Whoever owns this book owns a treasure.
—Eva Brann

THE TRIVIUM

THE LIBERAL ARTS OF LOGIC, GRAMMAR, AND RHETORIC

Understanding the Nature and Function of Language

SISTER MIRIAM JOSEPH, C.S.C., Ph.D.

Edited by Marguerite McGlinn

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PAUL DRY BOOKS
Philadelphia 2002

First Paul Dry Books Edition, 2002

Paul Dry Books, Inc.
Philadelphia, Pennsylvania
www.pauldrybooks.com

Text type: Electra
Display type: Fenice and Antique Olive
Composed by Northeastern Graphic Services, Inc.
Designed by Adrianne Onderdonk Dudden

Photograph of Sister Miriam Joseph courtesy of the Saint Mary's College Archives

15 16 17 18 19
Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Miriam Joseph, Sister, 1898–
The trivium : the liberal arts of logic, grammar, and rhetoric : understanding the nature and function of language / by Sister Miriam Joseph ; edited by Marguerite McGlinn.
p. cm.
ISBN 0-9679675-0-3 (pbk. : alk. paper)
ISBN 1-58988-013-7 (cloth : alk. paper)
I. English language—Rhetoric. 2. English language—Grammar. 3. Reading comprehension. 4. Language and logic. 5. Critical thinking. I. McGlinn, Marguerite. II. Title.

PE1408 .M568 2002
808'.042—dc21

2001058498

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Editor's Introduction

> "In true liberal education…the essential activity of the student is to relate the facts learned into a unified, organic whole, to assimilate them as…the rose assimilates food from the soil and increases in size, vitality, and beauty."
>
> *The Trivium: The Liberal Arts of Logic, Grammar, and Rhetoric*

What is language? How does it work? What makes good language? Coleridge defined prose as "words in their best order" and poetry as "the best words in the best order." Plain but apt, his definitions provide a standard, but where can a reader and a writer find the tools to achieve this standard? My search drew me to Sister Miriam Joseph's book, *The Trivium*. I knew that the skills I had learned as a liberal arts student, taught as a high school English teacher, and use as a writer and editor derived from the medieval and Renaissance approach to grammar, logic, and rhetoric, the three "language arts" of the liberal arts known as the trivium. However, a study of the original trivium showed me that the hodgepodge of grammar rules, literary terms, and syllogistic formulas offered as "language arts" differs from the original conception of the trivium that offered tools to perfect the mind.

Sister Miriam Joseph rescued that integrated approach to unlocking the power of the mind and presented it for many years to her students at Saint Mary's College in South Bend, Indiana. She learned about the trivium from Mortimer J. Adler, who inspired her and other professors at Saint Mary's to study the trivium themselves and then to teach it to their students. In Sister Miriam Joseph's preface to the 1947 edition of *The Trivium*, she wrote, "This work owes its inception…to Professor Mortimer J. Adler of the University of Chicago, whose inspiration and instruction gave it initial impulse." She went on to acknowledge her debt to Aristotle, John Milton, and Jacques Maritain. William Shakespeare, Thomas Aquinas, and Thomas More also make frequent appearances in *The Trivium*. This is good company indeed.

The Trivium teaches us that language evolves from the very nature of being human. Because we are rational, we think; because we are social, we interact with other people; because we are corporeal, we use a physical medium. We invent symbols to express the range of practical, theoretical, and poetical experiences that make up our existence. Words allow us to leave a legacy of our experience to delight and to educate those who follow us. Because we use language, we engage in a dialogue with the past and the future.

How does *The Trivium* help us use language to engage in such a dialogue with the past and the future and to negotiate our own lives? Aristotle's theories of language and literature underlie this work. His ten categories of being provide a central focus. Words are categorized by their relationship to being and to each other. When a speaker or writer uses a word, thus assigning it a particular meaning, it becomes a term and enters the realm of logic. Aristotle's categories enable us to translate the linguistic symbol into a logical entity ready to take its place in a proposition. From propositions, the reader moves to syllogisms, enthymemes, sorites, formal fallacies, and material fallacies.

The Trivium explains that logic is the art of deduction. As thinking beings, we know something and from that knowledge can deduce new knowledge. Where does the initial knowledge come from? The section on induction answers that question as it explores the process by which we derive general principles from individual instances.

Examples from the literary canon and Shakespeare, in particular, illuminate the explanations of grammar and logic. Sister Miriam Joseph, who was also a Shakespearean scholar, actually wrote about Shakespeare as a master of the trivium. For example, he often used litotes, the figure of speech based on the obversion of a proposition. *The Tempest* shows one instance of this. Sebastian, expressing his concern over the fate of Ferdinand, the king's son, says, "I have no hope that he's undrowned." Shakespeare makes the rhetorical decision to use obversion to dramatize that Sebastian faces a reality he cannot describe in direct speech.

Rhetoric concerns the choices a speaker or writer makes from the options grammar and logic offer. Sister Miriam Joseph reviews the history of rhetoric and presents Aristotle's perspective on the means of persuasion. She includes poetics—communication through the narrative created by the author—in addition to rhetoric or direct communication. Here, the reader will find Aristotle's six elements of poetics. The section on plot is extensive and includes a detailed analysis of structure

in Guy de Maupassant's "The Piece of String." In the service of rhetoric and poetics, Sister Miriam Joseph explains figurative language according to the classical topics of invention from which they are derived, poetry and versification, and the essay. The chapter ends with a brief guide to composition.

As this summary indicates, *The Trivium* provides a comprehensive view of grammar, logic, and rhetoric as well as of induction, poetics, figurative language, and poetry. The reader could, however, use parts of the book separately. Chapters One to Three: "The Liberal Arts," "The Nature and Function of Language," and "General Grammar" offer a guide to an integrated view of language. The logic section comprises Chapters Four to Nine. Chapter Ten, "A Brief Summary of Induction," presents the types of induction and scientific method. Chapter Eleven, "Reading and Composition," explains concepts of rhetoric and other literature. The few references to logic in Chapters Ten and Eleven are explained in the notes.

The notes are a new feature in this edition of *The Trivium*. Todd Moody, Professor of Philosophy at Saint Joseph's University in Philadelphia, provided commentary and amplification on the logic chapters. His notes are designated *TM*. My notes give etymologies, the source for quotations, and clarifications. Some notes repeat information from earlier chapters that I thought would be helpful to the reader.

The original publication had sketchy documentation of quotations. I researched all the quotations, and I used contemporary standard editions for frequently cited sources, such as Shakespeare's plays or the Bible. In a few cases, I could find the work cited but not the actual quotation. Saint Thomas More's *Confutation Concerning Tyndale's Answers*, for example, is a three-volume work in Renaissance prose. In one case, however, I was delighted not only to find the actual book, an out-of-print and now little-known book on logic, but to find the actual quotation.

The issue of gender and language occasioned several discussions among the editorial staff. In *The Trivium* Sister Miriam Joseph uses *he* and *man* to refer to all human beings; that was the accepted procedure in the 1930s and the 1940s, and it suited a book that used classical, medieval, and Renaissance sources. I left the text unchanged except for occasional substitutions of plural words or expressions like *human being* for *man*.

In her edition of *The Trivium*, Sister Miriam Joseph used an outline form. This edition adapts that outline by using equivalent headings and

by providing transitions. I also made distinctions between information and examples; in the original text, examples, illustrations, analogies, and notes were incorporated into the outline. In my own study of this trivium, I found that certain sections were key to understanding the work as a whole or were valuable additions to my understanding of language. I have presented these sections as displays in this edition, and they should serve the reader both in a first reading of *The Trivium* and also in a review of the text.

The author chose wonderful, literary examples for every chapter of the book. This edition keeps those selections. Occasionally, poems were mentioned but not included; this edition includes the poems. In some cases, Sister Miriam Joseph used quotations from, or references to, contemporary periodicals. Because they have lost their relevance, I substituted literary references.

I would like to thank the many people who helped bring this new edition of *The Trivium* to publication. John Kovach, librarian at Saint Mary's College, found the original *Trivium* and sent it to Paul Dry Books. Professor John Pauley of Saint Mary's College wrote Sister Miriam Joseph's biography for this edition. Todd Moody provided an invaluable service in reading and commenting on the logic chapters. He helped me clarify the text, and he answered all my questions affably and quickly. Darryl Dobbs, Professor of Political Science at Marquette University, read drafts at various stages and provided helpful commentary. Martha Robinson, a member of the Christian Trivium Board, reviewed a draft, and her advice helped me sharpen the focus. I would also like to thank Thomas McGlinn, my husband, who patiently sat through evening meals peppered with conundrums about grammar and logic as I worked my way through this project.

In editing *The Trivium*, I tried to do no harm to the original text and to be true to the vision and learning of the author and of her teachers. In the "Prologue" to *The Canterbury Tales*, Chaucer asks the audience to forgive him if he offends anyone or makes a mistake. He concludes by explaining, "My wit is short, ye may wel understonde." I invoke the same defense.

Ultimately, Sister Miriam Joseph speaks the most eloquently about the value of this book. She explains that studying the liberal arts is an intransitive activity; the effect of studying these arts stays within the individual and perfects the faculties of the mind and spirit. She compares the studying of the liberal arts with the blooming of the rose; it brings to fruition the possibilities of human nature. She writes, "The

utilitarian or servile arts enable one to be a servant—of another person, of the state, of a corporation, or of a business—and to earn a living. The liberal arts, in contrast, teach one how to live; they train the faculties and bring them to perfection; they enable a person to rise above his material environment to live an intellectual, a rational, and therefore a free life in gaining truth."

Marguerite McGlinn
Philadelphia, 2002

THE TRIVIUM

The Liberal Arts of Logic, Grammar, and Rhetoric

1 THE LIBERAL ARTS

THE LIBERAL ARTS

The liberal arts denote the seven branches of knowledge that initiate the young into a life of learning. The concept is classical, but the term liberal arts and the division of the arts into the trivium and the quadrivium date from the Middle Ages.

The Trivium and the Quadrivium

The trivium[1] includes those aspects of the liberal arts that pertain to mind, and the quadrivium, those aspects of the liberal arts that pertain to matter. Logic, grammar, and rhetoric constitute the trivium; and arithmetic, music, geometry, and astronomy constitute the quadrivium. Logic is the art of thinking; grammar, the art of inventing symbols and combining them to express thought; and rhetoric, the art of communicating thought from one mind to another, the adaptation of language to circumstance. Arithmetic, the theory of number, and music, an application of the theory of number (the measurement of discrete quantities in motion), are the arts of discrete quantity or number. Geometry, the theory of space, and astronomy, an application of the theory of space, are the arts of continuous quantity or extension.

The Trivium: The three arts of language pertaining to the mind

Logic	art of thinking
Grammar	art of inventing and combining symbols
Rhetoric	art of communication

The Quadrivium: The four arts of quantity pertaining to matter

Discrete quantity or number

Arithmetic	theory of number
Music	application of the theory of number

Continuous quantity

Geometry	theory of space
Astronomy	application of the theory of space

1-1 *The Seven Liberal Arts*

These arts of reading, writing, and reckoning have formed the traditional basis of liberal education, each constituting both a field of knowledge and the technique to acquire that knowledge. The degree bachelor of arts is awarded to those who demonstrate the requisite proficiency in these arts, and the degree master of arts, to those who have demonstrated a greater proficiency.

Today, as in centuries past, a mastery of the liberal arts is widely recognized as the best preparation for work in professional schools, such as those of medicine, law, engineering, or theology. Those who first perfect their own faculties through liberal education are thereby better prepared to serve others in a professional or other capacity.

The seven liberal arts differ essentially from the many utilitarian arts (such as carpentry, masonry, plumbing, salesmanship, printing, editing, banking, law, medicine, or the care of souls) and from the seven fine arts (architecture, instrumental music, sculpture, painting, literature, the drama, and the dance), for both the utilitarian arts and the fine arts are transitive activities, whereas the essential characteristic of the liberal arts is that they are immanent or intransitive activities.

The utilitarian artist produces utilities that serve the wants of humanity; the fine artist, if he is of the highest order, produces a work that is "a thing of beauty and a joy forever"[2] and that has the power to elevate the human spirit. In the exercise of both the utilitarian and the fine arts, although the action begins in the agent, it goes out from the agent and ends in the object produced and usually has a commercial value; and therefore the artist is paid for the work. In the exercise of the liberal arts, however, the action begins in the agent and ends in the agent, who is perfected by the action; consequently, the liberal artist, far from being paid for his hard work, of which he receives the sole and full benefit, usually pays a teacher to give needed instruction and guidance in the practice of the liberal arts.

The intransitive character of the liberal arts may be better understood from the following analogy.

ANALOGY: The intransitive character of the liberal arts

The carpenter planes the wood.

The rose blooms.

The action of a transitive verb (like *planes*) begins in the agent but "goes across" and ends in the ob-

ject (*the wood*). The action of an intransitive verb (like *blooms*) begins in the agent and ends in the agent (*the rose*, which is perfected by blooming).

Classes of Goods

The three classes of goods—valuable, useful, and pleasurable—illustrate the same type of distinction that exists among the arts.

Valuable goods are those which are not only desired for their own sake but which increase the intrinsic worth of their possessor. For instance, knowledge, virtue, and health are valuable goods.

Useful goods are those which are desired because they enable one to acquire valuable goods. For instance, food, medicine, money, tools, and books are useful goods.

Pleasurable goods are those which are desired for their own sake because of the satisfaction they give their possessor. For instance, happiness, an honorable reputation, social prestige, flowers, and savory food are pleasurable goods. They do not add to the intrinsic worth of their possessor, nor are they desired as means, yet they may be associated with valuable goods or useful goods. For instance, knowledge, which increases worth, may at the same time be pleasurable; ice cream, which is nourishing food, promotes health, and is, at the same time, enjoyable.

The utilitarian or servile arts enable one to be a servant—of another person, of the state, of a corporation, or of a business—and to earn a living. The liberal arts, in contrast, teach one how to live; they train the faculties and bring them to perfection; they enable a person to rise above his material environment to live an intellectual, a rational, and therefore a free life in gaining truth. Jesus Christ said, "You shall know the truth, and the truth shall make you free" (John 8:32).[3]

The new motto of Saint John's College, Annapolis, Maryland, expresses the purpose of a liberal arts college with an interesting play on the etymology of liberal: "*Facio liberos ex liberis libris libraque*." "I make free men of children by means of books and a balance [laboratory experiments]."[4]

Science and Art

Each of the liberal arts is both a science and an art in the sense that in the province of each there is something to know (science) and something to do (art). An art may be used successfully before one

has a formal knowledge of its precepts. For example, a child of three may use correct grammar even though the child knows nothing of formal grammar. Similarly, logic and rhetoric may be effectively used by those who do not know the precepts of these arts. It is, however, desirable and satisfying to acquire a clear knowledge of the precepts and to know why certain forms of expression or thought are right and wrong.

The trivium is the organon, or instrument, of all education at all levels because the arts of logic, grammar, and rhetoric are the arts of communication itself in that they govern the means of communication —namely, reading, writing, speaking, and listening. Thinking is inherent in these four activities. Reading and listening, for example, although relatively passive, involve active thinking, for we agree or disagree with what we read or hear.

The trivium is used vitally when it is exercised in reading and composition. It was systematically and intensively exercised in the reading of the Latin classics and in the composition of Latin prose and verse by boys in the grammar schools of England and the continent during the sixteenth century. This was the training that formed the intellectual habits of Shakespeare and other Renaissance writers. The result of it appears in their work. (See T.W. Baldwin, *William Shakespeare's Small Latine and Lesse Greeke.* Urbana: The University of Illinois Press, 1944.[5]) The trivium was basic also in the curriculum of classical times, the Middle Ages, and the post-Renaissance.

In the Greek grammar of Dionysius Thrax (ca.166 B.C.), the oldest extant book on grammar[6] and the basis for grammatical texts for at least thirteen centuries, grammar is defined in so comprehensive a manner that it includes versification, rhetoric, and literary criticism.

> Grammar is an experimental knowledge of the usages of languages as generally current among poets and prose writers. It is divided into six parts: (1) trained reading with due regard to prosody [versification]; (2) exposition, according to poetic figures [rhetoric]; (3) ready statement of dialectical peculiarities and allusion; (4) discovery of etymologies; (5) the accurate account of analogies; (6) criticism of poetical productions which is the noblest part of grammatical art.

Because communication involves the simultaneous exercise of logic, grammar, and rhetoric, these three arts are the fundamental arts

of education, of teaching, and of being taught. Accordingly, they must be practiced simultaneously by both teacher and pupil. The pupil must cooperate with the teacher; he must be active, not passive. The teacher may be present either directly or indirectly. When one studies a book, the author is a teacher indirectly present through the book. Communication, as the etymology of the word signifies, results in something possessed in common; it is a oneness shared. Communication takes place only when two minds really meet. If the reader or listener receives the same ideas and emotions that the writer or speaker wished to convey, he understands (although he may disagree); if he receives no ideas, he does not understand; if different ideas, he misunderstands. The same principles of logic, grammar, and rhetoric guide writer, reader, speaker, and listener.

Liberal Arts Education

Education is the highest of arts in the sense that it imposes forms (ideas and ideals) not on matter, as do other arts (for instance carpentry or sculpture) but on mind. These forms are received by the student not passively but through active cooperation. In true liberal education, as Newman[7] explained, the essential activity of the student is to relate the facts learned into a unified, organic whole, to assimilate them as the body assimilates food or as the rose assimilates food from the soil and increases in size, vitality, and beauty. A learner must use mental hooks and eyes to join the facts together to form a significant whole. This makes learning easier, more interesting, and much more valuable. The accumulation of facts is mere information and is not worthy to be called education since it burdens the mind and stultifies it instead of developing, enlightening, and perfecting it. Even if one forgets many of the facts once learned and related, the mind retains the vigor and perfection gained by its exercise upon them. It can do this, however, only by grappling with facts and ideas. Moreover, it is much easier to remember related ideas than unrelated ideas.

Each of the liberal arts has come to be understood not in the narrow sense of a single subject but rather in the sense of a group of related subjects. The trivium, in itself a tool or a skill, has become associated with its most appropriate subject matter—the languages, oratory, literature, history, philosophy. The quadrivium comprises not only mathematics but many branches of science. The theory of number includes not merely arithmetic but also algebra, calculus, the theory of equations,

and other branches of higher mathematics. The applications of the theory of number include not only music (here understood as musical principles, like those of harmony, which constitute the liberal art of music and must be distinguished from applied instrumental music, which is a fine art) but also physics, much of chemistry, and other forms of scientific measurement of discrete quantities. The theory of space includes analytic geometry and trigonometry. Applications of the theory of space include principles of architecture, geography, surveying, and engineering.

The three R's—reading, writing, and reckoning—constitute the core not only of elementary education but also of higher education. Competence in the use of language and competence in handling abstractions, particularly mathematical quantities, are regarded as the most reliable indexes to a student's intellectual caliber. Accordingly, tests have been devised to measure these skills, and guidance programs in colleges and in the armed forces have been based on the results of such tests.

The three arts of language provide discipline of mind inasmuch as mind finds expression in language. The four arts of quantity provide means for the study of matter inasmuch as quantity—more precisely, extension—is the outstanding characteristic of matter. (Extension is a characteristic of matter only, whereas number is a characteristic of both matter and spirit.) The function of the trivium is the training of the mind for the study of matter and spirit, which together constitute the sum of reality. The fruit of education is culture, which Matthew Arnold[8] defined as "the knowledge of ourselves [mind] and the world [matter]." In the "sweetness and light" of Christian culture, which adds to the knowledge of the world and ourselves the knowledge of God and of other spirits, we are enabled truly to "see life steadily and see it whole."[9]

THE LANGUAGE ARTS

The Language Arts and Reality

The three language arts can be defined as they relate to reality and to each other. Metaphysics or ontology,[10] the science of being, is concerned with reality, with the thing-as-it-exists. Logic, grammar, and rhetoric have the following relation to reality.

Logic is concerned with the thing-as-it-is-known.

Grammar is concerned with the thing-as-it-is-symbolized.

Rhetoric is concerned with the thing-as-it-is-communicated.

1-2 *Language and Reality*

ILLUSTRATION: Relationship between metaphysics and language arts

The discovery of the planet Pluto in 1930 illustrates the relationship between metaphysics and the language arts. The planet Pluto had been a real entity, traveling in its orbit about our sun, for centuries; its discovery in 1930 did not create it. By being discovered, however, it became in 1930 for the first time a logical entity. When it was named Pluto, it became a grammatical entity. When by its name knowledge of it was communicated to others through the spoken word and also through the written word, the planet Pluto became a rhetorical entity.[11]

Rhetoric is the master art of the trivium,[12] for it presupposes and makes use of grammar and logic; it is the art of communicating through symbols ideas about reality.

Comparison of Materials, Functions, and Norms of the Language Arts

The language arts guide the speaker, writer, listener, and reader in the correct and effective use of language. Phonetics and spelling, which are allied to the art of grammar, are included here to show their relationship to the other language arts in materials, functions, and norms.

Phonetics prescribes how to combine sounds so as to form spoken words correctly.

Spelling prescribes how to combine letters so as to form written words correctly.

Grammar prescribes how to combine words so as to form sentences correctly.

Rhetoric prescribes how to combine sentences into paragraphs and paragraphs into a whole composition having unity, coherence, and the desired emphasis, as well as clarity, force, and beauty.

Logic prescribes how to combine concepts into judgments and judgments into syllogisms and chains of reasoning so as to achieve truth.

1-3 *Language Arts: Their Materials and Functions*

Because rhetoric aims for effectiveness rather than correctness, it deals not only with the paragraph and the whole composition but also with the word and the sentence, for it prescribes that diction be clear

and appropriate and that sentences be varied in structure and rhythm. It recognizes various levels of discourse, such as the literary (maiden or damsel, steed), the common (girl, horse), the illiterate (gal, hoss), the slang (skirt, plug), the technical (*homo sapiens*, *equus caballus*), each with its appropriate use. The adaptation of language to circumstance, which is a function of rhetoric, requires the choice of a certain style and diction in speaking to adults, of a different style in presenting scientific ideas to the general public, and of another in presenting them to a group of scientists. Since rhetoric is the master art of the trivium, it may even enjoin the use of bad grammar or bad logic, as in the portrayal of an illiterate or stupid character in a story.

Just as rhetoric is the master art of the trivium, so logic is the art of arts because it directs the very act of reason, which directs all other human acts to their proper end through the means it determines.

In the preface to his *Art of Logic*, the poet Milton remarks:

> The general matter of the general arts is either reason or speech. They are employed either in perfecting reason for the sake of proper thinking, as in logic, or in perfecting speech, and that either for the sake of the correct use of words, as in grammar, or the effective use of words, as in rhetoric. Of all the arts the first and most general is logic, then grammar, and last of all rhetoric, since there can be much use of reason without speech, but no use of speech without reason. We gave the second place to grammar because correct speech can be unadorned; but it can hardly be adorned before it is correct.[13]

Because the arts of language are normative, they are practical studies as contrasted with speculative. A speculative study is one that merely seeks to know—for example, astronomy. We can merely know about the heavenly bodies. We cannot influence their movements.

A practical, normative study is one that seeks to regulate, to bring into conformity with a norm or standard—for example, ethics. The norm of ethics is the good, and its purpose is to bring human conduct into conformity with goodness.

Correctness is the norm of phonetics, spelling, and grammar.

Effectiveness is the norm of rhetoric.

Truth is the norm of logic. Correctness in thinking is the normal means to reach truth, which is the conformity of thought with things as they are—with reality.

1-4 *Language Arts: Their Norms*

The intellect itself is perfected in its operations by the five intellectual virtues, three speculative and two practical. Understanding is the intuitive grasp of first principles. (For example, of contradictory statements, one must be true, the other false.) Science is knowledge of proximate causes (physics, mathematics, economics, etc.). Wisdom is knowledge of ultimate causes—metaphysics in the natural order, theology in the supernatural order. Prudence is right reason about something to be done. Art is right reason about something to be made.[14]

2 THE NATURE AND FUNCTION OF LANGUAGE

THE FUNCTION OF LANGUAGE

The function of language is threefold: to communicate thought, volition, and emotion.

Man, like other animals, may communicate emotions such as fright, anger, or satisfaction by means of cries or exclamations which in human language are called interjections. Dumb animals use different kinds of cries to express different emotions. Dogs bark in one way when they are angry, and in another when they are pleased. So also the mews of cats and the neighs of horses vary in order to express various feelings.

Although they may be repeated, animal cries can never be united to form a sentence; they are always mere interjections, and interjections, even in human speech, cannot be assimilated into the structure of a sentence. Human beings, however, are not limited, as other animals are, to expressing their feelings by interjections; they may use sentences.

Volition (desires) or appetition (appetites) may be expressed by cries or exclamations, as when a baby cries or a dog barks for food. Since, however, desires multiply as knowledge increases, humans usually express their desires, choices, and commands in sentences.

Only humans can utter sounds which unite in a sentence to express thought because humans alone among animals have the power to think. Consequently, they alone have language in the proper sense of the word.[1] This follows from their nature, for they are rational and therefore have something to say, social and therefore have someone to say it to, and animal and therefore require a physical mode of communicating ideas from one mind, which is isolated from all others in the body, to another mind likewise isolated.

Pure spirits, such as angels, communicate thought, but their communication is not properly called language because it does not employ a physical medium.[2]

MEANS OF COMMUNICATION

There are possible only two modes of communicating ideas through a physical or material medium—by imitation or by symbol.

Imitation

An imitation is an artificial likeness, for example: a painting, photograph, cartoon, statue, pantomime, a gesture such as threatening with a clenched fist or rejecting by pushing away with the hands, and picture writing. There is no mistaking the meaning of a picture; it means what it resembles. The picture of a horse or a tree cannot represent a man or a dog. Even though imitation is a clear means of communication, it is limited, difficult, slow, and unable to express the essences of things. Imagine picture writing your next letter to a friend. Within limits, however, imitation is a vivid and effective mode of communication.

Symbol

A symbol is an arbitrary sensible sign having a meaning imposed on it by convention. A sign is sensible, for it can be perceived by the senses. Every sign has meaning either from nature or from convention. A cloud, which is a sign of rain, and smoke, which is a sign of fire, have meaning from nature. A green light, which is a sign that traffic should move, has meaning from convention.

SYMBOLS: MEANING FROM NATURE OR CONVENTION

By convention or arbitrary agreement, symbols are devised that are either temporary or permanent.[3]

ILLUSTRATION: Symbols

Temporary symbols: signals adopted by a football team, the password necessary to get through military lines, school or team colors.

Permanent symbols: traffic lights, flags, a soldier's salute, a nod of affirmation, heraldry, hieroglyphics, chemical formulas, numbers.

All words are symbols with the exception of a very few imitative or onomatopoeic words, such as *boom*, *buzz*, *hiss*, *plop*, *ticktock*.

We are likely to undervalue our precious heritage of symbols and to underestimate their convenience. Some symbols are less convenient

than others for the same purpose. For example, Roman numerals are less convenient for computation than Arabic numerals.

ILLUSTRATION: Computation with Roman numerals

In a work by Alcuin (735–804), CCXXXV is multiplied by IV in this manner.[4]

CC × IV—DCCC
XXX × IV—CXX
V × IV—XX

Roman numerals were used in all computations necessary in carrying on the business of the vast Roman Empire.

SYMBOLS: SPECIAL OR COMMON

Special symbols are designed by experts to express with precision ideas in a special field of knowledge, for example: mathematics, chemistry, music. Such special languages are international and do not require translation, for their symbols are understood by people of all nationalities in their own language. The multiplication table is a set of symbols understood by a French person in French, by a German in German, etc. The same is true of chemical formulas and equations and of musical notation.

Common symbols or words, such as French, German, Chinese, or Greek words, constitute the common languages. A common language is one invented by the common people to meet all their needs of communication in the course of life. Accordingly, it is a more adequate mode of communication than the special languages, although it is less precise and more ambiguous in the sense that one word may have either of two or more meanings. The common languages are not understood internationally but require translation.

Two attempts to provide an international language may be mentioned. Esperanto is an artificial amalgam based on words common to the chief European languages. Basic English is a careful selection of 850 English words, which through paraphrase are designed to do duty for a wider vocabulary.[5]

A common language may be native or foreign according to place, or living or dead according to usage. Every dead language, such as Latin, was at one time a living common language. It may be serviceable for special uses, such as liturgy or doctrine,[6] from the very fact that it is a dead language and, therefore, not subject to changes or to

a variety of interpretations as a living language is. A dead language is more likely to be understood in exactly the same way in all times and places.

According to the mode of expression, a common language may be a system of either spoken symbols or of other signs. The spoken language is the original and fundamental system of symbols for which all other signs are merely substituted. The written language is the most important substitute and the only one ordinarily understood. Among other substitute signs are Braille, sign language, the semaphore code. Each of these substitutes merely renders into its own system of signs words of a common language.

THE NATURE OF LANGUAGE

It is the nature of language to communicate through symbols. Language is a system of symbols for expressing our thoughts, volitions, and emotions.

A word, like every other physical reality, is constituted of matter and form. A word is a symbol. Its matter is the sensible sign; its form is the meaning imposed upon it by convention. Matter and form are metaphysical concepts necessary to the philosophical understanding of any material whole, for together they constitute every such whole.[7] Matter is defined as the first intrinsic and purely potential principle of a corporeal essence; as such, it cannot actually exist without form, for it is not a body but a principle of a body, intrinsically constituting it. Form is the first intrinsic and actual principle of a corporeal essence.

ILLUSTRATION: Matter and form

In animals, the body is the matter and the soul is the form.

In water, the matter consists of hydrogen and oxygen; the form is the precise mode of their union in a molecule of water and may be expressed by the chemical formula H_2O.

The matter of words in spoken language is the sound. This aspect of language is treated in phonetics. The matter of words in written language is the mark or notation. It is treated in orthography or spelling. The form of words is their meaning, and it is treated in semantics.

Language: a system of symbols for expressing our thoughts, volitions, and emotions

Matter of Words		**Science**
spoken language	sound	phonetics, study of sound
written language	mark	orthography, study of spelling
Form of Words	meaning	semantics, study of meaning

2-1 *Matter and Form in Language*

Matter of Language

Voice is the sound uttered by an animal. The voice of irrational animals has meaning from nature, from the tone of the utterance. The human voice alone is symbolic, having a meaning imposed upon it by convention.

Human beings have articulate voice by which they add to their simple voice modifications that are produced by the organs of speech: tongue, palate, teeth, lips. The capacity of the articulate voice to produce such modifications in almost limitless variety makes possible the many symbols needed to communicate the wide range of human thought.

The alphabet[8] of the International Phonetic Association is a system of written symbols aiming at an accurate and uniform representation of the sounds of speech. It distinguishes twenty vowel sounds, six diphthongs, and twenty-seven consonant sounds. The English language lacks three of the vowel sounds (those present in German *grün* and *schön* and in French *seul*) and two of the consonant sounds (those present in German *ich* and Scottish *loch*).

Form of Language

The form of language is meaning. Words can symbolize both individuals and essences. In metaphysics or ontology, the science of being, one can distinguish the individual and the essence. The individual is any physical being that exists. Only the individual exists in the sense that every material being that exists or has existed is an individual, is itself and not another, and is, therefore, in its individuality unique. Every man, woman, tree, stone, or grain of sand is an individual. Bucephalus, the horse which belonged to Alexander the Great, was an individual horse.

Essence is that which makes a being what it is and without which it would not be the kind of being it is. Essence is that in an individual which makes it like others in its class,[9] whereas its individuality is that which makes it different from others in its class.

Inasmuch as every individual belongs to a class, which in turn belongs to a wider class, we distinguish these classes as species and genus.

A species is a class made up of individuals that have in common the same specific essence or nature.

ILLUSTRATION: Species and class

Man is the species or class to which William Shakespeare, Albert Einstein, Jane Austen, Queen Victoria, and every other man and woman belong because the essence or nature of man is common to all of them.

Horse is the species or class to which Bucephalus and every other horse belong because the essence or nature of horse is common to all horses.

A genus is a wider class made up of two or more different species that have in common the same generic essence or nature.

ILLUSTRATION: Genus

Animal is the genus or class to which man, rabbit, horse, oyster, and every other species of animal belong because the essence or nature of animal is the same in all of them.

Flower is the genus to which rose, violet, tulip, and every species of flower belong because the essence or nature of flower is the same in all of them.

An individual animal or flower belongs to a genus only by being a member of a species within that genus. The abstract character of genus is such that one cannot draw a picture, for example, of animal but only of a particular kind or species of animal such as a horse or a dog. Yet, even species is abstract, for one cannot photograph the species horse or dog; one can photograph only an individual horse or dog since every horse or dog that exists is an individual.

In every individual is the specific essence or class nature which it has in common with every other member of its species and also the generic essence or class nature which it has in common with every member of the genus to which its species belongs. The generic essence is merely the specific essence with the more definite characteristics of the latter omitted. In addition to the essence which makes it like other members of its species and its genus, the individual has individuating characteristics which make it different from every other individual in its species or its genus.

An aggregate or group of individuals must be clearly distinguished from a species or a genus. An aggregate is merely a particular group of individuals, such as the trees in Central Park, the inhabitants of California, the Philadelphia Orchestra, the items on a desk, the furniture in a house.

A species or a genus always signifies a class nature or essence and includes all the individuals of every place and time having that nature or essence. For example, man is a species and includes all men and women of every place and time—past, present, and future. Tree is a genus and includes every tree. On the other hand, an aggregate is a particular group of individuals that may or may not have the same essence or class nature; but in either case, the aggregate does not include all the members that have that nature.

ILLUSTRATION: Aggregate

The women of the nineteenth century constitute an aggregate of individuals belonging to the same species, but they are only a part of the species, namely, those who existed at a particular time.

The things in a room constitute an aggregate of individuals belonging to different species, such as chair, desk, table, book, heat vent, window, etc., but they are only a small part of each species.

An individual is one. An aggregate is simply a group consisting of two or more individuals.

Essence is what makes a being what it is.

Species is a class made up of individuals that have in common the same specific essence.

Genus is a wider class made up of two or more different species.

Aggregate is a group consisting of two or more individuals.

2-2 *Essence Terms*

Language and Its Symbols

Language employs four important kinds of symbols to represent reality: two to symbolize the individual, two to symbolize the essence which is common to all the individual members of a class.

Language can symbolize an individual or an aggregate by either a proper name or a particular or empirical description. A particular or empirical description is a common name to which is joined a definitive

which limits its application to a particular individual or group. Empirical means founded on experience. Since only individuals exist, our experience is directly concerned with them. Throughout this book the word *empirical* is used with reference to our knowledge of individuals as such.

ILLUSTRATION: Language used to symbolize empirical information

A proper name, such as Eleanor Roosevelt, the Mississippi River, Halloween, London, the United States Senate, the Rotarians, the Mediterranean Sea, can symbolize the individual or an aggregate.

A particular or empirical description, such as the present store manager, this computer, the woman who made the flag, the furniture in this house, the microbe now dividing in the petri dish, can symbolize the individual or an aggregate.

If language could not symbolize the individual, one could not designate particular persons, places, or times. This would be extremely inconvenient. For example, people could not direct emergency vehicles to their houses.

On the other hand, if language could symbolize only the individual, people would be in a worse plight. Every word would be a proper name, and it would therefore be necessary to give a different proper name to every object spoken of—not only to people and places but to everything—to every tree, blade of grass, chair, fork, potato, coat, shoe, pencil, etc.

No one would understand except those who had shared through simultaneous sense experience acquaintance with the identical individual objects described. Hence, the language of every town, even of every home, would be different and would be unintelligible to outsiders. The reader may have had a similar experience when three or four friends were reminiscing about an earlier time not known to the reader. The outsider would take little or no interest in the conversation because even though the words could be understood, the proper names of the absentees sprinkled plentifully through the conversation would have no meaning. But if every word were a proper name, unless the listener had personal experience of the very objects being spoken of, he would be not only bored but completely baffled by the conversation.

Words, being all proper names, would become meaningless at the time of the destruction of the objects they symbolized. They could not even be explained the way proper names are now explained by means of common names (for example, William Caxton, 1422?–1491, first

English printer; translator), for there would be no common names. Therefore, there could be no history, no literature. What authors wrote would be as dead as their voices in their graves.

General or universal ideas could not be expressed in language. Therefore, there could be no books on science or philosophy.

Language can symbolize essence by either of two kinds of symbols, both of which are applicable to all the members of a class. A common name, such as child, tree, chair, square, hour, can symbolize essence. Most of the words listed in the dictionary are common names. Obviously, then, the bulk of language is made up of common names; they symbolize either species or genus.[10] For example, *jump* names a species of movement; whereas *move* means the genus of jump, fly, creep, walk.

A general or universal description such as a rational animal, an equilateral triangle, an organ of sight can symbolize essence. The definitions given in the dictionary are general descriptions of the single-word entries. They clarify the meanings of the common names. A general description is itself made up wholly of common names.

Words that represent no reality are not symbols; they are only empty words devoid of meaning. A proper name or an empirical description must symbolize an individual or an aggregate existing in fact (past or present) or in fiction (wherein are characters, places, etc. created by the imagination). Otherwise, it is devoid of meaning, as are the present King of France or the Emperor of Iowa. The following, however, are truly symbols: Hamlet, Sidney Carton, Rapunzel, Nathan Hale, Queen Elizabeth I. So also are all the symbols given above as examples of an individual or an aggregate.

A common name or a general description must represent an essence or class nature which is intrinsically possible although it need not actually exist. Otherwise, it is devoid of meaning as are a square circle or a triangular square. The following, however, are truly symbols because they express something conceivable: a mermaid, a purple cow, an inhabitant of another planet, a regular polygon with one hundred sides, an elephant, a rose. So also are the symbols given above as examples of the essence, or class nature, of either a species or a genus.

Language that symbolizes an individual or aggregate

proper name

particular or empirical description

Language that symbolizes essence

common name

general or universal description

2-3 *Four Kinds of Language Symbols*

Creating Symbols from Reality

Words are symbols of ideas about reality. How does one derive ideas from reality and how does one classify them? Generating a universal idea or concept involves several steps, a process more fully treated in the study of psychology.

GENERATION OF A CONCEPT

First the external senses—sight, hearing, touch, smell, taste—operate on an object present before us and produce a percept. The internal senses, primarily the imagination, produce a phantasm or mental image of the individual object perceived, and this phantasm is retained and can be reproduced at will in the absence of the object.

ILLUSTRATION: Percept and phantasm

A **percept** is like a portrait being painted by the artist while she looks at the model.

A **phantasm** is like that same portrait possessed and looked at whenever one wishes for years afterward although the person painted is absent or even dead.

There are four internal senses: the imagination, the sensuous memory, the common or central or synthesizing sense, and instinct.

The intellect through abstraction produces the concept. The imagination is the meeting ground between the senses and the intellect. From the phantasms in the imagination, the intellect abstracts that which is common and necessary to all the phantasms of similar objects (for example, trees or chairs); this is the essence (that which makes a tree a tree or that which makes a chair a chair). The intellectual apprehension of this essence is the general or universal concept (of a tree or a chair).

A general concept is a universal idea existing only in the mind but having its foundation outside the mind in the essence which exists in the individual and makes it the kind of thing it is. Therefore, a concept is not arbitrary although the word is. Truth has an objective norm in the real.

Percept: the image created by the external senses upon encountering reality

Phantasm: the mental image created by the internal sense, primarily the imagination

Concept: the abstraction created by the intellect through recognition of the essence

2-4 *Generating a Concept*

A general concept is universal because it is the knowledge of the essence present equally in every member of the class, regardless of time, place, or individual differences. For example, the concept "chair" is the knowledge of the essence "chair," which must be in every chair at all times and in all places, regardless of size, weight, color, material, and other individual differences.

The real object (a tree or a chair) and likewise the corresponding percept and phantasm, is individual, material, limited to a particular place and time; the concept is universal, immaterial, not limited to a particular place and time.

Only human beings have the power of intellectual abstraction;[11] therefore, only human beings can form a general or universal concept. Irrational animals have the external and internal senses, which are sometimes keener than those of humans. But because they lack the rational powers (intellect, intellectual memory, and free will), they are incapable of progress or of culture. Despite their remarkable instinct, their productions, intricate though they may be, remain the same through the centuries, for example: beaver dams, bird nests, anthills, beehives.

ANALOGY: Intellectual abstraction

Flowers contain honey. Butterflies, ants, bees, mosquitoes, and other insects may light upon the flower, but only bees can abstract the honey, for only bees have the power to do so. As the bee abstracts honey from the flowers and ignores everything else in them, so the intellect abstracts from the phantasms of similar objects the essence of that which is common and necessary to them and ignores everything else, namely, the individual differences.

There is nothing in the intellect that was not first in the senses except the intellect itself. Human intellectual powers need material to work upon. This comes from nature through the senses. Nature

provides the materials, and the human intellect conceives and constructs works of civilization which harness nature and increase its value and its services to the human race.

ANALOGY: Raw material for intellect

There is nothing in fine cotton, lace, organdy, or heavy muslin that was not in the raw cotton from which they were made. To produce these, the manufacturer requires raw material obtained from nature by cotton planters. Likewise, the intellect requires for thought the raw material obtained from nature through the senses.

Abstract, or intellectual, knowledge is clearer although less vivid than concrete or sense knowledge. For example, circles and squares of various sizes and colors can be perceived by the senses and can, consequently, be perceived by a pony as well as by a man. A pony in a circus act might be trained to respond in various ways to colored disks and squares.

Only a human being, however, can derive from these various circles and squares the definition of a circle and of a square. A person can also know by abstraction the properties of these figures, such as the relation of the circumferences of a circle to its radius, which he expresses in the abstract formula $C = 2 \pi R$. Such abstract knowledge is clearer although it is less vivid than the sense apprehension of the colored figures, which the pony can share with a human being.

Thomas More,[12] in his defense of the uses of statues and pictures, contrasts them with words as a means of instruction.[13] He points out that words are symbols of phantasms and concepts, as has been explained above:

> Images are necessary books for the uneducated and good books for the learned, too. For all words be but images representing the things that the writer or speaker conceives in his mind, just as the figure of the thing framed with imagination, and so conceived in the mind, is but an image representing the very thing itself that a man thinks of.
>
> As for example, if I tell you a tale of my good friend, the imagination that I have of him in my mind is not himself but an image that represents him. And when I name him, his name is neither himself nor yet the figure of him in my imagination, but only an image representing to you the imagination of my mind. If I be too far from you to tell it to you, then is the writing not the name itself but an image representing the

> name. And yet all these names spoken, and all these words written, be no natural signs or images but only made by consent and agreement of men, to betoken and signify such thing, whereas images painted, graven, or carved, may be so well wrought, and so near to the quick and the truth that they shall naturally, and much more effectually represent the thing than shall the name either spoken or written. For he that never heard the name of my friend, shall if ever he saw him be brought in a rightful remembrance of him by his image.
>
> —The Confutation of Tyndale's Answers[14]

TEN CATEGORIES OF BEING

Once the human intellect creates symbols from reality, those symbols or words can be manipulated and catalogued to increase our understanding of reality. Aristotle's ten categories of being classify words in relationship to our knowledge of being. These metaphysical categories have their exact counterpart in the ten categories or *praedicamenta*[15] of logic, which classify our concepts, our knowledge of being.

Every being exists either in itself or in another. If it exists in itself, it is a substance. If it exists in another, it is an accident. We distinguish nine categories of accident; these, with substance, constitute the ten categories of being.

1 Substance is that which exists in itself, for example, man.

2 Quantity is a determination of the matter of substance, giving it parts distinct from parts, for example, tall.

3 Quality is a determination of the nature or form of a substance, for example: dark, handsome, intelligent, athletic, chivalrous.

4 Relation is the reference which a substance or accident bears to another, for example: friend, near.

5 Action is the exercise of the faculties or power of a substance so as to produce an effect in something else or in itself, for example: clicking a camera, standing up, smiling.

6 Passion is the reception by a substance of an effect produced by some agent, for example: being invited to return, being drafted.

7 *When* is position in relation to the course of extrinsic events which measure the duration of a substance, for example, Sunday afternoon.

8 *Where* is position in relation to bodies which surround a substance and measure and determine its place, for example: on a bench, beside the lake.

9 Posture is the relative position which the parts of a substance have toward each other, for example: sitting, leaning forward.

10 Habiliment consists of clothing, ornaments, or weapons with which human beings by their art complement their nature in order to conserve their own being or that of the community (the other self), for example, in gray tweeds.

The categories can be organized into three subcategories by what they predicate[16] about the subject.

1 The predicate is the subject itself. If the predicate is that which is the subject itself and does not exist in the subject, the predicate is a substance. (Suzanne is a human being.)

2 The predicate exists in the subject. If the predicate exists in the subject absolutely as flowing from matter, the predicate is a quantity. (Suzanne is tall.) If the predicate exists in the subject absolutely as flowing from form, the predicate is a quality. (Suzanne is intelligent.) If the predicate exists in the subject relatively with respect to another, the predicate is in the category relation. (Suzanne is Mary's daughter.)

3 The predicate exists in something extrinsic to the subject. If the predicate exists in something extrinsic to the subject and is partially extrinsic as a principle of action in the subject, the predicate is an action. (Suzanne analyzed the data.) If the predicate exists in something extrinsic to the subject and is a terminus of action in the subject, the predicate is a passion. (Suzanne was injured.) If the predicate exists in something extrinsic to the subject and is wholly extrinsic as a measure of the subject according to time, the predicate is in the category *when*. (Suzanne was late.) If the predicate exists in something extrinsic to the subject and is wholly extrinsic as a measure of the subject according to place, the predicate is in the category *where*. (Suzanne is here.) If the predicate exists in something extrinsic to the subject and is wholly extrinsic as a measure of the subject according to the order of parts, the predicate is in the category posture. (Suzanne is standing.) If the predicate exists in something extrinsic to the subject and is merely adjacent

to the subject, the predicate is in the category habiliment. (Suzanne is in evening dress.)

LANGUAGE AND REALITY

Seven important definitions emerge from a consideration of language and reality.

1 The essence is that which makes a being what it is and without which it would not be the kind of being it is.

2 Nature is essence viewed as the source of activity.

3 The individual is constituted of essence existent in quantified matter plus other accidents. Essence is that which makes the individual like other members of its class. Quantified matter is that which makes the individual different from other individuals in its class because matter, extended by reason of its quantity, must be this or that matter, which by limiting the form individuates it. Accidents are those notes (shapes, color, weight, size, etc.) by which we perceive the difference between the individuals of a class. The individuals within a species (for example, all human beings) are essentially the same. But they are not merely accidentally different; they are individually different. Even if individuals were as alike as the matches in a box of matches or the pins in a paper of pins, they would be nonetheless individually different because the matter in one is not the matter in the other but is a different quantity or part even though of the same kind and amount.

4 A percept is the sense-apprehension of an individual reality (in its presence).

5 A phantasm is the mental image of an individual reality (in its absence).

6 A general concept is the intellectual apprehension of essence.

7 An empirical concept is the indirect intellectual apprehension of an individual. The intellect can know individual objects only indirectly in the phantasms because individuals are material, with one exception, the intellect itself; because it is a spiritual individual, the intellect can know itself directly and reflexively. (See Saint Thomas Aquinas, *Summa Theologica*, Part I, Question 86, Articles 1 and 3.)[17]

In a natural object the following are similar but distinct: substance,

essence, nature, form, species. The knowledge of these is the concept, which is expressed fully in the definition and symbolized by the common name.

Since man cannot create substance but can merely fashion substances that are furnished by nature, an artificial object such as a chair has two essences: the essence of its matter (wood, iron, marble, etc.) and the essence of its form (chair). The essence of the form is expressed in the definition (of chair).

Frequently, a common name symbolizes a concept that is not simple nor equivalent to the essence of the natural species, like human being, but is a composite, like lawyer or athlete, including in its definition certain accidents which determine not natural species but classes that differ only accidentally. A composite concept may be called a construct.

Lawyer and athlete are constructs, for their definition adds to the simple concept human being certain accidents such as knowledge of law or physical agility, which are essential to the definition of lawyer or of athlete although not essential to the definition of a construct. For example, a particular lawyer may be tall, blond, irritable, generous, etc., but these accidents are not more essential to being a lawyer than they are to being a human being.

A construct may be analyzed into its components by showing in what categories its essential meanings lie.

ILLUSTRATION: Analysis of constructs

Carpenter

Substance—human being

Quality—skill in building with wood

Legislator

Substance—human being

Action—making laws

Relation—to an electorate

Blizzard

Substance—water

Quality—cold

Passion—vaporized, frozen into snow, blown about by a high wind

In the English language a construct is usually symbolized by a single word which does not make explicit the composite character of the construct. In an agglutinated language like German, a construct is more commonly symbolized by a compound word which does make explicit its composite character, for example, *Abwehrflammenwerfer* (defensive flame-thrower). Also, the English word *tank* in German is *Raupenschlepperpanzerkampfwagen* (a caterpillarlike, self-moving, armored war wagon). This has been shortened to *panzer*, a term familiar through films and books.

Logical and Psychological Dimensions of Language

Language has logical and psychological meanings which may be illustrated through a closer look at the words *house* and *home*.

If *house* is represented as a b, then *home* may be represented as a b x. Objectively, the definition (the logical dimension) of *house* and *home* are similar and may be represented by the lines ab; but subjectively, *home* is a much richer word, for to its logical content is added an emotional content (the psychological dimension) associated with the word and represented by the line bx. The fact that *house* has practically no psychological dimension while *home* has much accounts for the different effects produced by the following lines, which are equivalent in the logical dimensions.

ILLUSTRATION: Psychological dimension of language

House, house, loved, loved house!
There's no place like my house! There's no place like my house!

"Home, Home, sweet, sweet Home!
There's no place like Home! There's no place like Home!"
—John Howard Payne, "Clari, the Maid of Milan"

LOGICAL DIMENSIONS OF LANGUAGE

The logical or intellectual dimension of a word is its thought content, which may be expressed in its definition, given in the dictionary. In rhetoric this is called the denotation of the word.

ANALOGY: Logical and psychological dimensions of language

The logical dimension of language may be compared to the incandescent electrified wire in a transparent bulb; the wire is obvious and its limits are clearly defined. The psychological dimension

may be compared to a frosted bulb, in which all the light, it is true, comes from the incandescent wire within, but the light is softened and diffused by the bulb, which gives it a more beautiful and psychologically warmer glow.

Language with a purely logical dimension is desirable in legal documents and in scientific and philosophical treatises, where clarity, precision, and singleness of meaning are requisite. Consequently, synonyms, which usually vary in shades of meaning, ought to be avoided, and the same word should be employed throughout to convey the same meaning; or if it is used with a different meaning, that fact should be made clear. Abstract words are usually clearer and more precise than concrete words, for abstract knowledge is clearer, although less vivid, than sense knowledge. Yet to communicate abstract knowledge, one should employ concrete illustrations from which the reader or listener can make the abstraction for himself since by so doing he grasps the abstract ideas much better than if the writer or speaker gave them to him ready-made.

PSYCHOLOGICAL DIMENSIONS OF LANGUAGE

The psychological dimension of language is in its emotional content—the related images, nuances, and emotion spontaneously associated with words. In rhetoric this is called the connotation of the word. Propagandists often abuse the connotative value of words.

Language with a rich psychological dimension is desirable in poetry and other literature, where humor, pathos, grandeur, and sublimity are communicated.

In literary composition, one should employ words that are concrete rather than abstract, that are rich in imagery and idiomatic. Synonyms should be used in order to avoid monotony of sound and to convey subtle shades of meaning that vary in both the logical and the psychological dimension.

A sensitive awareness of the subtleties of language, particularly in its psychological dimension, enables one to recognize good style in the speech and writing of others and to cultivate good style in one's own composition, both oral and written.

The substance of a given composition may be translated almost perfectly from one language to another in the logical dimension. Translation is seldom satisfactory, however, in the psychological dimension.

That is why poetry in translation is usually less pleasing than in the original.

Sound and the Psychological Dimension

Various characteristics of words affect the psychological dimension of language.

The mere sound of a word may produce a pleasing effect which another word of the same meaning lacks. In "Silver" by Walter de la Mare, the poet's substitution of words like *shoon* for *shoes* and *casements* for *windows* are examples of the poet's use of sound to create a psychological effect.

ILLUSTRATION: The psychological value of sound

SILVER

Slowly, silently, now the moon
Walks the night in her silver shoon;
This way, and that, she peers, and sees
Silver fruit upon silver trees;
One by one the casements catch
Her beams beneath the silvery thatch;
Couched in his kennel, like a log,
With paws of silver sleeps the dog;
From their shadowy cote the white breasts peep
Of doves in a silver-feathered sleep;
A harvest mouse goes scampering by,
With silver claws and a silver eye;
And moveless fish in the water gleam,
By silver reeds in a silver stream.

—Walter de la Mare

Pedantic Style

A pedantic or pompous style is psychologically displeasing. Compare these sentence pairs, identical in logical meaning.

ILLUSTRATION: Pedantic style

Behold! The inhabitants have all retired to their domiciles.
Look! The people have all gone home.

The vaulted dome of heaven is cerulean.
The sky is blue.

Idiom and Emotional Effect

The emotional effect of a word, often a by-product of its historical development, belongs to the idiom of language and would often be lost in translation. The following examples show that sentences alike in logical dimension can be quite different in psychological dimension.

ILLUSTRATION: Idiom

A young man tells a young woman, "Time stands still when I look into your eyes."

Another tells her, "You have a face that would stop a clock."

A young man tells a woman, "You are a vision." Another, "You are a sight."

At a meeting of the United Nations, an American produced bewilderment among the translators by speaking of a proposal as a "pork barrel floating on a pink cloud." A fellow American might understand this as "an impractical plan to be financed by public funds designed to gain local political patronage."

Ms. Smith and Ms. Baker had dinner together. Asked by Mr. Schofield, "What kind of meat did you have for dinner?" Ms. Smith replied, "I had roast pork." Ms. Baker replied, "I had roast swine meat."

We find Ms. Baker's answer revolting because *swine* has been regarded as a word unfit for polite discourse in English, certainly unfit to name meat, ever since the Norman Conquest in 1066. After that, the conquered and deposed Anglo-Saxons tended the live animal and called it *swine*, but the aristocratic Normans to whom it was served at the banquet table called it *pork*, a word derived from the Latin through the French, and in those languages applied to the live animal as well as to the meat. The associations built into the word *swine* in the history of the language are felt by modern English-speaking people who do not even know the occasion of the emotional response which they, nonetheless, experience.

Allusion

An allusion is a passing reference to phrases or longer passages which the writer takes for granted will be familiar to the reader. Sometimes the writer changes the phrases somewhat, but whether the same or modified, they depend for their effect on reminding the reader of the original; for instance, *With Malice Toward Some* is a title deliberately intended to remind the reader of the phrase in Lincoln's Second Inaugural Address, "with malice toward none."

An allusion depends for much of its effect on the psychological

dimension of language, for it enriches the passage in which it occurs with emotional overtones and associated ideas derived from the context in which it originally appeared. The following examples show the importance of allusion.

ILLUSTRATION: Allusion

Most of the paper is as blank as Modred's shield.
—Rudyard Kipling, "The Man Who Would Be King"

Bores make cowards of us all.
—E. V. Lucas, "Bores"

Friend, on this scaffold Thomas More lies dead
Who would not cut the Body from the Head.
—J. V. Cunningham, "Friends, on this scaffold . . ."

For those whose literary background is inadequate and who therefore are unfamiliar with the source of the allusion, a work such as the concordance to the Bible or to Shakespeare, both frequent sources of allusion, will prove helpful. A dictionary of people and places mentioned in Greek and Latin literature will explain classical allusions.

The writers who make allusions expect, of course, that their readers will be familiar at first hand with the literature to which they refer. One of the rewards of literary study is the possession of a heritage of poetry and story which causes many names and phrases to echo with rich reverberations down the centuries. The language of allusion often provides a sort of shorthand which links and communicates in a few words experiences shared by people facing similar situations in all periods of human history.

Combination of Words

The psychological dimension of words is especially affected by their combinations.

Some combinations, particularly of adjectives and nouns and of nouns and verbs, are "just right," for example, the following combinations in Milton: "dappled dawn," "checkered shade," "leaden-stepping hours," "disproportioned sin jarred against nature's chime." It is fitting to speak of azure light or the azure sky or an azure evening gown, but not of an azure apron because *azure* and *apron* clash in the psychological dimension. The combination is disharmonious. It is certainly not "just right."

Certain combinations of words and thoughts produce a vivid concentration of meaning rich in the psychological dimension.

ILLUSTRATION: Combination of words

I have stained the image of God in my soul.
—Catherine of Siena, *Dialogue*

What passing bells for those who die as cattle?
Only the monstrous anger of the guns.
Only the stuttering rifles' rapid rattle
Can patter out their hasty orisons.
—Wilfred Owens, "Anthem for Doomed Youth"

. . . inland among stones
The surface of a slate-grey lake is lit
By the earthed lightning of a flock of swans,
Their feathers roughed and ruffling, white on white,
Their fully grown headstrong-looking head
Tucked or cresting or busy underwater.
—Seamus Heaney, "Postscript" to *The Spirit Level*

The flesh-smell of hatred.
—Eavan Boland, "The Death of Reason"

Logical and Poetic Understanding

What is false when taken literally in the purely logical dimension may be true when understood imaginatively or figuratively in the psychological dimension.

ILLUSTRATION: Poetic use of language

Song

Go and catch a falling star,
Get with child a mandrake root,
Tell me where all past years are,
Or who cleft the devil's foot,
Teach me to hear mermaids singing,
Or to keep off envy's stinging,
And find
What wind
Serves to advance an honest mind.

If thou be borne to strange sights,
Things invisible to see
Ride ten thousand days and nights,

Till age snow white hairs on thee,
Thou, when thou return'st wilt tell me
All strange wonders that befell thee,
And swear
Nowhere
Lives a woman true, and fair.

If thou findst one, let me know,
Such a pilgrimage were sweet—
Yet do not, I would not go,
Though at next door we might meet;
Though she were true, when you met her,
And last, till you write your letter,
Yet she
Will be
False, ere I come, to two, or three.
—John Donne

This poem understood literally, in its logical dimension, is false and even ridiculous. But understood imaginatively, as it is meant to be since it is metaphorical, the poem has emotional truth. The very sound and movement of the words and the symmetry—the parallel grammatical and logical structure—of the three stanzas contribute to the pleasing effect.

The Ambiguity of Language

Since a word is a symbol, an arbitrary sign whose meaning is imposed on it, not by nature, not by resemblance, but by convention, it is by its very nature subject to ambiguity; for, obviously, more than one meaning may be imposed on a given symbol. In a living language, the common people from time to time under changing conditions impose new meanings on the same word, and therefore words are more subject to ambiguity than are the symbols of mathematics, chemistry, or music, whose meaning is imposed on them by experts.

The ambiguity of a word may arise from: (1) the various meanings imposed on it in the course of time, constituting the history of the word; (2) the nature of a symbol, from which arise the three impositions of a word and the two intentions of a term; (3) the nature of the phantasm for which the word is originally a substitute (see Chapter Two, Generation of a Concept).

AMBIGUITY ARISING FROM THE HISTORY OF WORDS

The symbol or word acquires various meanings during the course of time. The fact that one sound or word can have many meanings can

create ambiguity because it might not be known which meaning is symbolized. Such words are homonyms, ambiguous to the ear, and they may or may not differ in spelling when written. The ambiguous sound may be within the same language, or it may be in different languages.

ILLUSTRATION: Ambiguity in sound

The ambiguous sound may be within the same language.

road, rode; right, wright, rite, write;
sound "that which is heard" and *sound* "a body of water"

The ambiguous sound may be in different languages.

pax (Latin, "peace") and *pox* (English, "eruption")
hell (German, "bright," and English, "abode of wicked spirits")
nix (Latin, "snow"; English slang, "nothing") and *nicks* (English, "notches")
bright (English, "shining") and *breit* (German, "broad")
bower (English, "a leafy shelter") and *Bauer* (German, "farmer")

Note that the above pairs of words would be spelled alike if written in the alphabet of the International Phonetic Association whereby one can write such directions as "Spell [tu] three ways" without giving away the answer: "two, too, to."

A given notation is ambiguous when it symbolizes different meanings, whether in the same or in different languages. Some homonyms lose their ambiguity when they are written, for example, *road, rode, bright, breit*. Some retain it, for example, *sound, hell*. Some words, unambiguous when spoken, become ambiguous when written, for example, *tear* "rend," and *tear* "a drop from the lachrymal gland."

The dictionary records the meanings that have been imposed on a given notation in the history of the language. The dictionary does not legislate but merely records good usage. A work like Fowler's *A Dictionary of Modern English Usage* concentrates particularly on present usage. The *Oxford English Dictionary* undertakes to give the dates, if possible, when new meanings were imposed on a word and to cite passages illustrating that particular use.

An instance of a new imposition is that on *swastika*, both the word and the graphic symbol. After the revolution of 1918 in Germany, the swastika, which was an ancient symbol of good luck, was adopted by the Nazi Party.

Still another instance is the imposition of the meaning "treasonous group, working from within" on *fifth column*. In 1936, during the Spanish civil war, General Emilio Mola declared that he would capture

Madrid since in addition to his four columns of troops outside the city, he had a fifth column of sympathizers within the city.

The relationship between the various meanings that have been imposed on a given notation may be equivocal, having nothing in common—for example, *sound* "a body of water" and *sound* "that which is heard"—or analogical, having something in common—for example, *march* "a regular measured step" and *march* "a musical composition to accompany marching."

AMBIGUITY ARISING FROM IMPOSITION AND INTENTION

Ambiguity is caused by the very nature of a symbol, from which arise the three impositions of a word and the two intentions of a term.

The ultimate purpose of words and terms is to convey to another one's ideas about reality. But between the reality as it exists and as one apprehends it and expresses it are a number of intermediate steps: the creation of the phantasm, the creation of the percept, and the creation of the concept.

If one uses a word or a term to refer directly to a reality not itself, to what we know, it is used predicatively (that is, said of another, or referring to another, to the reality which it symbolizes). This is the ordinary use of a word or a term, and it is then used in first imposition and in first intention. If, however, one uses a word or a term to refer to itself as an instrument in any one of the intermediate steps by which we know or by which we symbolize what we know, it is used reflexively (that is, referring to itself, as a concept, a sound, a mark, a noun, etc.). This is the peculiar use of a word or a term in an imposition or an intention different from the ordinary use, as may be seen in the following examples.

ILLUSTRATION: Imposition and intention

Jane married a man. (Here the word *man* refers to another, a real man who exists; therefore, *man* is here used in first imposition and first intention.)

Man is a monosyllable. (Here the word *man* refers to itself as a mere sound. One can know *man* is a monosyllable without even knowing its meaning; therefore *man* is here used in zero imposition. It is false to say, "A man is a monosyllable," because when the article is added the word man refers to a real man, not to a mere sound. Jane did not marry a monosyllable.)

Man has three letters. (Here *man* refers to itself as a mere notation or mark. One can see that *man*, when written or printed, has three letters without knowing its meaning; therefore *man* is here used in zero imposition. It is false to say, "A man has three letters," because, with the article, *man* refers to a real man, not a mere notation. Jane did not marry three letters.)

Man is a noun. *Man* is the direct object of *married*. (Here *man*—and *married* also—refers to itself

as a word, a sign with meaning. One cannot classify a word grammatically as a part of speech or as subject, object, or the like, without knowing its meaning; *man* is here used precisely as a word, as a sign with meaning, and is said to be used in second imposition. It is false to say, "A man is a noun" or "A man is the direct object of married," because, with the article, *man* refers to a real man, not to a word. Jane did not marry a noun or a direct object.)

Man is a concept. Man is a term. Man is a species. (Here the term man refers to itself as an idea in the mind, or an idea communicated, or a class nature—all of which are logical abstractions; man is a term used here in second intention to refer to itself, not to a real man. It is false to say, "A man is a concept"—or a term or a species—because, *with the article, man* refers to a real man, a physical entity, not a logical entity. Jane did not marry a concept or a term or a species.)

Man is a substance. (Here the word or term *man* refers to another, a real man, who is a substance. The categories are primarily metaphysical classifications of real being; man is here used in first intention and in first imposition. It is true to say, "A man is a substance." Jane did marry a substance.)

Since a word is a symbol, that is, a sensible sign with meaning, it may be used in any one of three impositions. **First imposition** is the ordinary predicative use of a word with reference only to its meaning, the reality which it symbolizes (its reference to another, for example, a real child, dog, tree) without adverting to the word itself as a sensible sign. The word is then used like a window or like eyeglasses through which we see objects but of which we are unaware.

Zero imposition is the reflexive use of a word with reference only to itself as a sensible sign (a sound or a notation) without adverting to its meaning, which need not even be known. When a word is used in zero imposition, it is like a window or like eyeglasses at which we look instead of through which we look to see something else. This is not the ordinary use of words or windows or eyeglasses. Phonetics is concerned with the word as a sound, for it deals with its correct pronunciation, with the likeness of terminal sounds in words that rhyme, etc. Spelling, or orthography, is concerned with the word as a notation.

ILLUSTRATION: Zero imposition

Exquisite is often mispronounced.
Ally is accented on the second syllable.
Hamora has three syllables.
Do not mispronounce *fire*; it is not a dissyllable.
You use too many *and's* in your writing.
Erase *much* and substitute *many*.
Similes has seven letters, not eight.

Zero imposition is the basis of a certain type of conundrum.

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