



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Transactions of the Wisconsin Academy of Sciences, Arts and Letters. volume XVI, Part I, No. 2 1908

Madison, Wis.: Wisconsin Academy of Sciences, Arts and Letters, 1908

<https://digital.library.wisc.edu/1711.dl/B44YAM2CN6YXH8B>

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

TRANSACTIONS
OF THE
WISCONSIN ACADEMY
OF
SCIENCES, ARTS AND LETTERS

VOL. XVI, PART **II**. No. 2

EDITED BY THE SECRETARY.

Published by Authority of Law.



MADISON
DEMOCRAT PRINTING COMPANY, STATE PRINTER.
JUNE, 1908.

TRANSACTIONS

OF THE

WISCONSIN ACADEMY

OF

SCIENCES, ARTS AND LETTERS

VOL. XVI, PART II.

EDITED BY THE SECRETARY.

Published by Authority of Law.



MADISON
DEMOCRAT PRINTING COMPANY, STATE PRINTER.
JUNE, 1908.

TABLE OF CONTENTS.

	PAGE
Hybrid parts of speech; a development of this proposition: In a single sentence, and though un-repeated, a word may operate as different parts of speech.	<i>Edward T. Owen.</i> 107

HYBRID PARTS OF SPEECH

*A development of this proposition: In a single sentence a word
may operate, though unrepeated, as different
parts of speech.*

BY

EDWARD T. OWEN, PH. D.,

Professor of French and Linguistics in the University of Wisconsin.

The following pages are broadly corollary to others published in the effort to establish the mental phenomena registered by thought-connectives,¹ by strictly pronominal words² and by words improperly ranked as such, especially relatives² and interrogatives.³

They sketch the further application of an assumption developed in those former publications—the assumption that in various ways a factor of one thought may also be a factor of another thought.

¹“The meaning and function of thought-connectives.” *Transactions of the Wisconsin Academy of Sciences, Arts and Letters*, xii:1 to 48.

²“A revision of the pronouns, with special examination of relatives and relative clauses.” *Trans. Wis. Acad. Sci., Arts and Letters*, xiii:1 to 140.

³“Interrogative thought and the means of its expression.” *Trans. Wis. Acad. of Sci., Arts and Letters*, xiv:355 to 470.

TABLE OF CONTENTS.

	PAGE
SYNOPSIS	108
CHAP. I. ORIENTATION.	
Hybrids defined	111
Possible hybrids	111
Actual hybrids	113
The single thinking of what they express.....	116
Singleness versus so-called identity.....	117
The double thought-factorships of what they express	118
Thoughts in which double factorship occurs.....	119
Central thought	125
Lateral thought	134
Centro-lateral thought	139
The centro-lateral factor	140
(1) Its leadership among its lateral fellows....	141
(2) Its attendance by its lateral fellows.....	142
(3) Its central factorships	144
(4) Its lateral factorships	144
(5) Its double factorships	145
(6) Its expression by a verbal noun.....	146
(7) Its expression by a verbal adjective.....	147
(8) Its expression by a verbal adverb.....	152

CHAP. II. THE VERBAL HYBRIDS.

	PAGE
The verbal nouns.	
An embarrassing misconception.....	157
How they operate as verbs.....	163
How they operate as nouns—	
I. The usual interpretation.....	165
II. A preferred interpretation.....	168
Their inflectional possibilities.....	184
Their actual inflectional varieties.....	187
(1) The noun with merely verb-like meaning.	188
(2) The noun in verbal function.....	189
(3) The Latin gerund	190
(4) The Latin supine	190
(5) The English form in “ing”.....	190
(6) The infinitive	191
(7) The Portuguese infinitive	191
(8) The subjunctive in substantive function..	191
The verbal adjectives.	
Their inflectional varieties.....	195
(1) The adjective with merely verb-like mean- ing	195
(2) The adjective in verbal function.....	195
(3) The participle	198
(4) The subjunctive in adjective function...	198
The verbal adverbs.....	202
Secondary hybrids	202

Table of Contents.

v

CHAP. III. CLASSIFICATION OF VERBAL FORMS.	PAGE
The conjugational aggregation	204
Rational systems	214
 CHAP. IV. CHOICE OF VERBAL FORMS.	
Conditions of choice	223
Influence of thought-content	228
Influence of thought-structure	235
Influence of expressional expediency	245

SYNOPSIS.

In the interest of whoever may wish to read this writing by titles only, the table of contents should perhaps be supplemented as follows.

The assumption (page ii) that a factor of one thought may also be a factor of another thought, reappears (page 111) as the more special assumption, that a factor of one thought may also at the same time be a different kind of factor in another thought. This more special assumption, which leads to calling the word for such a factor a hybrid, is followed by some examination of the several possible pairs of factorships (111-112), attention to actual hybrids (113-116) being centered on verbal hybrids or words which in subordinate syntax operate as verbs, while in dominant syntax operating as other parts of speech.

After some comment on the single thinking of what is a (common) factor of two thoughts (116-117), some endeavor to distinguish actual singleness from the mere identity of twice-thought ideas (117-118), and some emphasis of doubleness of factorship (118), an examination is made of the thoughts in which double factorship occurs (119-125), an effort being made to vindicate a point of view from which the speaker senses a complex total of thought as, part of it, more and, part of it, less the burden of his expressional effort—that is, as partly central, partly lateral (and often even partly sub-lateral) to his expressional purpose—senses the complex total, that is, as what for convenience may be known as a centro-lateral thought.

It is further argued (125-134) that the central part of such a complex total must consist of three terms only, and that the lateral part cannot, without the loss of detailed existence as a thought, be operative as a term of central thought (134-139). The obvious oneness of the centro-lateral total is explained by the interlocking operation of a once-thought factor common to both central and lateral parts, and styled the centro-lateral factor (140-141), the word expressing which may be a verbal noun, a verbal adjective or a verbal adverb.

In the second chapter, an effort to clear away the embarrassing conception of the infinitive subject as per force accusative

(157-163) is followed by an examination of verbal nouns in their operation as verbs (163-165). In their operation as nouns the usual interpretation of e. g. total infinitive phrases as subjects, objects, etc. (165-168) is neglected in favor of an interpretation which regards the infinitive alone as centrally a noun—a subject, object, etc.—while laterally verbal and capable of service with a subject and an object of its own (168-184).

The extensive inflectional possibilities of verbal nouns are examined (184-187); the purposes of inflection are noted as determining actual inflectional varieties (187-194); a like procedure with verbal adjectives and verbal adverbs is outlined (194-202); the possibility of secondary hybrids is illustrated by a single word compelled to operate as an adjective and also as a verbal noun (202).

Chapter third endeavors (204-214) to convict of irrationality the current conjugational system, and to reach a tenable systematic tabulation of verbal forms (214-221), using in succession, as distinctives, differences in meaning (assertive or unassertive), differences in syntax of the unassertive forms (these being verbally substantive, adjective or adverbial), and amount and character of inflection. Incidentally, the several tenses are exhibited in chronological order (216-218), and an effort is made to refute the fallacy of the conditional *mode* (218-220).

Chapter fourth investigates the influences which determine the use of the several verbal forms. The hybrid sort being unassertive, and the remainder assertive, genuine choice between the two—distinguished from the mere adoption of another's choice (223-228)—is found to be the expressional corollary of a prior choice between thought including, and thought excluding belief [in truth or untruth] (228-235). Similarly, choice between the several kinds of verbal hybrids—i. e. verbal noun, verbal adjective and verbal adverb—is found to be the expressional corollary of a prior choice between the several available structures of thought—word-syntax, so to speak, reflecting idea-syntax (235-244). Choice between the varieties of e. g. verbal nouns is found to be grounded on expressional expediency; thus the compactness of the infinitive phrase, and the

substantive subjunctive's more effective marshalling of numerous details, are each in turn the more desirable, among other reasons, according as thought is simple or complex (245-251).

The use of particular verbal forms, being isolated thus from the influence of rule or imitation, conscious or unconscious, is exhibited as normally determined by the nature of thought to be expressed.

CHAPTER I.

ORIENTATION.

HYBRIDS DEFINED.

By a hybrid part of speech is meant, as indicated on the title page, a single, unrepeated word which, in a single expression, has a legitimate claim to different ratings as a part of speech.⁴ As words thus operating will be found to exhibit some, but not all the characteristics of two parts of speech, they may conveniently be known as hybrids.

As the only adequate distinctive of a primary word-class known as a part of speech, I recognize the particular thought-membership of what the word expresses. Accordingly, the rating of the hybrid, as at once two different parts of speech, implies that what it expresses does at once a double⁵ service as thought-member.

POSSIBLE HYBRIDS.

To make sure of covering all the possibilities of double membership in thought, I postulate that an idea serving in any mem-

⁴ Thus, in "The doctor forbade my eating meat," the adjunctive "my" may be said to look upon "eating" as a noun, which again is regarded by "meat" as a verb.

As in previous publications, the "I" will be used with the utmost freedom, for the sake of its convenience in the exhibition of mental operation, as well as its special fitness in the expression of what must rank as largely personal opinion only. Also in illustrations, when brevity becomes important, instead of the idea expressed by a given word, the word itself will be cited, when there seems to be no danger of misapprehension.

⁵ The case of treble membership will be examined later.

bership of one thought may also (a) at some other moment, or (b) at the same moment, serve in, case (1) the same, or case (2) any other, membership of another thought.

The possibilities of (a), exemplified by "I am fond of red. My wife likes red. Red is a beautiful color. My house is red," are too well known to admit discussion.

Case (1) or double service, as a single part of speech, has been considered in the examination of relatives, and is, moreover, foreign to the purpose of the moment.

Case (2) implies that a word may, at the same time, serve not only as a given part of speech, but also as any other part of speech—or rather, such would be the implication, if each of the reputed parts of speech exactly tallied with a single kind of membership in thought.

Were such exactness realized, and if every one of the parts of speech in actual practice hybridized with every other, the number of hybrids would be very great. Of the accepted parts of speech—say nine in number—one may hybridize with each of the remaining eight; one of the remaining eight with each of the remaining seven; and so on, till completion of the series, eight, seven, six, five, four, three, two, and one, which make a total of thirty-six.

Every hybridization may, moreover, occur in either of two ways, producing two different forms. Just as the offspring of horse and ass is of one sort when sired by the horse, and of another when sired by the ass, so also the hybrid of two parts of speech,—for instance, verb and noun—is of one sort when in dominant thought a noun and in subordinate thought a verb, and of another sort when these conditions are reversed. This difference, once admitted as distinctive, brings the number of possible hybrid parts of speech to seventy-two.⁶

⁶ Whether further breeding occurs between type and hybrid, I examine later (pages 202-3).

ACTUAL HYBRIDS.

Of possible hybrids, only a few occur in actual linguistic practice.

Some of the reputed parts of speech express ideas whose membership in thought is the same as that of ideas expressed by other parts of speech. For instance, the idea expressed by the article takes, in the structure of thought, a position nowise different from that of the idea expressed by an adjective, and the article may as well be ranked as an adjective of merely debilitated⁷ meaning.

Words traditionally ranked as pronouns, I have elsewhere sought to exhibit as sometimes merely somewhat peculiar nouns, sometimes (when relative) virtual case-endings, sometimes (when interrogative) sentences complete.

Of the conjunction I can at this point only state my individual impression, that careful examination would fail to show in its operation any peculiarity which is not exhibited by one or another of the parts of speech examined below, by a duplication or by a combination thereof, the conjunction in the last case being also a hybrid. In short, I cannot distinguish a conjunctive word-class so different from others in its operation, as to warrant special recognition.

The interjection is more or less consciously felt by language-students to be extra-sentential—in the sentence, but not of it—accordingly, not a part of speech, at least in the restricted sense of "*satz-theil*."

The participle is perceived, though not so universally as might be wished, to be a verbal adjective—that is, itself a hybrid.

The preposition (further interrogated in the note on p. 149), like the verb, exhibits a relation between a pair of terms. This relation, however, is always secondary, never to my knowledge reaching that prominence which is corollary to a double membership of thought. Accordingly, intending to make the prep-

⁷ So much so as to be incapacitated for service in the important predicate position.

osition at another time the subject of a special investigation, in the meantime I accept, without a search for explanation, the presumable fact, that prepositions do not hybridize.

Of the remaining parts of speech—the noun, the adjective, the adverb and the verb—each may cooperate with every other in the production of dual hybrid forms; or, figuratively speaking no longer, the double syntax of a word may give it rank as dominantly any one of the above four parts of speech, and subordinately any other—and vice versa.

Accordingly, the following forms may occur:

- (1) Nominal adjective, *a*.
- (2) Nominal adverb, *b*.
- (3) Nominal verb, *c*.
- (4) Adjectival noun, *a*.
- (5) Adjectival adverb, *d*.
- (6) Adjectival verb, *e*.
- (7) Adverbial noun, *b*.
- (8) Adverbial adjective, *d*.
- (9) Adverbial verb, *f*.
- (10) Verbal noun, *c*.
- (11) Verbal adjective, *e*.
- (12) Verbal adverb, *f*.⁸

Of these, however, some⁹ do not appear except in expressions

⁸ The pairs of hybrid forms obtained from a single pair of species are indicated by the repeated letters on the right.

⁹ (1) Nominal Adjective: "These ribbons are the *red* you like so much." This hybrid is not to be confused with the usual noun especially employed as adjective *only*; e. g., "an oak stick."

(2) Nominal Adverb: "I like him the *little* you expected." Following the method used in the examination of relatives, I find the quantitative "little", in dominant syntax, adjunctive to "like"—i. e., adverbial—while serving in subordinate syntax as a noun, the object of "expected."

(3) Nominal Verb: "The manufacturer double-*distills* this alcohol." In this expression "double" may be regarded not as a merely accidental variant of the adverb "doubly", but as strictly an adjective posing the (for "manufacturer" and "alcohol") verbal "distills", as for itself ("double") a substantive—as may indeed be done by any attribute, with that to which it is attributive.

(4) Adjectival Noun: "The *young* the saleswomen are amazes me"—a common Spanish construction, the article used with "young" being

of doubtful propriety, while the occurrence of the others¹⁰ may be imaginary only. Purged, accordingly, of these perhaps exclusively imaginary, and those perhaps improper forms, the

put in singular neuter form, as proper with an adjective used as a noun, while the adjective itself agrees with "saleswomen," being put in the feminine plural as befits an adjective used as such. This hybrid is not to be confused with the usual adjective specially functioning solely as a noun, as in "The sublime and the beautiful."

(7) Adverbial Noun: "The *little* he likes me is better than nothing." In major syntax "little" is a noun, the subject of "is", while in minor syntax, adverbial to "likes."

¹⁰ (5) Adjectival Adverb: "You do your sewing *where* I often am." Abiding by a theory of relatives advanced in a previous publication (Pronouns, etc., p. 70, etc.) I suggest that the locative idea expressed by "where" does not make two appearances in mind (as wrongly suggested to many by the phrase "in the place in which") but, rather, appearing once for all, and that indefinitely, in an earlier environment (expressed by "you do your sewing") holds its ground while a second defining environment (expressed by "I often am.") assembles about it. Thus used in double syntax, I regard the "where" as adverb with "do," while also posed as predicate adjective with "am," it being a mistake to rank the place-word as ipso facto, or on account of its form, adverbial. Compare "Die hiesigen und dortigen Kirchen."

(6) Adjectival Verb: To exhibit the possibility of this, I offer first: "He struck the table such a blow that he broke it," in which I regard "he broke it," as definitely revealing that force of the blow, which was indefinitely prefigured by "such." In other words "such a blow" etc., is merely a blow violent to the "he-broke-it" degree, or, more briefly, a "he-broke-it" blow, in which expression, as elsewhere argued, "broke" is a nucleary element, adjectively used, although attended in its further verbal function by its subject and object. That is, the breaking is dominantly adjective and subordinately verbal. To fit the illustration to the present case, I make the dominant clause subordinate, and vice versa, as in "He broke the table, he struck it such a blow", in which I find that "such" is used to repeat to the mind a violence of striking first revealed by "He broke the table." "Such a blow," in short, is a "*He-broke-the-table*" blow (Cf. "He struck it *that* hard" = "*he-broke-it hard*"). In other words, "broke", which is primarily verb, is secondarily nucleary factor of an adjective adjunct modifying "blow." But "broke" is by "such" repeated, not continued, and, accordingly, not a hybrid, as defined. To make it a hybrid, let it be continued by such a word as "qualis". Thus continued, "broke" would theoretically serve without a repetition, primarily as verb and secondarily, in its continuation by "qualis", as an adjective—that is, as adjectival verb.

(8) Adverbial Adjective: "I am *where* you often do your sewing." As merely the converse of (5) this hybrid hardly needs examination.

(9) Adverbial Verb: To exhibit the possibility of this, I vary the illustration used with (6), developing "He broke the table, he struck it so." In this, the violence revealed by the nucleary "broke," attended by its subject and object, is repeated by "so" and used as the adjunct of "struck," accordingly ranking in the latter function as an adverb. Let now continuation be supposed to take the place of repetition; let, for instance, "so" or "tellement" be replaced by "quellement" This being effected, "broke" is primarily verb and secondarily, in its continuation by "quellement," nucleary factor of an adjunct to "struck"—that is, an adverbial verb.

hybrid group would be reduced to three—the verbal noun, the verbal adjective, and the verbal adverb—which three accordingly I have from now on specially in mind, intending not so much an exhaustive investigation, as a forecast of results obtainable by the extension of reasoning followed in previous publications—reasoning available, I think, with all the hybrid parts of speech.

THE SINGLE THINKING OF WHAT THEY EXPRESS.

Single thinking of the idea which serves as factor in two thoughts has been sufficiently emphasized in previous publications, to allow an exposition of its now to be considered phase by illustration only. Accordingly, "Astronomers declare (the) sun (to) exceed (the) moon."

This expression reveals what may be regarded as two thoughts, in the sense that thought—or the recognition of two ideas and a relation between them—is twice exhibited: once in what might take the form of the judgment expressed by (1) "Astronomers declare an exceeding," and again in what might be developed into the judgment expressed by (2) "The sun exceeds the moon."

That these two thoughts, however, in the form expressed by the illustration, are regarded as forming together a single larger thought, may be inferred from the fact that neither one, deprived of the other, is sufficient. That is, neither what is expressed by "Astronomers declare to exceed," nor what is expressed by "The sun to exceed the moon," is worth expression. Indeed, if even a single element of that larger mental total be omitted, what remains is keenly felt to be incomplete, as may be shown by the experiment of omitting "astronomer," "declare," "sun," "exceed" or "moon."

This unity of larger thought requires that any factor common to the two constituent thoughts appear once only in the mind, for, were such factor thought not only once in one constituent, but also again in the other constituent, it would ipso facto, be two factors of the total thought instead of only one. Now, factor-duplication of this sort affects the unity of thought

precisely as factor-division, effecting the severance of total thought itself.

To illustrate this, two chains, each terminally linked to the same ring, may rank as a catenary unit. But that unit will no longer be a unit, if the ring be cut in two, or if it be replaced by separate rings, one for either chain. So also the sentence "He lies as he fell" expresses thoughts combined in a larger unit. But "He lies so. So he fell," (in which the idea, say of posture, once called up by "as," is twice called up by the twice employed "so") presents what ranks no longer now as a single thought, but obviously as two.

Specially applying this principle of single thinking to the illustration "Astronomers declare the sun to exceed the moon," I seem to see that the idea expressed by "exceed," though factor in one and another thought, appears but once before the mind. Indeed, I am prepared to find that verbal hybrids all of them express what is singly thought, although exhibited in two thought memberships.

SINGLENESS VERSUS SO-CALLED IDENTITY.

Under this title I wish to emphasize the difference between *being identical*, as the phrase is often loosely used, and *being one*.

Let the exhibition of this difference be aided by the illustration "I have seen Brown. Brown is going to Europe," in which an opportunity is given for the claim that Brown of the first and Brown of the second thought are identical. To this it is apparently the merest corollary, to add that these two Browns are one—that, accordingly, an element of the thought expressed by "I have seen Brown," is also an element of that expressed by "Brown is going to Europe."—that, in other words, the two thoughts interlock and thereby constitute one larger mental total, or say, an extended thought.

Plainly, however, this conclusion is untrue; and a moment's reflection shows that the error, in the reasoning which led to it, lies in the assumption that, because the Brown I thought of in saying "I have seen Brown" is identical with the Brown

I thought of in saying "Brown is going to Europe," the two are therefore one. In a sense, indeed, the assumption is true, but not in a sense which has any application beyond the *external* universe of fact. Therein it is doubtless true that there is but a single Brown—that Brown, and Brown only, is the same as himself—that, conversely, whatever is the same as Brown is ipso facto Brown himself, one and inseparable. But in the *internal* universe of thought all this has not the slightest application; for mind deals not with Brown himself, but only with mental counterparts of Brown.

In my illustration, two such mental counterparts of Brown appeared—one counterpart in each of two succeeding, self-sufficient, separate thoughts. In "Brown killed himself," the appearance of two counterparts occurs within the range of a single thought. It is true that only a single Brown is conceived as having external existence; and yet, upon the mental stage, two actors play their parts, each one of whom is Brown—the one the slayer, and the other his victim. In "*Brown* has sold *his* brother the horse bought by *him* (Brown) for *himself* during the visit *he* (Brown) made *his* (Brown's) mother," six mental pictures of the one externally existent Brown are in succession hung in view, each one remaining, till all are taken down as the exhibition closes.

This gallery of individual portraiture is quite enough—without considering the further possibilities offered by your own or other minds, which duplicate that gallery—to show that singleness of an idea, so far as it only means the singleness of what the idea copies, is far from implying single occurrence in the thinker's mind.

THE DOUBLE THOUGHT-FACTORSHIP OF WHAT THEY EXPRESS.

In the illustration, "Astronomers declare the sun to exceed the moon," the recognition of two thoughts, combined indeed to form a larger total, (as suggested on page 116) entails the recognition of "excess" as factor in each one of them. Postponing the question how much, in grammatical parlance, is the object of "declare," I hold it obvious that the exceeding is at least

a part of that object, and therefore so far enters, with what is expressed by "Astronomers declare," into the construction of one thought. At the same time "to exceed" is mid-term, or in this case verbal element, to "sun" and "moon"—that is, its meaning enters into the construction of another thought. Indeed, if the traditional classification of the infinitive as a verbal noun be strictly justifiable, it must be for the reason that the infinitive has the right to rank as verb and noun at once;¹¹ and this it can hardly do in the expression of a minimal thought (which I define in the following sentence) or in that of a single constituent thought—that is, a thought which is part of a larger thought.

THOUGHTS IN WHICH DOUBLE FACTORSHIP OCCURS.

In examining these it will be advantageous to center attention on such as contain the minimum number of elements, namely, the minimal conception (or two ideas and the relation between them, e. g., "The sun to exceed the moon" or "red" [in qualitative relation with] roses") and the minimal judgment (or conception plus belief in its truth or untruth, e. g., "The sun exceeds the "moon" or "The sun does not exceed the moon").

Of such thoughts, two only at a time will for the present be considered. The case of more than two thoughts with a single simultaneous factor will be examined under the title "Secondary Hybrids." The case of two thoughts, with more than one simultaneous factor, was examined in a previous publication,¹² without results of any value to the present investigation. The case of more than two thoughts exhibiting more than one common factorship¹³ will be omitted, as offering nothing new to the case to be considered.

¹¹ In "I'm going to post him on the subject of posts," the fact that "post" is *successively* verb and noun creates no claim to the rank of verbal noun.

¹² See "Revision of the Pronouns," page 83—(d)

¹³ E. g., "I have a book I want to read. "Of the perpendicularly indi-
which
cated phrase the factor "to read" is simultaneously factor with "I want", while "book" (as continued by "which") is simultaneously factor with "you to read" and with "I have."

The number of thoughts then being two, it is obvious that either might be a judgment, or it might be a mere conception. Of thoughts, however, to be considered, one at least must be a judgment; for otherwise expression would not be attempted.¹⁴

The other might also be a judgment, the two having equal rank in expressional purpose. But in such case verbal hybrids noted, to which alone I invite especial attention, are, in actual practice, not developed.

Illustrating this proposition by the statement "A wounded B" (the expression of a judgment), overlooking the radically different thought-memberships of subject and object, and giving each, as Grammar does, the rank of a noun, I note the following possibilities:

(1) If A (or B) is at the same time, in the expression of another judgment, subject or object of another verb, A (or B) is merely twice a noun and not a hybrid. Accordingly, this case may be dismissed.

(2) So also if "wounded," while serving as a verb with "A" and "B," serve also as a verb to another subject and object, "wounded" is not a hybrid, but merely twice a verb. Accordingly, this case may also be dismissed.

(3) But if "wounded," while serving as a verb with "A" and "B," should at the same time serve as either subject or object of some other verb, it is plain that "wounded" would be a hybrid.

(4) Also if A (or B), while serving as a noun with "wounded," serve also—say with C and D—as a verb,¹⁵ it is plain that A (or B) would be a hybrid.

¹⁴ This statement should be taken as merely the postulation of an opinion elsewhere defended, that (outside of poetry, in which suggestion may have even greater force than declaration—see page 229) a total of thought for which the speaker does not vouch as at least supposedly known by him, would not be offered by the speaker and even less accepted by the hearer, the game of communication in such a case not being worth the expressional candle. Thus the expressions "The sun to exceed the moon" and "The day after the fair" would not be regarded, individually or collectively, as linguistically adequate. I do not, however, forget that, as noted by Professor Paul, the *linguistic expression* of judgment elements may be incomplete, their indication being left in part to "the situation."

¹⁵ A (or B) is meant to stand for a subject (or object) of any sort, as for instance in "To incur disapprobation wounded B."

Of cases (3) and (4), which are merely a single case examined from opposite points of view, one aspect only needs to be considered. Let the preference be given to the more convenient (3); and let the purposes of illustration be effected by the following pair of judgments reading downward:

(a)	(b)
A	wounding
wounded	caused
B	death

As thus exhibited, these judgments have no simultaneous factor. That is, no term of either is, without a second thinking, term of the other. Accordingly, no element of either being also an element of the other, no word for any element has an opportunity to serve as simultaneously two parts of speech—that is, no word in either sentence can be a hybrid.

Let the effort now be made to use the idea serving in (a) as mid-term (expressed by “wounded”), as first (or last) term of (b), and that without a second thinking. This effort may be indicated by the diagram:

A			
wounded	caused	death	
B			

If now in linguistic practice the operation of “wounded” (or any substitute) be that suggested by the diagram, it shall be granted that a verbal hybrid is occasioned by two thoughts of which each one is a judgment. But in linguistic practice nothing of the sort, so far as I have found to date, occurs. Accordingly, without delaying to search for causes, which presumably would be found in practical considerations, I offer, in mere delimitation of the field to be examined, this conclusion: that two judgments do not occasion verbal hybrids—or, in other words, in order that a verbal hybrid operate in the expression of two interlocking thoughts, one thought must not assume the rank of a judgment—must be a conception. But it was previously concluded that one of them must be a judgment. Combining these two conclusions, and using, as before, the word conception to name the thought which is not a judgment, I

reach the more special conclusion that, of thoughts in whose expression verbal hybrids operate—thoughts, that is, in which occurs the double factorship of an element expressed by a verbal hybrid—one thought will be a judgment and the other a conception.

In examining these, I wish to differentiate them by their respective degrees of mental prominence, having now in mind what I particularly specify as *linguistic thinking*, in distinction from *thinking unadjusted to the needs of linguistic expression*. A little embarrassment is however offered by the variation of such prominence, with the frequent shifting of the momentary mental point of view. Thus, during the utterance of an intricate sentence, the difficulty of exposition (and the difficulty of comprehension, which latter perforce assimilates the speaker's thinking to that enforced upon the hearer by expressional limitations) may require an attention to every detail so complete—a nearness of the mind so close—that all the details may be said to have, each one in turn, the maximum of prominence. On the other hand, no doubt there are moments in which the mind stands back and takes a perspective view.¹⁶

In such a view there is presumably what, in a measure, corresponds to the artist's foreground, background, and middle distance. Conceivably also there are corresponding differences in perpendicular nearness, as well as lateral differentiations. Taking from the last a hint to guide the choice of terminology, I propose to call what dominates in thought-perspective, central—and that which does not do so, lateral. Of these two words, moreover, I wish the latter to be understood with a scope sufficient to cover divergence from the center in any direction, thus

¹⁶ In taking this view, I eliminate the tricks of rhetoric, by which the bona fide respective mental primacy of thought-constituents may be reversed. To illustrate, "The rays of the setting sun were gilding the higher tree-tops, etc., etc., when out of the forest dashed a steel-clad horseman."

In the mental operation recorded by this expression, I think it evident that the action of the horseman, indicated by a vigorous word and attended by the "tense" suggestion of all-at-once and once-for-all achievement, is rather the first-born of my mental fatherhood, than is that unobtrusive every-day awareness of solar business, which—to change my figure of speech—is really but the very legato accompaniment of a decidedly staccato theme.

adjusting itself to whatever number of dimensions the mental imaging may be regarded as requiring. Also "central" (as well as "lateral") shall be understood as including appreciable mental space—so much as may be necessary for a single minimal judgment.

Again, a thought which is lateral in comparison with the central thought, may also in its turn be central in comparison with another still more lateral thought, which last may be known as a remoter thought—or a sublateral thought—or even a plusquam lateral.

The expressions "central" and "lateral" plainly border closely on the "focal" and "marginal" of mind-investigators. Between these pairs, however, I intend this fundamental difference: that, while the latter deals with nearness to the conscious self, the former shall have its dealing with nearness to expressional purpose, or end to be accomplished.

Nearness to the purpose of expression is constant in this sense at least that, even if intermittently recognized, it does not vary in successive recognitions. In other words, if part of what I say exhibits, for instance, a particular end to which all else expressed is means, the end will rank as central, the means as lateral; and though in the linguistic act I momentarily forget this differentiation of end and means, in the absorbing exposition of the details of my thought, this differentiation does not change between the moments of its several happenings—never, for instance, in the normal¹⁷ use of language, posing means as end.

Nearness to the conscious self is variable. Exact expression and exact interpretation require momentary focal attention to

¹⁷ To illustrate the here excluded abnormal use of language, which I hope to make the subject of a special publication, I note that in "At last he departed" the words "at last" suggest the long-delayed, to the exclusion of the premature or deeply regretted, the idea of delay being the means by which you merely color your picture of the departure, as I do myself. On the other hand the words "he departed" exhibit what must rank as an end which is merely furthered by such means; for contrariwise I should have said, for instance, "His departure was long delayed." But in French the finality is with vexatious pertinacity brought to the fore, although "Il finit par s'en aller" is surely equivalent, in meaning intended, rather to "At last he departed" than to "He ended by departing."

every detail of the most extended mental total; and this very focality of momentary attention entails the synchronous marginality of the detail which has been or is about to be in its own turn focal.

Neither nearness implies the other. For doubtless, on the one hand, in the act of exhibiting each idea, I make it for the instant focal, without, however, being able to give to each idea the central place in expressional purpose. On the other hand the center of my purpose may all the time be so extremely marginal as almost to be unheeded—notably in the case of questions. A question may be defined (See “Interrogatives,” pages 437 and 468) as the linguistic expression of the speaker’s desire that the hearer give him information—an expression necessarily attended by adequate indication of the information to be given. It has its rather close analogy with the following order to my tailor: “(I want you to) send me a coat of the following color and dimensions.” In this order the description of what I want is plainly subordinate to my wanting to get it; and in every question the like is presumably the case. Yet in the question “Are you ill?” the position of “ill,” its emphasis, the suspensory tone (which might seem to suggest a dwelling on the idea which “ill” evokes) combine to indicate an even greater focality than belongs to my desire and your giving information. These, indeed, are so far from focal that quite an effort is required to find in “Are you ill?” the meaning presumably rightly expressed by “*I desire you to inform me as to your being ill.*” Again, my curtains being ablaze, in crying “Fire!” I cherish no doubt the central wish that you come to the fire and help me put it out—a wish less distantly inferable from the Frenchman’s “*A l’incendie!*”—and yet this wish is not sufficiently focalized even to reach expression.

One kind of nearness doubtless, however, often coincides with the other. As, with reference to expressional purpose, I take the perspective view of a complex thought, and recognize the solar nucleus of it surrounded by its planetary attendants, themselves in turn accompanied by their satellites, which also have their own sub-satellites, no doubt, as a rule, the central element of the system is also more precisely focal in my con-

sciousness than any lateral element. Perhaps, indeed, I ought to say that centrality is mere focality in the perspective view. The expressions central and lateral I prefer, however, as avoiding the necessity of indicating the particular moment or mental act in which focality or marginality shall be reckoned.

As has been intimated, thoughts with a simultaneous factor form together a continuous larger mental whole, or what in view of its extension might be figuratively called a mental landscape. Now it is in mental picturing on such a scale that, most of all, perspective values are appreciated. In particular, compared with the judgment pure and simple, associated elements appear less heartily intended. For instance, in "I want the book on the table," what is expressed by the last three words, being thought of solely to identify the intended book, is obviously a means to an end and ipso facto secondary in expressional purpose to the end itself (i. e., your knowing that I want the book). Again, in "Braving the heat, the farmers loaded the wagons," while the meaning of the first three words is not a means to an end, and might be ranked as self-sufficient, and also might be asserted, nevertheless, by the illustration, it is mentally posed as incidental, as a mere conception—lateral. Otherwise the expression would be "The farmers braved the heat. They loaded the wagons," or "Loading the wagons, the farmers braved the heat."

Accordingly, with further argument in view, I postulate that when a mental total consists of more than a minimal judgment, the judgment will be central and other elements lateral.

CENTRAL THOUGHT.

To avoid a possible misunderstanding, I must at this point be more careful in the use of words than when discussing thought-connectives. These were said to incorporate a preceding thought in a following thought (thus, in "Brown invited me. Therefore, I came," it was claimed that "Therefore" means "on account of Brown's inviting me"); and as every thought contains no smaller number of factors than three (thus the thought expressed by "A equals B" is no longer a thought,

if deprived of either factor), the ultimately constituted thought would seem, of necessity, to include some half a dozen terms. But (as indicated in that discussion, and further argued on page 135), in order to be incorporated, the preceding thought gave up its detailed existence, appearing in the following thought unanalyzed, quite in the fashion of an idea—that is, an ordinary single member of thought. In other words, to become a member of the following thought, the preceding thought gave up its distinctive existence as a thought. I therefore do not contradict myself in saying now that, strictly speaking, a central thought as such (*qua* central), consists of three terms¹⁸ only.

In defending this statement, I note *imprimis* that the augmentation of a three-term central thought by any further element entails the consciousness of a relation between the new element and one (or more) of the old;¹⁹ that is, such augmentation entails the formation of another thought consisting of an old element, a new element and the relation between them.²⁰ That this other thought and the central thought together form a larger thought, I not only concede but also contend (as indicated on pages 116 and 125 and again on page 139). Accordingly, to establish my opinion that a central thought consists of three terms only, I must show that the second constituent of this larger thought is not central.

Of the second constituent thought, it would seem to be a safe assumption that it must be (1) central like the first or (2) lateral or (3) partly one and partly the other or (4) both at once or (5) both in succession or (6) neither.

¹⁸ That one of these terms may be a group of ideas—homogenous, as in “three fruits,” or heterogeneous, as in “an apple, a peach, and a pear”—I concede as plausible, but avoid the case as special to the investigation of that class of so-called conjunctions which may be known as group-formers.

¹⁹ For otherwise the new element would have nothing to do with the original thought, and, accordingly, could not be a part of it.

²⁰ Thus, the expansion of “Apples are wholesome” into “Ripe apples are wholesome” requires a recognition of apples in a qualitative relation with ripeness, essentially as in “Apples (which) are ripe.” The fact that, in the thought thus indicated, the common idea expressed by “apples” appears in mind but once, does not impair the integrity of either thought, any more than a common corner-stone impairs the integrity of either south or east wall of my house.

Case (6) I dismiss on the ground that what is neither lateral nor central is not in mind and, therefore, not a part of any thought.

Case (2) I shall not argue, as it grants my contention; for what is lateral only cannot be a part of that of which it has been stipulated that it is exclusively central.

Case (4) would imply in optics the ability to look directly at an object while also seeing it "out of the corner of the eye," or, in painting, a landscape of which a part both is and is not in the foreground. Of mind, this case requires a simultaneous centralization and decentralization in thought-perspective, implying mental conditions quasi-analogous to strabismus (which, permitting double visual action, presupposes the existence of two eyes)—accordingly, the supposition of a self, at least for the moment, double—a supposition which I abandon to the jurisdiction of Psychology, being in the meantime personally unable to make use of it in general linguistic study or in the now examined field.

Case (1). Suppose the second thought, as well as the first, be central. For instance, given a first and central thought expressed by "I wrote my wife," let "My wife is in New York" express a second and also central thought.

I shall not strain imagination with the effort to locate these two centers in mental space, but merely assume that somehow, of a pair of mental pictures, each is in the central field of thought-perspective. It still remains to be determined whether the latter thought can operate as a constituent element of the former.

To facilitate such operation, let their common element be thought once only. Accordingly, "I wrote my wife (who) is in New York"—an expression of mental activity in which there is no interruption; that is, the mental act in the present illustration is continuous—a status which justifies the statement that, in a sense, thought now is one.

This sense, however, is unavailable in the present case. To use a more objective illustration, let the music of "Dixie" and "Old Hundred" be so played that the final note of one is the initial note of the other, the playing of the two becoming a

single musical rendition. It will doubtless be felt that continuity or singleness of such a type does not diminish the individuality of either melody, and that still less is either made a part of the other. In short, two melodies still exist.

That the double statement: "I wrote my wife (who) is in New York" is quite analogous, appears most clearly when this statement is compared with "I wrote my daughter (who) is in New York," of which I stipulate that her location in New York is known to you, and is by me intended merely to distinguish one daughter from another—as, therefore, auxiliary to the effectuation of a single expressional purpose inadequately indicated by the mere "I wrote my daughter." In short, my purpose is precisely what I should have expressed by "I wrote Amelia," had you been acquainted with my daughters' names—an expression in which my singleness of purpose is apparent.

On the contrary "I wrote my wife (who) is in New York," is plainly quite analogous to the confluent rendition of "Dixie" and "Old Hundred," exhibiting two self-sufficient thoughts—two independent expressional purposes—location in New York by no means being intended to distinguish one wife from another.

In short, the difference between the statement as to wife and the statement as to daughter, is what I have elsewhere sought to indicate by the words "polyphrastic" and "monophrastic."

On the other hand, the difference between "I wrote my wife. My wife (or she) is in New York" and "I wrote my wife (who) is in New York" is unessential, consisting vocally in the omission by the latter of (1) the second "my wife," (2) the fall of pitch and (3) the pause—and, mentally, in a failure to think a second time the idea expressed by "my wife."

This difference, to use a further illustration, appears to me exactly parallel to that between the algebraic " $a = b. b = c,$ " and " $a = b = c,$ " in which latter neither of the former equations of necessity forfeits individuality or becomes a part of the other.

In what is expressed by "I wrote my wife (who) is in New York" it cannot indeed be assumed that constituent thoughts are of equal intrinsic importance any more safely than, of two

melodies, it can be assumed that they are of equal length or merit. But of thoughts and melodies it is plain that, however closely they come together—even to the point of overlapping—each maintains its individuality, and, what is more important to the purpose of the moment, neither is a part of the other. I hold, accordingly, that when, of two thoughts, each is central only (not lateral), neither is part of the other.

Case (3). The elements of lateral thought being three in number, it is conceivable that either one or two of these, instead of the trio, might have also membership in central thought. Thus the second illustration examined under (1), "I wrote my daughter (who) is in New York," exhibits a member of lateral thought—the member named by "daughter," which is not repeated, but only continued by "who"—as member also of the central thought expressed by "I wrote my daughter."

The successive central and lateral aspects of "daughter" are examined on pp. 140–141. Meantime it should be noted that the number of central terms has not been augmented. Total thought indeed is augmented by the addition of an element expressed by "in New York" (which in its essential attributive unity may rank with "ill"). The relation necessary to such augmentation is expressed by "is." But what is expressed by "daughter" is the original last term of central thought—a term which merely holds its ground while terms of a second (lateral) thought assemble about it.

The thinkable central membership of two lateral thought-members (examined in "Pronouns," pages 83–84) is, in actual linguistic practice, unrealized. Compare "I wrote my wife, who whicked (i. e. wrote) my daughter," and "A stone struck Brown, which hurt whom."

Case (5), which is rare in linguistic practice, may be illustrated by the following sentence: "I want the book (which) is on the newel post." In this I intend the "is" to be taken with full assertive power. Accordingly the location of the book is announced as a proposition of self-sufficient informational value, precisely as if I had said "I want the book. The book is on the newel post." That is, not only the volitional thought, but also the locative thought is distinctly central.

In mentioning the book's location on the newel post, I had, however, a further motive. Assuming, indeed, that you did not know the said location, I declared it. Also, however, I intended the book's location to distinguish a particular book for you from other books. That is, in such distinguishing, I intended what is expressed by "(which) is on the newel post" to serve as means to the end proposed by "I want the book," (See page 128). In short, I intended it, as now regarded, not for its own sake, but for the sake of helping out another statement. In the now considered aspect, the locative thought is then distinctly lateral. Accordingly, reviving the conclusion of the just preceding paragraph, the thought expressed by "which is on the newel post" is lateral *and* central.

As indicated in the examination of case (4), I cannot regard the lateral and central positions of a thought as simultaneous, but only as successive. As to the order of these positions, it seems at first to be determined by the early appearing assertive "is." For assertion, which may be accepted when genuine as the sign of thought centrality, is made by "is" before the appearance of "on the newel post." Accordingly, location (of the book) which without assertion would, in thought perspective, surely take a position exclusively lateral to my desire for the book, appears to be forced at once by the assertive "is" to the perspective center.

Apparently then assertion, or say the element of belief, comes into the mental current very inconveniently—not as the continued flow or onpour of the mental stream, but as an independent affluent or inpour, as may be indicated by the following diagram:

(1) I vouch for desiring the book (distinguished by)	}	location on the newel post,
(2) I vouch for		

in which (2) "I vouch for" seems to prearrange location as in thought perspective central, before it even has a chance to assume a position lateral to my desire.

In English, indeed, this embarrassing interpretation is quite unnecessary, the "is" being sometimes assertive and sometimes unassertive, and therefore capable of being taken first without the assertive value—which later may be added. But in more

carefully inflected languages the "is" would have at once the unmistakable assertive value, which must, accordingly, be reckoned with.

To solve the difficulty, I turn as usual from form of word to the mental process which the word cooperates in symbolizing. This process I believe to be made up of several activities. In the first place, the receiving mind (whose operations the conveying mind must essentially duplicate), under stimulus of successive words, develops in turn the ideas or elements of thought-to-be-constructed. Also, largely by the aid of instructional elements, especially inflections, that mind employs each particular idea in a particular membership (e. g., as subject or as object) of that thought.

So long as word arrangement tallies with that of ideas in thought, each idea takes its place in thought as soon as suggested by the appropriate word. But if an idea is, so to speak, delivered to the mind before the time arrives to use it in constructing thought, the mind, unable to make use of it at once, must carefully preserve it—for it usually will not be repeated—until such time arrives, and meantime use those offered elements, the time to use which has arrived.

To illustrate: "Tityre tu patulae recubans sub tegmine fagi, meditaris."

Of this expression, "Tityre," the mere address of him for whom the thought to be constructed is intended, may be overlooked, because, although *de facto* in the sentence, it is not *de jure* of it.

"Tu," as calling up the idea of the junior partner in a colloquial act—an idea to be used as first term (subject) in thought-to-be-developed (as suggested by the nominative ending)—offers no embarrassment, reception of this idea being immediately followed by its recognition as part of the structure now begun.

When, however, "patulae" is reached, the plot begins to thicken. From it I obtain the idea expressed by "broad"—an idea assuredly to figure as a part of thought to be constructed. As what part it will figure, I am, however, by no means certain, being embarrassed by the multiplicity of possibilities.

The termination of "patulae" is of that special instructional type which I have elsewhere called associational. From it I learn nothing of absolute position in thought-structure, but only that the idea of breadth, known to be always adjunctive to some element expressed by a noun, must be associated with what is conceived as feminine and as singular (genitive or dative) or as plural (nominative or vocative). Accordingly, "patulae" cannot associate with "tu."

As a school-boy, at this point I deserted "tu" for the time, and rambled on in search of something for "patulae" to "go with," ultimately mending text to suit my convenience, developing "Tityre tu recubans sub tegmine patulae fagi." Recommencing operations on my thus improved hexameter, I had no difficulty in synchronizing idea-reception and thought-construction, stage by stage.

Suppose however now that you take up the original text and read the line aloud—that it is absolutely new to me—that I however know the Latin language well. As far as "Tityre, tu" I operate as before. On reaching "patulae" I sense the situation as before. But this time the idea of breadth must withdraw and wait till "fagi" is presented.²¹ This idea has behaved like a giddy actress, prematurely dashing on the stage and blurting out the merest interruption of proceedings. She must retire and bide her proper time, behind the scenes. Her contribution to the play will be effected on a second, later entrance. Meantime, no such contribution has been made. So also the first appearance, the withdrawal and the waiting of what is expressed by "patulae" are wasted, being quite irrelevant to the linguistic message sent or received, playing therein no truer part than a false start plays in a race. Linguistic business, interrupted by the appearance of "patulae," is resumed when "recubans" appears, continuing in the usual methodical manner, materials being built into thought as fast as received, until the appearance of "fagi." At this point the builder puts in place the idea expressed by "patulae," which,

²¹ Rather, what waits may be "patulae" itself; for the idea of breadth is useless except as burdened with four distinct and severally possible associations with other ideas.

meantime, has been waiting its turn or has been, so to put it, stored away for later usage.

The difficulty of storing over-many prematurely presented ideas, or storing such too long a time, while receiving and building together other ideas, may partially explain the restricted popularity of Latin poetry. When, too, the "periodic structure," as in the German sentence, runs to overgrowth, the withholding of one idea, which is but another way of expressing the premature exhibition of intervening ideas, produces excessive difficulty, discouragement, disgust. Barring, however, the cases in which such difficulty becomes insuperable, I hold that, be the order of idea-presentation what it may, the mind in thought construction may, and often does, take up ideas in an altogether different order.

Applying this doctrine to case (5), I conceive that the element of personal belief (which in a carefully inflected language would be unambiguously expressed by "is") while entering consciousness immediately on the utterance of the "is," by no means enters into the construction of thought until a later moment. In "I want the book (which) is on the newel post" I find accordingly that construction is effected precisely as in "I want the book distinguished by position on the newel post is vouched for by me." That is, in "I want the book (which) is on the newel post," the thought expressed by "book (which) is on the newel post," is at the outset lateral as compared with "I want the book," and subsequently central on its own account.

Now, perspective relations having been once at the outset adjusted, whatever either party to them does or does not do at a later moment, may be ranked as "after business hours" and altogether independent of the inter-subordination of business co-workers. Accordingly I rank the ultimate centrality (or individual self-sufficiency) of "book (which) is on the newel post" as independent of and quite irrelevant to the centrality peculiar to "I want the book." This ultimate centrality is then an incident which no more affects the mutual perspective relations established independently of its occurrence, than they are affected by the appearance of my desire for the book as

on its own account in lateral relation to a yet more central thought—as in “My friends expect me to desire the book on the newel post.”

Thus construed as independent—as a by-product of mental activity—the incidental centrality of the lateral thought exhibits the present case as merely an unimportant variant of (2).

Resuming the results obtained from the examination of the several possible cases, I find that any effort to increase the membership of central thought is unsuccessful—and that accordingly the central thought as such consists of three terms only.

LATERAL THOUGHT.

While it was argued in the preceding section that central thought consists of three terms only, it is obvious that central thought, by so to speak omitting one of its members, can make room in itself for that which otherwise would be an added member.

The present section aims to show that lateral thought, although a place be waiting for it, cannot become a member of central thought.²²

To illustrate, given “I saw a passenger train strike a freight train,” I note that what is expressed by the infinitive phrase is itself a thought, the recognition and organization of whose details are distinctly lateral to the judgment that I see whatever I see. In other words, the detailed indication of what I saw is an excursus, as compared with seeing it. While accordingly, I have doubtless made the lateral thought a member of a larger total consisting of itself and a central thought, the lateral thought is not yet central and therefore I cannot have made it a part of what is central. How the central thought begun by “I saw” is completed, will be examined later.

In a sense, however, lateral thought can easily be centralized and made a part of central thought. For instance, given

²² The antagonism between this opinion and that which possibly is held by those whose syntax—or, say, their collective parsing—poses phrases, clauses and even sentences as subjects, objects, etc., will later be shown to be superficial.

"A passenger struck a freight," I may add: "I saw the collision."

In the latter expression, "the collision" revives in mind what previously was expressed by "A passenger struck a freight." Moreover what is thus revived has doubtless taken its place as central and part of a central thought. In doing so, however, it has radically changed its character; its elements have fused, and that so completely that recognition of them ceases.

That such is the case, may be seen to better advantage on further examination of the illustration offered on page 125. Given "Brown invited me. Therefore I came," it will presumably be granted that what is intended by "Therefore" is expressed by "Because Brown invited me." Let now this intended mental total be extended, becoming the total expressed by "Because Brown, who is a friend of mine, invited me, I came." Moreover, in the expression of this extended total, let "Therefore" take, as before, the place of "Because Brown invited me," expression assuming now the form of "Brown invited me. Therefore, who is a friend of mine, I came."

In this expression it appears that "Brown invited me," though reinstated by "Therefore," is not exhibited in detail, "Brown" not being distinct enough in mind to continue (or "be referred to" by "who") as subject of "is."

It appears accordingly that lateral thought, in becoming as a whole a part of what is central, fuses into what cannot be rated as a thought.

The further question rises, whether a thought can at first be fused and afterward expanded into details, and, if so, with what results of linguistic interest. To illustrate, let the diagram

I saw a collision	}	passenger
	}	strike
	}	freight

suggest that, on arriving at the mental stage exhibited by "collision," I have in mind a phenomenon as yet unrecognized in detail; that, however, the idea expressed by "collision," still continuing in mind, unfolds into what is expressed by the remaining words. That is, as a blended whole, the occurrence

described is final term of a central thought; and, as an unfolded trio of details, it forms per se a thought which, in comparison with the first, will rank in thought-perspective as lateral.

In the mental process of this order there is danger, (see pp. 117-118) of a misinterpretation based upon the identity of blended whole and unfolded trio. Such identity, it should be borne in mind, is purely historical, akin to that of bud and flower, and fails to imply that what is true of blended whole is also true of unfolded trio.

To illustrate more suggestively, the chrysalis and the unfolded insect are historically one and the same. Yet, otherwise regarded, the chrysalis (which may be no larger than an olive) and the unfolded insect (which may have a wing-spread of a foot or more) are so decidedly different, that it cannot safely be inferred that where there is room for the one there is room for the other also. Nor, in view of time elapsing, can it be inferred that where the chrysalis was the insect of necessity is—or that a particular activity, in which the chrysalis may be implicated with something else, includes the unfolding of the chrysalis into the insect.

So too of thought, the blended whole and the unfolded trio, though historically one, are on the other hand too different in character and too presumably successive, to permit thought-membership enjoyed by one to be assumed with safety of the other. In particular it cannot be assumed that, because the "collision" of the diagram is the object of "saw," therefore the following phrase is also object of the same.

More generally stated, the process of unfolding a blended whole into a trio is independent of the process by which that whole is used with other ideas in forming a prior trio. Accordingly, in the ability of the blended whole to serve as member of a given thought, I do not find the slightest indication that the unfolded trio does or can do the same. Indeed, while I find the blended whole to be a part of central thought, I find the unfolded trio to be lateral, and wholly exterior to central thought.

To make this clear, I amend my diagram, enclosing in par-

entheses what seems to me to represent the central thought—that is, all words to “collision” included. If now a total extended thought is to be formed, including this central thought and the unfolded trio, this last must be in relation with an element of the central thought (see page 126) and doubtless in the relation of identity—or, say, equivalence—with the blended whole expressed by “collision.” Now, as what expresses (1) the blended whole, (2) the trio of unfolded terms, and (3) the relation between these two, impresses me as plainly lateral, I put it in brackets, which include “collision” and all remaining expressional elements. Accordingly,

$$(I \text{ saw a [collision]}) = \left\{ \begin{array}{l} \text{passenger} \\ \text{strike} \\ \text{freight} \end{array} \right.$$

This diagram expresses now *three* thoughts, the portion in brackets exhibiting equivalence between a blended whole and an unfolded trio, which latter is itself a thought. There remains accordingly the difficulty of using this (trio) thought as the final term of bracketed thought—a difficulty which a later section will endeavor to solve. Meantime, supposing this difficulty overcome, it is clear, as the diagram suggests, that neither the lateral trio nor any element thereof has entered the central thought parenthesized.

To make my reasoning conclusive, I must give it general value. Accordingly, whatever be conceived as possibly prodromic to the unfolded trio—be it a blended whole, or a medley of unorganized details,²³ or a so-called conjunction or sentence-article (e. g. “that”)²⁴ or the speaker’s promise or injunction, or the hearer’s expectation, or the mental void-to-be-filled or reservation of mental space in the mind of either, or mode as distinguished from entity, or the shadow cast before by a coming mental image, or a *grin et preterea nihil*, precursory to a Cheshire cat—whatever, I say, be conceived as the

²³ Any introduction of such into central thought might rank with such a moving of my house (?) as should consist in tearing it down and hauling the materials to the dumping ground.

²⁴ This word may rather rank as the sign of an empty category later to be filled.

forerunner of the unfolded trio, let that protean forerunner be expressed by P. Let also the relation between forerunner and unfolded trio be whatever you please, expressed by "precedes." Again let "passenger," "strike" and "freight" be accepted as representing any three ideas which can together constitute a lateral thought. Finally, let "I saw" be regarded as expressing any two ideas which together with P can form a central thought.

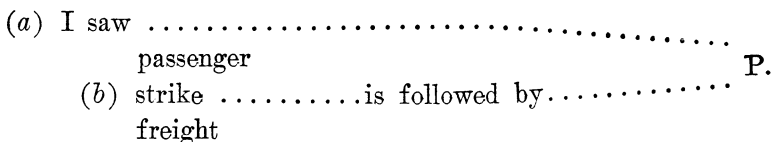
Accordingly, the amended diagram



which now may be regarded as of universal application.

Under the hint which it offers, I pass now in review the mental operation which it aims to indicate, and seem to find that as cerebration continues, after reaching in the expressional act what is indicated by P, its further stages are distinctly lateral to the preceding (see page 136). Indeed, I find, in all, three stages—or grades of thought-perspective: a central, of which the end is marked by P; a lateral, which lies abreast of "P precedes strike"; and a sublateral, which coincides with "passenger strike freight." In short, abstracting from the single outjutting but not detached idea expressed by "strike," I find that the unfolded trio of thought is two removes from being central.

I have not yet however completely established my proposition; for it is possible to conceive a mental operation partly the reverse of that above described, but virtually equivalent, and therefore to be reckoned with. To indicate this operation, I reverse my diagram, continuing all my symbols in their former universal value, but somewhat more conspicuously using distance from left to right, to indicate the passage of time. Accordingly the diagram



by which I mean that, after "I saw," but before the recognition of an object thereof, the trio appears as such in detail, blending promptly into what is consciously recognized as a related whole (or whatever else you prefer), which whole (expressed by P) then takes its place as the missing final term required with "I saw."

Examining this more awkward and exactly so much more implausible operation, I find as before that the P of (b) has entered (a); but no more than before do I find that any other element of (b) has entered (a). I conclude accordingly that lateral thought cannot become a member of central thought.

CENTRO-LATERAL THOUGHT.

While lateral thought cannot become a member of central thought, the two, as already indicated on page 126, may cooperate as a larger mental total, which may conveniently be known as a centro-lateral thought. To illustrate, "I have the book you wanted," in which my possession of a book and your desire for it appear as my possession of what you desire—or, say, of a particular book.

The existence of such totals is implied by the existence of lateral thought itself. For lateral is a relative term, implying, as that to which one thought is lateral, another thought which is comparatively central, just as the background of a picture implies a foreground. If the background be cut out, it ceases to be a background. If the lateral thought be isolated, it ceases to be lateral. In some way, it and central thought must constitute a mental whole. To use the phraseology of Grammar, the two must be joined.

As an earnest disbeliever in the joining of thoughts, as commonly conceived—and whether conceived as in the nature of sticking, stitching, spiking or fiat—I confine the examination of joining to the only type which I can imagine to be available with thoughts—to what may be known as interlocking.

To illustrate this objectively, it may be noted that a connecting link will make of two chains one, with exactly the solidity with which it is itself a part of one chain and the

other. So, also, "I have the book you wanted" has all the cohesion that belongs to "I have the book" or to "you wanted the book." In general then it may be claimed that centro-lateral thought, when thus constructed, has the same integrity as either central or lateral constituent.

THE CENTRO-LATERAL FACTOR.

In the illustration "I have the book you wanted," the idea expressed by "book" is plainly, without a repetition (pp. 116-117), member of a central thought expressed by "I have the book," and member of a lateral thought expressed by "you wanted the book." Accordingly, of total centro-lateral thought, the idea expressed by "book" may be known as the centro-lateral factor—centro-lateral, this time, in the sense of being central as well as lateral, but not (as in the preceding title) in the sense of including central and lateral elements.

In such an integration of central and lateral thought, the former may be said to share a factor with the latter; it is however a little more convenient to put it that, as there is *no room* in central thought for lateral thought or any of its factors, *room is made* by the suppression of a central factor, the space made vacant being occupied by a factor²⁵ of lateral thought.

Once a factor of lateral thought becomes a factor also of central thought, it plainly becomes a central factor. That is, in centro-lateral thought, the once-thought common factor of its two constituents—i. e., the centro-lateral factor—is central in the central constituent, while in the lateral constituent remaining lateral.

This double aspect of the centro-lateral factor appears in the following illustration: "The Episcopal church contains

²⁵ The possible simultaneous use of two ideas as members of two thoughts has been examined in the "Revision of Pronouns," appearing to be extra-linguistic. Compare "I have the book who (=I) wanted" and "I have the book you which (=had)." The simultaneous use of three factors abrogates the existence of one thought, as appears in experimenting on "I have the book" and "You wanted the paper." So soon as three factors are simultaneous, there remains only "I have the book" or "You wanted the paper" or "I wanted you," etc.

some members the Democratic party claims." In this, my central purpose contemplates the inclusion of some individuals in a particular church. I also however go out of religion and into politics, for the lateral purpose of specifying the intended individuals. These individuals or members, which in my religious purpose were doubtless central, continue in mind, as I carry out the lateral purpose. But, as part of what is lateral, they seem to me now, of quasi-necessity, lateral. Somewhat similarly, making an addition to my house, I regard the original outer wall as a constituent of the principal structure, when I am in that structure, but rather as part of the addition, when I am occupied therein. So also, surveying the completed total, whether a house or a thought, my perspective recognition of it seems to me to pose the simultaneous factor as central in what is central, without prejudice to its being lateral in what is lateral. At least, so far as self-examination may be safely trusted, I seem to use an idea without repetition, as member of a central thought and also of a lateral thought, which is perhaps sufficient ground for naming it after both the thoughts in which it serves.

Strictly speaking, as the observer of my own cerebration, I must perhaps conceive myself as stationary, while the panorama of my mental pictures moves along before me. However, in many comparisons of the moving and the stationary, it is helpful and harmless to think of what moves as stationary, and vice versa. Accordingly, let the mind be conceived to move from thought to thought, somewhat as the body moves from place to place. Somewhat then as, in a passage from one valley to another, the intervening ridge which at first was in the north appears now in the south as a constituent element of a second scenic total, without an intervening disappearance, and hence without a repetition—so also, in a passage from one thought to another, the mind, though keeping constantly in view their once-thought common factor, may see it so to speak on the other side, not only as now a part of a thought exciting less immediate interest than the former, but also as itself no longer so impressive as at first—as lateral now instead of central.

(1) *Its leadership among its lateral fellows.*

The suggestion offered by this title is a mere revival of what was noted in a former publication (see "Revision of the Pronouns," page 97), namely, that every thought may be sensed

as composed of any single element and a remainder; and that the remainder may be sensed as merely a means to the end of amplifying or even identifying that single element.

The facility of such a sensing appears in the following illustration: "Catherine eats meat. This the doctor requires. So *Catherine's meat-eating* is the leading theme of conversation at our table," in which expression the italicized words exhibit what was expressed by the initial sentence, in the modified aspect of a specific eating—distinguished (from others) as eating of meat versus fish, etc.—as Catherine's eating versus yours or mine.

The inevitableness of sensing lateral thought somewhat as indicated, so soon as a term of lateral thought is also a term of central thought, is obvious, the very centralness of such a term investing it with a prestige or primacy unshared by its lateral fellows. For in my illustration the lateral idea-company consists at first (in "Catherine eats meat") of a subject, a (relation-forming) action and an object; but so soon as this action is centralized (as in "Catherine's meat-eating is" etc.), the lateral trio is rather sensed as an action distinguished by its terms or personnel. That is, the uncentralized elements of lateral thought become the satellites of what is centralized.

(2) *Its attendance by its lateral fellows.*

This, in the very nature of thought, is indispensable. For if, as indicated on pp. 125-126, one of a thought's three elements be omitted, what is left is not a thought. In particular, if the centro-lateral factor, in becoming a member of a central thought, should be deserted by the other members of lateral thought, there would no longer be a lateral thought, but only fragments linguistically unavailable. Thus, given the uncompleted central thought expressed by "The doctor wishes" and the completed lateral thought expressed by "Catherine to eat meat," let any element of the latter—say "to eat"—become an element of the former, at the same time losing fellowship with other members of the latter—ceasing, that is, to be itself a member of the latter. Taking inventory of mental stock, as now

arranged on the linguistic shelves, I find one piece of goods complete, as indicated by "The doctor wishes to eat," and a pair of remnants (i. e., what is suggested by "Catherine" and by "meat") distinctly unconnected with the piece and even with each other. In short, to avoid a breach of integrity, it must be recognized that "to eat," in addition to its function with "The doctor wishes," serves to name the relation-forming action—or, say, the action-formed relation (see pages 153-154) between "Catherine" and "meat." That is, although becoming centrally a noun, "to eat" continues laterally a verb, somewhat as Victoria, in becoming Empress of India, did not cease to be Queen of England.²⁶

As however for convenience the idea of eating was conceived to take a membership made vacant for it in the central thought, it is consistent now to say that although it does so, it does not in so doing cease to be attended by its fellows.

It would however be carrying this figure of speech too far, to say that the lateral factor, in becoming a member of central thought, has introduced its lateral fellows with it. Just as, in joining hands with you and Brown, I become a member of a momentary union, without dissolving another union with my children, who are clutching the skirts of my coat, so also the centro-lateral factor establishes central fellowship, without a loss of lateral fellowship. But just as the children do not become a part of the group consisting of men, but only of the larger group consisting of men and children, so also the lateral fellows of the centro-lateral factor do not become a part of the central thought, but only of the larger centro-lateral thought.

Somewhat thus I would reconcile the antagonism between grammatical "lumpers" and "splitters"—between those who call the object of "wishes" "all that follows," and those who call it "to eat" alone—by saying that the object is "to eat" attended by the other lateral elements.

²⁶ So also it might be shown that, if either "Catherine" or "meat" were omitted, although by a closer analysis three terms might still be found—as in "Catherine to eat" interpreted as "Catherine to use food"—the thought so constituted would be an unintended thought, and might be ranked with no thought at all, in the expressional purpose of the speaker.

(3) Its central factorships.

These are theoretically three: as first term, as mid-term, as last term—that is, what serves as a factor of lateral thought may also be the first or the last or the mid-term of central thought.

Mid-term factorship however does not occur except in cases which may be neglected for reasons indicated on pages 114-116.

Last terms Grammar ranks as sometimes adjective and sometimes substantive, according as the mid-term is the relation of substance to its own attribute (as in "Roses are red"), or some other relation. Continuing to regard the nature of thought-membership as the only adequate ground for differentiating parts of speech, I neglect this distinction. I confine myself, however, in the interest of clearness, to the case in which the last term is by Grammar ranked as substantive.

Both the first and last terms, with the above exception, Grammar ranks as substantive. As it is not now important to differentiate their services in thought construction, I accept them as one species, restricting examination to the more convenient case in which a term of lateral thought is also last term of a central thought.

(4) Its lateral factorships.

These are plainly three: as first term, as mid-term, as last term. That is, what serves as factor of central thought may be the first or last or mid-term of lateral thought.

As indicated on pages 142 and 143, whichever lateral factor is also central factor, it will be still attended by its lateral fellows. Accordingly, in its cooperation with central thought to form a larger mental total, the lateral thought will pose before the mind as

(a) a mid-term attended by first and last terms (or, say, a relation between two terms)—or

(b) a first term attended by mid-term and last term—or

(c) a last term attended by first term and mid-term.

Case (c), in which one car of a thought-train may be said to be drawn by the rear-end, is often first thought backward and expressed by the passive voice. For instance, "I have the book you desire" is displaced by "I have the book desired by you." Consideration of the passive voice however would essentially repeat conclusions to be derived from examination of the active. This aspect of Case (c) accordingly will be neglected.

When on the other hand Case (c) is expressed by the active voice, as in "I have the book you desire," its interpretation involves the repetition of an effort made in a "Revision of the Pronouns" (pages 97-102)—an effort in this case to exhibit "You desire" as a restrictive adjunct of "book." Such a repetition would not bring to the classification of verbal hybrids, for which I am now preparing, any aid which is not offered also by case (b). Accordingly this aspect also of case (c) will for the present be overlooked.

(5) *Its double factorships.*

From the preceding sections it appears that any factor of lateral thought may also be used as any factor of central thought; that the use of a lateral factor as central mid-term has no practical importance; that its use as central first term does not need to be examined; that moreover the lateral last term does not need to be considered in any central factorship.

Consideration of double factorships accordingly may be confined for the purpose of initial classification, to the following cases:

- (a) the lateral mid-term is central last term.
- (b) the lateral first term is central last term.

Obviously (b) can develop no usage which in current classification would be ranked as what I mean by hybrid, but only double service as a noun. It will be found however to supply the conditions necessary for the occurrence of the verbal adjective and verbal adverb.

(a), on the other hand, will be found to occasion the verbal noun.

(6) *Its expression by a verbal noun.*

To illustrate, in what is expressed by "Astronomers declare the sun to exceed the moon," a last term is required for "Astronomers declare," to complete the central thought. As such a last term, only a single element of the lateral thought can operate (see pages 129; 134-139). This element plainly cannot be what is expressed by "sun"; for there is no declaring a sun exceeding the moon, or a sun *toward* exceeding the moon (compare pages 159-162). It also cannot be what is expressed by "moon;" for there is no declaring a moon exceeded, etc. It can only be the excess.

According to this convenient view, which will be defended on pp. 168-184, the immediate object of "declare" is "to exceed." What is expressed by "to exceed," accordingly, alone succeeds in entering the central thought expressed in part by "Astronomers declare." By this entrance however "to exceed" does not secede from fellowship with "sun" and "moon," the three continuing to express a thought which, in comparison with the central thought, is lateral,²⁷ the detailed exhibition of what astronomers declare being ranked as an excursus, compared to their making a declaration (see page 134). All ideas expressed however are members of the total centro-lateral thought—a whole made such by the interlocking of the central and the lateral thoughts. This interlocking is effected by the factorship, of the singly thought excess, in central as well as in lateral thought. The excess accordingly, though once thought only, has a structural position of its own in each of the two thoughts; and these positions are different. In central thought the idea of excess enjoys a membership which entitles the corresponding word for it ("to exceed") to rank as a noun. In lateral thought that idea has a membership which entitles that word to rank as

²⁷ I do not, however, mean that such is of necessity the case. I might have said, "According to the declaration of astronomers, the sun exceeds the moon", in which their declaring is lateral, and what they declare is central. But as I have, in the illustration actually adopted, begun by centralizing their declaring, I am bound to pose the detailed exhibition of what they declare, as relatively lateral, unless the extended mental landscape is to realize the impossibility of containing a foreground only.

a verb. As accordingly centrally noun and laterally verb, that word makes good its claim to rank as a verbal noun.

(7) *Its expression by a verbal adjective.*

This, as indicated on page 145, may occur when a lateral first term is central last term.

In illustration I offer a lateral thought containing ideas expressed by "Catherine," "the relation of eater to food" and "apples." This thought may be expressed not only by "Catherine to eat apples," but also by "Catherine eating apples," etc., although with variant effects to be examined later.

Let now this "Catherine" of lateral thought appear as also final term in a central thought, the centro-lateral total being rendered by "The doctor saw Catherine eating apples." At first sight the result is disappointing; for while the idea expressed by "Catherine" is plainly enough at the same time a central and a lateral factor, it is not in either factorship a mid-term. The word expressing it is merely twice a noun—in neither factorship a verbal element—therefore not a verbal hybrid—accordingly foreign to the present investigation.

The resultant double factorship of a closely associated idea will however repay examination—a double factorship which in the present illustration is occasioned by the choice of "Catherine" to serve as central factor with "The doctor saw," as may be shown to best advantage after noting what occurs when the choice of lateral term for central service falls upon the eating, or in other words, the relation (of eater to food) -forming action (See pages 153, 154).

In the latter case—that is, when that which enters central thought is the relation (i. e. when the eating is the object of "saw")—the other lateral ideas (expressed by "Catherine" and "apples") attend it without there being any need of recognizing further relations. Thus, in "The doctor saw Catherine eat apples," there is no occasion to analyze Catherine's apple-eating into her eating and an eating of apples—an analysis which would require the recognition of a relation between "Catherine" and "eat," and another relation between "eat" and "apples."

What is seen is sensed as rather one phenomenon than two—rather Catherine's gastronomic doings with the apples, than her performance of the eating plus what may be indicated by the words "the eating affected the apples."

Perhaps, indeed, on hearing only so much as "The doctor saw Catherine.....," you for a moment imagine "Catherine" to be the object of "saw"—to be, that is, as well as "The doctor," one of the terms between which there holds a relation of seer to seen; and this interpretation would require any further added element of thought to be in a further relation with, it might be, "Catherine." But the appearance of "eat" at once dispels this illusion; "eat" displaces "Catherine" from the membership so prematurely assumed, and takes its place as object of "saw," while serving still as mid-term, or relation-namer, with "Catherine" and "apples."

An occasion for such analysis does however occur in "The doctor saw Catherine eating apples." In this expression, "Catherine" (again at first, but this time rightly and finally) enters central syntax as the object of "saw." As "eating" comes upon the scene, being in any well-inflected language formally incapacitated for service as the central first or last or mid-term, it cannot like "eat" (above) displace either "Catherine" or any other central term, but must, as warrant for any affiliation with the central thought, exhibit a relation with some central term—in the present case, a relation with "Catherine."

Now thus far "eating" has not been recognized as in any relation with whatsoever it may be, but as itself exhibiting the relation (that of eater to food) between "Catherine" and "apples." So soon, however, as "apples" (in the special attention given first to the central syntax of "Catherine" and next to the relation of "eating" with "Catherine") be for an instant unheeded, "eating" naturally ceases to be regarded as furnishing a relation between "Catherine" and "apples," "Catherine" and "eating" being rather recognized as in the relation of actor to his own act.

Also "eating" and "apples" are recognized as in the relation of action to its own actee (object), "apples" being thus admit-

ted as a further increment of the now developed total: "The doctor saw Catherine eating apples."

In short, in the crowding of individual lateral factors, to find their places in the growing total, original grouping has been lost. "Catherine eating apples" no longer indicates a single group composed of two terms and their relation, but rather two groups of which the one consists of "Catherine," "eating" and their relation, while the other consists of "eating," "apples" and their relation. Accordingly the idea named by "eating" now is doubly a factor of thought—once in what is expressed by "Catherine eating," and again in what is expressed by "eating apples."

It appears accordingly that the total thought expressed by "The doctor saw Catherine eating apples" includes no less than three constituent thoughts, which might have been developed into the judgments expressed by

- (a) The doctor saw Catherine.
- (b) Catherine was eating.
- (c) The eating affected apples.

In "The doctor saw Catherine eating apples," the relation expressed in (b) by "was" has been stripped of no longer admissible assertion, and understood (pp. 120-2; 163, note 38) with "eating," which is used adjunctively with "Catherine." As this relation (strictly that of actor to his own act) is linguistically ranked as a mere variety of substance-to-attribute relation (see note, p. 155), "eating," in its adjunctive association with "Catherine," virtually ranks as what is called an adjective.

Again, in "The doctor saw Catherine eating apples," the relation expressed in (c) by "affected" has been stripped of no longer admissible assertion, and incorporated in the meaning of "eating," which, thus including the relational idea expressed by "affected" (or "was in the relation of action to actee"), governs as its object "apples," operating accordingly as what is called a verb.²⁸

²⁸ As prepositions also govern objects, my conclusion is not of necessity correct, and can be made so only by such an examination of the prepositional function, as may show that prepositions do not doubly operate in such a case. Meantime I content myself with remarking,

That, however, in "The doctor saw Catherine eating apples," the relations expressed by the "was" of (b) and the "affected" of (c) are usually much less keenly sensed than in the above interpretation, is eminently probable. They are rather replaced by a vague "All's well!"—a facile "Vidit quod esset bonum"—an assurance that somehow "eating" goes with (i. e. is in relation with) "Catherine" in the usual way (that is, in relation usual with term and adjunct), therefore operating as an adjective—and a consciousness that "eating" governs "apples" as its object (the former and the latter being related as action to its own actee), therefore operating as what is called a verb.

Of the possible judgments (a), (b), and (c), it is plain that in the expression "The doctor saw Catherine eating apples," (a) is central; (b), reduced to a mere conception, is lateral to (a) and forms with it a centro-lateral total, "Catherine" being singly thought instead of twice in succession; (c), reduced to another mere conception, is plus-quam lateral, forming with (a) and (b) a further augmented total, "eating" being also singly thought, instead of twice in succession.

Without insisting further on the minor differences in thought-perspective—and roughly posing "eating" and what precedes as comparatively central, and "eating" and what follows as comparatively lateral—I note that in central fellowship "eating" is an adjective, and in lateral fellowship a verb, and thereby entitled to rank as a verbal adjective in distinction from an adjectival verb.

That modes of interpretation thus far followed will now and then encounter difficulty, must be admitted. For instance, in the sentence "Being ill, my son deferred his departure"—com-

subject to future correction, even on my own part, that prepositions, presumably all of them originally spatial, in their primary meanings name relation to what serves as a landmark, e. g. "On Mont Blanc"; that spatial relation to a landmark is a substitute for absolute position, enforced by the linguistic unavailability of the latter; that otherwise position would rank (with horizontality, bulk or contour) on a footing with other attributes; that actually preposition and its object are a mere expedient for expressing what structurally operates exclusively as an adjective or adverb; that actual mental operation would be utterly misrepresented, in "The doctor saw Catherine at home," by supposing a relation between "Catherine" (or "saw") and "at," and another relation between "at" and "home".

monly ranked as offering a verbal adjective construction—I am unable to find that double function of “Being” as adjective (to “son”) and verb (to “ill”) which to me is the verbal adjective distinctive.

Contrariwise, on looking a little more closely at the thought expressed, I find two mental counterparts of my son (see pages 117 and 118), as if the expression employed had been “My son being ill, he (my son) deferred his departure.” Indeed a second mental picture is to me as indispensable as in “My daughter being ill, my son deferred his departure.”

The duality of this mental picture abrogates of course its use as a once-thought factor of the thoughts expressed by “son being ill” and “son deferred.” The relation of this pair of thoughts is not then that of co-possessors of a common factor, but some other—possibly that of concomitance or sequence—presumably, perhaps you will admit, the relation of cause to effect, expressible by “on account of.”

As elsewhere indicated (pp. 168-184) when two thoughts are in mutual relation, they appear as nucleary factors, each attended by its fellows; and the chosen nucleary factor of each thought is its mid-term. Accordingly, to give correct expression to the total thought suggested by my illustration, I write—by no means “On account of my son being ill, etc.,” but assuredly—“On account of my son’s being ill, etc.,” (he deferred his departure) his deferring was.

When such an expression, being duly inflected, rises to the dignity of an ablative absolute, two interpretations offer. The so-called participle (in its absence a participle of “esse” may be understood) may be held to be in fact a verbal noun, in the ablative of cause, etc., etc., as circumstances may require. It is peculiar that the subject of this ablative verbal noun adopts the case of the verbal noun itself, instead of repeating either of the choices respectively made by the verbal noun in “ing” (a virtual subjective genitive), the infinitive (an accusative) or the substantive subjunctive (a nominative). Such agreement(?) of subject noun with verbal noun(?) may be explained, however, as arising from one of those “attractions” or misapprehensions, in which the use of words abounds—Compare “Laissez

la porte grande(ment) ouverte." "Whom do men say that I am?"

Otherwise, my illustration offers one of those legionary cases in which a form of syntax eminently proper with a particular thought (expressible by "on account of my son who was ill") has been employed with another thought (expressible by "on account of the illness of my son") with which it is improper—though not disastrously. That is, linguistic usage has followed its habit of taking an ell when given an inch. In other words, it may be said that mental and sentential syntax do not tally, the anatomy of the sentence being morbid—a phenomenon which I intend to examine in another publication.

The word which thus participates in functions adjective and verbal, has been called a participle. In Grammar however this name is so frequently applied to forms in "ing," for instance, without discriminating between their different central functions—sometimes adjective, but also often substantive—that it is safer to discard the word in favor of the expression "verbal adjective," taken in a sense so broad as to include all words which simultaneously serve as centrally adjective and laterally verbal.

(8) *Its expression by a verbal adverb.*

As an introductory illustration, suppose in the first place the judgments expressed by

- (a) Catherine sang a song.
- (b) The singing was plaintive.

Wishing to make of (a) the central element of a larger mental total, and of (b) the lateral element, I use the interlocking method, thinking the idea expressed by "sang" and "singing" only once, and obtaining what is expressed by "Catherine sang a song plaintive." As however "plaintive" might be understood as belonging with "Catherine" or "song," I avoid this possibility by using the ending "ly," as sign that "plaintive" is to be construed as adjunct of the verb. Accordingly, "Catherine sang a song plaintively."

In this expression the idea of singing is plainly the mid-term of the central thought expressed by "Catherine sang a song." "Sang" in other words is centrally a verb. At the same time the idea of singing is that of which, in lateral thought, the plaintiveness is adjunct—that, in other words, with which the plaintiveness stands in the object-to-quality relation. In lateral thought accordingly singing operates as if it were substance, posing moreover as subject, or first term. "Sang" in other words is laterally a noun²⁹ (see page 114, note 9). Combining statements, I hold that, in "Catherine sang a song plaintively," "sang" is centrally verb and laterally noun—that is, a nominal verb—by no means a verbal noun.

The little obscurity of this case, which possibly has embarrassed other cases, may be relieved as follows:

The thinking of the singing, although single, has two aspects. In the former it fills a gap which may be indicated by the question "What have Catherine and the song to do with each other?", or "What is their relation?". The use of "sang" exhibits this relation as generically that of actor to actee (object)—specifically as that of singer to what he sings, as distinguished for instance from that of composer to what he composes.

This relation is formative—that is, it is viewed as in the process of formation, rather than as merely existent.³⁰ This formation implies a formative cause—or, say, an action—the two in linguistic thinking being hardly separated. Accordingly, instead of *formative relation*, I substitute *relation formed*

²⁹ "Plaintively" should therefore rank as strictly adjective—or, say, as of coordinate rank with an adjunct of either first or last term. But the perception of language-makers was not of the clearest, as shown by the use—and disuse—of adverbial endings. Grammar, assuming rationality in linguistic practices which registered such perception, ranked on equal footing subject and object of the verb; distinguished adjuncts of the first two as adjectives, and adjuncts of the last as adverbs; and then—it may be, weary of distinction-making—extended the adverb class to include the adjunct of any other adjunct (adjective or adverb) to the *n*th degree of remoteness from its term—this for no more excellent discoverable reason than that language-users happened to use with all of them similar endings, although an adjunct is strictly *ad-verbial* only when adjunctive to a verb.

³⁰ Compare "become" with "be", and "acquire" (in the sense of establish relation of owner to property) with "have" (in the sense of be in that relation).

by an action, the relation of singer to what is sung being obviously established by the act of singing.

Now obviously what is conceived in one aspect as *relation formed by action*—or action-formed relation—may also quite as easily and quite as properly to be conceived in another aspect as *action forming relation*—or relation-forming action—the one being merely the other inverted. More particularly, it is possible that the formation of relation by action appears in one aspect in central thought, and in the other aspect in lateral thought.

The double aspect of a complex idea does not, however, require its double formation in the mind. To illustrate quite objectively, your image on my retina is actually inverted; yet I sense you upright. On the other hand, as seen through a common type of spy-glass, your image is actually upright on my retina. Unfamiliar with such a glass, I sense you as standing on your head. With practice, however, I learn to sense you, as thus seen also, in the upright position. Obviously it is possible for me, having gained the new power, and still retaining the old, to sense you in either position, without repeating your image. Suppose once more that, while I look at you with one eye through the spy-glass, into the other (naked) eye be thrown the image produced by actual trees; I shall now presumably sense you with your head pointing toward the tree-tops. But if into that other eye there come instead the image formed by an inverted lantern-slide presenting trees, I shall probably turn you end for end, to match you with the trees. With equal ease it seems to me I can in central thought be conscious of an action-formed relation, which, without a repetition, is in lateral thought a relation-forming action.

In particular I see no difficulty in making the (action-formed) relation between the "Catherine" and the "song" of (*a*) appear as a (relation-forming) act described as being plaintive in (*b*). In other words the verb of (*a*) has become the subject—that is, a noun—in (*b*).

In the illustration "Catherine sang a song plaintively" I have thus far merely found that "sang," while operating as a verb, is also that with which an adjunct is associated—an ad-

junct of the special type regarded as an adverb. This adverb, however, hardly shows a trace of the promised verbal function.

To exhibit this, let (b) "The singing was plaintive" of page 152 be replaced by another (b) "The singing rent hearts"—the expression of a lateral thought, which is to cooperate with the central thought expressed by (a) "Catherine sang a song," in forming a larger centro-lateral total.

In the usual way, then, let the singing of the one and the other judgment be once thought only. That is, of lateral thought the first term shall be also mid-term of the central thought. As in the case presented by the preceding section, lateral first term still is followed by lateral mid-term, which in turn is also followed by lateral last term. That is, the lateral thought is, so to speak, stretched out, becoming a lateral and a plus-quam lateral, much as if the elements of the centro-lateral total were

- (a) Catherine sang a song.
- (b) Singing was rending (disruptive).
- (c) Rending affected hearts.

Accordingly, combining (a) and (b) as indicated, I obtain "Catherine sang a song rending." As, however, in this shape "rending" might be taken as an adjunct of either "Catherine" or "song," the ending "ly" shall be added, to make it certain that the rending is adjunctive to the singing.³²

Accordingly "Catherine sang a song rendingly."

The combination of this total with (c) is analogously effected. The rending is once thought only; its element "ing," though ambiguous, will succeed in suggesting the relation expressed by "affected." The presence of this relation will be somewhat emphasized by compounding "hearts" with "rend-

³² Strictly, the recognition of "rending" as adjunctive to "singing" is the recognition that the latter is to the former in the relation of cause to effect (compare page 201) as if the statement were made that "singing occasioned rupture." In linguistic practice, however, this relation is, in the use of adjuncts, not distinguished from the relation of action to its own actee or object, nor even from that of quality to its substance. E. g., "provocative" (or causing provocation) is adjunctively ranked on a par with "carnivorous" (or eating meat), and both are classed with "blue" and "heavy."

ingly.”³³ Accordingly, “Catherine sang a song heart-rendingly.”

In this expression “rendingly” appears in adverbial function in its relatively central fellowship with “sang,” while operating also as a verb in relatively lateral fellowship with “hearts,” thus making good a claim to rank as a verbal adverb.

³³ In Greek, compounding is unnecessary; e. g., *ταῦτα ἐχόντως*.

CHAPTER II.

THE VERBAL HYBRIDS.

THE VERBAL NOUNS.

An embarrassing misconception.

The study of some verbal nouns is embarrassed by the fact that, more or less successfully, Grammar infects expressions in which they occur, with what I am forced to regard as wrong interpretation. I refer to the frequently announced opinion that the subject of the infinitive is the object of a principal or central verb—an opinion which has favored the untrue generalization (that “idol” of the class-room) that the subject of the infinitive is put in the accusative case—a generalization attended by the more or less conscious derivative superstition that, for reasons wholly inconceivable, service as the subject of the infinitive inherently necessitates accusative case, whether formally indicated by inflection or not—a superstition which in turn distorts perception of thought-structure.

To deal with the forms of this mischief in the more convenient order, I note in the first place that the law of accusative usage is heartily violated by Spanish in “Le favorezoo por ser yo su amigo”—literally translated by “I favor him by reason of I to be his friend”—also in the exclamatory usage of German and English, for instance “Er so etwas thun!” “What! he do such a thing!”—and more distinctly in the following lines of Locksley Hall:³⁴

³⁴ These I quote with small respect for the editor's first occurring comma, deeming that the sense would much more naturally parallel that of my other examples, than be what he has indicated.

“I, to herd with narrow foreheads, vacant of our glorious gains,
Like a beast with lower pleasures, like a beast with lower pains!”

That the rule of accusative usage should thus be violated—that indeed it would have been much better always to use the nominative—appears to me essentially axiomatic, or at least demonstrable, as follows. Nominative inflection, which even in the case of an action has come to indicate the use of an idea as merely first term (and not at all the exacter of activity, e. g. with the passive voice) is quite as urgently demanded in the infinitive phrase, as it is in the sentence complete. If, in “George the dragon slew” I need to use in a highly inflected language (for that will be a language that pays little heed to the order of words) the nominative inflection of “George” as an indication that, in a thinking which includes the relation of slayer to victim (fixed by “slew,” which excludes the reverse relation of victim to slayer expressible by “was slain”) you must start your thinking with “George” and end with “dragon” (instead of starting with “dragon” and ending with “George”) in order to develop the particular thought intended, so also, in “Men declare George the dragon to have slain,” I need to give you a warning to begin subordinate thought with “George,” and not with “dragon.” That is, in a well-inflected language, I should consistently put the subject of the infinitive in the nominative case.

It must, however, be conceded, that in linguistic practice such consistency is not maintained. My illustrations of its maintenance are undoubtedly exceptions. The subject of the infinitive almost always takes the accusative form. But, remembering the greater desirability of the nominative, I cannot believe that the subject is put in the accusative because it is the subject—but rather in spite of its being the subject. The cause of its accusative form I have accordingly yet to find.

To illustrate what I believe this cause to be, let one Robinson’s employment of Italians appear as the object of a series of verbs which form a diminuendo in their ability to take a per-

son as their object; and let the person Robinson be expressed throughout by "him," for the sake of its case-showing power. Accordingly,

(1) "I urged him to employ Italians."

In this expression I concede, or rather contend, that what is the object of "urged" is not at all "to employ" (attended by a subject and an object); and Grammar I believe does not regard as that object the phrase "him to employ Italians." That object is obviously "him" only, total meaning being otherwise expressible by "I urged him toward employing Italians"—or "to (in the sense of toward) employ Italians."

"To employ" is commonly ranked as a "complementary infinitive"—a phrase which to me is valueless, all words of a well-ordered sentence being, in thought-expression, complementary, except the first, which initiates that expression. Enough for the present that the prepositional phrase "to employ Italians," quite analogously with "toward employing Italians," operates adverbially to indicate the figurative goal of the urging.

There is then no relation between the "him" *expressed* and the employment of Italians, except the relation based on common implication in the urging—a relation of part to part of a rather extended whole—a relation which also holds between "him" and "I" or "urged"—a relation which is certainly far from mentally prominent. Accordingly the "him" *expressed* is not the subject of "to employ Italians."

No doubt, however, a subject is *understood* with "to employ Italians;" and no doubt also the subject understood is "him"—not however the "him" which is object of "urged," but another "him" of identical meaning, two mental counterparts of one and the same individual appearing together upon the scene.³⁵

³⁵ As I shall not, in this forecast, specially consider the verbal noun in cases of this sort, I note at this point that, in "I urged him toward him employ Italians", the "toward" is namer of a relation between a first term "urged" and a last term "employ". Now a relation, whether expressed by what is ranked as a preposition or by what is ranked as verbal, poses its following term (the preceding term, demonstrably a nominal verb, I neglect) before the mind as momentarily substantive; or, in grammatical parlance, "employ" as object of "toward" or "to" is centrally a noun. As mid-term of "him" (understood) and "Italians", "employ" also laterally ranks as a verb—accordingly in toto as a verbal noun.

As indicated on pp. 117 and 118, the equivalence of "him" expressed and "him" understood affords an unfortunate opportunity for misinterpretation, that equivalence being wrongly sensed as oneness. Loosely speaking, the object "him" and the subject "him" are identical—are the same—are one; and, speaking with intentional vagueness, "him" is both subject of the infinitive, and also (though in another service) in the accusative case; or, phrasing distinctly the misinterpretation lurking in my vaguer statement, the subject of the infinitive is in the accusative case.

Strictly speaking, however, my final statement is untrue, or at least there is no means of establishing its truth; for the subject of the infinitive in the given illustration was never distinct enough in mind to even raise the question of case, to say nothing of using case inflection. But the statement has sufficient look of truth to satisfy the average user of speech, if not indeed to deceive the very elect.

In

(2) "I asked him to employ Italians."

the "him" which is in the relation of employer to employee with Italians—that is, the subject of the infinitive—is somewhat more distinctly before the mind.

In

(3) "I desired him to employ Italians."

the "him" which belongs with "to employ Italians" is even more conspicuous, tending to eclipse the "him" which is object of "desired." Indeed the desire cannot be regarded as affecting any one, except so far as told him. That is, so far as any "him" is object of "desired," the expression may be construed as meaning "I told him my desiring him to employ Italians."

At this point I believe the average language-user's discrimination utterly fails, it being quite too much to ask of any mind, in the haste of adapting thought to linguistic limitations, to sense the "him" as mentally double, one "him" being object of "desired," and the other "him" the subject of "employ." What happens is rather this: with the strengthened recognition of the "him" as subject of the infinitive (and therefore properly

nominative, as argued on page 158), there exists a vague supposing that somehow, as in the previous cases, what is now regarded as the single "him" is also object of "desired" and in that function properly accusative. That is, the form which has answered in other cases is uncritically accepted in a case for which it is strictly unavailable.

In

(4) "I wanted him to employ Italians"

desire is no longer conceived as told, and "him" entirely ceases to be regarded as an object (the direct object of "wanted"); for in no proper sense did I want "him," but only his employment of Italians, a phenomenon of which "him" is but a single factor, no more worthy of preeminence than "Italians" (compare "I wanted Italians," further conceived as employed by him). "Him" accordingly is felt to be merely the subject of "to employ." Nevertheless, the almost synonymy of (3) and (4) may be assumed to blind the mental eye to the perception of the really fundamental structural difference in thoughts expressed. "Him" accordingly continues to be used, though "he" is strictly the required form.³⁶

³⁶ To make this last more obvious, I paraphrase (3) by "I desired (=told my desire to, or requested) him (that) he should employ Italians." If now expression is to restrict itself to a single use of the pronoun, it is obvious that, as happens with the indefinite "whosoever" (e. g. "Be polite to whomsoever—whosoever—meets you") that pronoun might by its form exhibit either its fellowship with "I desired" or its fellowship with "should employ Italians." Accordingly there is precedent for either of the following linguistic expressions:

"I desired him (—) should employ Italians," or

"I desired (—) he should employ Italians."

And, if the finite form be displaced by the infinitive, either of the following has its precedent:

"I desired him (—) to employ Italians," or

"I desired (—) he to employ Italians."

But in (4), and still more certainly in examples yet to be offered, there is no "him" thought of in immediate association with "wanted". That is, I must not paraphrase (4) by

"I wanted him (that) he should employ Italians," but only by

"I wanted (that) he should employ Italians."

Now in this expression the pronoun has only one function—that of subject to "should employ." There is no opportunity for it therefore to take an accusative form for the sake of a function with "wanted". The like is moreover true when the finite verb is replaced by the infinitive. That is, there is linguistic reason only for the form "I wanted he to employ Italians."

In

(5) "I caused him to employ Italians," and

(6) "I made him employ Italians,"

it is even more certain than in (4) that "him" is in no relation (other than that of part to part of one whole—see p. 159) with "caused" or "made." For even the remoter relation suggested by "I caused *for* him" or "I made *for* him that he should employ Italians" is felt to be gratuitous. On the other hand, the more immediate relation suggested by "I caused him" and "I made him" clashes with the fact that I didn't and couldn't do either, and can hardly be supposed to think I did.

In

(7) "I declared him to employ Italians,"

I seem to reach a climax. Not only I cannot, in any here available sense, declare a person, but I have not even a satisfactory idea of what such declaration might be. I am accordingly very certain that what I soberly think of as declared is by no means "him." Yet, like every one else, I blunder along the now well-beaten trail of perverted syntax, using "him" instead of "he," as before. I seem to be haunted by a vague responsibility to the word "declared," as appears to be clearly shown by the passive form "He was declared by me to employ Italians."

I am aware that, in this last expression, it may be urged with some appearance of justice, that "He" is rather subject in the infinitive phrase ("He to employ Italians") than subject of "was declared." But if such interpretation be accepted, it follows that the rule of accusative subject for the infinitive is so far from universal (passive usage being theoretically always available instead of active) as to be negligible in further investigation.

Again, the defender of the accusative usage may argue that the properly accusative subject of the infinitive undergoes, in my passive illustration, an "undue influence" exerted by the principal verb ("was declared") as happens also much more strikingly in

"Faites-moi chercher, si quelqu'un vient me demander."

Faites-moi arriver au plus tôt."

Faites-les-lui donner."

If such explanation be accepted, it still holds true—and this is all I need to establish—that the form assumed by a possible subject of the infinitive, is an unreliable guide to the structure of thought. In particular, the accusative form of such a possible subject should not betray me into overhastily regarding it as the intended object of a more central verb.³⁷

How they operate as verbs.

In the first place they forego assertion, which is but another form of saying that the lateral thoughts which they in verbal function cooperate in expressing, are by no means judgments, but conceptions (see pages 121-122).

Thus, comparing

- (1) "I have seen an express train strike a freight," and
- (2) "I have seen a collision,"

I find that in (1) the expanded indication of what I have seen is, in its unassertedness, exactly on a par with the unexpanded indication effected in (2) by the word "collision."³⁸

³⁷ In this connection an interesting variant of infinitive usage may be worth a passing comment. To illustrate, "To exercise would be good for him", in which no doubt a subject for "To exercise" may be found in a "he" (or "him") understood, though such a thinking in of a subject is so needless as presumably to be neglected.

The like may be assumed of the rearranged "It would be good for him to exercise."

By further change the latter becomes "For him to exercise would be good" or "a good thing", in which the recognition of "for him" as an associate of "good," may persist—or not.

On the other hand, in such an expression as "For him to exert himself is not to be expected," "For him" can hardly be regarded as associated with the whole or any part of "is not to be expected." Thought appears to have been reconstructed, "him" becoming subject of "to exert," and the "For" now operating on "him to exert himself" much as "to," as commonly, operates on "exert"—that is, as sign that in some way the following phrase is to take a substantive position in the syntax of the expressional total, the preposition being regularly followed by what is substantively apprehended.

³⁸ That I might desire to express belief in the expanded indication offered by (1), and that linguistic means of doing so may be developed, I do not for a moment doubt. But obviously, were I to lay the burden of my belief on whatever could endure it, I should quickly overburden you. Such utterances as "If I (whom I believe to exist) were you (whom I believe to exist), I (whom again I believe to exist) should take better care of myself (whom a third time I believe to exist)" are so intolerable, that their non-occurrence may as well be posed as their impracticability. One assertion in the exhibition of one expres-

In the second place, the verbal nouns, in their verbal activity, continue to express a relation, which is lateral as compared with that expressed by the governing word (principal verb), but which is central as compared with other relations expressed by the possibly extended substantive phrase. To illustrate, in "I caused him to employ Italians from Pittsburg," the governing verb exhibits the central relation of cause to effect between "I" and what I caused, while "employ" exhibits the lateral relation of employer to employee between "him" and "Italians." But the latter relation is central as compared with the relation (say, of thing to source) exhibited between "Italians" and "Pittsburg" by "from."

By further illustration it might be shown that within the bounds of lateral thought, however much extended, the relation expressed by the verbal noun is more central than that expressed by what is ranked as a preposition—or any other part of speech; and this, in my own differentiation of the parts of speech, I should accept as entitling the verbal noun in lateral service to its commonly admitted verbal rank.

The idea-trio of the infinitive phrase may sometimes seem to be a duo. Three terms however still remain in fact, although it be at times not fully certain (and less important) exactly what the obscured idea (more commonly the final term) may be. To illustrate, in "The doctor wishes me to eat," the thought condensedly expressed in two terms by the infinitive phrase, may also be expressed in three terms by

me—to eat—food,

me—to perform—(the act of) eating,

me—to be—eating,

in which the infinitives in turn suggest relations of eater-to-what-he-eats (not for instance the relation expressed by "enjoy" or "digest"), of actor-to-his-own-action, of actor-to-his-action regarded rather as relation of substance-to-attribute (or accident).

Sometimes it is the first term that is obscured. In "Je fis bâtir une maison" the actor (the builder of the house) may be understood (e. g. "some one") or, as I am rather inclined to believe, entirely unheeded. According to the latter view, the first and last terms of the infinitive

sional purpose, however amplified, may be accepted as the linguistic norm. The merely apparent exceptions offered by an extraneous statement interlocked or merely parenthetical, as well as those afforded by the use of verb-forms sometimes assertive but not so at the moment, will be considered as they occur. For assertion following non-assertion, see pages 129-134.

phrase are the act of building and the house, the mid-term or relation between them (incorporated in what is expressed by "bâtir") being that of action to its own actee.

Sometimes first and last terms are both obscured. In "The doctor likes to eat," the obvious doer of the eating is himself, and that which is eaten is, with equal certainty, eatables. That is, both the actor and the actee are within easy mental reach. Whether they be, in this and the preceding cases, actually presented by multiple symbolization, or inferred from idea-environment—or even neglected, to the extent of remaining more or less subconscious—may be overlooked, because it is unimportant, and because it is hardly to be expected that different minds should operate alike. That however in some way a relation between two terms should be distinguishable in the infinitive phrase appears to me a *sine qua non*, the indication of such relation being the essential characteristic of every word to be ranked as verbal.

Sometimes indeed no terms at all appear to be findable, thought appearing quite unrecognized in detail. To illustrate from Italian, "Piove" suggests a phenomenon which may be regarded as mentally pictured without details, partly because they are not mentioned and partly because two people can hardly be found to agree upon the nature of the details. (Compare, Raining is occurrent. The present phenomenon is rain. The usual energy is in cause-to-effect relation with raining, etc.)

If now the question rise: what part of speech is "Piove"?, the answer plainly will be that it is not a *part* of speech at all, but the *whole* of a speech—a speech complete—a speech which indeed does not say much, but does say all that is required of it. "Piove" in short, although a single word, has acquired the power of expressing what is commonly expressed by three, that is, a judgment—or, to speak with possibly greater precision—that which would become a judgment, if sensed in detail. In view of this augmented power, "Piove" may be called a pregnant verb, and even more properly a sentential verb or a one-word sentence.

In "Dice che piove" analogy invites a ranking of the final word as a one-word clause, or clausal verb—that is, a word with all the powers of a clause. Although as such it is in all strictness part of a speech, it is too large a part to rank among what Grammar means by the "parts of speech", and accordingly may be neglected in the examination of their hybrids.

How they operate as nouns.

I. The Usual Interpretation.

To give to this the advantage of the utmost plausibility, suppose by way of illustration that you say (1) "Astronomers declare the sun to exceed the moon", and that I answer you by saying (2) "I declare that myself."

In my answer what is declared is plainly "that"; and what is meant by "that" is plainly what was meant by "the sun to exceed the moon." Of these essential synonyms it is natural to assume that they do not differ in syntax—that, as "that" is the object in the second sentence, so also in the first the object of "declare" is "all that follows."³⁹

The fundamental objections to this assumption have been sought already in the nature of linguistic thinking as examined under the title "Lateral Thought" (pages 134-139). At present, from the viewpoint and in the phraseology of Grammar, additionally and subordinately,

To this interpretation it may be objected:

(a) That it hardly allows the existence of a verbal noun. For if in the above illustration the object of declare (1) is "all that follows"—if, in other words, "all that follows" constitutes the noun which stands as object of "declare"—plainly "to exceed" is not the object of "declare" and therefore not in fellowship therewith itself a noun, but only a fraction of that object and therefore only a fraction of a noun. Accordingly, "to exceed," if named according to its double function with "declare" and with "sun" and "moon," can only be known as a verbal noun-fraction. As however the error committed at this point may lie in naming rather than interpretation, I raise the present objection solely to discredit in a general way the authority of Grammar, feeling that the pseudo-science here as elsewhere shows itself a guide by no means blindly to be followed.

(b) That it stops half-way. To illustrate, given "I rather expect my brother to meet me", if you asked me of what "my brother to meet me" is the object—a question which I may answer, as the maker of the thought expressed, with some authority—I answer that I mean it as the object by no means of a mere expecting, but of an expecting further conceived as

³⁹The fact that, in well inflected languages, "the sun" and "the moon" would be unmistakably in the accusative case, suggesting possibly that "declare" exerts an influence on case-selection—as if each one of the elements of "sun to exceed moon" were more or less the object of "declare"—I ignore as of no reliability, as indicated in the initial section of this chapter.

peculiar to myself, and only of a partial character at that. Indeed no other expectation of the meeting, so far as I am aware, exists, nor have I thought of any other; and yet I do not consider, and I do not understand that Grammar considers, "all that follows" as the object of "I rather expect"—that is, of all that precedes. It would accordingly appear that the present case is one of those in which sauce for the goose is also sauce for the gander—that, if the possible massing of "I half-way expect" is not effected with a view to governing the following clause, the possible massing of "my brother to meet me" with a view to being governed by the preceding clause, is presumably also not effected.

(c) That it ignores analogous cases. To illustrate, "I expect (1) the Herald to expose Durand" may be replaced by "I expect (2) the Herald's exposure of Durand," with only negligible variation of the thought expressed. Accordingly, so far at least as possible, the object of "expect" (1) and the object of "expect" (2) should be interpreted alike. But Grammar I believe does not regard the immediate object of "expect" (2) as "all that follows." (Compare illustrations, page 172.) There is accordingly apparent inconsistency in so regarding the object of "expect" (1).

(d) That it disregards established mental habit. This objection may be indicated very briefly, as mental habit will be emphasized (pp. 176-178) in the defense of another interpretation. Meantime let it be supposed that, before the development of the infinitive phrase, the makers of language had formed the habit of regarding every extended object of a verb as consisting of a nucleary factor attended by its fellows, somewhat as indicated in (2) of the preceding paragraph. Such a habit having been established, the linguistic chances lie against the development of another mode of sensing the object, e. g. as "all that follows." Just as a single architectural type is apt to characterize the race which is left to its own devices, so also a single mode of thought construction—and that by no means always the best—is apt to become the linguistic norm, to the neglect of others. Accordingly the habit of posing the objective clause as a nucleary factor attended by its fellows, once

established, the probability of sometimes posing such a clause as an objective total—the probability that what may be called collective syntax will occur—is comparatively small. Moreover, broadly and figuratively speaking, it is much more probable that in thought-masonry individual blocks will at once be moved to their proper places than that, first of all, sub-structures will be formed, which burdensome masses afterward, with an augmented effort quite unnecessary, must be moved to their required places.

While suggesting mental operation different from my own, I may add that, given the expectation of an object, excited by "Astronomers declare", a careless mind may lose it, if succeeding numerous details too much crowd upon attention—so far lose it, that, in spite of the plainly stated "Astronomers declare the sun to exceed the moon", if I ask for a repetition of my statement, I may be told that "In the opinion of astronomers, the sun exceeds the moon." That is, the expectation of an object has faded; from lateral, the infinitive phrase has changed to central; though not by me asserted as the main expressional purpose, it is sensed as what deserves assertion, which is formally given to it in the attempted repetition.

Such mental operations merely show that, as often happens, the linguistic mechanism has failed to work as intended, the blame in the given illustration being fairly chargeable upon the listener's carelessness. They are of small importance to the student of linguistic thought or expression.

II. A Preferred Interpretation.

In presenting this I use a mathematical illustration, because of the mental and expressional precision to which we are trained in quantitative operations. Accordingly I note that the expression $3:2::12:11$ is known as the statement of an arithmetical proportion—a proportion being defined as the equality of two ratios.

Now obviously equality, indicated by the foursquare lying dots, may also be indicated by the word "equals." To complete the translation of mathematical symbols into usual language, "equals" must in grammatical parlance be provided with a subject and an object. These lie right at hand, the latter being offered, as some might claim, by "12:11", which may be rendered in words by "12 to be in relation with 11;" for

the two dots express a ratio; and a ratio is merely a quantitative—or say, in the present case, a numerical—relation.

Let me now adapt the proportion formula a bit more closely to my purpose. Accordingly $3 > 2 :: 12 > 11$, in which expression the previously altogether indefinite ratios are displaced by ratios definite to this extent, that they are ratios of excess. In this expression it is as obvious that 12 is conceived to exceed 11, as it is in the isolated mathematical statement " $12 > 11$." Accordingly, it is strictly proper to render " $12 > 11$ " by "twelve to exceed eleven."

Adopting now the method of those who, in "Astronomers declare the sun to exceed the moon," regard the object of "declare" as "all that follows," I propose the total "twelve to exceed eleven" as the object of "equals." Indeed, completing my translation of mathematical into linguistic phraseology, and obtaining "Three to exceed two equals twelve to exceed eleven," I move you that the object of "equals" is "all that follows," and also that the subject of "equals" is all that precedes.

That I have, however, directly antagonized the mathematical view, is obvious. A proportion is defined as an equality—that is, a particular relation—between two ratios. These ratios also are themselves relations, attended moreover by their terms,⁴⁰ and therefore with them constituting thoughts. If accordingly, to mathematical apprehension, total thoughts were what should pose as equal one to the other, they could hardly have been overlooked, being so conspicuously in view. It was doubtless, therefore, advisedly that proportion was defined, not at all as an equality of thoughts (or, say, equations or inequations, as the case may be) but as an equality of ratios—that is, an equality, or special relation, obtaining between a member of one thought and a member of another thought. I find accordingly that, in the procedure of Mathematics, not a total thought, but only a single nucleary member thereof, although unseparated from its fellow terms, is regarded as forming part of another thought.

It appears accordingly that the method of Grammar and that of Mathematics are mutually antagonized. Personally cher-

⁴⁰ Indeed the ratios can not be identified without their terms.

ishing a far profounder respect for the latter science, I shall follow the precedent which it appears to offer, in forming my interpretation of the case in hand.

Abandoning then collective syntax, I shall look for what may be called individual syntax—a sentence-structure corresponding to the structural arrangement of thought-details.

Returning with this intention to my illustrative “Astronomers declare the sun to exceed the moon,” I am prepared to believe that thought expressed by the infinitive phrase is sensed precisely as each member (i. e. 3:2 and 12:11) of the proportion 3:2::12:11—that is, as a nucleary factor (the excess) attended by its fellow terms. In other words I sense the object of “declare,” as if the infinitive phrase were replaced by “an exceeding of the moon by the sun.” That is, the object of “declare” is the nucleary “to exceed” alone (employed as a noun), the latter being, however, attended (as a verb) by what exceeds (“sun”) and what is exceeded (“moon”). As indicated on pp. 134–139, I do not regard the lateral ideas attending the excess as forming part of the central thought (two-thirds of which is expressed by “Astronomers declare”), but only as part of the lateral thought, and therefore also of the centro-lateral thought (expressed by the entire sentence).

This will be more easily seen, if I change the verbal order of the illustration, obtaining

“Astronomers declare to exceed the sun the moon.”

If in this expression you center your vision on the word “declare,” you will see the adjacent words to the left and right so clearly, that we are near enough to the truth in saying that “Astronomers declare to exceed” is in the central field of vision, while “sun” and “moon” are in a lateral field.

You will however perhaps object that in actual practice “sun” appears *before* “to exceed.” But this priority, as it seems to me, expresses merely a choice of the lesser evil in structure-exhibition—a choice quite beside the question, as I will try to establish.

Conceding that mental space has three dimensions—or any larger number preferred—it is obvious that what may be called expressional space has not so much as a single dimension com-

plete; for, especially in oral speech, one word can only be after another, not above or below it, not in front of or behind it. As the flow of words is in one direction only—as a word can hardly be said to stand *before* another which as yet has no sentential existence, and therefore can scarcely serve as landmark for positional relation—it is hardly a transgression of figurative bounds, to say that speech is semi-dimensional. That is, one may, so to speak, proceed along the linguistic line from left to right but not in the reverse direction, and not in any direction perpendicular to that line.

Operating under these embarrassing restrictions, having announced “Astronomers” and “declare,” I should plainly find it advantageous to the recognition of central thought-construction, to bring in at once the remaining central term “to exceed.” But, as our minds are thus far little embarrassed by accumulated thought-material, there is hardly danger that “sun”—if now brought in instead of “to exceed”—will be mistaken as the object of “declare;” and as such a mistake, if made, would easily and promptly be corrected, no important harm is done by following “declare” with “sun.”

On the other hand the recognition of lateral thought-construction—which is no less necessary—is embarrassed by increased accumulation of thought-material (which, if many adjuncts were introduced, would be considerable), and will be particularly aided by the appearance of words for its terms in their natural order.

As to what such order may be, I note that the verb, as relation-namer, indicates a mind-sensation developed by a waning and a waxing idea—or, say, in a mental transit from a first term to a last—or the how-I-feel in mentally passing from one to the other. Relation, in other words, is ultimately sensed as holding *between* its terms; and the word which names it is picturesquely, and so far helpfully, put between the words for those terms. Accordingly, in spite of the prevailing order of words, apparently adopted in the interest of lateral thought-construction, I find no reason to doubt that central thought and its incorporation of what is lateral are rightly indicated by “Astronomers declare to exceed the sun the moon.”

By way of further illustration I note that, given "The storm of yesterday killed a sallow, white-haired stranger of some ninety years," I am content to associate the destructive energy of the storm with the stranger, without regarding it as spread over his sallowness, the whiteness of his hair, and his somewhat extraordinary age. That is, while in a way it may be said that the object of "killed" is all that follows "killed," that total hardly takes the object position collectively, but rather as indicated by ("The storm of yesterday killed [a stranger) distinguished by certain characteristics"]. In other words, the parenthesized expression and the bracketed interlock. The former strictly incorporates the latter only to this extent, that it incorporates its nucleary factor.

So also I construe my leading illustration, as most easily is shown by the diagram:

Astronomers — declare — the sun
to exceed
the moon

of which the horizontal expression includes the middle nucleary element only of the perpendicular. That is, precisely as I negotiate with a corporation through a leading official, so also a central thought establishes a structural union with a lateral, through a leading factor of the latter; and, to any objecting advocate of collective thought-construction, it may be answered that such procedure meets the more important needs. The difference between a thought collectively used, and a nucleary factor attended by its fellows, is the negligible difference between a whole of necessity recognized in its parts, and a part thereof unseparated from the remainder.

To illustrate quite objectively, suppose you ask me to bring you your dog. As a collectivist in syntax, you may wish me to pick up the creature bodily, and carry him. But, for reasons altogether satisfactory to myself, I adopt another method. Catching him by the ear, the tail, the scruff of the neck, as suits my humor, I lug him to his master. What more do you want? Or, again, I am to haul your senseless body out of a pit. Being skilled in cow-boy tactics, I cast a noose around your neck or waist or heels, somewhat as my convenience indi-

cates, and drag you out. Are you not content? Did you expect me to get a stretcher under you and lift you decorously, all together, on an even keel? I have not impaired or ignored your bodily integrity. Indeed it was my confidence that you would hold together that led me to adopt my plan. The result completely vindicates that confidence. I have rescued you in toto.

But, leaving now objective illustration, you perhaps object that, although a pull is exerted on the nuclear factor of lateral thought—a pull which brings that factor into central thought—and although the pull at the same time moves the total lateral thought, it does not however bring the whole of it into central thought. That such is the case I concede, believing moreover that it cannot be otherwise. If rightly argued on pp. 134-139, the complete incorporation of lateral thought in central thought is possible only when the former is so blended as to lose existence as a proper thought, appearing in thought-construction rather in the aspect of a single idea.

We may, however, well believe that lateral thought is not so blended. For, in the first place, words being signs of ideas, the occurrence of the individual words (“the sun,” “to exceed” and “the moon”) establishes the individual thinking of the ideas which they express, at the moment of their individual expression.

Trying now to ascertain precisely how these individually thought ideas enter into thought-construction, I note that the infinitive clearly shows its substantive function in the governing phrase—or, say, in major syntax. As prepositions are followed only by nouns or words at the moment regarded as such, the commonly prepositional English “to” is warning that the following word, or else the whole infinitive phrase,⁴¹ must be construed as a noun. In other languages a similar warning, often additional, is effected by a sometimes inflected article, and even by the occasional substantive inflection of the infinitive itself.

⁴¹ In my illustration it is hardly rational, and would apparently be without a precedent, to rank “the sun” or “the moon” or any pair of words as the object of “declare.”

On the other hand, as a rule, the infinitive makes no effort in the infinitive phrase—or, say, in minor syntax—to show what is its subject, or even, it might be argued, to show that it is itself a verb.

In Portuguese, however, the usual infinitive ending is occasionally followed by suffixed forms of person and number inflection—a procedure which my illustration will reproduce with full efficiency, if I change it into “Astronomers declare him to exceeds thee.”

In the infinitive phrase thus modified, it is plain that the subject of “to exceeds” (allowing the infinitive subject as usual to be in the accusative) is the third-personal “him,” and not the second-personal “thee,” which would require “to exceedest.” Operating thus, the infinitive does its duty by minor syntax with the utmost fulness, and leaves no doubt whatever that, in the infinitive phrase, it is indeed a verb.

At the same time, as shown above, the “to” (or any other expedient employed by other languages) exhibits clearly the substantive use of the infinitive—or else the whole infinitive phrase—in the leading clause. Indeed, as in any well inflected language the subject-place in that clause would be preempted by “Astronomers,” it is plain that the infinitive—or else the whole infinitive phrase—is the object of “declare.”

In determining whether it be the infinitive only or the whole infinitive phrase, that operates as object in the leading clause, I emphasize the order in which the infinitive inflections appear—regarding as such not only the terminal “s” but also the initial “to”—proposing now the question, how far the prior occurrence of an inflection gives assurance of its prior influence on the building of a thought.

Of inflections I recognize two varieties, one of which—for instance the sign of plurality, that of future time, and the superlative ending—expresses what are plainly materials to be used in thought construction. This variety I neglect, as it does not include the infinitive inflections now to be examined.

Other inflections, characterizable as instructional, while adding nothing to materials for thought-construction, show in one way or another how or where in thought-construction a

given element is to take its place. Thus, in "The University teaches students thoroughly," the ending "ly" adds no element of thought to the already accumulated total, but shows that the idea of thoroughness—not available as first or last or mid-term—must associate itself with teaching—not with any other idea.

Now to attach the instructional inflection "ly" to any other word than "thorough," to put it by itself in some other part of the sentence, or even to place it separately after "thorough," would—more or less, according to policy adopted—imperil intended thought-construction. I conclude accordingly (1) that instructional inflections are—and apparently must be—introduced at the moment of their need; and (2) conversely that, if at a given moment, inflection which exhibits particular syntax be introduced, that introduction may be accepted as indicating that such syntax is then and there effected.

Returning now to my modified infinitive illustration, I find that "to exceeds" effects two exhibitions of instruction. As indicated on page 174, the "s" is busy with the minor syntax of the sentence. On the other hand, the "to" is busy with the major syntax. Moreover the "to" precedes the "s". According then to principles of priority indicated just above, it appears that, as the instructional inflection for major syntax precedes the one for minor syntax, so also the major syntax itself is effected before the minor. That is, the infinitive—or else the infinitive phrase—is recognized as object of "declare", before there is any recognition that "him" is the subject of "exceed."

Now before this latter recognition there is properly speaking, no infinitive phrase. For reasons given on page 171 the element "him" indeed is present. I further concede that "to exceed"—without, as yet, the personal inflection—is also present, though I might contend that, in my illustration, "to" establishes, as object of "declare," an infinitive foreseen to be on the way, before its appearance. The "him" and "to exceed" are at the most, however, no more than tentatively ranked as subject and verb thereof; for such a ranking would be overruled by the possible "him to exceedest thee" (For change of word-order, see pp. 131-133.) Meantime the object "thee" has not

appeared at all. Allowing then for considerable difference of opinion, I presumably clash with none in saying that, at the moment in which "to exceed" acquires a place in major syntax, the minor syntax is in the midst of its effectuation. Therefore at that moment no whole infinitive phrase, no lateral thought collectively recognized, much less a blended whole, can operate as a constructional element, because none thus far is completed.

Accordingly my several indications that the object of "de-clare" is either the infinitive or else the whole infinitive phrase, were quite unwarranted. No infinitive phrase as yet being constituted, I am forced to reject the second alternative. Accordingly I hold that—in grammatical parlance—only the infinitive is immediate object of "declare", that—in my own phraseology—only a single nucleary element of lateral thought (in the present case the mid-term) operates as a term (in the present case the last term) of central thought.

In further support of the preferred interpretation it may be argued that it is favored by pre-established linguistic habit. To illustrate the special force of this, suppose that at a sleep-disturbing cat I throw a boot-jack, and that, providentially guided, the missile takes a course that would land it exactly half-way between the offender's eyes. The well-worn question arises now, which way the cat will jump. Excluding every momentary influence except the boot-jack, which may rank as neutral, I presuppose that on several preceding similar occasions the cat has been thus threatened on the right. I imagine that any psychologist would overwhelm me with reasons why, in the present case, the cat will jump to the left. So too I doubt not he would convince me that, for lateral thought expressed by the infinitive phrase employed in illustration, a particular mode of union with central thought will be elected, other circumstances being equal, provided that mode have become habitual, before the development of the infinitive phrase. I do not mean by this to indicate that the infinitive form was late in development, but only that such thought as the infinitive in well-developed speech expresses—namely, the mere conception, as distinguished from the judgment—could not have been so soon linguistically expressed, as was the judgment. For obviously what one is prepared to express as believed to be true, is a vastly more effective stimulus to speech, than what one merely thinks of without belief. To illustrate, let language proper be supposed to begin when, instructed by the observed effect produced on others by his purely reflex cry, the individual utters the cry with the conscious purpose of producing the effect. This beginning will plainly rather occur when I, for instance, sense myself as actually surrounded by wolves, than when I merely imagine such a status; and what I intend to communicate will surely

be my danger vouched for as true, and not a mere unvouched for suggestion. In short, the mechanism of speech was surely developed to express what may be variously known as an opinion, a belief, or knowledge, or a judgment—not however an unendorsed conception or, say, the mere material of a judgment.⁴²

The infinitive was however very possibly employed before the other verbal forms. But, in such employment, no doubt the speaker's belief was either incorporated in the meaning of the infinitive, or regularly supplied therewith—it makes no essential difference which—in order to give to what it co-operated in expressing, a value sufficient to warrant expression. In short, although the infinitive may well have been the first employed verbal form, it must, if so, have been employed first in the expression of judgments—not, that is, in its modern function of expressing mere conception.

First then in the order of linguistic development comes the expression of the judgment. The expression of the isolated conception never comes, for the very reason that it is not the first to come—because it is not worth expression.⁴³ When the conception is expressed, it is as part of a larger thought, of which the fundamental element is a judgment; and just so surely as the simple, in thought as well as in expression, precedes the complex, just so surely the minimal judgment expressible, for instance, by "The sun exceeds the moon" (by whatever form in fact expressed) preceded the extended judgment expressible by "Astronomers declare the sun to exceed the moon." I hold indeed that the expression of mere conception, which must figure only as an element of extended judgment, was not attempted, until the use of means adopted to express the minimal judgment had, by repetition, become habitual.

Now the particular linguistic means employed to express a judgment imply the construction of the judgment according to a particular plan. As I have elsewhere argued, belief in truth or untruth, which being added to a conception makes it a judgment, might have been associated with the total conception (or with its first, or with its final term). In actual practice it was associated with the mid-term or relation. This for present purposes is adequately indicated by the fact, that untruth, expressed by the negative adverb, is made to bear upon the verb; that truth is, as you please, expressed by or implied with the verb; that belief, in well-developed speech, is indicated by a modification of the verbal form—that is, by the indicative mode. In short, when a conception is developed into a judgment—when, in other words, to a conception there is added belief in its truth or untruth—the addition is, in linguistic thought, associated not with the conception regarded as a whole, but with the relation thereof—which latter is of course attended by its fellow terms.

⁴² For the translation of emotion into thought descriptive of emotion, see "Interrogative Thought," page 360.

⁴³ For the poetical use of mere suggestion, see page 120, note 14.

Accordingly when the time arrives for undertaking to use a conception as the would-be term of a judgment, mind is under the influence of a habit pre-established in the adaptation of the judgment to expression—a habit of regarding the conception as a nuclear term attended by its fellow terms.

The influence of such a habit may explain the grammarian's common failure to recognize the adjunctive modification of total thought. To illustrate, in "I rarely lose (or mislay) my temper," it is usually claimed that "rarely" is an adverb modifying "lose", to the exclusion of the actual intention to pose my loss of temper—that is, the total announced phenomenon—as what is "rare". That such indeed is the actual intention, I may claim with something more than knowledge of my individual cerebration. For presumably no one in such a case regards the isolated act of losing as of various species—rare, occasional and frequent—selecting for the case in hand the species best adapted. Rather what is rare is the whole phenomenon of which "I lose my temper" is the detailed exhibition.

That grammarians, in the majority of cases are however right, I see no reason to disbelieve. But they have merely rightly sensed a linguistic operation which itself is strictly wrong—which has failed to carry out original intention.

Linguistic thinking shirks the effort of handling thought collectively, regarding it even inaccurately as a nuclear factor attended by other associated factors. Indeed the action of the mind in such a case has some analogy with that of the hand, as may appear in the following illustration. Suppose you show me a row of three baseballs, the middle one attached by a cord to each of the others, saying "Take them into the other room." To make my illustration adequate, I confine myself to a single transportation, as well as to the use of one hand only. Now I find it awkward, if not indeed impossible, to manage all the balls at once with a single hand. Accordingly I grasp and carry one ball only, relying on the cords to bring along the other balls. While then my activity transports the three balls as desired, it immediately operates on one ball only.

To interpret my parable, every ball is an idea. The united trio of balls is a thought. The cord which joins one ball to another is the indispensableness of each associate element of thought to the nuclear element—for instance, in my illustration, the indispensableness of "sun" and "moon" to "exceed"—there being no thought, but only a fragment, in the absence of either. The moving of the balls is the building of "the sun to

exceed the moon" into structural union with "Astronomers declare". The difficulty of grasping three balls is the difficulty of sensing thought-constituents recognized by particular syntax, as the aggregate prescribed by collective syntax—the difficulty of treating the total "the sun to exceed the moon" as the object of "declare"—or vice versa, the difficulty of regarding the force of "declare" as spread over the total "the sun to exceed the moon." The moving of a single ball, which, however, is attended by its fellows, is the posing of "exceed" alone, as the object of "declare", though "exceed" is not forsaken by its fellow-terms.

To use an even more objective illustration, I seem, in building the infinitive phrase, to think very much as I dress in preparation for a tramp in the brush. Putting on first my canvas trousers, I further strap them about my ankles, and also buckle a belt that runs through the loops of the waist-band. In doing this it may occur to me that trousers, ankle-straps and belt together constitute one nether garment. But straps and belt I actually adjust as trouser-supplements, additions or appendages. In a sense I have donned a single outfit; but I put it on, not at all collectively, but in successive details. And quite analogously, in my sentence-making, I feel that in the word "(to) exceed" I have provided the only proper object of "declare;" while, with "sun" and "moon," I have further provided that object—itsself an action also—with (in form, at least) an actor, and also with that whereon to act. That is, I have added to "exceed" what must rank as thought co-members with "exceed", but not immediately as such with "declare."

I do not however believe that in thought-building the adoption of one plan excludes another from mental recognition at the moment. In the universe of mind you may doubtless have your cake and eat it. While telling you about a collision, I can doubtless be thinking that I have an abominable headache. While thinking of what I have seen as a single detail (the striking) of a collision, further attended by its fellow details, I can also think of what I have seen, as their organically assembled total. As I read in the morn-

ing news that "the doctors are surprised by the invalid"⁴⁴ showing so much vitality", I doubt not the cause of surprise was mentally recognized by the writer as the showing (or exhibition) rather than the invalid. But this recognition found no expression in actually employed words. Correspondingly, in "I have seen an express train strike a freight," while properly only "strike" is recognizable as object in the actually employed expression, doubtless more or less subconsciously or intermittently it is also recognized that what is seen is a total phenomenon.

Subconscious recognition of this sort, foreign to thought as a matter of fact expressed, seems to be the cause of the usual interpretation. All of us presumably set out, in the given illustration, with the intention to express the seeing of a whole phenomenon. As the difficulty of linguistic presentation thickens, we content ourselves with expressing the seeing of a single nucleary element of the phenomenon, this element being joined by its fellows in quite a secondary presentation. The substituted thought-construction meets, however, every important need. We are conscious of no failure. The unimportant change of our intention is forgotten. We fancy we have done precisely what we set out to do. We imagine that we have employed as object of "have seen," the whole of the following phrase.⁴⁵ In fact we have so employed the nucleary "strike" alone.

Viewing now more broadly the procedure followed more especially with lateral thought, I note that the physical act of speech is attended by three distinguishable cerebrative acts.

First, the pre-linguistic. This is usually far from complete in detail, comparing with thinking in preparation for linguistic expression, somewhat as the roughest sketch compares with the finished picture. It is quickly displaced by thought especially adapted to expression. Although available as an

⁴⁴ I believe this construction (?) is not yet attempted with the pronouns—e. g. in this case "him".

⁴⁵ In "Mrs. Robinson is spending a few days in the gubernatorial mansion. He is at present taking the Alaskan trip", no doubt the reporter thought he had provided a Mr. Robinson, or perhaps a governor (suggestible by "gubernatorial") as antecedent for the "He"; but neither strictly enters into thought expressed; for Mrs. R. may be a widow; and the governor may be dead, and no successor installed.

aid to interpretation, it cannot be regarded as what is actually expressed by speech.

Second, the linguistic. This is of necessity analytic, often extremely so. What I think at first as single (though complex) is presented, in the actual absence of an adequate single word for it, by a number of words expressing normally an equal number of ideas. Thus, wishing, at a reception, to speak to you of a particular person—whose name is unavailable, because we do not both of us know it—I cannot suggest him to your mind, except by more or less of his permanent or momentary connotation, analyzed and expressed in detail. Obviously thought of this sort, and not its very different non-linguistic predecessor, must be accepted as what is directly intended by the sentence.

Third, the perspective. This includes, in a collective recognition, each installment of thought delivered—or, say, the total thought expressed by the individual sentence. Of such a total when it is extensive, such a recognition—being in the nature of a bird's eye view—inevitably loses many details. The individual fellow-members of the single sub-thought blend into a sub-whole, which with other sub-wholes coalesces into a minor whole, such minor wholes combining into wholes of major rank. Also, by the aid of this blending process, the gist of one sentence is reinstated—or, it may be, even continued—in another sentence; the substance of a paragraph is incorporated in its successor; indeed, when reasoning and exposition are well conducted, the essential elements of a chapter, or even a volume, have the oneness of a vista reaching far into the distance. See "Thought-Connectives," page 48.

This recognition of thought-masses is, however, an operation altogether different from their construction. To illustrate, when the Creator had completed the world, He recognized "quod esset bonum". He may, moreover, have recognized, in the midst of creative activity, the goodness of what already was completed. But either act of recognition was obviously distinct and independent of the creative act. So also a mere forethinking of the creative act, and the appreciation that it would be good, should rank as mutually independent. The like impresses me as true of such a thinking, and the recognition that creation

thought of (or the thought thereof) would be an organic whole composed of sub-wholes mutually subordinated—the recognition *quod esset unum*. So also the act by which I build together details into thoughts and interlock the latter, and my recognition that collectively the details form a whole whose sub-wholes are perspectively distributed in foreground, background and middle distance—these two acts are no less distinct and separate, than are the act by which I build my house in detail, and my recognition that it consists of basement first and second stories—of front and back and middle rooms—of right wing, left wing, center.

The difference between the linguistic act and the perspective survey, is the difference between my doings and my revision of my doings—a revision complete and final, or partial and interpolated. Collective syntax,—or say the recognition of complex thought as more or less consisting of masses—reflects the perspective survey or revision of linguistic doings, to the neglect of doings surveyed. Particular syntax reflects what may be called the molecular structure of thought—the ultimate elements, their particular thought-memberships and, what is of extreme importance, the ever recurrent interlocking of thoughts, effected by their common factors.

Thought-perspective is readily sensed aright and at will by him who has rightly sensed the mutual bearing of all details. The woods are easily seen by him who comes out from the trees. If my house and yours are alike in detail, they will also seem alike when viewed perspectively at corresponding angles. The converse does not hold. The details unperceived in like perspectives, may not agree on close examination. Collective syntax then is both unnecessary and only in part effective. Particular syntax on the one hand satisfies all needs; on the other hand it is altogether indispensable to complete appreciation of linguistic operations.

Particular syntax, moreover, is all that the sentence directly reveals. To illustrate, “I used my feet because I could not fly,” the thought expressed by which is plainly made up of two, which together form a third, as if I had said “My inability to fly—caused—my use of my feet.” These two, in my

pre-linguistic planning of the total, I doubtless foresaw collectively as first and last terms of the third, and even as blended wholes; and thus no doubt I also sense them in any final or intermediary perspective survey. But the collective or blended view which is taken—be it prevision or revision—is not suggested by my sentence. In a well inflected language you will find indeed sufficient indications that “I” is subject of “used”, and “feet” its object; that “I”, “could” and “fly” are in similar fellowship; that “my” is adjunctive to “feet”, while “not” has a similar bearing on “could”; and that “could” is not only verb to “I” and “fly”, but also, as a noun, the object⁴⁶ of “because”. This however, as I imagine, is all that you find. You find no indication that, in major thought-construction, minor thoughts are used collectively—nothing to embarrass their recognition as nucleary factors attended by their fellow terms.

As I shall later argue, the choice of nucleary factor varies, for different excellent reasons. But when the speaker is influenced merely by the practical difficulty of sensing collectively what in thought-construction he would like to use collectively, that choice is found to fall, with conspicuous regularity, upon the verbal, or say the relational element. Thus, in “I rarely lose my temper” (see page 178), while pre-linguistically conceiving the idea expressed by “rarely” as bearing on a total thought, but electing in linguistic thinking to exhibit that idea as bearing on a nucleary element itself attended by other elements, I select as nucleary the idea of losing. So also, if you asked me what I was talking about, with all existing proneness to make myself the center of the universe, I should not answer

“myself implicated in a loss of temper,” nor

“a temper implicated in my losing,” but rather

“a loss, in which self and temper were implicated”—

a choice in which the major importance of the relation (for man is distinctively a relation-finder), or the conspicuousness of the action which develops relation, may be regarded as the de-

⁴⁶ Such interpretation will be defended in a section devoted to the subjunctive. Meantime it appears more plausibly in the infinitive illustration “por no poder yo volar” (by reason of I not to be able to fly).

termining cause.⁴⁷ In many cases, however, the verbal element alone is available as nucleus. Thus, in "Astronomers declare the sun to exceed the moon," and in "The doctor wants me to eat meat," nothing can serve as nucleus except the verb, without an important and unacceptable change of meaning.

Their inflectional possibilities.

As verbal nouns perform the service of a verb and also the service of a noun, it is obviously possible for them to be inflected for each of the services. Accordingly they offer some analogy with relative words, in the examination of which (see "Pronouns," pages 58-9) some effort was made to show the possibility and even the rationality of double inflection. To illustrate, in "I know a man (who) will help you," the idea named by "man" being thought once only and only once expressed (for "who" does not *repeat* that idea but only *continues* it), but serving none the less as member in each of two thoughts (those, namely, which might be expressed by "I know a man" and "Man will help you"), it would be rational to give to "man" the accusative inflection showing it to be the object of "know", and also a nominative inflection (virtually supplied by "who") showing it to be the subject of "will help".

In such a case the doubly serving word is, in its double clausal membership, one part of speech. In the case of verbal nouns it is two. In the latter case a double inflection is accordingly inflection as two different parts of speech, a type of inflection quite as possible, quite as rational—even more rational, I think—than double inflection of a doubly serving noun. For, with the increase in the possibilities of thought-construction, comes the greater expediency of utilizing every means to make the actual construction obvious.

To illustrate, given "I have seen an express train strike a freight," since "strike" is object of "have seen", it is rational and desirable to give to "strike" the accusative noun-inflection;

⁴⁷ Also the relation alone necessitates companion terms. Thus the presence of > entails the mental presence, say, of A and B, while neither the presence of A nor that of B entails the presence of any other idea.

and, as "strike" performs for "express" and "freight" the duty of a verb, it is rational and desirable to give to "strike" the inflection of a verb.

It would, moreover, be most effective to put the accusative sign, the sign of particular service in the beginning clause, where it would do most good—that is, at the beginning of the inflected word—and to put the verbal inflectional sign, the sign of service in the ending clause, where also it would do most good—that is, at the end of the inflected word.

While such inflectional possibilities have not perhaps been exactly realized, sufficiently close analogy is offered in actual practice by the Portuguese infinitive in which (as noticed on page 174) a substantive inflection at least precedes a verbal inflection.

Double inflection, as verb and as noun, being accordingly conceded as a possibility, it will aid the appreciation of actual hybrid inflection, to examine for a moment the possible inflection of verbal hybrids in its maximum extension.

In this examination let it be remembered that inflections (compare pp. 174–175) serve three different purposes: (1) to furnish elements of thought to be constructed—a purpose effected by the endings of e. g. the genitive, dative and ablative cases, "domini" for instance (as a singular) contributing to thought-materials, not only what is expressed by "master", but also the relational idea expressible by "of"—the inflection being of the type which may be known as *constructional*; (2) to show absolute position of an idea in the structure to be built, the "ed" of "aided," in "Brown often aided his cousin", not only expressing past time, but also showing, so far as it identifies the word as a verb (indicative), that the idea of aid must be used as mid-term of thought to be constructed, no matter with what other words it thereby finds itself associated—the inflection being of the type which may be known as *functional*; (3) to show an idea's position relatively to that of some other idea in the structure to be built, the "as" of "bonas" showing that the idea of goodness must be used adjunctively with some idea conceived as plural, feminine and objective, no matter into what part of thought to be constructed such adjunctive service takes

it—the inflection being of the type which may be known as *associational*; and both this and functional inflections may be known as *instructional*.

The constructional inflections of the individual verb are those which indicate voice, that is, the proverse or reverse aspect of a relation⁴⁸—tense, or the added element of time—assertion, or the added element of the speaker's belief. Its instructional elements are functionally whatever shows its service as a mid-term (usually an inflection primarily employed for another service) and associationally its so-called number and person endings, which show that even with a choice of positions as mid-term it must take the one which will bring it into association with a first term of a particular number and person. These endings, however, do not indicate an actual (*bona fide*) number or person of the verbal idea.

The constructional inflections of the noun are those for number, those for gender and those for the genitive, dative and ablative cases. Its instructional inflections are functionally the nominative and accusative, which regularly exhibit service as first or last term,⁴⁹ and associationally any inflections used to indicate apposition.

Taking Latin as a model, and allowing to the noun *five* cases (the vocative being strictly extra-structural, corresponding neither to building materials nor to their position absolute or relative, but rather to the name of him for whom a structure is to be erected), *two* numbers, and *three* genders; and allowing to the verb *two* voices, *six* tenses (subject to later examination) and *six* varieties of purely formal person and number; it is obvious that a verbal noun which should possess in full the standard inflections of both verb and noun, would have in all no less than $5 \times 2 \times 3 \times 2 \times 6 \times 6 = 2,160$ inflectional forms. Moreover, were the verbal noun inflected to suit the *two* numbers, *three* persons and *three* genders of its object, which is linguist-

⁴⁸ Compare "The book overlies the box" (= the two are in the relation of overlies to overlain) with "The book is overlain by the box" (= the two are in the relation of overlain to overlies).

⁴⁹ Not however service as last term after a quality relation. The last term "red" of "The roses are red" is ranked as an adjective. Compare "The roses have redness."

ically not by any means without a precedent, this total would be increased to $2,160 \times 2 \times 3 \times 3 = 38,880$.

Their actual inflectional varieties.

Obviously the very perfection of such a system of verbo-nominal inflection as should realize all possibilities, operates to bar its adoption, the fatigue of wielding or even holding so vast an implement being unendurable. In actual practice only such inflection is adopted as is felt to be indispensable, with a considerable leaning toward omission of inflection in case of the slightest doubt.

The inflections which contribute elements of thought are actually employed, except in cases in which it is more or less legitimately felt that what they mean can be supplied. Thus in "The expurgation of Mrs. Hemans" (the core of a famous joke of Eugene Field) "expurgation", commonly ranked as a verbal noun, suggests that a publisher omits whatever obscenities may be findable in Mrs. Hemans' writings. On the other hand, the expression "Mrs. Hemans' expurgation by Field" suggests (though not of absolute necessity) a work of supererogation "suffered" by the writings. That is, a single form is used for either voice, distinction being effected inferentially. Other forms, for instance the infinitive, are usually varied to indicate intended voice. Time also, when distinctly thought of, is indicated, as in the present, past and even future infinitive forms. But time is sometimes quite unthought of, as in the case of the so-called "tenseless forms" occurring in verbs of other languages. In such a case the tense inflection is neglected, as in the above illustration, in which indeed the expurgation may be ranked as tenseless.

Passing from the verbal meaning of the verbal noun to its meaning as a noun, I note that the idea expressed by a verb is, in its substantive aspect, commonly and adequately posed as of no (*bona fide*) gender. The idea of number⁵⁰ is inflection-

⁵⁰ I mean the genuine singleness or plurality of what the verbal noun expresses. As expressed by assertive forms of the verb, such number is examined later.

ally expressed, when needed, by verbal nouns of the "expurgation" type. The ideas expressible by case-inflection are usually rendered by one or another preposition, or an inflected article—or both, though also inflectionally expressed with considerable fullness by the Latin gerund, and to some extent by the supine.

Of instructional inflection, be it substantive or verbal, the amount employed varies with the varying need of structure-exhibition, which it will be advantageous to examine later.

It is most convenient to exhibit the inflectional varieties⁵¹ of the verbal noun as forming at the same time a diminuendo series, viewed as nouns—and a crescendo series, viewed as verbs; accordingly:

(1) The noun with merely verb-like meaning.

To illustrate, "Murder is a sin." The distinction between this and the following class of nouns (which take an object or a subject or the one and the other) is difficult and hardly necessary. In my illustration "Murder" may be held by some to be a quasi-synonym of "Killing a man." To such the construction of thought is the counterpart of a genuine verbal noun syntax. Whether such a syntax really be detectable or intended in my illustration—whether accordingly such a word should rather rank as a verbal noun of the following class—whether it should be rejected as not at all a verbal noun—may be left unsettled.

Again, in "The Lincoln murder," some may employ "Lincoln" as a virtual adjective⁵² to "murder", while others may use the latter word in the sense of "murdering", with "Lincoln" as its object. The "Booth Lincoln murder" may intend that "Booth" (like "Booth's") be taken as a virtual subject, or may employ "Booth" as an adjective, leaving it open whether "Lin-

⁵¹ Of these, the following exhibition makes no claim to be complete, nor is completeness vital to mere illustration of method.

⁵² Instead of meaning "characterized by one or more of Lincoln's qualities", the adjectively employed word would in such case mean "distinguished by Lincoln's implication (known to be objective)."

coln" coöperate with "Booth" in adjective function, or operate alone as object of "murder".⁵³

(2) The noun in verbal function.

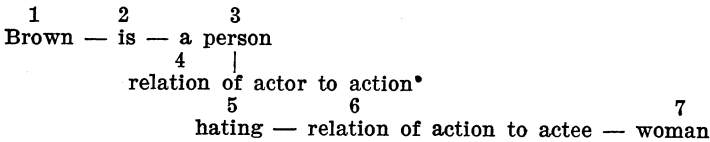
To illustrate, "Brown is a woman-hater" may perhaps be well enough construed by merely regarding "hater" as centrally a noun, in fellowship with "Brown is"—while at the same time operative as a verb with its direct object "woman."⁵⁴

In "Woman-hatred is uncommon" the actor has disappeared, relation being that of action to what it affects.

In "The Lincoln murder," so far as "Lincoln" may be sensed as object of "murder", the latter word again exhibits the act and its relation (of action to its own object) with "Lincoln."

⁵³ In short, I am quite unable to determine whether, in my illustration, "murder" should be ranked as of this or the following class. These linguistic short-cuts are so short, and the syntax indications are so meager, that it is unsafe to claim, for a particular structure of thought-expressed, that it is intended by all or even a majority of speakers. By these short-cuts, only what is adequately known can be indicated with success. Thus, however much you know of Lincoln and of Booth, unless you know the act which my illustration names, you cannot be sure of rightly understanding what it means; for it might be construed as naming a deed of which the two men named were the perpetrators, or of which the two were the victims. Some ideas themselves these short-cuts indicate but vaguely; and they hardly attempt the exhibition of thought-structure. They seem to content themselves with any structure that the facts allow.

⁵⁴ Looking a little more closely, I somewhat fully analyze intended thought, as indicated in the following diagram:



But the very fullness of the above analysis makes it implausible. It is more likely that mental action is briefer, and less accurate. The "person" in the indicated relation with the "hating" seems to pose before the mind as an act-producing actor (an actor producing the act of hating); and, as the act of "hating" further occasions the indicated relation between "hating" and "woman", the "person" may pose as a relation-producing actor—this however only previous to the arrival, on the mental stage, of what is expressed by "woman". On this arrival, somewhat as indicated on pp. 153-154, the relation-producing actor is sensed, without a mental repetition, as the actor-produced relation. In the former aspect the idea is central last term in the thought expressed by "Brown is a hater"; and "hater" is entitled to rank as a noun. In the latter aspect the idea is lateral mid-term between the relation-producing actor of the former aspect and the last term expressed by "woman"; and "hater" is entitled to rank as a verb.

In "The Booth Lincoln murder," actor, correlating act and object (actee) are all presented; but as indicated, it is open to argument that "Booth" and "Lincoln" form a virtual compound, operating adjectively as the distinguisher of "murder".

In "The murder of Lincoln", "murder" indicates again an act alone, the relation of actor to actee (object) being weakly expressed by "of". This "of" in fully inflected languages becomes the case-inflection of "Lincoln", the latter word when thus inflected being known as an *objective* genitive, which is matched by a *subjective* genitive in "Booth's murder of Lincoln." "Murder" thus construed is rankable under (1). Yet the question may be raised whether the analogon of the "of" and that of the "'s" be rightly incorporated with their respective nouns—whether they do not rightly belong to "murder" itself. In Spanish a diminutive inflection belonging with a noun is sometimes shifted to an adjective limiting the noun. The present case may exhibit analogous shifting. The vagaries of the German separable preposition also are suggestive.

With all the above examined kinds of verbal noun the highly inflected languages freely employ noun-inflections, but none, I believe, that are verbal.

(3) The Latin gerund. In this the substantive inflection becomes incomplete, while a closer approximation to strictly verbal methods is effected in the treatment of the object.

(4) The Latin supine. In this the substantive inflection further diminishes, even what survives being sometimes ranked as verbal. Indeed it is eminently natural that, while modern students of the Latin language regard these inflections as the signs of case, others sensed them as the signs of voice.

The strictly verbal function of the supine is, however, not easy to find, unless perhaps one regard the word as expressing action and either actor or actee (or both), as in "Mirabile dictu" interpreted as "wonderful in (any one's) telling (it)," or "Ire visum," "to go for the purpose of (one's) seeing (something)."

(5) The English form in "ing;" e. g. "Eating apples promotes digestion." In this all noun-inflection commonly dis-

appears (But compare "apple-eatings"). On the other hand a virtual verbal time-inflection may appear, as in "having eaten" and "being about to eat." Even voice-inflection is a possibility, as in "Being eaten by cannibals must be disagreeable."

This form of verbal-noun continually reverts to the constructions indicated in (2), as in "apple-eating," "The eating of apples" and "Robinson's eating of apples."

(6) The infinitive. This also as a rule foregoes all substantive inflection, except what may occasionally be offered by the degraded article, as in "Er widmet sich dem Wein trinken." As a verb it usually operates, in dealing with its subject and its object, like the solely verbal forms, except for the common appearance of its subject in the accusative form (Compare pages 157-163) which may be regarded as the business of that subject, rather than that of the infinitive. Time and voice it expresses adequately, though not attempting the associational person-number inflection except in the case of

(7) The Portuguese infinitive. To this, in certain cases, the person-number inflectional endings of the subjunctive are attached. This interesting form, exhibiting the recognizedly substantive infinitive, with a part of the inflectional peculiarity which constitutes the essential ground for differentiating the substantive subjunctive from the infinitive, forms a suggestive connecting link between (6) and

(8) The subjunctive in substantive function. That this is felt to be, in one of its functions, at least a part of a noun, is indicated by the fact that in Spanish, etc., the clause in which it stands is frequently preceded not only by the substantive-clause sign "que" (Latin "quod"), but at the same time also by the article. The history of the sometimes so-called sentence-article "that" and its Teutonic collaterals, and the suggestion offered by the Anglo-Saxon "for thy thaet," etc., confirm the thoroughly substantive function of what I have striven to exhibit as rather the nucleary—in this case the verbal—element of the lateral clause, than the clause regarded as a total. Accordingly, in a sentence containing a substantive subjunctive clause, I diagram construction as follows:

my son
|
The doctor — desires — (that) eat
|
apples

in which eating, recognized as rather a relation-forming action, is a last term in the central "The doctor desires eating"—and in which eating, recognized as rather an action-formed relation (Compare pp. 153-154) is mid-term in the lateral "my son eat apples."⁵⁵

Of the several verbal-noun constructions, I do not mean to argue that, in the exhibition of thought, they operate without

⁵⁵ For the verb at first unassertive but secondarily assertive, see pp. 129-133, the indicative form in such a case being properly employed; for the first-required, unassertive verbal value is readily inferred from context, while the second, assertive value can only be known from its expression.

By way of further comment on the subjunctive used as a noun, I offer, as an illustration of the most refractory type, "It is desirable that you take exercise." Of this I admit that, in such thinking as precedes the special thinking for expression, your taking exercise is, in a blended form, the intended subject. I also admit that, after the communicational act is ended, and independently thereof, your taking exercise may blend again into a mental unit, felt again to be the intended subject. Moreover the "It" is operative in the interest of that subject, as holder of its place, or even as announcer that in syntax it ought collectively or blendedly to operate as one—not however expressing it in any aspect, and not even effectively prefiguring it; for in your mind the intended subject makes no kind of appearance, until exhibited in detail.

Giving now to "that" its original demonstrative value (or letting it merely act as an instructional sign that your taking exercise must somehow operate as a substantive element—such a sign however introducing nothing into the structure of thought), I have in succession the substantive "It", the substantive "that" and the substantive "you take exercise". Now the subject place is taken by "It," all other places also being filled. In order then to enter syntax, "that" must obviously be to "It" in one of the several relations suggested by "apposition"—say the relation of equivalence. Also the would-be subject (and therefore substantive) "you take exercise" must be in similar relation with "that" or with "It" (if, as above suggested, "that" be ignored) or must be directly subject of "is" (if also "It" be ignored). It is required then in any case to use a thought, while in the very act of its construction, as an element of another thought. The difficulty of infinitive syntax, about which centered the discussion of pp. 165-184, is accordingly repeated. No recourse seems available except, as before, to enter subjunctive thought into other thought as a nuclear factor, its verb in the present case becoming in more central syntax a noun, while in lateral syntax, as still a verb, it maintains association with a subject and an object.

a difference. Thus to illustrate, "You see that the birds (are) eat(ing) insects," suggests by means of "that" a blended view of the birds' activity—a view which, however, I cannot discover to be taken, until the expressional act is concluded, and which therefore does not seem to me to affect the syntax of the subjunctive clause or the mode of its affiliation with "You see." Accordingly I restrict myself to saying that the given expression encourages at first a view of the later revealed phenomenon, as an unknown unit necessarily to be made known by means of its constituents. The following expressions rather suggest to me, at the outset, constituents which, after the sentence-end, may be combined into mental units. Each one I consider in its lateral aspect only, without regard to the prestige with which the verbal element of each is invested by admission into central syntax.

"You see the birds (to be) eat(ing) insects," so far as unaffected by emphasis, appears to me to pose the birds, the eating and the insects on a footing of absolute parity.

"You see their eating insects" leaves to "eating," "insects" (and their action-to-object relation) their undiminished eminence, while reducing "birds" (and their relation to the eating) to a secondary adjunctive rank.

"You see them insect-eat" appears to operate analogously, "insects" (and the relation holding between eating and them) being reduced to a secondary adjunctive rank, while "them" and "eat" retain their primacy. "You see their eating of insects" seems to subordinate both the birds and the insects to the eating.

Obviously, once a noun, the subjunctive like any other verbal noun is theoretically able to perform all functions of a noun. It may enter syntax not only as the object (or the subject) of a more central verb, but also in other functions unconsidered here. Although it is uninflected as a noun, the unaided subjunctive verbal noun may be sensed as dative of purpose, ablative of cause, concomitant, etc. Aided by a preposition, it operates with all the powers of the prepositional phrase, playing its part in syntax as adverbial and sometimes

even adjective clause or—as some will have it—sentence. The adjective clause is, however, more often developed directly by the aid of a relative word, as indicated in the following section.

So far as observed, the subjunctive is not inflected in its substantive service, except by the use of a merely case-exhibiting article, or that of a primarily appositional demonstrative accomplishing a virtually inflective result. Verbally, on the other hand, it has the full inflectional scope of the indicative, including in Spanish even the expression of futurity measured from a point of reckoning in the past, as will be indicated later. Of all the forms of verbal noun, the subjunctive is accordingly the most completely equipped for verbal service—a fact of fundamental importance, as one of the grounds of its employment, which will be indicated in the chapter on “Choice of Verbal Forms.”

THE VERBAL ADJECTIVES.

Intending, in what remains of this chapter, merely to give a hint of what might be accomplished in the study of further hybrids by applying suggested methods, I present remaining topics with increasing incompleteness. How the now to be examined hybrids operate as verbs, can hardly need investigation, after what has been said of the analogous operation of verbal nouns. How they operate as adjectives was indicated in the examination of relative words (See “Pronouns,” pages 95-102), it being therein concluded that any verb may operate as a virtually adjective limiter of its subject (or object), being at the same time attended by its object (or subject) and indirect associates.⁵⁶ Discussion of inflectional possibilities would almost be a repetition of pages 184-187. Accordingly I turn at once to

⁵⁶ Thus, in “The book you gave my brother,” *your-giving-to-my-brother* operates as distinguisher of the intended book from other books.

Their inflectional varieties.

In exhibiting these it is convenient to present, as a verbal crescendo, a diminuendo series of adjectives, beginning with (1) the adjective with merely verb-like meaning.

To illustrate, "Many insects are destructive." Of this expression, the final word, invested merely with what might be known as verbal potentiality, or better perhaps the souvenir of one-while function as a verb, performed by its progenitor (destroy), has obviously no claim to rank in situ as a hybrid, unless it be construed as meaning "destroying *something*," in which case it is merely an abbreviation of

(2) The adjective in verbal function.

To illustrate this form of verbal adjective, let

- (a) "Harris studied insects,"
- (b) "Insects are destructive," and
- (c) "Destructiveness affects plants"

express three judgments which are to be remodeled into a single extended judgment. Accordingly let "insects," which is factor of both (a) and (b), be thought but once. Moreover, for convenience of further exposition, let the "are destructive" be replaced by the clumsy "are characterized by destructiveness." To make expressional purpose single, let also the assertion of (b) be omitted. Thought as thus far reconstructed, may be indicated by the expression (ab) "Harris studied insects characterized by destructiveness."

This thought contains, it is true, a central and a lateral section; but, for present purposes, the whole may be regarded as central in comparison with the still more lateral (c), which now shall interlock with it.

To effect this interlocking, let the "destructiveness" common to (ab) and (c) be thought once only, and—with a view again to singleness of expressional purpose—let the assertion of (c) be omitted, producing (abc) "Harris studied insects characterized by destructiveness affecting plants."

The comparatively central "characterized by destructiveness" is merely a round-about for "destructive," though the latter

rather implies⁵⁷ than expresses the qualitative relation indicated by "characterize." On the other hand, the lateral "destructiveness affecting" adds to "destructiveness" the relation between it and what is destroyed.

Thinking still of "destructiveness" as quality attributively used—that is, in this case as an adjective—and thinking also of the "affect" relation, but not twice thinking the "destructiveness," and not expressing its qualitative relation with "insects," I use the word "destructive" to exhibit both my thinkings, as in the diagram:

Harris studied insects
 destructive
 plants,

in which I intend the "destructive" to take the place which might be taken by "destroying." That the meanings of "destructive" and "destroying" are identical, I do not insist, admitting that "destructive" rather indicates what poses as a quality regarded in its active consequences, while "destroying" indicates an action posing in a qualitative relation. This difference indeed I regard as the *raison d'être* of the doubtless verbally functioning adjective "destructive."

In English this adjective operates peculiarly, requiring change of order and union with its object. Accordingly, "Harris studied plant-destructive insects," in which, allowing for some dimness of syntax-perception, I regard "destructive" as an adjective to "insects," while also verbal in its government of "plant," because containing in its meaning the relation of action to its own actee.⁵⁸

⁵⁷ One reason for supposing this may be found in the use of adjective words in the predicate. Thus in "Roses are *red*," the relation of object to its own quality—subsisting between "Roses" and redness—finds expression, as it appears to me, in "are", which means to me "are characterized by", the proper "conversion" of the proposition taking the form of "Redness characterizes roses." If then in such usage the adjective does not assume the burden of relation-expression, it would seem to be an a priori probability that also, in "*Red* roses are not rare," it does not do so.

⁵⁸ A precedent for supposing the verbally functioning adjective in such a case to incorporate in its meaning the relation of action to actee, may be found in the general consciousness of language students, who with the utmost pains distinguish active from neuter verbs.

In the forms thus far considered, verbal inflection, even in highly inflected languages, is almost completely neglected. The verbal time-inflections do not need to act; for what is dominantly posed as qualitative, poses also rather as of all time, or of no time at all (or time inferred), than as of absolutely present, past or future time. Voice, indeed, is often indicated, as shown by the expression "Insect-destroyable plants." In this, it is true, the suffix "able" is not usually ranked as inflectional, but is distinguished as derivative. I do not wish, however, to neglect main issues, for any present effort to establish the futility of such distinction. Enough that verbal change of form, to indicate an element of meaning, is a possibility, and is occasionally utilized.

Of inflection to show that a verbally functioning adjective, in lateral function, is operative as a verb, I find no reliable cases.

Verbal inflection for person and number, to indicate with what the hybrid word must be associated—that is, what may be known as associational or sympathetic inflection—is omitted, as unnecessary, since in well inflected languages the now considered verbal adjective is provided with an equally effective adjective inflection for gender, number and case.

In addition to this associational inflection, the verbally functioning adjective exhibits by its form its function as an adjective, and not for instance as a noun or adverb, as appears in comparison of "destructive" with "destruction" and "destructively." Whether variation of this sort shall rank as derivative or inflectional, I make no effort to decide.

Passing to adjective variations of form, designed to indicate a change of meaning, I merely note that they occur. As to comparison, or change of form to indicate, in what is ranked as quality, degrees of its intensity, absolute or relative, in ascending or descending scale—whether it shall rank (so far as manifested by the verbal adjective) as derivative or inflectional—whether any form analogous to "bigger" be one or the other—and what, in either case, to do with forms analogous

to "biggish"⁵⁹—and why—let the devotee of Grammar determine.

(3) The participle: e. g., "Harris studied insects destroying plants."

Syntax in this case remains as in case (2): "destroying," as an adjective in central clause, expresses (see page 155, note) as a quality of insects, what poses as a relation-forming action (compare pp. 153, 154) or activity, while "destroying," as a verb in lateral syntax, expresses what poses rather as their action-formed relation to what is destroyed.

Adjective inflection continues as before, except that I do not remember a case of "comparison;" and verbal inflection extends to time, while becoming more distinctly recognizable in the form of "voice."

(4) The subjunctive in adjective function: e. g., "Harris studied insects which destroy plants."

To this illustration it will perhaps be objected that "destroy" is indicative. Having later comment to make on the subject of modes, I restrict myself for the moment to noting that, in my use of words, no form of the verb, however spelled and however pronounced, will be called indicative, unless it is assertive. Now if in the illustration "destroy" is assertive, the case in hand is merely that of two self-sufficient judgments. These judgments, equally expressible by the separate sentences "Harris studied insects" and "Insects destroy plants," dealing both of them with insects and the same ones, advantageously reject two thinkings of these insects in favor of a single thinking, becoming therefore a continuous mental act expressed by a continuous utterance, although they do not become a single judgment. This utterance accordingly, as the embodiment of two expressional purposes, must rank as a polyphrastic—not a monophrastic—sentence; that is, it must not rank as a single sentence, but as two interlocking sentences. In it neither "(which) destroy" nor "destroy plants" is adjectively used with

⁵⁹ Such are developed by the diminutive suffixes of the Romance languages.

“insects,” any more than is “Harris studied.” Unless then “destroy” be unassertive, the illustration is irrelevant.⁶⁰

Languages which freely use the subjunctive are more alert in distinguishing assertion and non-assertion, than languages which use that mode but little. The former therefore offer better illustration of the case in hand. For instance, in French, asserting that “I am looking for a servant,” if (a) I wish without sentential breach to continue with a second assertion (of that servant’s faithfulness), I use a relative clause containing the indicative. But if (b) I merely wish by means of a relative clause to restrict attention to a servant of a particular type (which I may or may not further pose as hoped for, wished or intended by me), I put the verb of such a relative clause in the subjunctive. Accordingly, (a) “I am looking for a servant (actually known by me) who *is* faithful;”⁶¹ (b) “I am looking for a servant (the creature of my fancy) who *be* faithful.”⁶²

While in English the use of “be” in the second expression is doubtless quite unusual, I doubt not that the users of our language who have learned in other languages a keen perception of the difference between assertion and non-assertion, are well aware that, in admitting “is” instead of “be,” they by no means intend assertion.

As for the undeveloped perception of the unpracticed mind, it doubtless parallels the mental unawareness of him who synonymizes “shall” and “will,” or him who all the days of his life makes use of “time” for either “Zeit” or “Mal” (“temps” or “fois”), with never an adequate recognition of the difference in his mental operations.

Ranking then the verb of the relative clause in my illustration (“Harris studied insects which destroy plants”) as unassertive, I cannot see that “destroy plants” is any more able to stand alone upon its individual merits than the “destroying

⁶⁰ The possible successive assertive and unassertive values of “destroy” (see pp. 129–133) do not need to be discussed again.

⁶¹ Je cherche un domestique qui *est* fidèle.

⁶² Je cherche un domestique qui *soit* fidèle.

plants" of (3), which obviously, thus isolated, would not have linguistic existence. Either of these expressions must, to live, attach itself to another expression that is self-supporting—that is, the expression of a judgment. Of "destroying plants," which coheres by virtue of the action-to-object relation between destruction and plants, the element "destroying" clings to "insects" (in "Harris studied insects") by virtue of the relation of object-to-quality conceived between "insects" and "destroying." Procedure of the subjunctive "destroy" I hold to be the same.

As argued in the examination of Relatives (see "Revision," etc., pages 49-52), the "which" does not repeat at all the idea expressed by "insects"—for such a repetition would break the oneness of total thought (see page 117)—but orders that idea, which has already been a member of a prior group ("Harris studied insects"), to be maintained in mind while a second group of fellows gathers about it. At the same time "which," in a well inflected language, exhibits the rank (case) of that idea, among its fellows of the second group. Both these operations of "which" however being purely instructional, the word may be neglected, in any effort to establish actual materials of thought expressed, precisely as in the case of the language which has no relative pronoun. Accordingly I reduce my illustration to "Harris studied insects destroy plants."

In this it is plain, I think, that two thoughts are interlocked, as indicated by

(Harris studied [insects] destroy plants.),
in which, as "insects" is object of "studied," it would be natural merely to add that, by means of "destroy," "insects" and "plants" are put in the relation of destroyer-to-what-is-destroyed.

But in the making of the centro-lateral total diagrammed above, a nucleary lateral factor ("insects") may be said to have been drawn into central membership. Now the pull which, so to speak, has moved the idea expressed by "insects," also stretches out the thought which "insects" aided in expressing. An original "insects—relation of destroyer-to-destroyed—

plants” becomes “insects—relation of actor-to-action—destruction—relation of action-to-acted—plants” (See pp. 148, 149). That is, we are now to recognize a relation between “insects” and “destroy,” and another relation between “destroy” and “plants.” As the latter relation is incorporated in the meaning of “destroy”—or as, in grammatical terms, that word is made to govern an object—“destroy” in its lateral use with “plants” may rank as verbal.

If “destroy” is further to rank as a verbal *adjective*, it must be such by virtue of ranking as an adjective with “insects.” That so indeed it does, may appear as follows.

Doubtless to exact perception (compare page 155, note) the relation between “insects” and “destroy” is that of actor-to-(his-own-)action. But this relation is often linguistically sensed more vaguely as merely a species of the broadly and vaguely conceived attributive relation, such adjectives as “fearful,” “desirable,” “cheap,” “conditional,” etc., emphatically indicating the extensive scope allowed, in linguistic operations, to the attributive category. Accordingly, to rank an actor-to-action relation as a substance-to-attribute relation, is merely to make a habitual passage from the specific to the generic—to lapse from precise recognition into recognition less precise. In regarding then the unassertive “destroy” as adjective to “insects,” I merely repeat the operation which language has carried even further in the adjectives “carnivorous,” “ichthyophagous,” etc.

My interpretation seems to me to be confirmed by the intention of the illustration, which I should paraphrase by “Harris studied insects characterized by destruction of plants” or “by plant-destruction.” It has moreover the convenience of assuming a single mode of thought-construction in

Harris studied plant-destructive insects.

Harris studied insects destroying plants.

Harris studied insects (which) destroy plants.

The subjunctive thus employed does not to my recollection make use of any adjective inflection. What may be said of its verbal inflection is quite analogous to what was said of the subjunctive used as a verbal noun, on page 194.

THE VERBAL ADVERBS.

These, as their name suggests, are operative centrally as adverbs, and only laterally as verbs. To exhibit this, if possible, more clearly than was done on pages 152-156, I offer a type of thinking rather possible than actual or even plausible. Approaching this by easy stages, suppose I hear from the street a noise of the sort that commonly attends a misunderstanding between a dog and a cat. I may say

“That is a sound like-the-sound-of-fighting” or, more briefly,

“That is a fighting sound” or, less conventionally,

“That sounds fightingly.”

Having settled on the thought-form indicated by the last, severely strained expression, if now I wish to bring in dogs as actors, and cats as actees, I must associate them with fighting, already used adverbially, but now required to act as also verb to subject “dogs,” and object “cats.” To indicate this mental operation, I form the diagram

dogs
That sounds fightingly
cats.

The sporadic verbal adverbs have, so far as I remember, no inflection, except the sign of adverbial use in syntax, and may be regarded as important only to completeness of view.

SECONDARY HYBRIDS.

As the merest hint of linguistic possibilities, I offer the case of what might rank as a verbal noun, performing further and more central service as an adjective. Approaching this case also by small advances, I note that in

“Men to eat their dinner”

the act of eating, for all that is indicated, is purely verbal. That is, “to eat” expresses an action-formed relation between “men” and “their dinner,” and does not serve in any other indicated function. But, in

“Men’s eating of their dinner,”

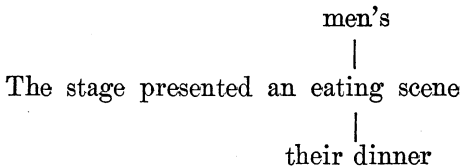
relation-expression may be held to be divided between the *apostrophe s* (expressing the relation of owner to property,

figuratively replacing that of actor to action) and the *of* (which expresses the relation of action to actee). "Eating," being stripped of all relation-naming, is a mere action-namer, substantively posed in its relations to "men" and "dinner." But in the expression

"Men's eating their dinner,"

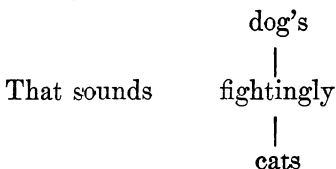
while "eating" still may be regarded as a noun to "men's," it is verb to "dinner," having assumed the burden of showing, between the act which it names and "dinner," the relation of action to actee—or in other words governing "dinner" as its direct object. That is, "eating" in this expression operates as a verbal noun.

Wishing now to utilize this verbal noun in a description, and wishing it to operate in that description as an adjective, I illustrate the structure of my thought by the diagram



in which the "eating," serving in its fellowship with the central "scene" as an adjective, while also laterally a noun with "men's" and sublaterally a verb with "their dinner," may rank as a verbo-nominal adjective.⁶³

A little further stretching of imagination might also develop a verbo-nominal (or from a different point of view, a nomino-verbal) adverb, as in



⁶³ If "eating" be felt to be a verb with "their dinner" more centrally than it is a noun with "men's," its rank would rather be that of a nomino-verbal adjective.

CHAPTER III.

CLASSIFICATION OF VERBAL FORMS.

THE CONJUGATIONAL AGGREGATION

Under this advisedly disparaging title I invite attention to what appears to me irrational in what may be called the conjugational roster.

As ground for antagonizing what at least enjoys the rank of honored tradition, even though its acceptance be not prescribed by linguistic orthodoxy, I note that neither form nor meaning consistently controls its membership, but sometimes one and sometimes the other. Thus the conjugation of the verb for being, in languages of various times and peoples, admits to fellowship words of the completest formal difference (e. g. "am," "was" and "have been"), and doubtless very properly; for, while they differ one from another in the time to which being is referred, no one of them exhibits diminution, augmentation or any other variation of being itself.

Contrariwise in Greek the preterite $\alpha\iota\delta\alpha$ in the sense of "I know," is admitted to the conjugation of the verb which only means "to see," it being alleged that "having seen, I therefore know"—an inference doubtless somewhat justifiable, but hardly more so than that "having fasted, therefore I hunger." Accordingly forms which mean respectively seeing and knowing have no better right, on the ground of meaning, to appear in a single conjugation, than forms which mean respectively fasting and being hungry; and so long as the latter are not united in a single conjugational system, it would seem advis-

able to separate the former, even though in form they be identical. For, if form-identity prevail over difference in meaning, "wax" for instance in the sense of grow, and "wax" in the sense of cover with wax, will form a single conjugational system, to the presumable discontent of every grammarian.

It further appears to have been at least undesirable to join with the conjugation of affirmative verbs, the forms which exhibit negation, even when, as in some of the languages, negation (if I remember aright) is accomplished by inflectional variation of the affirmative form. The difference between eating and not eating is essentially the difference between eating and fasting. Whatever rational ground exists for admitting "not eating" to the conjugation of "eating," equally favors the admission of "fasting," and even "not fasting." So long as "fasting" is not admitted to the conjugation of "eating," there seems to be no better than a very imperfect, formal reason for ranking affirmative and negative systems in a single conjugation.

Again the difference between eating and fasting is fully equalled in importance by the difference between eating and being eaten.⁶⁴ The reasons which favor the conjugational separation of the former pair, would seem to apply to the latter. Accordingly it does not appear to have been advisable to join the "voices" in a single conjugation.

Conjugation commonly admits occasional forms expressing (as one of their meanings) "customary or repeated action."⁶⁵ Thus of "jacio" (I throw) the Latin grammars offer "jaciebam" (in the sense of I repeatedly threw) as a conjugational form. Per contra, "jacto," which may also mean repeated throwing, is ranked as an independent verb. Grammar can, however, hardly

⁶⁴ As I am ready to argue in another publication, it is, in the voices, strictly not at all the action named that varies, but the implication of the action personnel. Between "the cannibal dined on missionary" and "the cannibal was dined on by a missionary," the difference intended hardly bears on the nature of the dining, but on who was diner and who dinner—i. e., whether relation expressed by the verb is that of diner to dinner, or vice versa.

⁶⁵ I momentarily pose the verb, for convenience, only as exhibiting action, without intending to neglect the less obvious meanings which it also renders.

be held responsible for this inconsistency, in view of the embarrassment offered by the coexistent "jactabam," "jactito" and "jactitabam." But Grammar is apparently responsible for ranking "jaciebam" as a *tense* of "jacio." So far as tense be taken as expressing merely present, past or future time of occurrence, "jaciebam" cannot be distinguished in tense from "jeci," either being available for any date admissible with the other. Apart from difference in time consumed—a topic for later examination—the difference between them is the difference between "throwing" and "throwings." In short the so-called tense is a sporadic inflectional form, which exhibits as *plural* an act not so regarded by other forms of the verb. As such, it is to be distinguished with some care from the *so-called plural* forms of the verb, which merely require the verb's association with a plural subject. The existence of these purely instructional "plurals" leads me, in view of possible confusion, to object to the practice which admits to conjugation those otherwise entirely admissible bona fide plural forms.

At this point one encounters terminology of quite elusive and presumably inconstant value. "Progressive" action, in the sense of making progress from a beginning toward an end, implies "duration" or "continuation;" but the converse proposition does not hold. "Completion" is ambiguous, applying not only to the case in which nothing remains to do, but also to the case in which merely nothing more is done. I "complete" my eating either because I am no longer hungry or because the supply of food is exhausted, recognizing both an ideal and a practical completion of the act. Without attempting to enforce or apply these distinctions, I content myself with a rather rough-shod treatment of the two ensuing topics.

The verbal form for bona fide plural action (e. g. "faciebam") often neglects plurality, adding instead to the constant meaning of the verb the idea of continuation—a change of value not so violent as might perhaps at first appear. For the continued—or, say the long, in either time or space—is in much the same relation to the uncontinued—or say the short—as the many to the one. Both the continued and the many may

be regarded as respective augmentations or extensions of the uncontinued and the one.⁶⁶

Even verbs which express an action virtually instantaneous are figuratively made to express an act extended over considerable time, facilitating thus the time-coincidence of one such action with another. To illustrate, the arrival of the Humane Society's agent and the single kick that I give my dog, consume perhaps each one of them so little time, that it is hardly plausible to pose them as exactly synchronizing. The difficulty is that of lodging my bullet in your visiting card at twenty paces—a difficulty relieved by stretching the target, or by substituting, say, the door of the barn. Quite analogously all the difficulty of synchronizing kick and arrival may be met by spreading one or the other over considerable time. Accordingly, "The agent arrived while I was kicking the dog."

As however the amount of time consumed by an action, whether bona fide or imaginary, has nothing in common with date of occurrence, it is plainly quite irrational to rank the form expressive of (continuance) duration as a particular tense of the verb. Whether the act regarded as continuing should rank as any sort of variant of the act not so regarded, and whether correspondent verbal forms should be included in a single conjugation, may be examined to better advantage in connection with acts regarded as beginning, and acts regarded as ending.

Beginning and ending form, with continuing, a categorical trio, apotheosized in the several aspects of the triune Hindoo Brahm, as Brahma the creator (beginner), Vishnu the preserver (continuer) and Siva the destroyer (ender)—re-emphasized in the classic Clotho, Lachesis and Atropos—of which the recognition of any member implies the recognition of the other two. Accordingly this inveterate analytic habit of thought ap-

⁶⁶ The kinship of number-extension and mass-extension may also be exhibited by nouns, the plural "fishes" indicating rather repetition of a type—or, say, a numerical count—while the also quasi-plural "fish" may be construed as indicating the more than one in the aspect rather of augmented bulk. Compare with "a fish", "a dozen fishes" and "a barrel of fish."

pears to require that the verb which admits to its conjugation forms intended to express the one, should also admit the forms intended to express the others.

Grammar however is by no means consistent. Forms for beginning, known as inchoative, it gathers into the separate conjugation of what it ranks as an independent verb. Forms for ended—and forms for continuing—action it associates with those which exhibit the constant meaning of the verb without the idea of beginning, continuing or ending.

So to misshape the mental eye as to reproduce the distorted vision which betrays the pseudo-science in further procedure, is perhaps impossible. Somewhat however as follows Grammar seems to have celebrated. First of all the ending of an act and the ended act are confounded. (1) "I completed falling" and (2) "I completely fell" are seen as one.⁶⁷ Again, from completely falling it is but an easy step to its immediate sequel "being down," expressible by "am fallen," which indicates a status resultant from a completed fall, itself resultant from the completion of the act of falling.

In terminology Grammar thrives no better than in discrimination. A given verbal form, conceived as indicating action continuing in the past (for instance "faciebam") is called imperfect, presumably because the completing or perfecting of the act remains unindicated. For it can hardly be the space of time required for the act, that is conceived as uncompleted, as this on occasion may be distinctly shown to have lapsed in another century—a thousand years ago; and the conception of the time required for the act as, in a former century, uncompleted, is a little too refined for linguistic usage. The space of time required for the act accordingly is completed, or perfectly past; but the act itself may be uncompleted or imperfect—not only at the moment in which it is sensed, but forever; that is, it

⁶⁷ For distinctly expressing (1) there seems to be no special form. "I fell" can hardly be construed as expressing any analytic element of falling—either its beginning, continuing or ending. (2) has been held to be expressed by "I have fallen," though personally I confess a complete inability to find in "I have fallen" any distincter expression of completion or completeness than is findable in "I fell."

may never have been carried to completion. Accordingly it is the act itself and not the time it occupies, that presumably accounts for the name "imperfect." Analogously the verbal form conceived as indicating action ended in the past (for instance "feci") is said to be in the perfect tense. As before, the time of the act is perfectly past, and therefore cannot be the ground for giving this form a different name. The act itself is however in this case, if you stop to analyze it, doubtless begun, continued and completed or perfect. Accordingly in this case also it is the completeness of the act itself, and not the completeness of the time it occupies, that accounts for its name, it being known as "perfect."

But an action conceived as completed in the *remoter* past is said to be of the *pluperfect* tense, an expression which offers several interpretations. (1) That an act be more than complete, is hardly conceivable and not, I think, intended. (2) The like may be said of the completeness with which the time required for the act has elapsed. (3) Yet obviously of two actions or two times occupied by action, both completely past, the one may belong to a remoter past than the other; and this it is, presumably, that is intended and alone intended by the word *pluperfect*. It appears accordingly that completeness and remoteness from the present have been rather mixed in the cited naming of past tenses.

My aim in seeking to establish the confusion of tense (or date of occurrence) with the several stages of occurrence, has been to discredit the authority of Grammar. Further means of doing so are findable in several confusions of tense with mode, in the sense in which Grammar conceives the latter.⁶⁸ But, without the aid of these, the already cited errors may be held to free the student of Grammar's classification from any allegiance to tradition.

⁶⁸ Thus, for instance, Grammar's perception appears to be at times completely baffled by the rather treacherous succession of dissolving mental views suggested by the series "*future*—not yet realized—*unexisting*—unknowable—unknown—unassertable—unasserted—*subjunctive*," of which the italicized elements have been alone enough to lead a multitude into the pit.

Utilizing this freedom, I note imprimis that, in spite of the age of the categorical trio (beginning, continuing and ending) and although all actions doubtless may be conceived as beginning or continuing or ending in the present or in the past or in the future, the trio is not, in languages generally, recognized with any regularity. Most commonly indeed it seems to me to be quite ignored. I say "I breakfasted at eight," with no more thought of beginning, continuing or ending, than I give to the muzzle, barrel and butt of my rifle, when I say to you "Take the gun." Special forms expressing initial, intermediate and terminal stages of activity are sporadic, and on that account extremely subject to misinterpretation, as, in the absence of sufficient series, their like and unlike elements fail to be emphasized by repetition. Their admission to the conjugation of the verb with merely constant meaning, is accordingly not only indefensible, but also a probable and indeed an actual source of confusion.

Again, it is not so natural as might at first appear, to regard the stages of an act as variants of the act itself. The tendency is rather the other way about. What might be exhibited for instance as eating in the inceptive stage, is more commonly exhibited as an act of inception which inaugurates an eating, presumably continued and concluded. Accordingly, "I began to eat" and not "I accomplished the initial stage of eating" or "I ate initially," or any linguistic equivalent thereof. Thus exhibited, "beginning to eat" is rather perhaps a variant of beginning, than a variant of eating.

Indeed to conceive the part as merely a variant of the whole is not the linguistic habit. Sunrise, daytime and sunset you do not put in a single class with day. "Bite off," "chew" and "swallow" will not class with "eat." It is apparently inexpedient to include in the conjugation of "to eat" the forms which express that act as beginning, continuing or ending.

It is in the category of mode that conjugation exhibits the most vexations confusion. If mode be based on the adding or not adding of belief to, say, the dictionary meaning of a verb,

the case is simple: There are two modes—the assertive and the unassertive—the latter being subdivisible, as later indicated, first according to the verbal idea's membership in thought, and again according to inflectional outfit.

If per contra verbal forms containing further additions to dictionary meaning be regarded as further modes, I see no theoretical limit to their number. If such there be, it has hampered Grammar very little. All together, grammars thus far examined exhibit more than a score of modes. As an illustration of their genuineness, I cite what may be known (the actual name declining to recur to me), as the "as if" mode, or system of forms available in expressions of the type "My brother acts as if he were ill." Mode for condition and mode for conclusion not contenting the modal adept, a special mode is invented to serve in what apparently is not perceived to be the merest abbreviation of "My brother acts as he would act if he were ill."

Abstracting from such little known and less accepted modes, I pass to the examination of modes more commonly recognized, which however also impress me as irrational, beginning with the imperative.

To illustrate, the expression "Rise!" The equivalent of this, in highly inflected languages, is formally differentiated from its conjugational associates, retaining however a formal resemblance thereto, sufficient to warrant its admission to their conjugation so far as any, the most obvious, formal kinship can be recognized as alone sufficient ground for admission. As indicated however on page 204, I recognize no value in kinship of form, except when attended by all-important kinship of meaning. Indeed, in illustration, I shall consider kinship of meaning even unattended by kinship of form, the latter being always readily conceivable as coincident, in view of the accidental formal similarity to which words are notoriously subject.

Examining then the meaning of the imperative "Rise!" (See "Interrogative" pages 397-401), I offer in definition "I wish (command, etc.) you to rise" (or "That you rise is my wish,"

etc.). Compared, as so defined, with "me to wish you to rise," the so-called imperative is distinctly assertive and accordingly indicative. What is asserted is however by no means rising, but obviously wishing. The fairly consistent usage of speech accordingly justifies the assumption that, in the expression "I wish you to rise," the wishing alone is purely verbal, the rising being a verbal noun employed as the immediate object of the wishing. To rank my wishing your rising as a mode of (your!) rising, appears to me no more to be commended than to rank my wishing a mutton-chop as a mode of mutton-chop. If wishing a mutton-chop must at any cost be ranked as a mode, it would apparently be better to rank it as a mode of wishing; and the like may be claimed of wishing your rising.

Again, whatever reason may be claimed for ranking my wishing you to rise as modal, may with rather greater force be urged for ranking my causing you to rise, as in "I raise you," as also modal. This indeed has been done in the grammars of some languages. These again, however, have committed the error of ranking raising as a mode of rising, which to say the least is rather difficult. It would be far more rational to rank it as a mode of causation.

As indicated, "Rise!", if ranked as a mode, will rationally be conceived as a mode of wishing. But as I am able to wish for anything under the sun, the variety of wishing modes is obviously so great, that conjugation of the single verb "to wish" would surely so increase the bulk and consequent price of grammars, as to effect a serious decrease in the number of their readers. Pro bono publico accordingly, if for no other reason, the verbal forms which stand for wishing should not be admitted to the conjugation (or declension) of what is wished.

The optative, whenever it incorporates into its meaning the idea of wishing, also (being essentially imperative) has no legitimate claim to enter the conjugation of the verb expressing what is wished. When the optative, no longer including desire, is governed by a word of desire (expressed or understood) or any other word, it fairly ranks as a (tense) form of the subjunctive.

The potential mode, exhibited by "That may be true" (Note the student's "Cela soit vrai" based on the spurious definition of "soit" so often given in grammars) is lost in "Cela peut être vrai" as well as in "potest." That is, the idea of possibility, whether expressed by an added verb ("peut") or by a recognizedly different verb ("potest"), is in French and Latin not regarded as developing a mode of "to be." If a mode of anything, "may be" (compare "may die," etc.) is a mode of possibility and not a mode of being, and as such may include the idea of belief or reject it, thereby laying claim to appear as indicative, subjunctive, infinitive, etc., as the situation of the moment indicates—accordingly not a mode, but in its allowable scope a conjugation complete in itself.

The so-called conditional mode (Compare "He *would* come if he could"), by which I mean the mode employed in conditioned statements—that is, in conclusion—I shall later exhibit as a possible tense of any mode,⁶⁹ and accordingly foreign to the topic of the moment.

Interrogative conjugation is best appreciated in the light of the simple indicative and imperative forms. To illustrate, the series (1) "You rise." (2) "Rise!" and (3) "Rise you?" (or "Do you rise?") may be regarded as asserting (1) that you rise, (2) that I wish you to rise and (3) that I wish you to inform me as to your rising. The imperative is accordingly a pregnant indicative, and the interrogative a pregnant imperative. (See "Interrogative," pages 401 and 410.) So far then as augmentation of meaning offers a valid objection to the inclusion of (2) in the conjugation of (1), so far, and even further, a greater augmentation of meaning offers more valid objection to the inclusion of (3) in the conjugation of (1).

Resuming what has been said of the accepted conjugational system, I object to (1) a general irrationality, neither form nor meaning consistently controlling its membership, and (2) an irrational admission of

⁶⁹ Compare "I expected him *to come* if he could," and "I looked for his *coming* if he could," in both of which I intend the condition to bear on his action only—not on my expecting.

- (a) negative forms,
- (b) interrogative forms,
- (c) passive forms,
- (d) forms for repeated action,
- (e) forms for continued action } forms for initiated action
- (f) forms for completed action } being excluded,
- (g) imperative forms,
- (h) optative forms,
- (i) potential forms,
- (j) conditional forms, so far as given modal rank,
- (k) and many other so-called modal forms.

So far as these objections be well founded, they exhibit as a veritable medley, a bewildering multitude of verbal forms which, under the name of conjugation, quite too long have masqueraded as a system.

RATIONAL SYSTEMS.

Recognizing that it is vastly easier to disapprove an accepted classification, than to produce in its place another more worthy of acceptance, I wish the following suggestions to be taken strictly as suggestions only.

I.

If all the verbal forms remaining, after the omissions indicated in the preceding section, be admitted to a single genus, species and subspecies may be formed as follows:

As some of these forms are verbal in the expression of central thought only, while the others are verbal in the expression of lateral thought only, the former may be known as central verbs, and the latter as lateral verbs. As the latter again at the same time serve as other parts of speech, and the former serve as verbs only,⁷⁰ the two might be also known, the former as pure or genuine verbs, and the latter as hybrids—or again

⁷⁰ The possibility of nominal verbs, etc., indicated on page 114, I do not now consider.

the one as verbs and the other as verbals. Moreover central thought, as previously indicated, must be a judgment, or in other words requires assertion; and it has happened, though by no means of necessity, that assertion is effected only by that element of central thought-expression which is called a verb. Per contra, strictly lateral thought is not a judgment, or in other words is not asserted by any of its expressional elements. (See further page 234, note, and page 242.) The central verbs are accordingly assertive, while the lateral verbs are unassertive; and by these names it is best, perhaps, to know them.

The assertive verbal forms moreover lend themselves to arrangement into time-groups known as tenses, which may for convenience include what in certain languages is known as the "tenseless form of the verb."

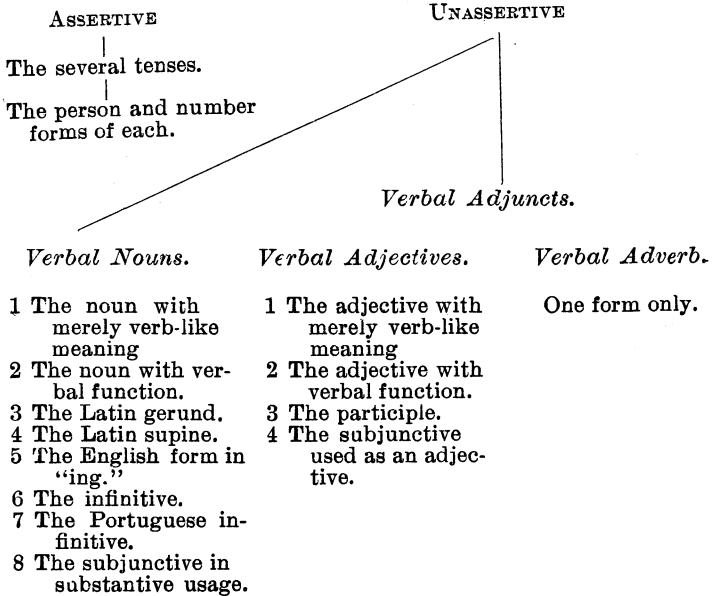
The forms of each assertive tense are further grouped according to their number and person inflections, which show with what manner of subject they must be associated.

The unassertive forms of the verb are properly classified in the second instance, according to non-verbal function, as verbal nouns, verbal adjectives and verbal adverbs, of which the last, so far as observed, exhibit only a single form.

The many forms of verbal noun, and those of verbal adjective, are further classified according to the more or less of inflection, verbal and non-verbal, which they respectively exhibit.

In the following tabular form, presumably incomplete, the verbal nouns exhibit at once a diminuendo of substantive inflection and a crescendo of verbal inflection; also the order of the verbal adjectives conforms to decreasing adjective and growing verbal inflection. For the sake of brevity, their occasional well-known variations for tense, case, etc., are unnoted.

TABLE OF VERBAL FORMS



While different languages exhibit the several species and sub-species listed, in greater or less profusion, and while each species and sub-species offers more or less of formal variation, little if any difficulty attends their exact appreciation, except perhaps in the case of tense.

Meaning by tense the variation of the verb, to express, in crude approximation, date intended, and excluding all idea of singleness or multiplicity of occurrence, of time occupied, and of beginning, continuing or ending, I note that time is conceived as consisting of a past and a future, divided by an instant known as the present.⁷¹ Thus, confining attention to the indicative mode, I find that "I ate," "I eat" and the periphrastic "I shall eat" exhibit the action named, as occurring respectively in the past, in the present or in the future—or, say, at a past, a present or a future date.

⁷¹ Linguistically however the present is often conceived as having more or less duration, consisting of the actual present and more or less of the past, or more or less of the future, or more or less of each.

As simple reckoning of this sort must of necessity be prior to whatever is more intricate, let the time-divisions noted bear the name of *primary*. As further reckoning will be found to base itself upon them, they may also be known as *basal*, *fundamental*, or say *absolute*. As suggested by the expressions "primary" and "absolute," the reckoning of time may also be *secondary* or *relative*. Instead of adopting a moment absolutely present, past or future, as itself the date of an occurrence, I may make a use of such a moment, as a temporal landmark or reckoning-point, to which I regard the occurrence as relatively prior or coincident or posterior—that is, relatively past or present or future. Thus, in the historical reckoning of time, the birth of our Lord and Savior serves as point of reckoning, to which the discovery of America is sensed as posterior. Now "posterior to" is "future as reckoned from" a given point in time. That point of reckoning being itself in the past, the discovery is accordingly in what is commonly known as the future from a past reckoning-point, though better knowable perhaps, more briefly, as the post-past. Analogously, the tense of eating in "I was to eat," and in "I said six hours ago that I should eat in two hours," is also the post- or future-past, an interpretation familiar to every student of the Romance languages.

Conversely, the Punic wars, regarded from the historical reckoning point, are in the tense which is variously known as pluperfect, anterior past, remoter past, or past from a viewpoint in the past, but more simply still as the ante-past.

Again, not only a past, but also a future point of reckoning may be adopted, developing an ante-future and a post-future, exemplified by "I shall have eaten"⁷² and "I shall be about to eat.

The present-past and the present-future, which would only repeat the simple past and the simple future, require no comment.

⁷² The ante-future value of this expression is obvious when dates are supplied, as in "Tomorrow at 9 A. M. I shall have eaten my breakfast at 8 A. M."

The use of a relative tense, as itself the point of reckoning for what is sub-relatively past or future, is sporadic only, its possibility being illustrated by "I had been about to eat." The further possibilities exhibited by "I had been about to have eaten," etc., are, so far as observed, entirely neglected in linguistic practice. (But, in the time-correlation of several verbs, compare "We believed him to have been about to confess to have regretted his not having planned to claim to have desired, etc., etc.")

Degree of remoteness from the chosen point of reckoning is occasionally indicated. For instance, "I have eaten," developed perhaps by analogy with "had eaten" and "shall have eaten," indicates in English a less degree of pastness than "I ate"; but as, in the use of correspondent forms, the other languages exhibit notable inconsistency, it may be neglected.

Listed in chronological order, the tenses appear as follows:

- (1) Ante-past, e. g. "I had eaten."
- (2) Past, e. g. "I ate."
- (3) Post-past, e. g. "I was to eat."
- (4) Present, e. g. "I eat."
- (5) Ante-future, e. g. "I shall have eaten."
- (6) Future, e. g. "I shall eat."
- (7) Post-future, e. g. "I shall be about to eat."

The imagined modal force of the post-past, on which some comment was foreshadowed on page 213 may be explained as follows: Of two phenomena let one (men's being horses) appear as condition, and the other (men's eating oats) as conclusion; and let the condition rank as untrue. In cases of this sort the condition is commonly conceived as past. The reason for this it is unnecessary to establish.⁷³ Granted the

⁷³ The shadow at least of a reason is apparent. Thus, that men be horses is, so far as accumulated data indicate, untrue. Yet, if to all futurity be given the chance to make them horses, the obviousness of such untruth is somewhat lessened. This loss of obviousness it is the part of rhetorical prudence to avoid. It is better not to give to time the chance to turn the untruth into truth—better not to use the future tense.

Of the remaining tenses—past and present—the latter is exposed to the risk which attends all incomplete observation; and observation in the very nature of the case can never be carried out completely to the

fact that the condition is posed as past, the conclusion will be conceived as in the post-past.

The reason of this is apparent to the most hasty observation. The conclusion which is realized a long time after its condition, thereby forfeits something of impressiveness. If I threaten you by saying "If you don't give up your purse, you will in 1950 be a dead man," I fail to cause you serious alarm. To impress you forcibly, I even violate all common sense, by substituting "You *are* a dead man." In general, to maintain its vigor, a conclusion is put in that tense which most closely follows the tense of the condition.

Now, the condition being put in the past, the tense which allows the closest sequence in time is the post-past, or future measured from that past. For, whatever be the time elapsing between a period in the past and any other subsequent period, the post-past alone can certainly include the initial moment of that time. Accordingly, my illustration may be completed as follows: "If men were horses, they would eat more oats."

That the verb of the conclusion in this case has complete assertive intensity, although by the condition restricted in scope—and that it should accordingly rank as merely a tense-form of the indicative (and not at all as of another mode) even when, as in Latin, it is of the subjunctive form—has been argued at some length in "Interrogatives," pages 393 and 397, note. Long employment of "would eat" in usage of this nature has however dimmed perception of its value as only a tense. Such perception is easier in the Neo-Latin forms of the type exemplified by "mangeraient," of which the meaning, historically established beyond a doubt, is "were to eat," and which accordingly is plainly a future indicative reckoned from a point of starting, in the past. Indeed the assertive meaning, which should rank "would eat" as an indicative form, is plain

present instant. "Remoter districts" are always still to be heard from. The untruth of men's being horses, though confirmed by all reports thus far received, may have been overthrown by information still on the way. It is again the part of rhetorical prudence to put the untrue condition in that part of time in which it may have at least the look of being history. It is better then to use the past.

enough in "You wouldn't eat more, if you had it—Yes I *would*."

That this tense might also appear in any of the hybrid forms of the verb, is obvious; that it sometimes actually does so, is illustrated by the occurrence of a post-past in the Spanish subjunctive.

II.

More strictly considered, the admission of the verbal noun or the verbal adjective or the verbal adverb to the verbal inflectional system, is distinctly irrational. As previously argued, these forms are only secondarily verbal. That is, their verbal function is confined to thought which is lateral to the thought with which their function is substantive or adjective or adverbial. As varieties, they are accordingly varieties rather of nouns or adjectives or adverbs than of verbs. This indeed is sufficiently indicated by their very names. Precisely as the phrase "a reddish blue" exhibits a particular shade of color rather as a variety of blue than as a variety of red, so also the phrase "a verbal adjective" exhibits a word as rather a variety (verbal) of the adjective than a variety (adjectival) of the verb.

Accordingly, as the more completely rational exhibit of verbal forms—or, say, as the proper conjugation of a verb—I nominate a system containing only the various tenses of the indicative mode, each tense exhibiting its several person and number forms.

The forms of the verbal noun, excluded from this system, might be exhibited as variants of the noun.⁷⁴ Better still they would rank as an altogether independent system. The like would be true of the verbal adjective forms and the single form of the verbal adverb.

Such an arrangement would in one particular conform the policy of language science to that of other sciences, for instance Botany and Zoology—the policy, I mean, of multiplying gen-

⁷⁴ "Striking" for instance would rather rank with the substantive "stroke" than with "I strike."

era—the policy, in other words, of reducing each genus, until the members of each genus are unmistakably homogenetic.

Even in linguistic science, Lexicography exhibits, at its best, a striking adoption of this policy. Better, it is felt, augment the number of meaning-groups, until each meaning-group be homogeneous—containing only directly or collaterally kindred meanings—even though thereby the number of meaning-groups be greatly multiplied, and even though the resultant necessary increase in the number of respective symbols for meaning-groups, require that what is in form a single word, be, in its different meaning-presentations, recognized as two or more independent linguistic entities.

Accordingly, a recognition of the existing conjugational total as comprising the variant forms of several independent words—a recognition of so great a number of these words, that each one's share of the present miscellaneous varietal whole shall stand for a meaning-group beyond a peradventure homogenetic—such a recognition is backed by excellent precedent. In following this precedent, Grammar need not fear the charge of hasty innovation. Not to consider two thousand years of absorption essentially without elimination—of growth without pruning—Grammar has stolidly retained its past unmodified amid the changes which in fifty years have reconstructed every other science, even in its foundations, down to the very footings. The little concession suggested might be helpful to Grammar, in making language-study more endurable by rationally minded students, who at present, with other embarrassments—not to say compunctions—are bewildered by a procedure which defines the verb as the word which asserts, while admitting among its variants forms which make no assertion—a procedure, that is, which seems to recognize two classes of assertives, those which assert and those which do not.

CHAPTER IV.

CHOICE OF VERBAL FORMS.

Under this title I have in mind the field of inquiry suggested by the typical question: "Why is such and such a verb in the subjunctive mode?" Without however intending to revive the torments of "oratio obliqua" or any other instrument of class-room inquisition, I wish to find for questions of this sort some answer other than "According to Rule so-and-so."

I used, when a school-boy, to be taught that, in dependent clauses, the Latin language uses the subjunctive after verbs of fearing, or—to speak a little more conveniently—that when a dependent verb expresses what is feared, it is put in the subjunctive. This statement, as I plan to show a little later (pp. 242–244), is by no means altogether true. Letting it however for the moment pose as true, I note that such a statement has no value as an explanation. Masquerading nevertheless as such in actual class-room practice, it illustrates a pernicious mental tendency, which it is—or ought to be—a principal effort of academic training to overcome.

To clarify the situation by the aid of an objective illustration, suppose that, starting for his office, Brown falls down the steps which lead from the door of his house to the sidewalk; and suppose you ask of me, who know him intimately, why he fell. If I now answer "His leaving the house is always followed by a fall," it surely needs no argument to show that matters are by no means mended. All that I have done is to pluralize your observation; for it is not contemplated that one house-leaving differ from another in explanatory value. What-

ever shortage of such value there be then in a single leaving of the house, is twice as great in two house-leavings; and the more the phenomena recorded by my generalization outnumber the one phenomenon observed by you, the more I have by my ostensible explanation increased the difficulty of explaining. The general statement of Brown's mishaps not only does nothing toward explaining any one of them, but also, introducing a total still more difficult to explain, augments the embarrassment of the investigator; and the last state of that man is worse than the first.⁷⁵

My illustration seems to me, however, to parallel exactly the procedure of at least a considerable number of Grammar-teachers. If your school experience tallies with my own, we were allowed, if not distinctly encouraged, to regard the rule of linguistic usage as furnishing the cause of the particular linguistic occurrence. Given the question "Why is this verb in the subjunctive?" we answered "Because it expresses what is feared"—or even "Because it follows a verb of fearing." That is, of two phenomena succeeding regularly one upon the other, the earlier is the cause of the later. In other words, "post hoc, ergo propter hoc." Or if anyone object that "succeeding" should be replaced by "attendant," I offer the greater absurdity of "*cum hoc, ergo propter hoc.*"⁷⁶

CONDITIONS OF CHOICE.

Choice of verbal forms implies, in a language, a development sufficient to afford an opportunity to choose, and, in the individual, a knowledge of the language, sufficient to permit a

⁷⁵ That the general statement has a stimulative value is obvious, the regular sequence of two phenomena suggesting causal relation into which, in some way, each of them enters.

⁷⁶ Such experiences—and their name is legion—invite a chapter on the mental risk attending exposure to academic language-teaching—a risk that is largely neutralized, no doubt, by the severely rational elements of the curriculum, scientific, mathematical and philosophical. Unfortunately, however, he whose mental dangers are thus escaped is commonly left with a distrust of language-study, so pronounced as to deprive it of his support; while he to whom the severer forms of reasoning are repellent, he who can view inveterate error with the eye of untroubled faith—he it is, that becomes the devotee of language-study, the recognized apostle of linguistic doctrine.

using of the opportunity afforded. Language being therefore examined in its maturer stages, and the individual being considered rather as the linguistic master-workman than as a mere apprentice, it still is worthy of remark that well-developed language may retract an offered opportunity and also that the master-workman's choice may otherwise be vitiated—even nullified.⁷⁷

In examining the former case, it must be recognized that linguistic life implies linguistic growth—but not of necessity always in all directions. In any language neither dead nor dying, the inventory of ideas available for thought-construction will show no doubt from time to time a gain in number and in quality. On the other hand, the English language, for example, though very much alive and making gratifying gains of that description, has for generations hardly invented or extended any plan of combining ideas into thoughts. That is, the architecture of thought has not advanced in scope or type. What is more immediate to my purpose, added means of indicating architecture have not been found. Various influences—tribal, sectional, professional, of sex or caste—have even operated to reduce their number and their potency.

Such results, familiar in the case, for instance, of defective verbs,⁷⁸ though fostered by the various influences above suggested, often look, no doubt, for their beginning, to the merest accident—say even blundering—which will perhaps appear more clearly in a blundering into usage that is new, than in a blundering out of what is old. To illustrate what I may call creative blundering, I cite an amusing linguistic treasure-trove of recent date. To make this intelligible, let it be remembered that General Burnside, whose picture during part of the Civil War was everywhere, wore lateral whiskers of a partic-

⁷⁷ Strictly speaking, choice implies co-recognition of more than one activity as possible—not merely a preconception of what one does, but also a preconception of what might be done but is not done. I shall however include in this discussion occasional cases in which a preconceived activity is carried out because per se approved, however incompletely at the moment other possible activities be recognized.

⁷⁸ Note the awkwardness of many substitutes for "I can't now, but hope to *can* to-morrow."

ular cut. These in his honor were known as "burnsides," and imitated by a numerous body of admirers. The general's fame however did not maintain itself, his name surviving chiefly as the symbol of a whisker type, which little by little even lost the special character required to make of it his capillary monument.

By the merest slip of tongue—or possibly an error of profounder sort—this word assumed in someone's mouth the form of "side-burns." To him who for the first time heard it, "side-burns"—promptly associated with the proper object, by the aid of circumstance—was accepted in the sense of "burns" or whiskers, of perhaps a special order, growing on the sides of the face. Indeed it may be assumed that even he who was familiar with "burnsides," but had no knowledge of the General or his whiskers, was converted, "side-burns" having a convincing formal analogy with "side-whiskers."

This neologism, already very much in vogue, especially among the rising generation, needs but another accident to give it general prevalence. Once let loose upon the stage in a popular play, or in the columns of a widely circulated magazine or daily, it may enrich the English language with an important addition to its tonsorial vocabulary.

As intimated just above, it is doubtless not only possible to blunder into usage that is new, but also to blunder out of usage that is old. To illustrate, accident pure and simple may surely bring it about, that I hear on twenty successive occasions the expression "I expect that he will come," without once hearing the essential equivalent, "I expect him to come" or "I expect his coming." Being given in the use of words to following blindly the lead of others, I unconsciously neglect and even altogether abandon the latter expressions. Under my influence, suppose that my wife and children do the like—that my family dominates my clan—that other favoring circumstances spread my idiosyncrasy to all the community in which I live. Let now another accident—it may be literary, social or political—augment extremely the importance of my community in the English-speaking world. Just as the altogether extra-linguistic incident of Prussia's elevation to the hegemony of central Eu-

rope, displaced the speech of Hanover by that of Prussia, so also the expressional habit of my community may become the universal custom of the English language.

That thus, in moments of linguistic folly, modes of speech are abandoned, whose loss, in moments of after-wisdom, may be keenly felt, is indicated by the following expressions, of which, in my own linguistic environment, those in parentheses are obsolete or obsolescent.

3 modes	{	I expect that he will come—him to come—his coming.
	{	I believe that he has come—him to have come—(his having come).
2 modes	{	I fear that he will come—(him to come)—his coming.
	{	I look for (that he will come)—him to come—his coming.
	{	I say that he will come—(him to come)—(his coming).
1 mode	{	I want (that he come)—him to come—(his coming).
	{	I enjoy (that he come)—(him to come)—his coming.

The individual abrogation of choice, which in preceding paragraphs has been examined in its development into general linguistic loss of opportunity, will plainly, in the vast majority of cases, go no further than the individual or an unimportant group. The number of these cases gives them however some significance.

To examine choice-abrogation of another sort, supposing the individual to have passed beyond the stage of ignorance or dim perception of his opportunity to choose, his choice may still be vitiated by motives not linguistically worthy, as for instance a silly craving for the unusual or even altogether novel. Such a craving doubtless may for the moment extend the practical scope of his linguistic powers. Ultimately, however, being apt to close his eyes to more usual modes of expression, this crav-

ing tends (when once the no longer novel is abandoned) to restrict or even nullify his choice.

Such desire to do what others *rarely* do, is more than offset by a tendency to do that *only* which others do. The ordinary expressional method of others dominates the individual, forestalling choice, not only when the method is, but also when it is not, exhibited formally in a general statement—say a rule.

In the former case, the numerically unimportant users of a language who consciously obey a rule, no more exert a linguistic choice than he who obeys an order to be silent. To gain a teacher's approval, to escape his disapproval, to avoid conspicuousness, to side with a legion of predecessors, the language-user abrogates what might have been a choice⁷⁹ between linguistic possibilities, in favor of what may be called a choice between choice and imitation. Rather, it may be said, he makes no choice of his own, but adopts the choice of others. At least his choice is secondary; and, being void of any genuine expressional motive, it may be neglected in favor of that bona fide prior choice of which it is the merest reflection.

In the latter case, the doing of what others do is, rather, subconscious. To illustrate this, desiring ultimate eternal happiness, and—as a colloquialism puts it—"saying whatever comes into my head," it is eminently possible that I use the words "I want to be an angel." For, beginning in early childhood, I have, at one time and another, read or heard those initial words of an infants' hymn presumably scores of times. Accordingly the "path" or channel between a mental status and a particular expression, is in this case deeply worn. Given then the postulated mental status, the cited expression ensues by a process rather reactive than elective. If you ask me why I used the particular expression, I properly answer that I couldn't, or certainly didn't, help myself. Precedent has in

⁷⁹ To illustrate, intending to express in French what is expressed in English by "If I liked him, I should invite him," I am keenly aware that my hypothesis will not endure assertion. Accordingly my natural choice of mode would lead to "Si je l'aimasse . . ." By rule, however, I am bidden to forego the use of the regular subjunctive form, and to substitute what seems at first to be an indicative—namely "aimais"—but obviously is not indicative in the sense of accomplishing assertion.

this case operated independently of any conscious recognition on my part. Almost I may say that, in using this expression to the exclusion of another, I have not done anything, but rather that, in either sense of the phrase, I have been done for; choice has failed to be exerted; the case may be excluded from the field to be examined.

It appears accordingly that choice in many cases, even in the presence of existing opportunity, is not exerted. To this concession, however, little importance needs to be attached. It merely admits that, so to speak, the hundredth sheep has gone over the stile, under the influence of the ninety-ninth, or that of the preceding ninety-nine, or the transmitted influence of the leader. It does not apply to the act of sheep number one—in every way the most important member of the band—the one which most would be investigated by a rational student of sheep-procedure.

Quite analogously, complete investigation of the choices made between the several verbal forms, would pass beyond the conscious or unconscious imitator, and over preceding imitators, to the original chooser; and in examining him we should certainly raise the questions when and where and how the forms originated, between which choice could be made, as well as precisely what thought-elements and thought-architecture the several forms originally indicated, and how these elements of thought and this thought-architecture came to be developed.

A search for the answers to all these questions would involve some danger of being lost in the linguistic wilderness. There is abundant opportunity for safer investigation, in the causes which now determine the permitted and actually effected choice between today accepted verbal modes of expression. Of these causes I put first in order and importance the

INFLUENCE OF THOUGHT-CONTENT.

By the content of thought—or *what*, in other words, I think—I mean the materials or constituent ideas of thought, as distinguished from its architecture and also from the indication of that architecture.

Of the infinite variation in the personnel of thought-constitueny, I propose to examine chiefly that occasioned by the presence or absence of the speaker's belief in the truth or untruth (the being matched or not, in external reality) of what he intends to express. The occurrence or non-occurrence of this belief, in the speaker's mind, cannot perhaps directly be controlled; but its incorporation into what the speaker elects for expression is an altogether different matter, and doubtless quite within the speaker's jurisdiction, as will be somewhat fully indicated in another connection. Meantime, in the examination now to be undertaken, I confine myself, for the moment, to minimal thought, by which I mean such thought as cannot be reduced without its ceasing to be a thought.

Such a thought, when void of belief, is not expressed, as I have elsewhere argued at some length, except in the poetical vein. To illustrate, suppose that you are ill, and that you dread the outcome of your illness. As your physician, I should hardly set before you, unattended by belief, the thought expressed by "you to be better." If, however, instead of tantalizing you with a mental picture pure and simple, I could add the assuring element of my belief, as in the expression "You are better", I should be warranted in saying so. In short, in the every-day matter-of-fact use of speech, it is the speaker's conviction—and conviction I say instead of knowledge, as much apparent knowledge is illusory—that invests his thought with value.⁸⁰

On the other hand, in the poetical vein, a thought may be offered for the sake of its beauty or otherwise attractiveness, apart from any utilitarian estimate of its value. Thus "A night in June—a rising moon—a warm wind from the south" may on occasion be preferred to "The night was one in June; the moon was rising; and a warm wind was blowing from the south." Yet in the former utterance I not only do not express

⁸⁰ The difference in practical value between what is believed and what is unattended by belief, is recognizable even when belief is indirect in its bearing on the mental counterpart of outer reality. Compare "me to hope you are better" (which does not vouch for my hoping) and "I hope (i. e. believe the truth of my hoping) you are better."

belief, but also I do not, to my knowledge, even think of belief as part of what I wish to express, that utterance being accordingly the faithful indicator of my meaning.

But in non-poetical speech, as indicated, minimal thought of necessity includes belief. The double possibility of including, and omitting belief, will not accordingly be found except in extended thought, or thought consisting, in other words, of two or more constituent minimal thoughts. Confining attention, as in previous cases, to centro-lateral thought, of which a single constituent must—and no other may—contain belief, I note the possibility of making either constituent central—the other being lateral—and the corollary possibility of including belief in either constituent.

To illustrate, "It is possible that your son be delayed" expresses an extended thought consisting of two interlocking thoughts, which, developed into judgments, may be expressed by "Your son is delayed" and "Being delayed is possible." Now, in the extended thought, the once-to-be-expressed belief may associate itself with either constituent thought. That is, the extended thought may take on either the already noted form, expressed by "It is possible that your son be delayed," or the different form expressible by "Your son is possibly delayed."

This choice of belief-location is plainly, for the total extended thought, a choice of arrangement or architecture—a choice, in other words, of structure. For each constituent thought, however, it may be regarded as a choice of materials—that is, an election of thought-content, its influence in determining verbal forms-to-be-employed being therefore rankable under the present title, as an influence of thought-content.

In linguistic practice, so far as known to me, it has so happened that only verbal forms possess the power of expressing belief, and, of the verbal forms, those only which are known as assertive. Accordingly the presence of belief, in thought to be expressed, determines the use of an assertive form of the verb. Per contra, the absence of belief restricts the use of

verbal forms⁸¹ to those which are unassertive. Choice, accordingly, once affected between the presence and the absence of belief in thought-to-be-expressed, the correspondent use of assertive or unassertive verbal forms is a linguistic corollary. That is, the case is parallel to that exhibited by "statue" and "torso," of which the latter stands for less than does the former—of which accordingly that one must be employed, which more correctly indicates the mental content.

Doubtless, however, if the speaker recognizes in advance the advantages and disadvantages attending possible means of expression, he may, for the sake of rhythm or rhyme or euphony or any of a dozen other reasons, first of all make choice of an assertive or an unassertive verbal form. In such a case, in the particular of containing or not containing belief, the content of thought would be the corollary of that choice. Such initial choice of verbal form is however obviously exceptional—and indeed abnormal—implying, as it does, an obedience to the injunction "Think what you say," instead of the traditional injunction "Say what you think." Moreover, even when the content of thought has been determined thus, it no less in its turn determines again the use of assertive or unassertive verbal forms. For obviously, whatever be, for instance, the motive that has led me to adopt for expression the judgment expressed by "I want my dinner," I am not linguistically free to use the expression "me to want my dinner."

Accordingly, neglecting such procedure, and centering attention on the determination of verbal form by pre-established content of thought, I wish to emphasize the effectiveness of such determination. To illustrate, suppose I wish that, through your agency, my table stand a little nearer to my chair. The act by which you carry out my wish, I shall conceive as caus-

⁸¹ That non-verbal forms may also be employed, is obvious, but irrelevant to the matter in hand. Thus, for instance, instead of the unassertive verbal relation-namer used in "the trees surrounding the house", I may substitute the also unassertive prepositional relation-namer used in "the trees around the house," the relation being in either case approximately that of circumference to center.

ing motion; and obviously I may conceive this motion either with or without the attendant idea of direction toward myself. In the latter case, so far as my words be true to my mental operation, I simply *must* say "*Move* the table nearer to my chair," instead of saying—as, in the former case, would be required—"Bring⁸² the table, etc.," an expression which distinctly indicates direction toward myself. Again, it is plain that I may conceive your action as effected by your extensor muscles, or as effected by your flexors. Also I may neglect the operation of your muscles altogether. Accordingly my motion-word is of necessity "push" or "pull" or neither, as the case may be.

To illustrate more broadly still the linguistic axiom exemplified above, I note that, if linguistic effort shall succeed, I *must* say "horse" instead of "young gazelle" or "crocodile," when thinking of the animal on which I take my daily ride. In short, the very existence of language implies that we use expressions for what we think, and not expressions for what we do not think—an axiom of which it is plainly a merely partial statement, to say that the presence or absence of personal belief in thought revealed determines the use of assertive or unassertive verbal forms.

Obvious as it is, this principle is obscured by the tradition, commonly emphasized in grammars, that the subjunctive stands for what is untrue or doubtful, and the more or less distinctly formulated complementary tradition, that the indicative stands for what is true or certain. One's confidence however in this apportionment of expressional tasks is somewhat shaken by the fact that, if I wish to falsify, I certainly shall use the indicative mode—the liar's mode par excellence. Again, though merely a little short of confidence in what I say, 'twill be no innovation, if I play the mental bully, masking the substantial weakness of my proposition, not only by the formal boldness of assertion, but also by intensive adjunct, noisy speech or pulpit-thumping.

To apply to these traditions a somewhat careful test, I note

⁸² I use the word with no idea of lifting.

that the expression "The sun revolves about the earth" no doubt exhibits an untruth, and yet for ages it and its equivalents unflinching employed the indicative mode. To this it may be answered that the statement made was true according to the lights of the maker, which is all that is expected of the language-user.

Answering the answer, I offer the expression "The sun does not revolve, etc." In this, the use of "does" may rank as a merely formal accident of the English language, the word being omitted even by that language as by others, in the poetical style. Accordingly "The sun revolves not," which I have elsewhere ("Interrogatives," pp. 386-392, etc.) sought to exhibit as by no means indicating any lack of belief, but as meaning "I believe the untruth of the sun's revolving, etc." According to this interpretation, the untruth is, in "The sun revolves not," distinctly and solely expressed by the negative "not." On the other hand, the antagonistic idea of truth is not in mind. Accordingly truth, in this case, is not expressed by the indicative. Strictly interpreted, the indicative expresses only part of a thought which by "not" is posed before the mind in the aspect of untruth (or failure to be matched by external reality)—and belief (in that untruth). That is, the indicative expresses neither truth itself nor any part of aught that is posed before the mind as true.

Given, on the other hand, "The earth revolves about the sun," in the absence of a special "not" to indicate untruth, the idea of truth may be supposed to be incorporated in what is expressed by the indicative, which accordingly in this case does express the idea of truth itself as well as part of what is posed as true.

It appears then that indicative usage is not determined by the truth or untruth of what it cooperates in expressing.

On the other hand, in (1) "I fear that he come" and (2) "I fear that he come not," no belief is associated with his coming; but in one case the coming is posed in the aspect of truth, and, in the other, in the aspect of untruth. Of the meaning expressed by the "come" of (1) the idea of truth may be sup-

posed to be part. In "come not" of (2) the idea of untruth is specially expressed by "not" alone. It accordingly appears that the subjunctive *can express* the idea of *truth*, but *cannot express* the idea of *untruth* (except in certain languages in which, if I rightly understand, the function of "not" is performed by a verbal inflection). On the other hand, the subjunctive *cooperates in expressing* either what is posed as true or what is posed as untrue.

Accordingly I repudiate the notion that either truth or untruth influences the use of indicative or subjunctive mode, holding that the presence or absence of belief is what determines their respective use; and by parallel reasoning I should reach the same conclusion for the other verbal forms.

Even belief itself does not entail assertion, except under special conditions. All my life I have been aware that I have two hands—whenever I think of them. But I do not tell you of this possessing, unless at the moment of speaking I am thinking of it. So, too, in "Astronomers declare the sun to exceed the moon," although I am frequently conscious that I believe in such exceeding, nevertheless I did not express that belief, because I was not thinking of it as I wrote the sentence. Hence I did not use an assertive form of the verb, but the unassertive "to exceed."

Nor is this all. Although I express a thought, which at the moment of expression I am conscious of believing, I am by no means always bound to express my belief. Given only the thought expressible by "it to be raining," I am plainly bound by linguistic courtesy to express belief, by saying "It is raining," or hold my peace. But in the statement "On account of its raining I must go," belief in the raining, though still in mind, does not appear in my expression.⁸³ I have not re-

⁸³ As some linguistic students do not seem to be entirely clear in their perception of the presence or absence of belief, I add the following illustration: (1) "On account of its raining (conceived as the merest possibility and altogether unattended by belief) I should never give up a walk." In this, the raining, posed as a mere contingency, is plainly attended by no belief. If now, in (2) "On account of its raining (conceived as true, or actually occurring) I must go," the element "raining"—which in form precisely duplicates the "raining"

nounced belief itself, but only its membership of thought-to-be-expressed. On the other hand, in "It is raining; I must go," I have renounced neither belief in raining nor its membership of thought expressed.

It appears accordingly that, apart from the contra-linguistic practice of those who do not know the meanings of the words they use, and the strictly extra-linguistic practice of liars, presence of belief, in thought intended—or its absence—determines the use of assertive or unassertive verbal forms.

Any rule, accordingly, for the use of either instead of the other, would merely be a part of the rule already intimated: Always use in speech the word for what you intend, to the exclusion of the word for more or less than you intend—or, more briefly—"Say what you think."

It is so obvious that "voice" is normally determined by the proverse or reverse relation intended by the speaker (See page 205), and that tense is controlled by the time intended by the speaker, that examination of tense and voice is quite unnecessary to the present topic.

INFLUENCE OF THOUGHT-STRUCTURE.

By the structure of thought I mean its architecture, as distinguished from the elements of which it is built—not *what* I think, but *how* I think.

Conceding, somewhat as in the previous section, that a choice

of (1)—were intended by me to express belief, the question rises how you could assure yourself of my intention. Inference appears to be the only means at your command. The situation guarantees indeed your safety in the inference that I do believe in the raining as now in fact occurring—but, after all, no more than your safety in the inference that in (1) I do believe in the raining as in fact occurring sometimes. The inference that in either case I *intend to express* belief is quite a different matter, and is weakened by the fact that, had I intended to express belief, I could easily have done so unmistakably (e. g., "It rains and therefore I must go", "It sometimes rains, but I should never give up a walk on account of that"); that obviously the raining was lateral to the going and therefore (as argued on pp. 129-134) would not be attended by belief, except in a second central aspect, separated mentally from my going; that such expression of belief was quite unnecessary; that expression of all belief experienced would be an intolerable burden, as illustrated on page 163, Note 38.

of verbal forms may first be made, entailing a particular structure of thought, I hold it axiomatic that the choice of structure is normally prior to use of verbal forms, and rank the use of particular verbal forms as corollary to structure-choice.

To illustrate, given what is expressed by "I saw a collision," and what is expressed by "An express train struck a freight," suppose I am to use the former as central and the latter as lateral, in a centro-lateral thought.

From what is to serve as lateral I omit, as previously shown, the element of belief, thereby renouncing the use of assertive verbal forms.

From what is to serve as central I omit (see page 134, etc.) the final term in order to make room for a lateral substitute.

The opportunity thus afforded is available in several ways, in exhibiting which I take a hint from the unique Artemas Ward's description of the funeral of Brigham Young, the solemnity of which, as chronicled by the humorist, was more or less impaired, if I rightly recollect, by the mutual jealousies of twenty widows, each of whom aspired to precedence in marching to the grave.

For the purposes of illustration, let their number be reduced to three, to match the elements of lateral thought, these latter also being thinkable as each aspiring to priority of entrance into association with central thought; and let it be determined in what aspects the little company might appear.

(1) To a bird's eye view of the "exercises," the female total may offer no distinguishable individual constitutents, appearing rather as a blended whole or, more specifically, as a vidual continuum. This case, however, and the variant presented by a blended squad of two attended by one distinguishable individual (or vice versa) may be dismissed for reasons indicated on pages 134-139 (and in "Revision," pages 83-4).

(2) To a nearer view the three may be distinguishable, each from the others, without however appearing in any orderly arrangement, but rather as a miniature chaotic aggregation—or, say, a relict rabble—a case rejectable, as altogether

inconsistent with the structural indications usually offered by the word-inflections of the lateral clause.

(3) The humorist solved the problem created by the afore-said jealousies, by marshalling the widows toward the grave without precedence, twenty abreast—a formation the many advantages of which might well arouse a wish to imitate it in the use of words, but in vain, as, for obvious reasons, words (to say nothing of ideas) do not synchronize; and even if by the use of several speakers, or a suitable arrangement of echoing surfaces, the several words of a phrase were made to reach the hearer's ear together, it is plain that only confusion would result. Accordingly, although reluctantly, I renounce the above formation, including the special arrangement of three in a line oblique to the line of march, as I do not obtain from it any guidance to the knowledge of linguistic methods. I also neglect the possible precedence of two exactly or inexactly abreast, as quite unmatched by linguistic usage (compare "Revision," pages 83-4).

In orderly arrangement of the considered three, it appears accordingly that one must precede. The variable disposition of the remaining two appears in the following cases.

(4) One of the three may precede, the others following side by side. This formation cannot really occur in the use of words; but as two following words may be on a footing of parity in their association with their leader, I allow the case to stand, for the sake of its suggestive value. The possible obliqueness of their line, to the line of march, is neglected as in case (3).

(5) One of the three may precede, the others coming after, one behind the other.

Following now the suggestion of the last two cases, I note that the constituent first-term, mid-term and last-term of lateral thought may in that order (or the reverse order) approach association with central thought—say in Indian file, or in what (as indicated in (4) above) is suggested by a wedge-formation headed by the middle term; or, in obstetric parlance, head or feet or breech may be presented.

Either first or last term may then lead in Indian file; but only the mid-term can head a wedge, for the imparity of the mid-term and either remaining term, prevents the two from being sensed as evenly following the other; and only a wedge can the mid-term head, for the structural parity of first and last terms (later emphasized) is pictured only by their even following of the mid-term. Accordingly, reverting to my illustration of page 236.

(a) Suppose that, as central last term, I choose the lateral first term. In doing so I force the lateral elements to make their appearance, so to speak, in Indian file, not merely in order of time, but also in priority of structural rank, the first appearing "express" being built at once into the central portion of the growing mental edifice. "Express" is followed by "striking," which takes a lateral position as its adjunct, being followed in its turn by "freight" which, as the object of "striking," is sub-lateral to "express."⁸⁴ Thought being thus constructed, "striking" ranks as one of the verbal adjectives.

(b) Again, as central last term, I may choose the lateral last term; that is, the "freight" may be the first to enter central syntax as immediate object of "saw," entailing as a rule the use of the passive participle, being followed accordingly in thought-construction by "struck," which in turn is followed by "express."⁸⁵ The lateral elements again appear in Indian file, but in reverse order, the lateral "struck" being also ranked as one of the verbal adjectives.

(c) Also the lateral mid-term may be the first to enter central syntax, as immediate object of the central "saw," being followed by its first and last terms (subject and object) "express" and "freight." Accordingly "I saw an express train strike a freight." Although the limitations of vocal utterance compel these two to make their appearance one before the

⁸⁴ For this stretching of lateral thought by the pull which brings its first term into central structure, compare pages 148-149.

⁸⁵ The investigation of the preposition "by," in "I saw a freight train being struck by an express," which may rank as the survivor of a make-shift means (one of several) of expressing reverse relation, I reserve for another publication.

other, neither differs from the latter in rank, to the degree that either differs from "strike," or from any adjunctive lateral element which might be added. Imitating Grammar, which does not differentiate the two as parts of speech, I rank the two as essentially on a footing of structural parity, the formation of the mental march of them and striking being comparable to a wedge.

My motive in adopting the last exhibited structure might have been the actual mental pre-eminence of the striking, while in the two preceding structures the motive might have been the respective pre-eminence of the express and the freight. It is possible however that no one of these three elements be pre-eminent—that I merely regard the three as coequal elements of the collision. In this case I am still compelled by linguistic limitations to adopt some one of the already noted modes of structure; and in actual practice, as indicated on page 183, I regularly adopt the one exhibited by "I saw the express strike the freight."

(d) Again, as indicated on pp. 152-156, occasions arise on which the structure assumed by thought requires in expression the use of a verbal adverb, as in "Catherine sang the song heart-rendingly."

Without a repetition of what has been said of this verbal hybrid, it appears that thought may be constructed on either of three plans, respectively expressed by the aid of a verbal noun, a verbal adjective, a verbal adverb.

Of the thoughts which these cooperate in expressing, I do not assume that they are absolutely alike in content. For instance, "striking" suggests a time duration which is not suggested by "strike." (And "I saw birds singing their songs" suggests a seeing different from that suggested by "I saw birds sing their songs.") So far as such duration be intended by the speaker, its examination belongs in the preceding section, the influence of thought-content obviously extending beyond the initial double possibility of assertive or unassertive expression, and taking into account whatever contribution to thought-content may be offered by the varieties and sub-varieties of un-

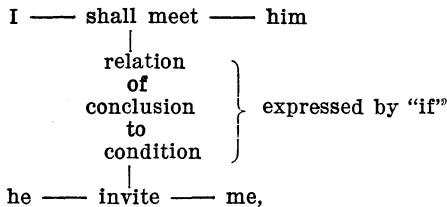
assertive forms. I leave however to a closer observer the establishment of shades of meaning, rather contending for a method of language study, than seeking to exhaust the field of its application.

One application however I suggest, lest I seem to have neglected it in generalizing on thought-structure—namely, the so-called “adverbial sentence,” which may be exemplified as well perhaps by a conditional clause as otherwise. To illustrate, “If he invites me, I shall meet him.”

In the choice of modal forms the languages vary greatly, some employing the subjunctive (by which I mean a fully inflected form, without assertive power) under that name or another—some electing what, on account of its form alone, is known as indicative—some preferring what is sometimes known as a conditional mode, though oddly enough the Frenchman is sorely offended, if foreigners use in condition what he has seen fit to call a conditional form of the verb. (*Conclusional* or *conditioned* might have saved misunderstanding.) It seems however axiomatic that all the languages agree in ranking the verb of the conditional clause as unassertive. Pending further examination, I call it substantially subjunctive.

Also, renouncing all effort to utilize or even understand the claim that “if” is a conjunction, I paraphrase the word by “in case of”, which sufficiently exhibits the prepositional value⁸⁶ of the word, and indicates the substantive nature of the clause which follows.

Otherwise regarded, my illustration exhibits the mental counterparts of two phenomena, and a variety of causal relation (that of occurrence to what at least permits it, but taken in the reverse order,) between them. Of these, the former, substantively posed, is, with the relation, used as adjunct of the latter, being as usual immediately associated with its verbal element, as indicated by the diagram (reversed for convenience):



“invite” being verb in fellowship with “he” and “me”, and noun in fellowship with “shall meet” and the relation between itself and it. “Meet”, as indicated on page 114, in this latter fellowship is also incidentally substantive, ranking in that aspect as a “nominal verb.”

⁸⁶ Compare the approximately opposite “though”, which is matched in German by “trotz”, commonly ranked as preposition, and followed by substantive clauses—e. g. “trotz seines Bier trinken (s).”

The motives that determine which particular element of lateral thought shall be used as also an element of central thought, need not to be examined. Granted, however, that a particular structure of thought has been, for whatsoever reason, effected, the use of the linguistic symbols adequate to that structure is inevitable. If, for instance, in the structure of my thought, the idea of thoroughness takes position as adjunctive to first term, I may express it by the adjective "thorough," as in "Thorough universities make their students learn;" but I cannot use the adverb "thoroughly." If on the other hand the said idea be last term, or again if it be adjunct of the mid-term, I must use a substantive or an adverb, as the case may be, as in the expressions "Universities teach thoroughness" and "Universities teach thoroughly." In short, the use of a particular part of speech is corollary to particular structure of thought.

The like is true of words which figure as two parts of speech at once. If, for instance, in the structure of thought an idea appears as last term in a central fellowship, and mid-term in a lateral, it must be expressed by a verbal noun, as in "I saw an express train *strike* a freight." I cannot use the verbal adjective "striking" (the ordinary use of "striking" here would not be substantive, but adjective) or the verbal adverb "strikingly," without exhibiting a structure of thought which was not in my mind. On the other hand, the idea which operates as lateral mid-term and as central adjunct must be expressed by a verbal adjective or verbal adverb, according as its adjunctive service rank as adjectival or adverbial.

It appears accordingly that the use of a particular kind of verbal hybrid (verbal noun, verbal adjective or verbal adverb) is corollary to the structure of thought to be expressed, and that any rule to guide the speaker would again be merely a part of a larger rule, distinctly proper, but hardly necessary, namely: "Say what you think, as you think it."

Thus far accordingly choice of verbal form (regarding both the content and the structure of thought) is the merest corollary to choice of thought itself.

The present is perhaps the most convenient moment to examine the truth of Grammar's dictum (noted on page 222) that the subjunctive is used in dependent clauses expressing what is feared. Truth presumably there is in it (although the subjunctive is sometimes displaced by the infinitive), or it would not so long have been tolerated. This truth may be exhibited as follows:

A genuine dependent clause is ipso facto a lateral clause. For, as previously argued, only an independent clause—a clause of self-sufficient importance—can be truly central, though two clauses which have a simultaneous common factor may both be central, in which case one of them, by reason of its interlocking with the other, exhibits a merely formal resemblance to a lateral clause; e. g., "I have a letter from my wife, who is in New York." (Compare pages 127-128.)

A genuine lateral clause—for instance, a clause which is only a means to the end of clearly exhibiting a central thought (e. g., "I have a letter from my daughter *who is in New York*"—not the other daughter)—a clause, in other words, which cooperates with a central clause in forming a centro-lateral total (not bi-central)—is not asserted, except as indicated on pages 129-134. That is, its verb cannot be genuinely indicative. It may, according to the architecture of thought and the means of indicating architecture, appear in any of the unasserted (i. e. the verbal hybrid) forms. It may in short take any non-indicative form. Given the architecture of thought exhibited by the illustration "I fear he will come," the lateral clause may employ any verbal noun—the substantive subjunctive or any other.

The fact that classic Latin ordinarily employs no construction parallel to ("I fear him to come" or) "I fear his coming," restricting itself to the equivalent of "I fear that (or lest) he come," is explainable by influences discussed on pages 224-226.

Accordingly, supposing no verbal noun to be available, except the substantively used subjunctive; and assuming thought-architecture of what is feared, to be of a type which cannot

rightly be expressed by a verbal adjective or adverb; the situation may be stated thus: only the assertive indicative and the unassertive subjunctive are available; the unassertive subjunctive is used *because the clause expressing what is feared is dependent*—that is, lateral—therefore, void of assertion. In a word the only available unassertive form—that is, the substantive subjunctive—is used for the excellent reason that assertion is not intended.

To test this statement, let it be examined whether the circumstance of expressing what is feared—or say the following or coming after a verb of fearing—have any influence, when the clause expressing what is feared is not dependent.

Obviously, if previous reasoning has been correct, it will, in my illustration, be impossible to pose his coming as direct object of “I fear”, and at the same time make the coming independent. If the latter alternative be chosen, the fearedness of the coming must be indicated otherwise. Accordingly, “As I feared, he is coming,” or “will come;” or “He is coming (which is what I feared).”

In these expressions, “He is coming,” which is the exhibiter of what I feared, and which follows a verb of fearing, regularly and properly employs the indicative. The like is true in “I feared he would come; *he has come,*” in which what is feared, being independently repeated, also is expressed by the aid of the indicative. Accordingly, the fact of expressing what is feared does not entail the use of the subjunctive, unless the expressing clause is dependent.⁸⁷

⁸⁷ Compare also the clause of result, or effect of an asserted cause. So long as such a clause is dependent, being in particular commonly employed as merely a measure of cause, it may among other possibilities employ the subjunctive. To illustrate, my inability to catch a dog, resulting from that dog's activity, may be used to measure that activity. Accordingly, “He ran fast to a degree causing me to miss him” or “He ran so fast that I did not catch him,” i. e. “to the I-didn't-catch-him degree of speed” or “with I-didn't-catch-him speed.”

When however, vice versa, cause is the mere explainer of result—as when the activity of a dog, which causes or results in my failure to catch him, is used as the mere explainer of that failure—the modal usage is reversed. Accordingly I properly say “I did not catch the dog on account of his running so fast” or “because he ran so fast”—which last expression, if assertive, must be regarded as secondarily assertive on its own account, while primarily unassertive in its fellowship with “I could not catch the dog” (see pages 129-134).

It would seem accordingly that what occasioned subjunctive usage must have been dependence. Yet conceivably the fearing might have a contributory influence. Let it then appear how far dependence can develop subjunctive usage, without cooperation on the part of fear. In short, let fear be replaced by any other idea, e. g. belief or knowledge. Accordingly, "I believe or I know that he *has* come." In this expression undeniably the indicative spelling and pronunciation prevail. But the coordinate "I don't believe that he has come" can hardly be held to intend the "has" to be taken as assertive; for, if it so be taken, the speaker is expressing by "I don't believe" an absence of belief in what, by "he *has* come," he expresses himself as believing. Obviously what is intended is no more than what is intended by "I don't believe him *to have* come." Analogously, what is intended by "I believe (or "know") that he has come" is presumably no more than what is intended by "I believe (or "know") him *to have* come." In short, the value of "has" is really subjunctive. Otherwise—that is, if "has" were indicative=assertive=expressive of belief, or knowledge—"I believe or know" would be the merest repetition, equally vexatious to the speaker and the hearer.

The Grammar rule accordingly may be restated thus: Strictly dependent clauses require unassertive forms of the verb; the particular form conventionally employed in a dependent substantive clause, to express what is feared, is, in Latin, the subjunctive.⁸⁸

Accordingly the clauses most of all in need of explanation are those in which the verb of the dependent clause appears to be indicative—clauses sometimes to be explained as exhibiting unassertion followed by assertion (see pp. 129-134)—more often, as employing an indicative form with subjunctive value.

⁸⁸ The reasons, independent of conventionality, which, in the substantive clause, determine the use of rather one (e. g. the subjunctive) than another variety of verbal noun, will be examined later.

INFLUENCE OF EXPRESSIONAL EXPEDIENCY

Under this title I propose to examine the respective advantages afforded by the varieties of each verbal hybrid, in exhibiting the structure of the thought in whose expression either variety of that hybrid might cooperate. As I have not yet encountered any varieties of verbal adverb, examination covers only varieties of verbal noun and varieties of verbal adjective.

Beginning with the former, I presuppose that thought in the expression of which the verbal forms considered operate, is void of belief—that it accordingly is lateral—that the structure of centro-lateral thought demands for its expression the use of a verbal noun—that theoretically it is practicable to employ any one of the several verbal nouns exhibited on pages 188–191.

That these may exhibit minor differences in the content of thought by them expressed, and that these differences may influence the speaker's choice, shall be admitted, without admitting them to have an important determining value. The like is true of minor structure-differences, which are likely to attend the differences in content of the thought.⁸⁹

⁸⁹ To illustrate, I offer two expressions containing verbal nouns:

(1) I desire (that) Brown *employ* Robinson;

(2) I desire Brown's *employment* of Robinson.

In (2) the "s" exhibits a relation, not of possession, but of actor to his own action, distinctly recognized by Grammar in the phrase "subjective genitive"; and the (in meaning) variable preposition "of", which here is operative as a case inflection, exhibits the relation of action to its own actee, distinctly recognized by Grammar in the phrase "objective genitive." These two relations may however be made over into one. Much as the combined relations of "brother to brother" and "father to son" are (in case the father and one brother be identical) made over into the single relation of "uncle to nephew", so also the relations of "actor to action" and "action to actee" are made over into that of "actor to actee", which, in the special form of "employer to employee" is expressed in (1) by "employ." It appears accordingly that relation is, in (2), more analytically recognized than it is in (1).

This difference in the content of thought, exhibited also in the structure of thought, does not impress me however as adequate to explain the use of (1) to the exclusion of (2) or vice versa. Indeed it is by no means impossible that, to many, the two suggest no difference of content or of structure—that the "s" and the "of" and the "employment" of (2) are virtually ranked as the merely trisected "employ" of (1), precisely as "Brown is in the *nephew-to-uncle* relation with Robinson" may be cut up into "Brown is in the *son-to-father* re-

Minor differences accordingly (of either order) being overlooked, it may be regarded as a foregone conclusion, that one at least of the causes which determine the use of a particular kind of verbal noun, will be its superior power of structure-exhibition.

To illustrate this,

- (1) I cannot imagine that men who strive diligently succeed worse than a man of mere ability;
- (2) I cannot imagine men who strive diligently to succeed worse than a man of mere ability.

In both these expressions I have omitted punctuation, and, were they presented orally, I should avoid all vocal aid of pitch or pause or tone, in order to throw each verbal form upon its own unaided expressional resources.

In any sufficiently inflected and severely consistent language, the word for "succeed" in (1) will have a recognizably subjunctive form; and even in English, with its frequent neglect of the few subjunctive forms it has, the word "succeed" is plainly subjunctive in value—that is, it is not assertive: it does not, in its meaning, include belief.

The expressional resources of "succeed" in (1) are adequate. Those of "to succeed" in (2) are quite inadequate. For, although I intended (2) to express a thought, the essential duplicate of (1) in content and in structure, plainly (2) is in danger of being taken to express a different thought, as follows: "To succeed" may be taken as the object of "strive," the sense of the expression being thereby radically changed. Such wrong construing credits me with meaning—what I did not mean at all—that I cannot imagine diligent strivers for success to be worse than a man of ability.

Such wrong construing is in (1) forestalled by the subjunctive. The expression "men who"⁹⁰ indicates, by means of

lation with a *man* who is in the *brother-to-brother* relation with Robinson," which latter statement quickly reduces in your mind to the former, and presumably would gain the power of directly presenting the kinship named in the former, without a reducing process, if forced to do so in the absence of the briefer formula "nephew-to-uncle."

⁹⁰ In "Pronouns," pages 49-62, I have argued that "who" does not repeat the idea expressed by "men", but merely indicates that this idea is factor of two thoughts, and in the second has the function indicated by the nominative case.

“who,” that, in a secondary function, “men” is the subject of “strive”. The subjunctive “succeed,” by its inflection for person and number (in any well inflected language), lays claim to a plural, third-personal subject; and the only one that offers is “men” in a primary function. It follows that what is object of “imagine” (which requires an object) must be “(men) succeed” and not “(men) [to be] worse”—a conclusion aided by the use of “that,” which indicates the substantive usage of “(men) succeed”.

The adequacy of the subjunctive and the inadequacy of the infinitive, being foreseen by the master of linguistic mechanism, are accordingly the grounds for what may rank as a deliberate choice between them, uninfluenced by thought itself, regarded either in its content or in its architecture—influenced only by respective advantages of structure-exhibition.

The preceding illustration exhibits a particular variety of the verbal noun (the infinitive) in its bungling. Sometimes a given variety of the verbal noun exhibits a veritable flinching, when confronted with excessive expressional difficulty. To illustrate, “The boy ran away without his father’s knowledge,” an expression into which I wish to introduce the father’s absence from home. Moreover, being a reporter, I wish, for the sake of conforming to journalistic fashion—as well as for the sake of the extra penny a line—to expand the father’s knowledge into a knowing “the sad occurrence to have happened.” Accordingly, “The boy ran away from home without his father’s, who was out of town, knowledge of the sad occurrence to have happened.”

This expression has so small a chance of being tolerated, or even understood, that it would hardly be ventured even by the bravest of the linguistically brave. Yet the difficulties insuperable by the quasi-verbal “knowledge”—difficulties unattempted, even by the more effective “knowing” and “to know”—are the merest child’s play to any subjunctively active language. Such a language would substitute “The boy ran away from home without that (dass, que) his father, who was out of town, knew (wüsste, sût) the sad occurrence to have happened.”

On the other hand, expressional advantage of another sort is sometimes offered by verbal nouns of inferior verbal potency—for instance, the infinitive. To illustrate, exhorting my dog to leave his place of comfort under the sofa, to tackle an intruding rat, I say “Go catch him!”—in which I follow the syntax of the Frenchman’s “Allez chercher!”, intending “catch”, as an infinitive, to operate as dative of purpose with “Go”.⁹¹

This thought may also be expressed subjunctively. A speciality of the subjunctive being however the utmost carefulness in looking after its subject, we shall not find the subjunctive by any means contented, if we give it no subject to care for. In perhaps the majority of languages we shall therefore find it necessary to express that subject, which is so commonly omitted with infinitives, when it has already served as subject of a more central verb. Accordingly, in subjunctive expression, the catching will appear as “you catch”, further amplified by an introductory “that”, or sign of substantive usage; so, then, “that you catch.” Moreover, as the going and the catching are in the relation of action to desired resultant action (or say purpose), it is usual to express this relation by the preposition “for”, or by “in order that”. In full then, my order to the dog, expressed with subjunctive aid, appears as “Go in order that you catch him.”

In this elaborate form, I doubt whether my dog will understand the order. What has been gained in the accuracy made possible by fullness, has been rather more than lost in the compactness which, in “Go catch him”, was enforced by brevity. To say nothing of the canine power of interpretation, the dog’s attention has had too long a time to wander.

With verbal adjectives the case is quite analogous. To illustrate, and again without the use of punctuation, “I hardly know a man who having been pressed by his wife for money to buy an Easter bonnet have (*ait*) though keenly realizing that

⁹¹ In the form “Go and catch”, the “and” may be regarded as the old preposition so commonly made over into “a”, “an” or “and”, as in “I go a fishing,” perhaps in “He was an hungered” and in “Try and find it”. That is, the “catch” is not imperative.

there is only money enough available to pay existing debts the firmness to say no." While not commending this expression as a model of clearness, I regard it as comparing favorably with the following, effected by the aid of the participle—or say another form of the verbal adjective—which is second best in power of marshaling details: "I hardly know a man \wedge having been pressed by his wife for money to buy an Easter bonnet \wedge though keenly realizing that there is only money enough available to pay existing debts *having* the firmness to say no."

That, in the last expression, I have given the substituted "*having*" the advantage of the most effective position, perhaps will be conceded, if the "*having*" be moved for instance to the position marked by either caret. Yet, even as the expression stands, you run some risk of going for the moment wide of the mark at the first "*having*" (as if it were I who had been "pressed"), at "*though*" (as if I intended "pressed though he realizes"), and, for at least an instant, at the final "*having*" (as if "*having*" belonged with "debts").

Per contra, in spite of the antagonism offered by certain purists, I prefer "Students desiring to continue French will notify the registrar" to "Students who desire, etc."—partly on account of its compactness, and partly because it does not tend to exhibit a second relative clause, as coordinate with the clause of desire; e. g. "Students desiring to continue French, whose standing is inadequate (or, "to whom the appointed hour is unavailable") will notify the registrar." Of verbal adjectives, I therefore hold that, as the case may be, a greater clearness or a greater compactness commonly determines the use of one or the other available form.

To the influence of expressional expediency it may be objected that it does not always operate. Thus I may say "I hope that you find your purse;" but I may not say "I hope you to find your purse," or "I hope your finding of your purse." Such objections do not however seem to me to weaken the principle advanced. It cannot fairly be accused of weakness because it fails to explain what doesn't happen. The lin-

guistic case in hand is merely one of an often occurring atrophy—or, say, an arrest of development—a losing, or a failing to develop, given expressional types. Thought of given content and given structure simply will not flow through a given linguistic outlet, when that outlet has never been opened, or when it has been closed.

That clearness and brevity are not the only advantages which may determine the use of a particular verbal noun or adjective, is obvious. Other advantages⁹² however are so easy to appreciate, that any general examination of their influence may be omitted.

More important is the settlement of the question, not till now approached, how far the advantages considered—thus far assumed to be conscious—be after all subconscious, or even unconscious.

In trying to discover this, I plan an illustration which shall serve, so far as possible, as a trap to catch the elusive cause of what, I think, will be found to be a conscious choice. Accordingly, “Everybody with the *completest confidence*, expects.”

Let it be conceded that thus far, from never mind what causes, I have reached *in mind* the particular phraseology adequate to express my thought, although as yet I have not spoken. There now may rise before me, all together, as possible completions of my sentence, three series of words, (1) “that he will come”, (2) “him to come”, (3) “his coming.” Let it be supposed that they do so.

The italicized syllables of the illustration are those on which I foresaw in mind that I should lay in utterance a vocal stress. Accordingly, after the stress attending “Everybody”, I was to be left with six, or even seven successive syllables, without a natural stress. Disliking this tongue-tangling—not to say ear-

⁹² E. g., the agreeableness of individual consonant or vowel sound; the agreeableness of sound sequence; the rhythmic effect produced by syllabic accent; the fitness of either of these to ideas expressed (Compare the unfitness of a dancing rhythm to serious thought); the dignity or caste of the word (Compare “sweat” and “perspiration,” which moreover interchange prestige in passing from poetry to the parlor).

offending—combination, I mentally rearranged my expression, obtaining “Everybody expects with the completest confidence.” At this point, having been already a little prolix, I was inclined to use the briefer verbal nouns. But it dawned upon me that these are commonly used in rather immediate sequence on the principal verb, or—to put it less positively—that there would be a sort of oddity in “Everybody expects, with the completest confidence, him to come” or even “his coming.” Or, we may say, an inhibition occurred, of which the grounds were possibly less than fully conscious, but which itself was sufficiently effective to lead to a thoroughly conscious effort to find a better expression. Accordingly I attempted “Everybody expects him to come (or his coming) with the completest confidence.” But I felt at once that you might well be quite uncertain whether this confidence was intended to characterize the expectation, or the coming. So once more I made an effort, developing the expression “Everybody expects with the completest confidence that he will come,” and, thinking again “quod esset bonum”, I gave the expression utterance.

After all this making, trying on and refitting, the ultimate clothing of thought in the subjunctive form may be ranked I think as a choice, or act of conscious preference. The particular form of verbal noun expression is in this case hardly obtained by any mere reaction to previous mental status. It surely is not the result of obedience to rules, for I am not aware of any. It is not occasioned by a desire to imitate, except perhaps so broad and vague as to have little application to the case in hand.

To cover all the cases recognized, I contend that the use of the given hybrid must be explained by *subjective* causes.

With that in mind which has been said—and more, no doubt, that ought to have been said—a broader, deeper and exacter investigation would, I believe, establish that the use of verbal forms is not so often as believed occasioned by obedience to rule, or by conscious or unconscious imitation; that it is rather corollary first of all to inclusion or exclusion of belief in thought

to be expressed, such inclusion of belief (in thought accordingly self-sufficient) determining at once the use of an assertive form to express that inclusion; that otherwise, in the second place, the particular adopted structure of thought unattended by belief (and accordingly not self-sufficient), forcing the factor known as mid-term into one or another second factorship in another thought, determines, in the corresponding syntax of the sentence, the use of a particular kind of verbal hybrid (verbal noun, verbal adjective or verbal adverb); and that, last of all, the use of a particular hybrid of that kind (e. g., a gerund, an infinitive, a substantive subjunctive) is mainly determined by its special effectiveness in indicating the adopted structure of thought, the particular structure's greater or less simplicity most of all determining the means employed to reveal it.

Madison, Wisconsin, October, 1907.

