General and Rational Grammar:

THE PORT-ROYAL GRAMMAR

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GENERAL AND RATIONAL GRAMMAR

Grammar is the art of speaking.

Speaking is explaining one's thoughts by signs which men have invented for this purpose.

It has been found that the most useful of these signs are sounds and vocals,

But because these sounds are transitory, other signs were invented in order to make them lasting and visible; these are the characters of writing which the Greeks called γράμματα (grammata), whence comes the word grammar.

Thus one can consider two things in regard to these signs. First, what they are by their nature, that is to say, as sounds and characters.

Second, their signification, that is to say, the manner in which men utilize them for signifying their thoughts.

We will treat of the former in the first part of this grammar, and of the latter, in the second part.



THAT THE KNOWLEDGE OF WHAT OCCURS IN OUR MINDS IS NECESSARY FOR UNDERSTANDING THE FOUNDATIONS OF GRAMMAR; AND THAT ON THIS DEPENDS THE DIVERSITY OF WORDS WHICH COMPOSE DISCOURSE.¹

Until now we have only considered the material element of speech, and that which is common, at least as far as sound is concerned, to both men and parrots.

It remains for us to examine the spiritual element of speech which constitutes one of the greatest advantages which man has over all the other animals, and which is one of the greatest proofs of man's reason.² This is the use which we make of it for signifying our thoughts, and this marvelous invention of composing from twenty-five or thirty sounds an infinite variety of words,³ which

1 This chapter title may be seen as expressing one of the fundamental conceptual themes of the Grammar, i.e. the rationalistic basis of grammar.

The notion of the flexibility of language response as separating men from beasts is taken from Descartes. See for example the Discourse on the Method of Rightly Conducting the Reason, Part V, where Descartes indicates the method by which we may "recognise the difference that exists between men and brutes... It is a very remarkable fact that there are none so depraved and stupid, without even excepting idiots, that they cannot arrange different words together, forming of them a statement by which they make known their thoughts; while, on the other hand, there is no other animal, however perfect and fortunately circumstanced it may be, which can do the same." Philosophical Works of Descartes, trans. E. S. Haldane and G. T. Ross (New York: Dover, 1955), I, 116-17. For a full discussion of this aspect of Descartes' thought, see Noam Chomsky, Cartesian Linguistics (New York: Harper and Row, 1966), 3ff., and Language and Mind (New York: Harcourt, Brace and World, 1968), Chapter 1.

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³ Chomsky sees the emphasis upon the fact that in the employment of language we "make infinite use of finite means", in Humboldt's locution, as well as the attempt to give an account of this creative potential, as one of the key contributions of the tradition of rationalistic linguistic theory or "Cartesian linguistics". He sees the *Grammar* as a major landmark in this tradition, in which he also places his own work. See *Cartesian Linguistics*, Chapter 1;

and all of the diverse movements of our souls. others who cannot penetrate into the mind all that we conceive although not having any resemblance in themselves to that which others all of the secrets of the mind, and to make intelligible to passes through our minds, nevertheless do not fail to reveal to

which men have made into signs for signifying their thoughts.4 Thus words can be defined as distinct and articulate sounds

minds previously has not been clearly understood, since words were invented only in order to make these thoughts known. in words cannot be clearly understood if what has gone on in our This is why the different sorts of signification which are embodied

All philosophers teach that there are three operations of our

minds: conceiving, judging, and reasoning.5

Conceiving is only the simple attention of the mind to things, either in a purely intellectual manner, as when I think of the notions of being, duration, thought, or God, or else accompanied by corporeal images, as when I imagine a square, a circle, a dog or a horse.

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Judging is the affirmation that a thing of which we conceive is

especially 355 and 363. Minerva, sive de causis linguae latinae commentarius (1587), see Robin Lakoff's review of H. Brekle's edition of the Grammar, in Language 45 (1969), 343ff., Language and Mind, Chapter 1; Aspects of the Theory of Syntax (Cambridge, Mass.: M.LT. Press, 1965), Chapter 1; and Current Issues in Linguistic Theory interesting attack on Chomsky's view of Arnauld and Lancelot as "Cartesian" (The Hague: Mouton, 1964), Chapter 1. See also Donzé, Chapter 1. For an but as rather being pre-Cartesian, more directly influenced by Sanctius

words, thoughts and things which figured strongly in the intellectual heritage century. For a proto-typical account of the view of the relationship among of Port-Royal, see Augustine's De Magistro. western philosophical thought not subject to serious criticism until the twentieth The view that words are signs of thoughts represents a dominant theory in

ences to this work will be to this English edition, and will be cited as Logic translation is that of James Dickoff and Patricia James, The Art of Thinking (1662). A convenient recent French critical edition is that of Pierre Clair and Logic by Antoine Arnauld and Pierre Nicole, La Logique ou l'Art de penser François Girbal (Paris: Presses Universitaires de France, 1965). A recent Much of the material in this work bears on the Grammar. Port-Royal Logic (Indianapolis: Bobbs-Merrill, 1964). All subsequent refer-For detailed discussions of the "operations of the mind", see the Port-Royal

> and what roundness is, I affirm of the earth that it is round such or is not such, as when, having conceived of what the earth is

is a virtue, I conclude that patience is laudable. as when, having judged that all virtue is laudable, and that patience Reasoning is the use of two judgments in order to make a third,

speak simply to express what they conceive, but rather almost our endeavor to consider only the first two operations or that parmind is only an extension of the second. And thus it will suffice for always in order to express the judgments which they make from of the first which is contained in the second. For men scarcely the things which they conceive. From whence it can be seen that the third operation of the

round in the above example. In addition to the terms, a proposition earth is round, is called a proposition, and thus every proposition includes the connection between the two terms, the copula, is the second is called the predicate and is that which is predicated, as is that of which one predicates, as earth in the above example, and necessarily embodies two terms: the first is called the subject and A judgment that we make about things, as when I say, The

and which is the object of our thought, and that the connection the action of our minds, and the manner in which we think belongs to the second operation, which could properly be termed the first operation of the mind, because it is this which we conceive Now it is easy to see that the two terms properly belong to

still relate to what occurs in our mind the conjunctions, disjuncin our minds is to say that one can consider the object of our movements of our souls, such as desires, commands, questions tions, and other similar operations of our minds, and all the other the main form being judgment, on the other hand. But one must thought on the one hand, and the form or manner of our thought, And thus the greatest distinction to be made about what occurs

necessary to draw a most general distinction among words into to mark everything that occurs in their minds, also found it those that signify the objects of thoughts and those that signify It follows from this that men, having had need of signs in order

the form and the manner or mode of our thoughts, although the in conjunction with the object, as we will show. latter often do not signify the manner alone, but only the manner

express our thoughts, as we will show. as a necessary consequence from the natural manner in which we kind are verbs, conjunctions, and interjections. These are all derived pronouns, participles, prepositions, and adverbs. Those of the second Words of the first kind are those which are called nouns, articles

OF NOUNS, AND FIRST OF SUBSTANTIVES AND ADJECTIVES

are the manner or modification of things, like being round, being red, being hard, being learned, what is called accident. the sun, water, wood, what is ordinarily called substance, or else The objects of our thoughts are either things, like the earth

whereas accidents depend for their existence on substances.2 manner of things or accidents: substances exist by themselves, There is this difference between things or substances and the

and those which signify accidents, in marking the subjects in which which signify substances have been called substantive nouns, these accidents inhere, have been called adjectival nauns.4 the words which signify the objects of thought. For those words It is this which has engendered the principal difference among

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selves in discourse without requiring another noun substantive by itself, people came to call all those words which exist by themmanner of signification. For since substance is that which exists it was not so much signification itself that was dwelt upon as the But the matter went beyond this consideration, and we find that This then is the first origin of substantive and adjectival nouns.

1 This chapter is a clear example of the "deep-structural" analysis in which the authors are engaged. The distinctions drawn are conceptual rather than

ment of the rules of logic is taken from [Aristotle's] Analytics" 26, where Arnauld asserts that "we acknowledge that nearly our whole treatattribute metaphysics is clear in this passage. Cf. Logic, "Second Discourse", The explicit acceptance of <u>Aristotelian</u> subject-predicate logic and substance-E.g. "earth" or "sun", Logic, 99. E.g. "good", "just", "round", Logic, 99.

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to be joined to other nouns in discourse.6 contrary, those words which signified substances came to be called adjectives when, by their manner of signifying, they needed nouns, even though they in fact signified accidents.5 And on the ic an adjectival usun

fused signification, which can be called the comotation of a thing, with which that which is marked by the distinct signification itself is that outside of its distinct signification, it also has a con-Now the reason that in certain instances a noun cannot exist by

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either expressed or understood.8 discourse, because the word which signifies this subject must be redness, from whence it comes that red never exists by itself in But red signifies redness by marking confusedly the subject of this Thus the distinct signification of red is redness [la rougeur].

from prudent, prudence, etc.9 tives, as from colored, color, from red, redness, from hard, hardness from words which signify accidents, they are made into substan-Since this connotation forms the adjective, when it is removed

explained by the authors, and their meanings must be extrapolated from the which follow. These notions were of course of great importance for all Cartecontexts in which they appear. Some attempt is made to do this in the notes sians. Descartes relies heavily upon them in the Discourse on Method and in the a certain quality, expressed as a substantive, like redness. The confused sighave to those objects in which the quality appears; in the above example nification, or connotation, of such adjectival nouns is the reference they ideas were further developed by the Leibnizean Christian Wolff in his Logic. "Reflections on Knowledge, Truth and Ideas" (1684) in P.P. Wiener (ed.), Leibniz Selections (New York: Charles Scribner's Sons, 1951), 283. These them. For the best attempt to explicate these and related notions, see Leibniz' Meditations, but it is common knowledge, that he gave no adequate account of by the word designating the thing which is red, expressed or understood that "red" never appears alone in discourse, but must always be accompanied we always talk of something being red. It is for this reason, argue the authors "redness" (its distinct signification) by way of modifying some subject — i.e. those things which have the property of redness. Thus "red" only signifies The theory seems to be this: Adjectival nouns like "red" distinctly signify E.g. "wisdom", "whiteness", "color", Logic, 100.
E.g. "human", "carnal", Logic, 100.
The words "clear", "distinct", "confused", "obscure", are never adequately

> as out of man, manly, or, in French, out of homme (man), humain to which these substances are connected, adjectives are created substances this confused connotation or signification of a thing (human, adjective).10 And on the contrary, when one adds to words which signify

words, ferreus (iron, adjective), aureus (golden), bovinus (bovine). vitulinus (calf, adjective), etc. The Greeks and the Latins have an infinite number of these

the de (of): d'or (of gold), de fer (of iron), de bæuf (of beef), etc. fewer of these words. For French conveys this notion by use of But Hebrew, French, and the other vernacular languages have

are created. Thus, having made human from homo, or humain trom hunain.11 from homme one can make humanity from human, or humanité their connotation, new substantives called abstracts or derivatives If these adjectives formed of substantive nouns are stripped of

men, like king, philosopher, painter, soldier, etc. And what makes stantives although these nouns are in fact adjectives, as they signify form is suitable. Such are the names of the various professions of es an accidental form, and since they also mark a subject to which this But there is another class of nouns which are considered sub-

of some object. Since nothing definite is indicated by the blank, the things which "red" consists in our ability to fill in the blank in "a red connote something which is modified by it. Thus the adjectival function of satisfy that schema are indicated only "confusedly". the things modified by the adjective, and thus to be an adjective, a word must creates an adjective, for it has the effect of indicating the subjects to which The addition of the confused connotation to words signifying substances _" with the name

the essence or substantial form and thus be an intensional notion, wile as equivalent, but this seems unlikely. Alternatively, man may here designate stantive homme (man). It is possible that the authors saw man and humanity in the new substantive humanité (humanity) rather than in the original subdifficult to see why stripping the confused connotation from humain results the noun homme (man) by addition of the confused connotation, then it is the quality or set of qualities or essence is attached. humanity may designate the class or totality of men and thus be an extensional This argument is cryptic. If the adjective humain (human) is created out of

notion of this distinction here. Cf. below Part II, Chapter 10, n. 2. notion, and if this is the case, it seems that the authors did not have a clear

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word's being an adjective, since the confused connotation is the reference to

The confused connotation is thus the feature which is constitutive of a

substantive. And for this reason these words have had in usage what is peculiar to substantives, that is, to exist alone in discourse. confusion that the connection cannot be made with any other substantive to them, because one can understand without any primary usage of nouns. It has not been necessary to join their a subject, at least in ordinary circumstances and according to the these nouns pass for substantives is that they can only have man as

provincia (province). Consult the New Latin Method for further discussion, 13 substantive so general that it is understood easily and precisely as by subaudition negotium (trouble); or patria (native home), supply said to be taken substantively, because they are connected to a by subaudition terra (land), or Judea, supply by subaudition triste lupus stabulis12 (the wolf is terrible to the flocks), supply It is for this same reason that certain nouns or pronouns are

manner as distinct as the word whiteness itself, candor. confused manner, marking in pafficular no one thing which could obliquo, however more distinctly. Thus white, candidus, signifies have whiteness, and it signifies whiteness only indirectly, but in a directly that which has whiteness, habens candorem, but in a most only signify the form indirectly, what the grammarians call in marians say, in recto, although more confusedly, and that they is certain that they signify the subject directly, and as the gramsignification were also the more direct. Because on the contrary, it which is that of the form, and the other confused, which is that of the form more directly than the subject, as if the more distinct the subject. But it must not be concluded from this that they signify I have said that adjectives have two significations, one distinct,

adjectives: [subject compluted but advect

OF PROPER NOUNS AND APPELLATIVES OR GENERAL NOUNS

only a single thing to us like the idea that each person has of his father and of his mother, of a friend, of his horse, of his dog, of We have two sorts of ideas. First of all, the ones which represent

2things, to which the idea is equally suitable, as the idea that I have of man in general, of horse in general, etc. The other sort is that which represents to us several similar

Men needed different names for these two different sorts of

proper nouns, like the name Socrates, which refers to a certain philosopher; or the name Paris which refers to a certain city. They have called those which are suitable to singular ideas

to all men in general, and similarly the words lion, dog, horse general nouns or appellatives, like the word man which refers They have called those nouns which signify common ideas

same name. And then it is necessary to add other names to it whom one is speaking serve as a proper noun, as the name Louis, which fits severa which will make it determinate and which will make it once again is only accidental, because several individuals have taken the individuals, becomes proper to the King who rules today by saying because the context of discourse makes it sufficiently clear of Louis the Fourteenth. Often it is not even necessary to add anything names fit several individuals, such as Pierre, Jean, etc.; but this This is not to say that it does not often happen that proper

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Vergil, Eclogues, 3, 80.
 New Latin Method, Bk. VI, 87.

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ones, which appear to be contrary to the rule, are not in fact con trary. Here therefore is the rule as I have conceived it: and to make manifest that these modes of speech and other similar misery, help me), une sorte de bois qui est fort dur (a sort of wood which is very hard). In view of such examples I wondered whether Seigneur, qui voyez ma misère, assistez-moi (Lord, who sees my il n'y a homme qui sache cela (there is no man who knows that) this rule could not be put in such terms as to render it more general chatiment (he is guilty of crimes which deserve punishment)

which determines it no less than an article would. noun, if it is not determined by an article or by some other thing In current French usage, a qui ought not be put after a common

or an indistinct part,2 by metaphor, this is accidental), and the extension of this signification, which is fixed (for if it sometimes varies, by equivocation or one can distinguish two things in the common noun: the signification, which is subject to variation according to how the noun is interpreted, either as referring to a whole species, or to a distinct In order to fully understand this, it is necessary to recall that

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whether it ought to be taken generally or particularly; and being mon noun is indeterminate when there is nothing which indicates taken particularly, whether it stands for a distinct or indistinct It is only with regard to this extension that we say that a com-

and reference, is more fully developed in the Logic, where it is referred to as 2 This distinction, which parallels the modern distinction between meaning the distinction between comprehension and extension and is explicated as

three sides, the idea of having three angles, and the idea of having angles idea. For example, the idea of a triangle is made up of the idea of having The comprehension of an idea is the constituent parts which make up the whose sum is equal to two right angles, and so on.-

of all kinds whatsoever, (Logic, 51). superior. Thus, the general idea of a triangle has in its extension triangles are called the inferiors of that idea, which with respect to them is called the idea can be applied. The objects which belong to the extension of an idea The extension of an idea is the objects to which the word expressing the

to all of the inferiors or only to some without changing the meaning, (52). The passage in the Logic goes on to indicate that the extension may be applied LANGUAGE; NAMELY THAT ONE OUGHT NOT PUT THE EXAMINATION OF A RULE OF THE FRENCH

RELATIVE AFTER A NOUN WITHOUT AN ARTICLE

would oblige me to take too much time if I wanted to treat them very important for the rationalization of language, but which me the opportunity to speak in passing of many things which are What has led me to undertake to examine this rule is that it gives

avec violence (he has been treated with violence), but if I wish which was totally inhuman). qui a été tout-à-fait inhumaine (he has been treated with a violence can do this only by adding an article; il a été traité avec une violence to indicate that this violence has been thoroughly inhuman, I put the qui (who, which).1 Thus one says properly, il a été traté filled, namely that after a noun without an article one must not as several other very judicious ones, with which his remarks are Mr. de Vaugelas is the first to have enunciated this rule, as well

conform to this rule, as for example among others the following: knows how to govern), il est coupable de crimes qui mériten il agit en politique qui sait gouverner (he acts like [a] politician who that there are several modes of speech in French which do not This appears at first very reasonable, until one becomes aware

and relative clauses in French "for a hundred and fifty years ... was the centra grammar' ...", 13. issue debated in the controversy over the possibility of developing a 'rationa called rule of Vaugelas, which involves the relation between indefinite articles d'articles", 387-389. Chomsky argues in Language and Mind that the soindefini", 385; "Le pronom relatif ne peut se rapporter à un nom qui n'a point relatif, ou, le pronom relatif ne se rapporte jamais au nom qui n'a que l'article Vaugelas, Remarques, "L'article indefini ne reçoit jamais après soy le pronom





particular. And, on the contrary, we say that a noun is determined when there is something which indicates its determination. This makes manifest that by determined we do not mean restricted, since according to what we have just said, a common noun ought to be considered determined when there is something which indicates that it ought to be taken in its full extension, as in the following proposition: toute homme est raisonnable (every man is rational).³

It is upon this that our rule is founded. For one can well make use of a common noun, while only considering its signification as in the example that I proposed, il a été traité avec violence (he was treated with violence), where it is not necessary that I determine it [i.e. the common noun]; but if one wishes to say something particular about it, one does this by adding a qui (which). It is very reasonable that in those languages which have articles for determining the extension of common nouns, one uses them then, so that one can better know to what this qui (which) ought to be related, whether it is to all which can be signified by the common noun, or only to a distinct or indistinct part.

But one also sees from all this that, as the article is necessary on these occasions only in order to determine the common noun, if it is determined in some other way, one can adjoin a qui to it as if there were an article. And this is what makes manifest the need for expressing this rule as we have done, in order to make it general. This also shows that almost all the modes of speech which seem contrary to this are in fact conformable to it, because the noun which is without an article is determined by some other thing. But when I say "by some other thing", I do not include in it the qui which is joined to the noun. For if one did include it,

one could never act contrary to this rule, since one could always say that one only uses a qui after a noun without an article in a mode of speech determined by the qui itself.

Thus, in order to give an account of nearly every objection to this rule, one must merely consider the different ways in which a noun without an article can be determined.

(1) It is certain that proper nouns which only signify a single thing are determined by themselves, and that is why I have spoken of the rule in question only with regard to common nouns, it being indubitable that it is perfectly proper to say, it imite Virgile, qui est le premier des poètes (he imitates Virgil, who is the greatest of poets), toute ma confiance est en Jésus-Christ, qui m'a racheté (all my trust is in Jesus Christ, who has redeemed me).

(2) Nouns in the vocative are also determined by the very nature of the vocative case, so that an article is not required to adjoin a qui to such a noun since it is indeed the supression of the article which renders a noun vocative and which distinguishes it from the nominative. It is therefore not at all contrary to our rule to say: Ciel, qui connaissez mes maux (Heaven, who know my afflictions); soleil, qui voyez toutes choses (sun, who see all things).

the numbers, such as two and three, etc. tout (all), nul (none), aucun (any), etc. determine as much as do the articles. This is too obvious to dwell upon.

(4) In negative propositions, the terms on which the negation falls are determined to be taken generally by the negation itself, whose nature is to take everything away. This is the reason why one says affirmatively with the article: il a de l'argent (he has money), du cœur (courage), de la charité (charity), de l'ambition (ambition), and negatively without the article: il n'a point d'argent (he has no money), de cœur (courage), de charité (charity), d'ambition (ambition). And it is this which also shows that the following modes of speech are not contrary to our rule: il n'y a point d'injustice qu'il ne commette (there is no injustice which he does not commit); il n'y a homme qui sache cela (there is no man who knows that). Nor does even the following violate the rule: est-il ville dans le

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Note that in the Grammar, "determined" means either that the scope of the noun is restricted to some subset of the extension, or else that the noun is clearly referring to the entire class in its full extension. In the Logic, on the other hand, "determined" is used as a synonym for restricted. Thus in the Logic, it is asserted that when an addition made to a term "restricts the extension ... the addition is called a determination" (118). Or again, "a complex expression is a determination if the extension expressed by the complex term is less than the extension of the idea, expressed by the principal word" (60).

plus obéissante (there is no city which is more obedient). reduces in meaning to a negation: il n'y a point de ville qui soit royaume qui soit plus obeissante? (is there a city in the kingdom which is more obedient?), for an affirmative with an interrogative

This is why it is not at all contrary to our rule to say je suis homme which follows the auf is better the speaks frankly), for homme a man who have seen many things) rather than qui a bien vu des third. For example, je suis homme qui ai bien vu des choses (I am choses (who has seen many things). is an animal, a monkey is an animal; therefore a monkey is a man it. And this is the reason why the following argument is false: Man sitions, the subject draws the predicate to itself, that is, determines i. e. since "animal" is the predicate of the first two propositions (5) It is an absolutely true rule of logic that in affirmative propo-

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sorte de fruit qui est mûr en hiver (a sort of fruit which ripens in and not d'un fruit (of a fruit). This is why it is correct to say une an article. For example, we say une sorte de fruit (a sort of fruit) which is very hard). winter); une espèce de bois qui est fort dur (a species of wood the ones that follow them, which, for this reason, ought not have (6) The words sort, species, genus, and similar words determine

faire ses affaires (he speaks like a [in] man who knows how to a [in] king who knows how to rule), or il parle en homme qui suit conduct his affairs). In the former example, comme un roi (like a contrary to our rule to say: Il agit en roi qui sait régner (he acts like manière d'un roi (in the manner of a king). This is why it is not in itself the article equivalent to comme un roi (like a king) or en la in vivit ut rex, il vit en roi (he lives like a [literally, in] king), includes king) is what is meant; in the latter comme un homme (like a man). (7) The particle en (literally, in) in the sense of the Latin ut as

(8) De alone with a plural often takes the place of des which is

delà de son bien (he is charged with debts which exceed his belong which make him lose patience); il est chargé de dettes qui vont audealing with the article. And thus the following modes of speech the plural of the article un (a), as we have shown in the chapter de maux qui lui font perdre patience (he is overwhelmed by troubles are very good and are not contrary to our rule: Il est accable

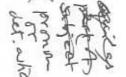
to do with our rule. is not at all related to the noun without the article, it has nothing affirm of ce qui tombe (it which falls) that c'est de la grêle (it is and the qui make up part of the subject of which I affirm. For I ce sont des gens habiles (they are able people). And since the qui hail); of ceux qui m'ont dit cela (those who told me that) that habiles (able people), is what I affirm and consequently the predicate numbers. For the noun without the article, grêle (hail), gens without an article, but to the ce (it) which serves for all genders and to our rule, because the qui is not related to the noun which is , dit cela (it is able people who told me that), are not at all contrary qui tombe (it is hail which falls), ce sont gens habiles qui m'ont (9) The following modes of speech, good or bad: c'est grêle

arule, and which one can not rationalize by means of the preceding guage. On the other hand, one ought not adduce them in order of the fact that those modes of speech which are authorized by a style, where articles were almost always omitted. It is a maxim observations, these, I believe, can only be vestiges of an older other modes of speech which usage has not authorized. Otherwise nor should they be used to authorize as consequences of themselves to cast doubt upon the rules and disturb the analogy of languages, that those who work on a living language must always keep sight if they are contrary to the rules and internal analogy of the langeneral and uncontested usage ought to pass as legitimate, even If there are other modes of speech which seem contrary to our

a model and its regular imitation. An analogical form is a form made on the model of one or more other forms in accordance with a general rule" (161). McGraw-Hill, 1959), gives a succinct definition of analogy: "Analogy supposes Ferdinand de Saussure, in his Course in General Linguistics (New York:



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to be determined, observing the foregoing maxim, will cause a language to remain he who will linger only on these aberrations of usage, without forever uncertain, and lacking any principles, it will never be able

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OF PREPOSITIONS

We have said above in Chapter II that cases and prepositions have been invented for the same purpose, namely, to indicate the relationship which things have with one another.

in a particular grammar.2 to give an exact examination of them, such as would be necessary account here of the principal ones of these which are marked by the prepositions of the French language, without obligating myself marked by prepositions; this is why I rest content with giving an It is virtually the same relationships in all languages which are

the following: I thus believe that the principal relationships can be reduced to

In the first edition of 1660, this chapter is numbered X, and this misnumbering continues until the end of the book

as an illustration of general principles i.e. as opposed to a general grammar. Here French is being used ostensibly

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Desn.	of the term indicating							of time									of place, location, order																	
from where one leaves				0000 0000	is going	where one			(since)	depuis	(during)	pendant	(before)	avant	(at the place of)	chez		(behind)	après		(before, in front of)	devant	(under)	SOUS	(upon)	SHL OL SHE	(out)	hors	(at)	À	(in)	en	(in)	dans
(from He leaves from Paris.)	sb	envers Son amour envers Dieu.	wards the north.)	(towards The magnet turns to-	vers L'aimant se tourne vers le nord.	(to to Rome.)	(to He goes to Italy.) à Â Rome	en Il va en Italie.	(Since the war.)	Depuis la guerre.	(During the war.)	Pendant la guerre.	(Before the war.)	Avant la guerre.	(He is at the place of the king.)	Il est chez le roi.	king.)	(Such a one walked behind the	Un tel marchait après le roi.	king.)	(Such a one walked before the	Un tel marchait devant le roi.	(All which is under heaven.)	Tout ce qui est sous le ciel.	(He is upon the sea.)	Il est sur la mer.	(This house is out of the city.)	Cette maison est hors la ville.	(He is at Rome.)	Il est à Rome,	(He is in Italy.)	Il est en Italie.	(He is in Paris.)	Il est dans Paris.

'd'apprès' garaha D ships of of cause other relationmaterial final opposition: union: efficient separation: exception: conformity: deletion: exchange: (in order to in order to live there.) officers.) avec Les soldats avec leurs officiers. pour pour y loger. (of of stone or of brick.) de de pierre ou de brique. (by House built by an architect.) par Maison bâtie par un architecte. contre Soldats revoltés contre leurs outre les officiers. outre Compagnie de cent soldats officers.) sans Les soldats sans leurs officiers. (with officiers. soldiers besides officers.) (for Give up a prisoner for anothpour Rendre un prisonnier pour un regiment.) de Soldats retranchés de regiment. their officers.) (against Soldiers revolted against (besides A company of a hundred (Without The soldiers without their (according to According to reason.) selon Selon la raison. (from Soldiers excused from the The soldiers with their

much for all languages as for French in particular. There are some remarks to make concerning prepositions, as

of acc. to Coated. what reason would have desired, which is that one relationship First, on the subject of prepositions, no language has followed

OF VERBS, AND OF THAT WHICH IS PROPER AND ESSENTIAL TO THEM¹

Until now, we have explicated those words which signify the objects of thought.² It remains to speak of those which signify the manner of thought, i.e. the verbs, the conjunctions, and the interjections.

The knowledge of the nature of the verb depends on what we have said at the beginning of this discourse, namely that the judgments that we make about things, as when I say the earth is round necessarily includes two terms, one called the subject, which is that of which one affirms, the earth in the above example, and the other the predicate, which is that which is affirmed, round in the above example. There is further the connection between these two terms, which is properly speaking the action of our minds which affirms the predicate of the subject.

Thus men have had no less need of inventing words that mark affirmation or assertion, which is the principal mode of our thought, than of inventing words which mark the objects of our thought.

And this is properly speaking what the verb is, a word whose principal use is to signify affirmation or assertion, that is, to indicate that the discourse where this word is employed is the discourse of a man who not only conceives things, but who judges and affirms them. In this the verb is distinguished from a number of nouns which also signify affirmation, such as affirmans (an affirming), affirmatio (affirmation), because the latter signify it only in as much as by an act of reflection of the mind, the affirmation has

become an object of our thought, and they do not indicate that he who makes use of these words affirms, but only that he conceives of an affirmation.

I have said that the principal use of the verb is to signify affirmation or assertion, because we will show later that it is also used in order to signify other movements of the soul, like to desire, to pray, to command, etc. But this is only changing the inflection and the mood, and thus we are considering the verb in this whole chapter only according to its principal signification, which is the one which it has in the indicative, and we shall withhold discussion of the others for another place.

According to that, one can say that the verb in itself ought to have no other use save to mark the connection that we make in our minds between the two terms of a proposition, but it is only the verb to be, which is called the substantive verb, which remained in this simple state, and further one can say that even this verb properly speaking only remained so in the third person present, is, and on certain occasions. For, as men naturally proceed to shorten their expressions, they have almost always joined to the affirmation some other significations in the same word.

(1) They have joined to it that of some attribute, so that in such a case the two words constitute a proposition, as when I say Petrus vivit (Peter lives). For the word lives includes not only the affirmation, but also the property of being alive. Thus it is the same thing to say Peter lives as to say Peter is living. From this comes the great diversity of verbs in each language. Whereas if people had been content to give to the verb the general signification of affirmation, without joining to it any particular attribute, one would only have had a need for one single verb in each language, which is the one called substantive.³

(2) They have also joined to it in certain instances the subject

3 Cf. Aristotle, De Interpretatione, Chap. 12, 21b, 5, trans. E. M. Edghill, in Richard McKeon ed., Basic Works of Aristotle (New York: Random House, 1941). Cf. Metaphysics, 1017a, 28, trans. W. D. Ross, in McKeon, Basic Works, "For there is no difference between 'the man is recovering' and 'the man recovers', nor between 'the man is walking' or 'cutting' and 'the man walks' or 'cuts', and similarly in all other cases."

Logic, Part II, Chapter 2, "The Verb" reprints the chapter virtually verbatim See above, Part II, Chapter I ff.

of the proposition, so that in such an instance two words, and indeed even one word, can constitute a complete proposition. The case of two words is exemplified when one says in Latin sum homo (I am a man), because sum not only signifies the affirmation, but also includes the signification of the pronoun ego (I), which is the subject of this proposition, which in French is always expressed as je suis homme [or in English as I am a man]. A single word constituting a proposition is illustrated by the Latin examples vivo (I am living) and sedeo (I am sitting). For these verbs contain in themselves both the affirmation and the attribute, as we have already said, and being in the first person, they also include the subject, I. From this has arisen the difference of persons, which is ordinarily found in all verbs.

(3) They have also joined to it a relationship to the time regarding which the affirmation is made, so that a single word, like caenasti (you supped) signifies that I affirm of him to whom I am speaking the action of supping, not for the present time, but for the past. And from this has come the diversity of tenses which is again, ordinarily, common to all verbs.

The diversity of these significations joined in the same word is that which prevented many otherwise very astute people from properly understanding the nature of the verb, because they did not consider it according to what is essential to it, namely affirmation, but rather according to the following relationships which are accidental to it qua verb.

Thus Aristotle, having confined his attention to the third type of signification which is adjoined to that which is essential to the verb, defined it as vox significans cum tempore (a word which signifies with time).4

Others, like Buxtorf, having added the second signification, have defined it as follows: vox flexilis cum tempore et persona⁵

(a word which has different inflections with time [tenses] and persons).

Still others, having stopped at the first of these adjoined significations, namely that of the attribute, and having considered that the attributes that men have joined to the affirmation in the same word ordinarily pertain to actions and passions, believed that the essence of the verb consisted in signifying actions or passions.

And finally Julius Caesar Scaliger believed that he solved a great mystery in his book On the Principles of the Latin Language by saying that the distinction of things into in permanentes et fluentes, that which endures and that which changes, was the true source of the distinction between nouns and verbs; the nouns signifying what endures, and the verbs signifying what changes.

But it is easy to see that all these definitions are false, and do not at all explain the true nature of the verb.

The manner in which the first two definitions were conceived makes this manifest, because it is not at all said there what the verb signifies, but only with what it signifies — cum tempore, cum persona, with time [tense], with person.

The latter two are even worse, for they suffer from the two greatest vices of a definition, neque onni, neque soil, which is to fit neither all that is being defined, nor only what is being defined.

For there are verbs which signify neither actions nor passions, nor what changes, like existit (it exists), quiescit (it rests), friget (it is cold), alget (it is chilled), tepet (it is warm), calet (it is hot), albet (it is white), viret (it is green), claret (it is bright), of which we will speak in another place.

And furthermore there are some words that are not verbs at all which signify actions and passions and even things which change in conformity with Scaliger's definition. For it is certain that

⁴ Aristotle, De Interpretatione, Chap. 3, 16b, 6; "A verb is that which, in addition to its proper meaning, carries with it the notion of time".

Johannes Buxtorf (1564-1629) was Professor of Hebrew at Basle, and a well-known grammarian. He is best known for his grammar of the Hebrew language, Epistome Grammaticae Hebraeae. Brokle cites the reference to the London edition of 1653 as follows: Chapter XII, De Verbo, 22. Donzé, 188,

n. 16, points out that similar definitions exist in the works of two other grammarians known to Arnauld and Lancelot: the Gramere of Ramus, and Sanctius Minerya.

Scaliger, 134, 137, 220. In the New Latin Method, Book VI, 98, Lancelot cites Sanctius as holding this same view. Cf. Sanctius, Book III, Chapter II, text cited in Donzé, 209, n. 57.

participles are truly nouns, and that nonetheless those which are formed from active verbs signify actions and those which are formed from passive verbs signify passions, no less than the very verbs from whence they come, and there is no reason whatever to pretend that fluens (flowing) does not signify something which comes to pass as much as does fluit (it flows).

To which one can add, against the first two definitions of a verb, that participles also signify with time [tense], since there are present participles, past participles, and future participles, especially in Greek. And those who believe, not without reason, that a vocative is actually a second person, especially when it has a different ending from the nominative, will find that there is in this regard only a quantitative [rather than qualitative] difference between the participle and the verb.

And thus the essential reason why a participle is not a verb is that it does not at all signify affirmation or assertion, from whence it comes that it can form a proposition (this being the property of the verb) only by adding a verb, that is by replacing what has been removed in changing the verb into a participle. For why is it that Petrus vivit (Peter lives) is a proposition while Petrus vivens (Peter living) is not, if not because the affirmation which is contained in vivit (lives) has been removed in order to form the participle vivens (living). From whence it appears that the affirmation which is either found or not found in a word is what determines its being a verb or not a verb.

Concerning this one can further remark in passing that the infinitive, which is very often a noun (as we shall explain), as when we say le boire (the drink), le manger (food; literally, the eat), differs from participles in that participles are adjectival nouns, while the infinitive is a substantive noun, made by abstraction from this adjective, in the same way as from candidus in Latin comes candor, or from white comes whiteness. Thus in Latin ruber, a verb, signifies is red, comprising both the affirmation and the attribute, while rubens, the participle, simply signifies red, without the affirmation, and rubere, taken as a noun, signifies redness.

It ought therefore remain certain, in considering simply

what is essential to the verb, that its only true definition is vox significans affirmationem or a word which signifies affirmation or assertion. For one cannot find a word which marks affirmation – and which is not a verb, nor can one find a verb which does not serve to mark affirmation, at least in the indicative. And it is indubitable that if a word such as est (is), which always marked affirmation, had been invented without having any difference either of person or tense, so that the diversity of persons were marked solely by nouns and pronouns, and the diversity of tenses by adverbs, it would not fail to be a true verb. Thus, in fact, in the propositions that the philosophers call eternal like God is infinite, all body is divisible, the whole is greater than its parts, the word is signifies only simple affirmation, without any relationship to time, because these are true for all time, and without our mind attending to any diversity of persons.⁷

Thus the verb, according to its essential characterization, is a word which signifies affirmation. But if one wished to add to the definition of the verb its principal accidental qualities noted carlier, it could be defined as follows: vox significans affirmationem, cum designatione personae, numeri et temporis (a word which signifies affirmation or assertion, with the designation of person, number, and time [tense]). This is what properly belongs to substantive verbs.

As far as the other verbs are concerned, in so far as they differ from it in terms of the union which men have made of the affirmation with certain attributes, they can be defined in this way: vox significans affirmationem alicujus attributi, cum designatione personae, numeri, et temporis (a word which marks the affirmation or assertion of some attribute, with the designation of person, number, and time [tense]).

And it can be noted in passing that the affirmation, in so far as it is conceived, can also be the attribute of the verb. For example, in the verb *affirmo* (affirm), this verb signifies two affirmations; of which one concerns the person who is speaking and the other

What is being distinguished here are what Kant later called "analytic a priori judgments", and what Hume called "relations of ideas".

concerns the person of whom one speaks, whether the latter is the speaker or another person. For when I say Petrus affirmat (Peter affirms), affirmat is the same thing as est affirmans (is affirming), and therefore est (is) marks my affirmation, or the judgment that I make concerning Peter, and affirmans ([is] affirming) marks the affirmation that I conceive and that I attribute to Peter.

The verb nego (deny), on the contrary, contains an affirmation and a negation, for the same reason.

It is necessary once again to remark that although not all our judgments are affirmations, there being some negative ones, nevertheless the verbs themselves do not signify anything but affirmations, the negations being marked by the particles non, ne, or by nouns that entail these particles: nullus (none, not any), or nemo (no one), which, when joined to verbs, change the affirmation into a negation, for example, nul homme n'est immortel (no man is immortal); nullum corpus est indivisibile (no body is indivisible).

But after having explained the essence of the verb, and having in a few words indicated its principal accidents, it is necessary to consider these same accidents in a bit more detail, and it is appropriate to begin with those which are common to all verbs, to wit, the diversity of persons, numbers, and tenses.

Y

OF THE DIVERSITY OF PERSONS AND NUMBERS IN VERBS

We have already stated that the diversity of persons and numbers in verbs has come from the fact that men have wanted, for the sake of brevity, to join in the same word to the affirmation which is proper to the verb, the subject of the proposition, at least in certain instances. For when a man speaks of himself, the subject of the proposition is the first person pronoun, ego (I); and when he speaks of him to whom he addresses his speech, the subject of the proposition is the second person pronoun, thou, you.

Now, to obviate always having to make use of these pronouns, it was believed that it would suffice to give to the word which signifies the affirmation a certain ending which indicated that it is of oneself that one is speaking, and it is this which has been called the first person form of the verb, as in video (I see).

The same thing has been done with regard to the one to whom speech is addressed, and this is what has been called the second person, vides (thou seest). And as these pronouns have their plural form, when one speaks of oneself together with others, nos (we), or of the one to whom one speaks also together with others, vos (you), two different endings have been given to the plural: videmus (we see), videtis (you see).

But because the subject of the proposition is often neither the speaker nor the one to whom one is speaking, it was necessary in order to restrict these two endings to these two sorts of person, to create a third ending that was joined to all the other subjects of the proposition. And this is what has been called the third person, both in the singular and in the plural, although the word person

OF SYNTAX, OR THE CONSTRUCTION OF WORDS PUT TOGETHER

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distinguish discourse.

it is a natural result of what is in use nearly everywhere to better

The first, for the most part, is the same in all languages, because

when one of two words causes a variation in the other.

when words ought to agree with one another, and government,

Syntax is generally distinguished into two parts: agreement,

some general notions according to the principles we have estabof words put together, about which it will not be difficult to give There remains to be said a word about syntax, or the construction

a neuter; for it was indeed only for this purpose that genders were or else putting both into the neuter in those languages which have and consequently the adjective must be in the plural: homines sitated putting substantives and adjectives into the same gender, docti, hommes doctes (learned men). The distinction of feminine and masculine has similarly neces-

subjects which share the characteristic marked by the adjective,

which is indicated confusedly, albeit directly, by the adjective,

plural when the other is. For since the substantive is the subject number, that is to say, putting one of the words in the singular or

then if the substantive word marks several things, there are several

necessitated making the substantive agree with the adjective in

Thus the distinction of two numbers, singular and plural, has

nouns and pronouns. If one encounters something apparently Verbs, similarly, ought to agree in number and person with

GENERAL AND RATIONAL GRAMMAR

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contrary to these rules, it is by a figure of speech, that is to say [that the words stand for] rather than the words themselves, as we by some word being understood, or else by considering the thoughts

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even always found. not have any particles, but rather the simple article, which is not tively, while Italian adjoins da for the ablative. The other cases do only have of and to indicate the genitive and the dative respec which only indicate a few of these cases, as French and Spanish make use only of small particles which take the place of cases and Some languages effect governing according to case; the others arbitrary, and for this reason is very different in all languages The syntax of government, on the contrary, is almost totally

treatise concerning prepositions and cases should be consulted. For more on this subject, what has been said earlier in this wally eatise concerning was a subject.

GENER

use in all languages.1 But it is well to note some general maxims which are of major garetur

purpose is what is marked by the verb. express what is thought about what is conceived, and this latter purpose of speech is not only to indicate conception, but also to ship to some verb either expressed or understood, because the The first is that there is never a nominative which lacks a relation

John J

nominative of the verb, although before infinitives it is in the accusative: scio Petrum esse doctum (I know Peter [him] to be learned). something of which one affirms, this being the subject of the verb being affirmation or assertion, it is necessary that there be tive, either expressed or understood, because the nature of the The second is that there is also no verb which lacks its nomina-

of his discussion (167), in the chapter on ellipsis. See Book VII, "Of Figurative Syntax", Chapter I. cussed in the part of the chapter dealing with regular syntax, while in the "Of the first figure called Ellipsis", 166ff. Lancelot cites Sanctius as the source New Latin Method they are dealt with in the section on figurative syntax this chapter of the Grammar. In the Grammar, however, these rules are dislot discusses a series of general maxims, including the first four discussed in These rules are basically derived from the New Latin Method, where Lance

SEN TY Substantin (Blats to

substantive, because the adjective confusedly indicates a substantive, namely the subject of the characteristic which someone who is learned.2 marked distinctly by this adjective: doctus (learned) is related to

tion de, i. e. ex (out of). de, which is the mark of the genitive, is often put for the preposivernacular languages with greater difficulty, because the particle Methods for these languages.3 This rule can be applied to the genitive, either in Greek or in Latin, as is made clear in the New something like the possessor, it is necessary that it be governed by the thing possessed. This is why no verb properly governs the not governed by another noun. For since this case always marks

this or that case as it pleases. case, but rather demonstrates that custom has been able to choose choice does not change the relationship which is specific to each various sorts of relationships which are inherent in the cases, which often chosen according to the caprice of custom from among the The fifth maxim is that the case which a verb is to govern is

instance of attribution, to which the action of the verb was related the action takes place, and the world which the latter governs as an to regard the word which the former verb governs as the term where although these are two verbs for to aid, because the Latins chose cusative), and some say opitulari alicui (to aid someone; dative), Thus in French one says servir quelqu'un (to serve someone), Thus some say in Latin juvare aliquem (to aid someone; ac-

or the accusative indifferently. and servir à quelque chose (to serve for something). Thus in Spanish, the majority of active verbs governs the dative

alicui or aliquem (to surpass someone; dative or accusative). when one admixes cases governed by prepositions, like praestare Thus the same verb can govern different cases, especially

172-173; New Greek Method, Book VII, Rule IX, 351ff., especially 354. See above, Part II, Chapter II, last paragraph, See New Latin Method, Book V, Rule X, 21ff; Book VII, Maxim VII,

The third is that there can be no adjective which is not related

The fourth is that there is never a genitive in discourse which is

CREATING BOOK TO

GENERAL AND RATIONAL GRAMMAR

someone [accusative] from death [dative]) ot mortem alicui (death [accusative] from death [ablative]), and so forth. [accusative] from someone [dative]) or aliquem ā morte (someone Thus one says, for example, eripere morti aliquem (to snatch

necessary to consult the custom of the language in question. aliquem [accusative] is to beware of someone. In this it is always alicui [dative] is to look out for someone's interest, but cavere to the authorization of custom, since, for example, in Latin cavere the force of changing the meaning of the expression, according Sometimes these different ways of governing have themselves

Of the figures of construction

understanding of its natural order, when all the parts of discourse are simply expressed, and where there are no extra words and no natural expression of our thoughts. missing words, and where the discourse is in conformity with the What we have said earlier about syntax is sufficient to allow the

on like so many irregularities in grammar, although they are some of words - for all these reasons it has come about that four times perfections and beautifications of language. modes of speaking called figurative were introduced, which are word which seems superfluous, or they reverse the natural order or even because, considering elegance of style, they allow some often, in order to abbreviate, they omit something from discourse, rather than the words which are used to express them, and because But because men often follow the meaning of their thoughts w

the words of discourse is called syllepsis or conception, as when The mode which agrees more with our thoughts than with od

tian than Cartesian, contrary to Chomsky's claim. primarily derived from Sanctius, the Port-Royal grammarians are more Sanc-Royal grammatical corpus. Lakoff further argues that since this notion is "Review", Language 45, 352ff., argues that the discussion of ellipsis in the New Latin Method is the best evidence of transformational elements in the Port-Latin Method, where an entire book is devoted to it (Book VID, Lakoff, Sanctius. The account of figurative syntax is much more detailed in the New As previously indicated, this discussion of the figures is derived from

magis major (more greater), etc. is called pleonasm or abundance, like vivere vitam (to live a life),

of discourse is called hyperbaton or reversal. And that mode of speaking which reverses the natural order

Greek and Latin, where this is amply discussed.7 particular languages, and especially in the New Methods for One can see examples of all these figures in the grammars of

is second to none in either beauty or elegance.8 and least encumbered fashion, although at the same time, French and of expressing things as much as possible in the most natural these figures than French, because it is particularly fond of clarity I add only that there is scarcely a language which uses fewer of

ADVERTISEMENT⁹

which are treated here. is very useful for clarifying this book, and for proving several things or the Art of Thinking, which being based on the same principles, first printing of this book, another has appeared entitled Logic than a general grammar. But it is a pleasure to report that since the say, because this concerns the task of a general dictionary rather words, about which there would be many interesting things to We have not spoken at all in this grammar of derived or compound

New Latin Method, Book VII, Chapter VII, "Observations on figurative construction", 367ff.

^p This advertisement does not appear in the first edition of 1660, since the so blatantly ethnocentric a pronouncement. It is ironically fitting that this alleged "general grammar" should end with

first edition of the Logic appeared in 1662.

: 6 000 would more easily find [men] to go to Rome than [men] to go to stood) qui Romam proficiscantur quam qui Athenas (Cicero) (you understood, as in the case of facilius reperias (homines is undercity of Rome).6 And finally, something which is governed is Romae (he is at Rome) instead of est in urbe Romae (he is in the the word which governs another word is understood, like est understood (I wish [to address] a [cw [words] to you). Sometimes is expressed, for example, in paucis te volo where verbis alloqui is The mode of speaking which has more words than are required rains). Sometimes the substantive is understood while the adjective

is not genitive, as Arnauld and Lancelot assume, but locative. This example is incorrect, as the word Romae in the sentence est Romae

or omission. For example, sometimes the verb is understood, That which excises something from discourse is called ellipsis

stood, as in pluit (it rains) for Deus or natura pluit (God or nature

almost always understood. Sometimes the nominative is underwhich is quite common in Hebrew, where the substantive verb is

Ovid, Heroides, 1.88; 12.43.

onto the ship), etc. feminine singular], though submerged [masculine plural], hung

together like pars mersi tenuere ratem (some [literally, a part, ruunt5 (the crowd rushes [literally, rush] along), and of both [literally, who, masculine] destroyed me?), of number, like turba ubi est scelus qui me perdidit? (where is the crime [neuter] which the actual words, causes me to say it est six heures, rather than my thought, which is directed to this sixth hour without considering cate a precise time, and only one of these hours, namely the sixth,

And this figure sometimes creates irregularities of gender, like

six, eight, ten, fifteen, men), etc. But, because we purport to indiand as one still says its sont six, huit, dix, quinze, hommes (they are sont six heures (they are six hours), as was indeed said formerly, for, according to the words, it would be necessary to say elles I say il est six heures (it is six o'clock; literally, it is six hours)

elles sont six heures.