO** and **QdO**, i. e., an equal mixture of red and yellow). Hues in the **Qd** column approaching **IQg** are named by suffixing **Q**, **I**, **E**, and **A** in order, and those approaching **IQb** by **U**, **ai**, **oi**, and **ou**; thus, the hue of yellow one



au oi ai U O Q I E A oi ai U O Q I E A oi ai U O Q I E A oi ai U O Q I E A oi ai U O Q I E A oi ai U O Q I E A
 The color plate looks dull because it is the middle step of chroma but the maximum chroma is shown in the little squares at the top. The names are kQbzvO, glQgzbo, zbQdzdO, plQbvO, kQggO, klQdgo.

A Color Notation

The primary colors are Qb red, Qd yellow, Qg blue (see figure at right). The names of the secondary colors are derived from the use of initial I denoting that the secondary color is the complement of the primary color; as, IQg orange, the complement of blue. Each tertiary color is a compound of the three primary colors; thus, Qlb is two parts red, one part yellow, and one part blue. It is named by placing I after the vowel of Qb, the primary color to which it is most closely related. The quaternary colors are complementary to the tertiary colors and are named by placing I before the vowel of the tertiary color: as, IQlg, the complement of Qlg.



In order to develop a color notation it will be necessary to explain the three dimensions of color. There is nothing perplexing or mysterious about the three dimensions of color and they are as readily comprehended as the three dimensions of a box. Hue is the quality which distinguishes one color from another, as a red from a yellow, a green, or a blue. Referring to the color plate on the opposite page, we note that it is divided into six perpendicular columns. The third column to the left is yellow gradually merging toward the right through all the intermediate hues of yellow and orange to pure red at the middle of the first column at the right. This yellow column also merges to the left through green to pure blue at the middle of the fifth column on the left.

O at the bottom of column Qd indicates a line up through the center of this column; thus, QdO means pure yellow; QbO pure red; IQgO pure orange (half way between QbO and QdO, i. e., an equal mixture of red and yellow). Hues in the Qd column approaching IQg are named by suffixing Q, I, E, and A in order, and those approaching IQb by U, ai, oi, and ou; thus, the hue of yellow one

point nearer orange than pure yellow is **QdQ**, the hue of green two points nearer blue than yellow is **IQbai**, etc. The hue on the line between two columns may be named by using the suffix with the stem denoting either the primary or secondary hue; thus, either **IQgA** or **Qbou** is the name of the hue half way between pure red and pure orange.

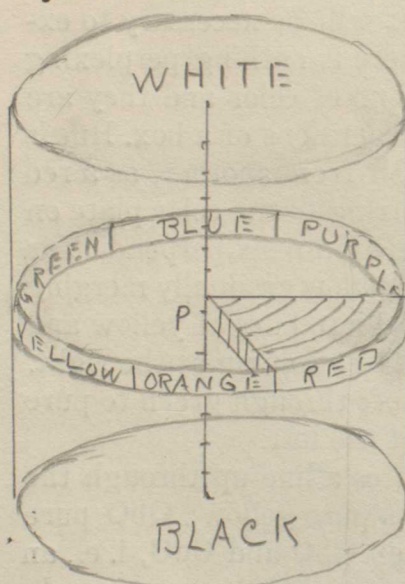
Again referring to the color plate, we note it becomes lighter as it approaches the top of the plate and darker toward the bottom. This brings us to the second dimension of color, which is called value, and is that quality which distinguishes a lighter color from a darker one. At the right of the color plate it is seen that the center of the red column is indicated by **p**. By placing **p** before **Qb**, we will name the middle value of red, that is, **pQb** is that value of red half way between black and white. **zQb** is that value of red three-fourths down the column toward black, **slQg** one-fourth down the orange column, **sklQb** one-sixteenth down the green column, **zgQd** fifteen-sixteenths down the yellow column, etc.

Now by suffixing the vowels and prefixing the consonants to the color stems we may name 720 points on the color plate; thus, **pQdI** is yellow one-fourth way to orange and five steps from white;

plQbO is green half way between blue and yellow and half way between black and white.

In the figure at the left the color plate is represented as joined at **QbA** and **IQdou** thus forming the convex surface of a cylinder. The axis of this cylinder is graduated into sixteen equal parts corresponding to the values of hue on the color plate and varies thru all the values of gray from black at the extreme lower end to white at the upper end. The general color of this axis we will call **Qz** gray. The fifteen values of gray are designated by the consonants as with the hues on the

color plate; thus, **pQz** is middle gray; **sQz** four steps down from white; etc. White we will call **Qv** and black **IQv**.



In the figure the middle values of the hues are represented as a band around the vertical axis. We may imagine one of these hues to grow inward toward the gray axis, growing grayer or weaker in color strength until it reaches this central axis and loses its color (hue) altogether. We have now grasped the idea of the dimension of color known as chroma. By dividing this into steps, we have a scale upon which the strength or chroma of color may be measured. The strongest known chroma of **QgA** (blue-green) is only half that of the strongest known chroma of **QbO** (pure red). We will assume the strongest known chroma of **QbO** as the sixteenth step and the whole surface of the color plate as having a chroma strength of eight. The chroma of the color plate will be named by placing **p** before the vowel suffix; thus, **pQbpO** the middle value of pure red at the middle step of chroma. Chroma strength less than that of the surface of the cylinder will be denoted by the consonants **t, k, f, s, sp, st, and sk** in order of decreasing strength; thus, **pQbtO** is the middle value of pure red one step nearer neutral gray than the color plate. Chroma greater than that of the convex surface of the cylinder will be denoted by **d, g, v, z, zb, zd, zg, and zv** in order of increasing strength; thus, **pQb-zvO** is the middle value of pure red sixteen steps from the neutral gray axis. If pigments having greater chroma than sixteen steps are discovered, the further combined preceding consonants as listed on page 8 may be used to name them.

In order to illustrate opposite or complementary colors, balance, color combinations, etc., it is necessary to assume that the color solid is a cylinder of which the color plate is the convex surface, the lower base is black, and the upper base white. A fuller discussion of this subject is beyond the scope of this book, but it will prove a fascinating subject for any who may be interested.

Such names as slate, citrine, russet, buff, plum, sage, etc., are usually applied to the tertiary and quaternary colors, but no two independently would exactly agree on the hues named by these words even without attempting to distinguish the various values and steps of chroma. By substituting **Qlb** for **Qb**, **IQlb** for **IQb**, etc., the hues, value, and chroma of the tertiary and quaternary colors may be named by the same method as used in naming those of the primary and secondary colors.

By a simple phonetic system, easily mastered and applicable to the whole language formation of **Oz**, we are able to name 24,953 definite colors whose exact hue, value, and chroma can be accurately demonstrated.

The derivative color words so far considered are formed by supplementary derivation (see page ten), but by means of direct and indirect derivation we may form an almost infinite number of words. A few examples of indirect derivation are: **abbAtQb** reddish; **intEgQb** turn (become) red; **adkEzQb** inclined to be red; **abOfsQb** rosy. On account of the derivative value of **u, a, e, i, l, y, c,** and **n**, direct derivation is an important factor in forming color words: **cQb** all the values of red; **Qbe** all the hues of red; **Qbcu** all the chromas of red; **cQbcO** all the values of all the chromas of the pure red hue; **cQbpu** all the values of red of the eighth step of chroma; **cQc** all the values of all the hues; **cQcpu** all the values of all the hues at the eighth step of chroma; **Qbe** all the hues of red; **tQbe** all the hues of red at the seventh value; **tQbte** all the hues of red at the seventh value and seventh step of chroma; **cQbce** all the hues of red at all values and all chromas; **cQcce** all hues of all values and all chromas. By substituting **n** (or **N**) for **c** and **i** for **e**, "all" in the above examples will read "any;" thus, **nQb** any value of red. Other examples are: **QN** hue, **nQN** value, **snQN** tint, **znQN** shade, **QNni** chroma, **nQNni** color.

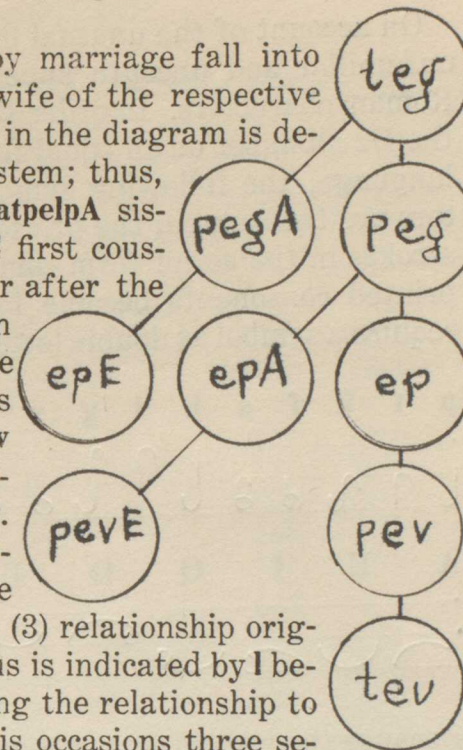
When all the possibilities of derivation are fully considered, it is no exaggeration to say that the number of color words which may be formed by this system is practically infinite. Altho color is the only subject that is very thoroughly worked out in this book the structure of **Oz** is such that it can be adapted to the expression of every phase of thought.

Consanguinity

The figure on page 35 illustrates consanguineous relationship. **ep** signifies "self," **akepA** brother or sister, and the various cousins are designated by the vowel suffixes in alphabetic order. **atteg** grandmother, **appev** son, **aktev** grandchild, etc. Collateral relationship is denoted by the various consonants as prefixes with vowel suffixes; as, **aptegA** great uncle, **appevE** nephew.

Paternal relationship is indicated by **z** after the stem; as, **atpegzA** paternal aunt; and maternal relationship by **d**; as, **apteg d** maternal grandfather.

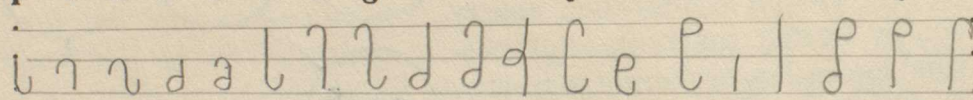
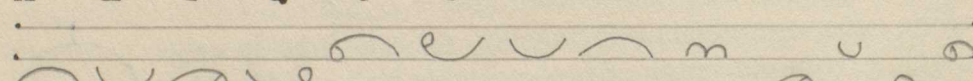
Words denoting relationship by marriage fall into three classes: (1) the husband or wife of the respective consanguineous relative indicated in the diagram is denoted by **l** after the vowel of the stem; thus, **upelp** husband; **appelg** stepfather; **atpelpA** sister-in-law (brother's wife); **atelpE** first cousin's wife; **appelv** son-in-law. (2) **r** after the vowel of the stem denotes the son or daughter by former marriage of the respective persons in class (1); as, **aperpA** stepbrother; **apperv** son by former marriage of propositus' son-in-law or daughter-in-law. It will be noted that only **r** distinguishes this relationship from the same consanguineous relationship. (3) relationship originating from marriage of propositus is indicated by **l** before the vowel of the stem denoting the relationship to propositus' wife (or husband). This occasions three series of words: (a) words derived from the diagram: as, **atlepA** sister-in-law (wife's sister); **aklepE** wife's first cousin; **applev** stepson; (b) words derived from class (1); as, **atplelg** wife's stepmother; **atlelpA** wife's sister-in-law (her brother's wife); **atplelv** wife's daughter-in-law (wife of propositus' stepson); (c) words derived from class (2); as, **aplepA** wife's stepbrother; **applerv** stepson of wife's son (or daughter).



All the laws of derivation as illustrated under color on page 34 are equally applicable here. A few examples are: **neg** ancestor; **negi** collateral relative of past generation; **nev** descendent; **nevi** collateral relative of future generation; **neN** lineal relative; **neNi** any collateral relative; **epi** any relative contemporary with the propositus; **neNni** any relative; **neNA** any relative named in first column to left; **neNI** any relative in third column to left; **kegi** any relative in third generation before propositus, etc. All the other grammatical consonants may be used as in color words.

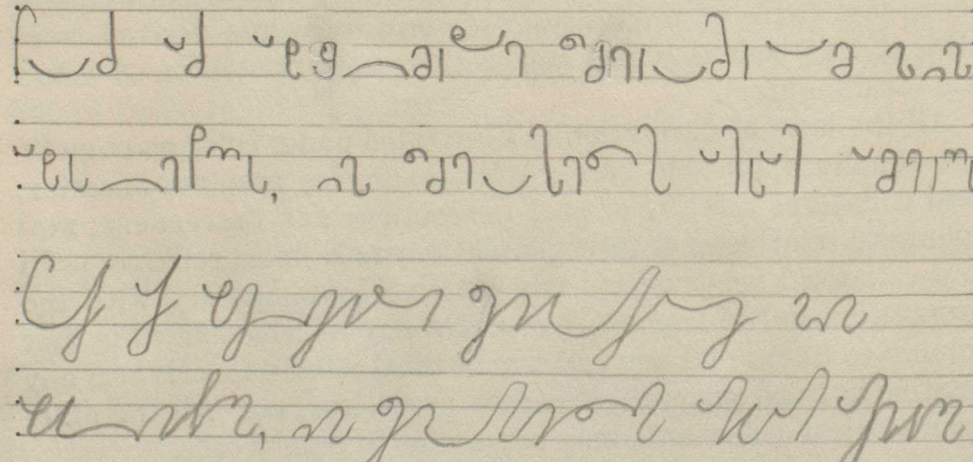
Phonetic Symbols

On account of the unusual use of capital letters, **Oz** presents an unfamiliar and uncouth appearance when written or printed in Roman characters. In order to overcome this obstacle and place the **Oz** alphabet on an equal footing with the other features of the language, the following symbols have been devised. The characters are the same in the printed and script forms except that up strokes in the script form connect letters and the circles of the printed consonants become loops in the script form. **m** does not require a symbol as double letters are confusing only when spoken.

p t k f s b d g v z c j n N l r w y h

A E I Q O U ei oi au u a e i


Because the wicked do not receive their just deserts immediately, they grow bold in transgression.

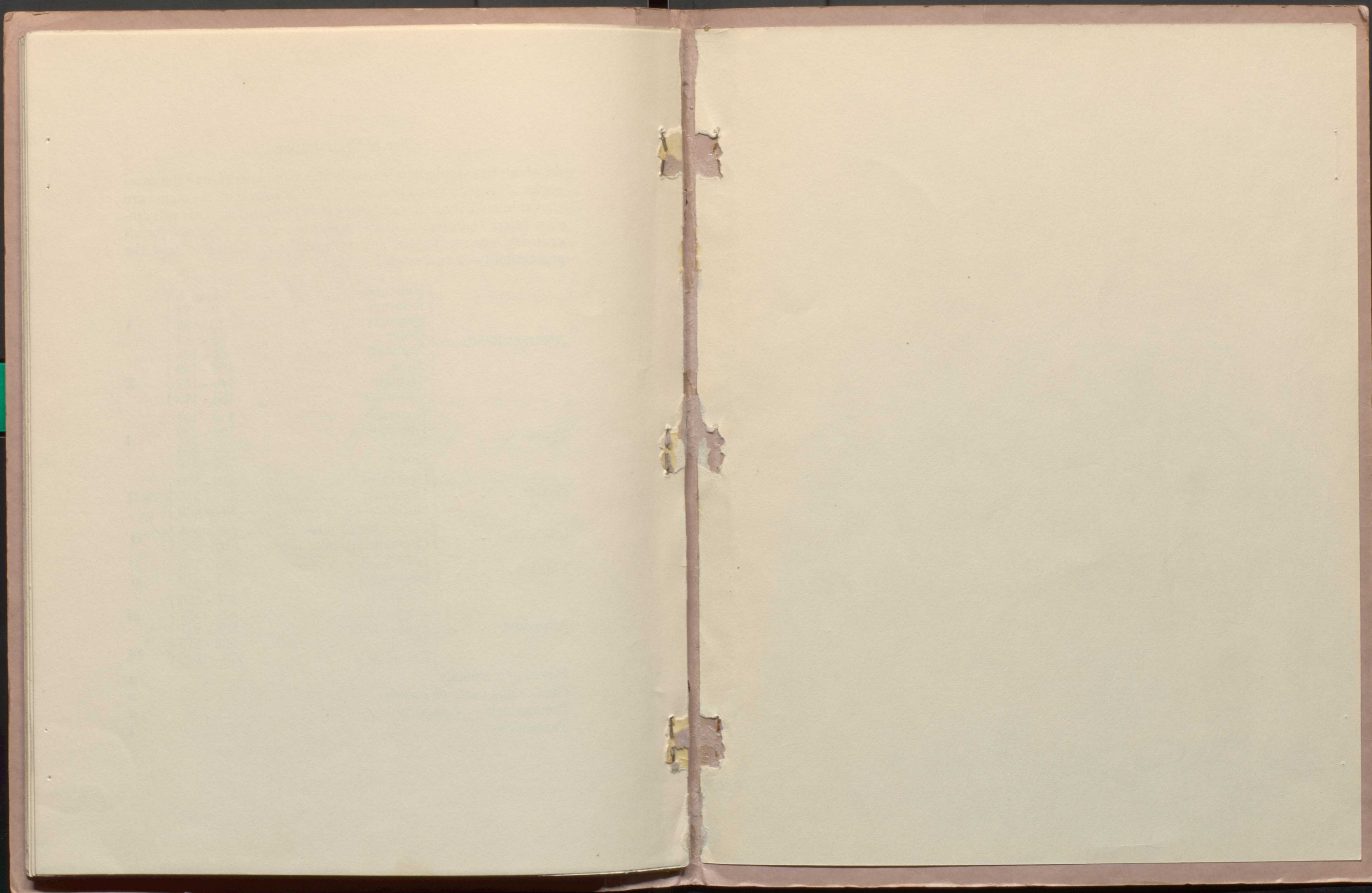
hEv az ansAslUt iftEplezlais kek anpAtpyaup, ek iftEgtOg adpad astlaup.



Plan of Classification

on which the vocabulary is based. The numbers refer to the categories of Roget's Thesaurus and the basic vowels of the stems are shown in bold face. A vocabulary is in preparation. This will employ fewer than one thousand stems but will be adequate for all ordinary communication and sufficiently extensive to test the practicability of an *a priori* language.

Abstract Relations	Existence . . .	1 to 8	A
	Relation . . .	9 - 24	
	Quantity . . .	25 - 57	
	Order . . .	58 - 83	
	Number . . .	84 - 105	
	Time . . .	106 - 139	
Change . . .	140 - 152	E	
	Causation . . .		153 - 179
Space . . .	Generally . . .	180 - 191	I
	Dimensions . . .	192 - 239	
	Form . . .	240 - 263	
	Motion . . .	263 - 315	
Matter . . .	Generally . . .	316 - 320	Q
	Inorganic . . .	321 - 356	
	Organic . . .	357 - 449	
Intellect . . .	Formation of ideas . . .	450 - 515	O
	Communication of ideas . . .	516 - 599	
Volition . . .	Individual . . .	600 - 736	U
	Intersocial . . .	737 - 819	
Affections . . .	Generally . . .	820 - 826	oi
	Personal . . .	827 - 887	
	Sympathetic . . .	888 - 921	
	Moral . . .	922 - 975	
	Religious . . .	976 - 1000	
Plants and animals	u
Gender and parts of speech	a
Pronominals (see page 16)	e
Tense signs	i



MAR 26 1932

