THE WORD
WITHIN THE WORD III

Third Edition
Compatible with The Word Within the Word III, Student Book Third Edition

Instructor Manual

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If you are reading this sentence, you likely are already familiar with *The Word Within the Word*. Perhaps you have used either or both of the first two volumes with students previously, or perhaps you are considering using the series in your curriculum and want to understand what part this third volume plays in the *Word Within the Word* program.

The most salient fact about Volume III is that, like Volume II, it emerges organically from the previous work. It continues to extend and apply the students' previous knowledge. It continues to emphasize not isolated words but a Latin- and Greek-based system of words; it is the word system that is the object of examination. It once again emphasizes why words mean what they mean and how their meanings are constructed within the words. It once again discloses the hidden inner poetry and philosophic insight of the words. It once again is anti-unit in nature, building cumulatively not only on the content within itself but also on the words and stems of Volumes I and II; nothing is left behind.

There are some particular goals that motivated me in the exciting but enormously laborious process of writing this volume. Some of these goals are part of the entire *Word Within the Word* series, while others have received special emphasis in the third book. I hope that these are your goals, too.

UNCOMPROMISING RIGOR

In the age of the dumbed-down curriculum, I have wanted—more than I can adequately express—to create an antidote, an anti-dumbed-down curriculum. The land is replete with pallid, bled texts, anemically vacuous of big words, big ideas, and big readings, not to mention shocking words, divergent ideas, and controversial readings. The approved, sanitized curriculum has been educationally cleansed. I wanted this book, without being aloof or stuffy, to convey the sanguine joy of high learning—the fun of it—and to lure students down the beginning of a path that will lead them to a lifelong love of scholarship. This book is filled with literary and scholarly allusions, such as a story about a cloud named Percy that will serve as a springboard to reading Percy Bysshe Shelley's immortal, thunderous, and drenched poem "The Cloud." *Caveat emptor*: I have not provided any sort of key to the numerous allusions; they are hidden in the hidey-holes of the lessons, and I hope that part of the fun for students and instructors alike will be to catch me. Catch me if you can. I like to imagine that many of these sometimes-oblique allusions will cause students to dash off on spontaneous jaunts of the mind, reading or researching something I have alluded to.

Part of my intent in this series, but especially in this volume, is to bring students to the study of English as though it were a foreign language. Why should we not? It is customary, in studying foreign languages, to be methodical, exacting, demanding, and yet when we study our own language, we are often disarmed. We somehow feel that because English is our first language, we need not be so seriously rigorous. We feel that in the case of English, we already know those things, whatever *those things* are. Well, if foreign language has permission to be challenging, then English may be challenging, too. In fact, our culture has become so popular that for many English-speaking students, the educated stratum of English *is* foreign to them. It *must* be studied as though it is a foreign language.

A related idea is that I have attempted to make this book uncompromising, difficult, rigorous, and substantial. Even the brightest students, I think, will have to study in order to succeed with this curriculum. Autopilot will not work—and that is good. Must all curricular material be accessible to the unmotivated?

I think not. This book, certainly, will be an impenetrable barrier to the unmotivated; only students who have the will and the self-discipline to study will be able to move through it, and that good experience is a part of the purpose, a part of what motivated me in writing it. I want extraordinary students to have a book written for them. Unmotivated students will have to *change*.

HIGH EXPECTATIONS

In this book I have continued to disregard the idea of grade-level vocabulary. I should say *specious* idea because that is what I think. And the more I have thought about it, the more convinced I am that the idea of specific words belonging at specific grade levels is patent and tragic pedagogical nonsense. What would it mean to say that *clamor* is a ninth-grade word? Would it mean that a third grader could not learn the meaning and use of *clamor*? Of course not. I could teach an entire second-grade class to use *clamor* in one minute. If *clamor* is a ninth-grade word, are we waiting for something before we teach it? What are we waiting for? Look closely, and behind the arras of grade-level vocabulary, you will sniff the noisome treachery of anti-intellectualism. We lack the confidence of learning, and so we pronounce our youngsters unready for *clamor*, though any self-respecting first grader can say *sanfranciscofortyniner* with ease.

What do you think the grade level is of the book from which the following words come: *ignominy, gesticulate, tedious, stringent, peremptory, assuage, repartee, sonorous, doleful, voluble, plausible, irrevocable, subterfuge, sanguine, paroxysm, asperity, obtuse, dolorous, affable, benison,* and *turbid*? Would this be a ninth-grade book? A senior book? A college-level book? No, these words come from Kenneth Grahame's *The Wind in the Willows*, a children's book. Mole, Ratty, Badger, and Toad. The *incorrigible* Toad, mind you. For learning great words, most youngsters are ready already; it is we who must drop our perfidious hesitations and proceed confidently to teach them wonderful things.

Some of the words in this book may strike you as elementary, and some may strike you as impossibly abstruse, erudite, and advanced, but that is part of the point: they are neither. They are all words that are examples of the system of words that is the true object of examination. Certainly there are rare and exceptionally erudite words to be found in the lists; I have attempted to expose students to some of the most scholarly and difficult language that they are likely to encounter in their future learning.

AN ARRAY OF OPTIONS

I also continue to view the contents of this program not as stringent requirements but as options, as alternatives. I do not expect every instructor to use every part of every lesson; rather, each lesson contains a variety of possible experiences that different instructors will be differently drawn to. In my classes, the weekly lessons were assigned as homework; I gave a test on the last day of each week, and we played with the other components as time permitted. If we were reading a novel such as *Crime and Punishment*, then a few weeks passed in which the weekly test was the only thing we did. When the literary dust cleared, we spent extra time retrieving some of the readings, notes, and ideas. It is bootless to pound a round curriculum into a square instructional session.

INTERDISCIPLINARY CONNECTIONS

The words I have selected for this book have been chosen for their interdisciplinary connections. Each list of words is a point of departure for stories into history, painting, poetry, ballet, philosophy,

military strategy, fiction, or science. Each list is a set of word-phenomena that radiate out to the fields of thought from which they came. One word, such as *pointillism*, might suggest art, while another, such as *demography*, might suggest social science. This may be a vocabulary book, but it is not in some narrow sense an "English" book, whatever that may mean. Its purpose is to launch students off into the higher language of all disciplines, to make them articulate in an ecumenical way.

CUMULATIVE LEARNING

As I have suggested, this three-volume program is cumulative with a vengeance. It is anti-unit and cumulative both within each book and across books. The cumulative weekly tests are not merely an authentic assessment of the students' mastery of the accumulated content; they are an authentic learning experience in their own right. The testing is a teaching. The sheer repetition for years of the same stems that the students have already repeatedly been tested on has its own cumulative effect, its own message; this is much better than if the students had been tested once, found to have "mastered" the word or stem, and moved on. The cumulative nature of the program gives years of weekly reinforcement for meaning, pronunciation, spelling, and insight. The stems and words finally become routine facts of life. It is impossible for me to imagine that any student who has gone through three years of *The Word Within the Word* will not have a vocabulary that is permanently affected by the experience. (I am increasingly suspicious of the "unit" concept; in too many cases, finishing a unit means finishing the knowledge; the unit is over, and the students then have permission to forget it. And if it has no more value than that, why teach it in the first place? There is so little time, and there are so many vital things to teach—things that have profound, lifelong value. I taught no units of anything; everything I did was cumulative.)

EQUITABILITY AND POSITIVITY

One goal that was continually in my mind in writing these books was to make them free of gender bias and sexist stereotypes. For a writer, this presents problems far beyond trying to avoid gender-specific pronouns. It is also beyond the mere questions of representation in the example sentences, the classic novels that are referred to, and the characters in the creative readings. These matters are important but insufficient. There is also the simple question of content: Is there a divergent variety of ideas, exercises, and readings that will appeal to students of any gender? And finally, there is the trap of stereotypes. One cannot simply assume, say, that girls don't like armies or that boys don't like ballet, and set about writing example sentences of girls in art museums and boys at scout camp. The stereotypes must be rejected and confounded, offering food for thought to every student of every gender about life's rich opportunities. I have not tabulated such matters, but in this book—as in every one of my books—I tried to write in the most complete good faith I could summon.

Anyone who has looked long at a good dictionary will notice that there are myriads of negative words—words of insult, words of pain, words of failure, words of condescension, words of ethnocentrism, words of segregation, words of existential angst. Our nasty, brutish, and short life is reflected in the sympathetic vibration of nasty, brutish, and sometimes sesquipedalian words. Furthermore, centuries of ethnocentrism, bigotry, and sexism are incised in the stone tablet of our diction. It is easy, in compiling a word list, to fall into the habit of featuring the stinging derogatory words, and one feels the thrill of revenge—smite the Philistines; smite them I say—by teaching students words such as *miscreant, Sybarite,*

refractory, antediluvian, specious, sophist, disingenuous, mendacious, odious, lassitude, and *vituperate.* I have made an effort to avoid this trap, this delicious allure of negative words, and to include positive, bright, and lively words as well, such as *insouciant, rejuvenate, peripatetic, venial, procreant, edify, unique, perspicuous, renascent, pellucid, sapid, ruminate, emolument, ineffable, transcend, veridical, gregarious, prodigious, sanguine, encomium, munificent,* and *cogitate.* These are wonderful words! The cumulative effect of a good soak in the dictionary is to be reminded of the richness of life, to be aware of good and evil, success and failure, youth and age, beauty and ugliness, problems and possibilities. Vocabulary eventually emerges as a set of juxtaposed, opposite ideals, leaving us nonplussed mortals scurrying in the ambiguous no-man's-tension between the pure extremes.

USEFUL OBSERVATIONS

There are some necessary observations to be made about the particular characteristics of this volume:

- In Volume III, in contrast to the first two volumes, the stems in words are sometimes less obvious, more subtle, further in the historical background. In Volumes I and II, I avoided spelling variations and confined myself more to words in which the stems were spelled in their primary form; *punct* appeared in *punctilious*. In this book, however, I have introduced many words that contain familiar stems in unfamiliar variations. (Variation is the spice of diction.) We find *punct* in *expunge*. We find *xero* in *serene*. We find *apo* in *aphorism*. Thirty centuries of dusty culture can bury a stem deeply in a word; only a sun-bleached consonant or so may protrude above the arid surface, and it may take some deft work with a trowel to expose the buried *tang* or *circum* to the light.

- The tests in this volume are more difficult; now the students must study stems *with* words in order to learn the right meaning in word context. Some new stems are introduced that have the same spelling as previous stems, and more emphasis is placed on knowing the right stem meaning for any given word.

- Many of the stems are repeated repeatedly. You might find *pre* in three successive lists. Why not? The stem is there in the words, and so seeing it again (and again and again) in the stem lists makes a point and sensitizes students to its frequent use and importance. You won't have to convince students that these stems are important; it will be as plain as the lists.

- In Volume III, as in Volume II, each list contains five review words. Three of the five are from Volume II, and two are from Volume I. The emphasis this time is on important words, words that regularly occur in the classics, words that are not rare or excessively erudite but that will be frequently read or heard as the students enter college and professional life.

- The short definitions of the words are often only hints. In a short format such as this one, where I attempt to provide a two- or three-word definition, all I can do is to provide a minute, functioning launchpad, a word group that will suggest the sense of the word. You will find that in many cases I have gone on in the Notes or Ideas pages to elaborate on the collateral meanings and subtleties of the words, but I hope that students will enjoy using my succinct definitions as incentives to look the words up and explore them further. I always envision this text being used in conjunction with a good college dictionary. Words, unlike Hamlet, cannot be bounded in a nutshell; each word is a microcosm, a poem, an artifact, a Swiss Army thought.

INTRODUCTION

The Word Within the Word, Volume III, is a brilliantly innovative vocabulary textbook whose purpose is to help you to understand the academic English that is the medium of exchange for all learned people in our culture. Included in the book is a discussion of Rome in the period after the assassination of Julius Caesar. The purpose of this material is to broaden your understanding of the world that gave us so much of our language. This material is central to our purpose of helping you become an educated person, and we hope that it both informs you and arouses your curiosity, helps you to understand the Roman context and makes you aware of what you do not know.

In *Volume II* of the *The Word Within the Word*, we looked at the history of Rome from its origins as a little mud village in the center of Italy to its emergence as the dominant power in the Mediterranean. The primary focus there was on what made Rome so successful, and we saw how the Romans took the central structure of their society, the patron/client relationship, and exported it to the wider world, thereby embracing the people in Italy they conquered and making them long-term allies rather than bitter and lasting enemies. We also looked at the process in which the divisions between factions of Romans destroyed the Republican government that had persisted for 450 years and that had been the foundation on which the Romans had built their successful domination of their world.

In this volume, we explore what the Romans did with their pre-eminence once they conquered the world around them. How did they end the divisions that reached their peak with the assassination of Julius Caesar on the floor of the Senate? The answer to that question lies in the victory of Octavian Caesar over all opponents, including Antony and Cleopatra, in a protracted process that took nearly fourteen years. The next question is: With what organization did they replace the Republic? The answer lies in the accommodations Octavian found with patricians of Rome. The more important question is: Once the Romans reached an end to their divisions, how did they change their world? The answer does not lie in stories of wars or of conquests or of palace intrigues. No, the answer we seek is far more tangible. It is about what the Romans developed and manufactured, about the physical structures they imposed on the world around them, about how they organized the prosperity that came with peace.

In *The Word Within the Word II*, we saw the prodigious powers of organization that the Romans possessed as they not only fought Hannibal to a standstill in Italy but also attacked overseas to the east and west at the same time, fighting wars on three fronts, finding for the first time in their history the resources for naval battles and amphibious invasions. In this volume we will see that same genius for organization put to use in peace to produce an unprecedented prosperity. In ways large and small, the Romans transformed the lives of the people in their world, and the success of their empire was built upon the benefits it brought to the inhabitants who for the most part willingly enjoyed them. Fascinatingly enough, the answers to how the Romans changed the ancient world can be seen in the buildings still standing and the artifacts to be found in thousands of archaeological sites throughout what was once the Roman world.

One of the most intriguing—and least known—aspects of ancient Rome is its performance as a center of business and as the greatest manufacturing power the world was to know until the industrial revolution of the nineteenth century. The patron/client structure that was central to Roman society and thinking provided an ideal organizational structure to allow wealthy patricians to invest in a variety of enterprises. They developed new methods of manufacture and new materials and processes to make their enterprises more efficient and effective. They produced manufacturing plants, the infrastructure for commerce and trade, articles for domestic consumption, and weapons for war with a sophistication and in quantities that the world had never seen before, that none of their contemporaries could match, and that posterity was unable to duplicate in many instances for more than a millennium after the fall of the Roman Empire.

Part of the story is the colossus that Rome was—in ways we might fail to appreciate if we do not look hard at what they have left us.

Thomas Milton Kemnitz

Latin stems are in standard style; Greek stems are in *italics*; new stems are in **bold**:

• per	(through)	perplex	• ob	(against)	ostentatious
• co	(together)	copious	• tens	(stretch)	ostentatious
• trans	(across)	traverse	• *micro*	(small)	microcosm
• *biblio*	(book)	bibliophile	• *cosmo*	(universe)	microcosm
• *phile*	(love)	bibliophile	• de	(down)	defenestrate
• *demo*	(people)	demography	• anim	(mind)	animus
• *graph*	(write)	demography	• *neo*	(new)	neophyte
• sangui	(blood)	sanguine	• *phyte*	(plant)	neophyte
• cred	(believe)	incredulous	• mens	(measure)	commensurate
• in	(not)	incredulous	• non	(not)	nonplussed
• **plex**	(weave)	perplex	• plus	(more)	nonplussed
• inter	(between)	interdiction			

perplex (confuse) Socrates was executed for perplexing the youth of Athens.

copious (abundant) Bottom's superfluous words were more copious than his ideas.

traverse (cross) Slowly, Hillary and his team traversed the face of the mountain.

bibliophile (book lover) The quaint old store was a Mecca for bibliophiles.

demography (study of populations) They examined the demographics of the school community.

sanguine (cheerful) His sanguine disposition encouraged the other survivors.

ostentatious (showy) The ostentatious home offended their subtle, refined tastes.

microcosm (small universe) She gazed at the squirming microcosm in the drop of pond water.

defenestrate (toss out the window) Defenestration was the preferred treatment for cheaters.

animus (intent or hatred) Katherine the Great sensed a disturbing animus in the English noble.

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nonplussed (perplexed) The nonplussed anthropoid gazed vacantly at the skull in his hands.

interdiction (prohibition) Despite the interdiction, crowds protested before the Bastille.

commensurate (of like measure) The salary was not commensurate with the responsibility.

neophyte (beginner) She could not just relinquish the project to callow corporate neophytes.

incredulous (not believing) The incredible devastation left even Oppenheimer incredulous.

per
through • away

The Latin stem **per**, which we define as meaning *through*, actually can have a wide variety of meanings, including *through*, *throughout*, *away*, *thoroughly*, *completely*, and other related meanings. In most cases, the *through* idea seems to convey the meaning sensibly enough. Some of the English words that contain this Latin stem are provided below. Look up some of the most intriguing words, and note the way in which their definitions are functions of their etymologies.

peremptory:	dictatorial or imperious. Her peremptory command made him jump.
perambulate:	to walk through. They perambulated happily through the park.
perennial:	perpetual. The quartet was a perennial favorite among the Vienna crowd.
perdition:	damnation. Marlowe's Faustus is dragged away to perdition.
perfunctory:	done in superficial routine. He gave the table a perfunctory wipe.
perfidy:	treachery. In his perfidious act, he broke faith with his companions.
perfuse:	pour over. The objects in the room were perfused with the red liquid.
permeate:	penetrate and spread through. The ink permeated the cloth.
perpetrate:	to do evil. In the dark of the moonless night, he perpetrated his foul crimes.
pernicious:	destructive. The false rumor had a pernicious influence on the crowd.
peroration:	conclusion of a speech. At length Pericles came to his sublime peroration.
perseverate:	pathological persistence. He perseverated in his effort to speak to Moses.
persiflage:	flippant style. Their sarcasm and persiflage carried them through the crisis.
perspicacious:	insightful. Sappho's perspicacious poems have endured for millennia.
pertinacity:	obstinacy. With grim-mouthed pertinacity, he refused to let go.
perforce:	necessarily. After the debacle, he perforce went into hiding.
permutation:	radical rearrangement. She marveled at the weird permutations of his ideas.
perpend:	to ponder. "Perpend," said Polonius, as he held out Hamlet's letter.
perquisite:	a privilege or benefit of title. The position included attractive perquisites.
perturbation:	disturbance. Dracula detected the psychic perturbations in his victim's fear.
pervasive:	spread throughout. Aristotle's influence was pervasive in Medieval theology.

1. The noun **microcosm** is contrasted with its opposite, **macrocosm**; under the microscope, we discover a microcosm in a drop of pond water, and this microcosm is remarkably complex and populous, a nutshell vista of phenomena and vitality. The excitement of modern science, of course, is that neither the microcosm nor the macrocosm seem to have apprehensible limits. Even one of the most minute organisms in a drop of pond water is itself another microcosm, filled with mysterious cells (though it may be unicellular) and curiously motivated protoplasm. And a tiny piece of this protoplasm is itself another microcosm, an animated universe of molecules and atoms, which are in turn whirling systems of even vastly smaller something or anothers that we metaphorically call *particles*. Where does it end? (Does it end?) Of course, it can be an acrophobic experience to turn around from the lens of the microscope and look up, only to see the great wheeling and sparkling dome of the macro universe overhead. Thoreau noted that we stand at the meeting of two infinities, but we also are caught at the meeting two cosms; our human scale is a kind of intercosm between the microcosm and the macrocosm, each of which makes the other, and each of which we are made.

2. A **Micropoem**: To **perplex** someone is to confuse that person by complicating the situation, but the metaphor concealed in the word is one of tangles and knots, of strands that are twisted or woven (*plex*) through (*per*) each other into a snarl that can no longer be understood. The perplexed person is left hesitant, in doubt, confused by the complexity. Note the kinship between the words *perplex* and *complex*. The verb *perplex* and its variations, the adjective **perplexed** and the noun **perplexity**, are widely used in literature: Tom Sawyer's Aunt Polly looked perplexed, as did Defoe's Robinson Crusoe. My favorite example, however, comes from Emily Brontë's *Wuthering Heights*, in which "Kenneth was perplexed to pronounce of what disorder the master died."

3. When we think of the horror of a **sanguinary** battle, or of the familial comfort of **consanguinity**, we find it puzzling that the adjective **sanguine** means cheerful. Bloody cheerful, the British might think. The puzzle is solved by realizing that a cheerful and healthy person is traditionally known as rosy-cheeked—not gray and cadaverous but having the pink tone of good circulation. Kenneth Grahame's Toad, in *The Wind in the Willows*, is a "sanguine, self-satisfied animal."

4. A **Classic Word**: Although the verb **traverse**, from *trans* (across) and *vert* (turn), is not one that we hear in everyday conversational use, it has a venerable history in English speech and literature. It can mean to move across, to cross and recross, or even to oppose. We find it in 1667 in Milton's *Paradise Lost*, but we also find it in 1963 in Sylvia Plath's *The Bell Jar*. It has been used by Mary Shelley, Walter Scott, James Fenimore Cooper, and Mark Twain. H.G. Wells, Joseph Conrad, and even F. Scott Fitzgerald used it. We find characters "traversing with the decided step of one who remembered the way well" (Dickens), "traversing the country" (Defoe), "having traversed immense seas" (Mary Shelley), and "traversing the room with hasty strides" (Scott). In Mark Twain's *Tom Sawyer*, "Nudges and winks and whispers traversed the room," which is a beautifully creative use of the word, unless nudges and winks are more talented than I have heretofore suspected.

DEATH IN THE SENATE
Dr. Thomas Milton Kemnitz

The sixty senators who conspired to assassinate Julius Caesar on the Ides of March had no plan for what would happen after Caesar was dead. We now consider the killing of Caesar as a cataclysmic event, and yet they had no plan for the future! Their absence of a plan should give us pause and raise the question: *What were they thinking?* Their expectation seems to have been that things would continue much as they had before Caesar was in control of Rome, that the Republic would continue as it had for the past 465 years, that they and members of their class would control the events of state, and that the problem was Caesar himself and not a larger, systemic threat to the Republic. The assassination plot was closely held among the patrician senators; a new man like Cicero was not included in the plot, even though the plotters knew that Cicero would have sided with them on constitutional grounds. The exclusion of Cicero is a clear indication that the cohesive force at work was the interests of a class of men rather than an ideological impetus to restore the state. Their expectation that the Republic would continue as before was enhanced by the results of killing enemies of their class for the previous eighty-nine years and having only positive outcomes from the deaths. Beginning with the murder of Tiberius Gracchus in 133 B.C.E., their great-grandfathers, grandfathers, and fathers had met threats to their interests with assassination, sending their enemies to premature and violent deaths, and those assassinations had worked for them. So now the sixty senators expected the same result from the same action.

The assassins spared the life of Mark Antony on the Ides of March; they could have killed him, but they did not consider him a threat to their class, and they decided the evening before to let him live. Mark Antony was not held in high regard because he led a life that was anything but the embodiment of the traditional Roman virtues of discipline, self-control, and moderation. In a society in which family counted for much, Antony was the son of an ineffectual man known for his corruption and remembered for his bankruptcy, a man whose early death was unlamented. Antony's mother was Caesar's cousin, hence Antony's position as a general under Caesar. He had proven an able general, and Caesar had been influential enough to have him made Tribune of the Plebs in 50 B.C.E.; Antony had been one of the two tribunes run out of Rome by the senators when he tried to stop the proceedings that were intended to remove Caesar from office and relieve him of control of his armies. Mark Antony had a long history of drunkenness, gambling, and licentiousness, and he had been a poor civil administrator when Caesar had left him in charge of the government in Rome. Caesar had relieved him of authority, and for two years Antony had done little while Caesar ended the threat to his rule that Pompey and his sons had posed. In 44 B.C.E. Caesar had made Antony co-consul with him, but that had not been sufficient to raise the esteem in which Antony was held. He owed his life to the low opinion the senatorial conspirators had of him as much as to their desire to assert that the death of Caesar was an act of principle, not the prelude to a bloodbath.

However dissolute he may have been, Antony was not without ability, which he used to think, plan, and maneuver better than the senatorial conspirators. In the immediate aftermath of the stabbing of Caesar, Antony hid, unsure if he was an intended victim. When he found that he was not in danger, he swiftly began to rally the Caesarean forces to take control of the state. On the night after Caesar's assassination, Marcus Lepidus seized control of the Forum. He had been in the vicinity of Rome with an army of veterans about to go into retirement in Spain; now he considered making himself master of Rome. However, Antony convinced him not to and formed an alliance with Lepidus, sealing it with the marriage of his daughter to Lepidus's son. He also assisted Lepidus in taking the office of *Pontifex Maximus*, which Julius Caesar had held until his death. The *Pontifex Maximus* was the chief religious official of Rome. Antony gave the assassins, led by Brutus and Cassius, assurances of his friendship, even sending his son among them as a hostage. The need of both sides was legitimacy, and on the 18th of March they crafted a compromise that gave amnesty to the assassinations but did not declare Caesar a tyrant and thereby left in place all his laws and programs, as well as his officials. Moreover, Antony got the senators to pass a decree that ratified all of Caesar's acts without naming or even describing them. A balance seemed to have been reached—until Antony inflamed the crowd at Caesar's funeral and made Rome unsafe for the assassins.

THE TANGLED WORLD OF MARCUS JUNIUS BRUTUS

Dr. Thomas Milton Kemnitz

Marcus Junius Brutus was the acknowledged leader of the senatorial assassins of Julius Caesar. Disentangling his beliefs, bonds of family, and loyalties is extraordinarily complex. When he was seven years old, Brutus's father was killed by Pompey in suppression of a purported plot against the state. Brutus was raised and educated by his mother's half-brother, Cato. This formative experience may have imbued in him a dedication to the Roman Republic as Cato understood it and perhaps an enormous respect for Cato personally. Brutus began his career as an assistant to Cato during his governorship of Cyprus. There he made a fortune by lending money at exorbitant rates of interest. In party terms, Brutus was a patrician and one of the conservative *Optimates*. His politics and loyalties might have placed him in opposition to Caesar, but Caesar was the long-time lover of Servilia, Brutus's mother. Caesar was quite solicitous of the son of his lover, and he offered Brutus every kindness and preferment possible.

Once when Cato was attacking Caesar in the Senate, the latter received a missive. Cato accused Caesar of receiving a conspiracy note during Senate proceedings. Caesar handed to Cato the missive, which was a love note from Cato's half-sister (and Brutus's mother) Servilia. This did nothing to diminish Cato's hostility to Caesar; we can only speculate on how Brutus felt about the episode, but embarrassment is likely.

Brutus's first wife had conflicted family ties to both parties; her uncle was Clodius, one of Caesar's closest and most notorious allies; he was killed by the *Optimates*. Her father was attacked in the courts by Caesar's party and was vigorously defended by Cato and the *Optimates*. This put Brutus further at odds with Caesar.

In 49 B.C.E. when Caesar crossed the Rubicon, Brutus sided with Pompey and the Senate, standing with the man who had killed his father against the man who was his mother's lover. He followed Pompey to Greece and participated in the battle of Pharsalus. At that battle Caesar gave orders that Brutus was not to be harmed if Caesar's legionnaires encountered him on the battlefield. After Pompey lost, Brutus decided not to follow Pompey and Cato in continued resistance to Caesar and instead applied to Caesar for clemency, which was immediately granted. Thereafter, Caesar brought Brutus into his inner circle.

After the Republicans lost the battle of Thapsus in 46 B.C.E., Cato committed suicide. Fourteen months later Brutus divorced his wife (causing something of a scandal and a rift with his mother because he gave no reason for doing so) and married his cousin, Cato's daughter. Brutus also authored a pamphlet in which he honored Cato, who was at once his uncle and his posthumous father-in-law. Meanwhile Caesar fostered Brutus's career, making him the governor of Cisalpine Gaul in 46/45 and a praetor for the year 44, and he put him in line to be a consul in 41. As Caesar moved increasingly toward taking all power in his hands and violating many of the practices of the Roman Republic, Brutus, then 40 years old, was drawn into becoming the leader of the conspiracy to kill him. All of Caesar's personal kindnesses toward Brutus were repaid with a dagger, but Brutus's true loyalties were to the patrician class, the *Optimate* party, and the protection of the Republic.

The complex family ties and bonds of friendship of the sixty senators certainly helped them to keep secret their plot to assassinate Caesar. The initiator of the conspiracy was said to be Gaius Cassius Longinus, who was a little older than Brutus. He was married to a daughter of Servilia, who was Brutus's mother; thus, Cassius and Brutus were brothers-in-law. Other leading members of the conspiracy were the Casca brothers: Publius Servilius Casca Longus—who struck the first blow in the assassination—and Gaius Servilius Casca; they too were members of the Servilia family and were thereby related to Brutus through his mother. The Servilia had been prominent patricians in Rome for 450 years by the time of the assassination of Caesar. Roman families venerated their ancestors, who gave the family identity, pride, and prominence. Among the Servilia ancestors was Gaius Servilius Ahala, who nearly 400 years earlier had assassinated Spurius Maelius to prevent a plot to make the latter king. Although at the time this was thought of as murder, by 44 B.C.E. it was an act cited often as an example of the courage and heroism of the ancient Romans in their defense of the Republic. As such, Gaius Servilius Ahala provided a standard for Brutus and the Casca brothers to emulate.

Though it is good to have a rich vocabulary, it is not good to abuse that vocabulary by writing verbose, sesquipedalian sentences. Those who overuse their vocabularies often do so at the expense both of clarity and of others' patience. Translate the following ostentatious, ponderous passage into graceful, direct English.

Clinging to the face of the cliff, the neophyte rock climber had begun to lose his usual sanguine complacency and to develop an unwonted animus against the stubborn rock wall. Three attempts to traverse the face had left the climber perplexed and incredulous, glaring in frustration at the microcosms of lichen-covered granite that continued their montane existences two inches from his nose. What curious animal demography could describe the copious microorganisms that inhabited these microscopic gray landscapes?

Far in the west, the incarnadine sun had set, and the azure sky had transmuted into a soft, purpling mauve. The temperature was dropping. Soon the ostentatious glitter of the Milky Way would taunt him with its own interdiction: Do Not Climb at Night. Somewhere above his head, a bird was engaged in twilight defenestrations, flinging from its nest the rubbish of the day's events. Bug legs. Broken feathers. Bits of bird debris that fell steadily on the nonplussed climber's head—more debris than seemed commensurate with the small projects of a bird.

"In the morning," he thought as he checked his ropes and pitons and prepared himself to sleep on the rock face, "in the morning I will make it." But he knew that only a different synergism, a new combination of energy, coordination, and commitment, would get him safely across the difficult face and over the top of the cliff.

An important source for our knowledge of this period is a history written by Appian before 162 C.E. Appian was born in Alexandria in about 95 C.E. to a Greek family of the equestrian order. He went to Rome in about 120 C.E.; there he was a lawyer, and he argued cases before the emperor. Only about half of his history has survived, but five books detailing the Roman civil wars have come down to us. They offer fascinating insights into the events and behaviors of the leading individuals, and it is revealing to read parts of them. For instance, the chapter on Caesar's funeral is well worth the ten minutes it takes to read it. This is most easily found by looking for Appian, *Civil Wars*, Book II, Chapter XX.

Reading Comprehension

1. For Translation #61, which of the following does the passage suggest?
   a. The climber is supremely confident.
   b. The climber is confident but realistic.
   c. The climber is terrified and is trying to convince himself that he will survive.
   d. The climber is confident but is deceiving himself about his skills.

2. Which of the following is the best title for Translation #61?
   a. An Incredulous Encounter with Mountain Microcosms
   b. A Sanguine Night on the Rock Face
   c. Keeping Defenestrations on Top of Things
   d. A Neophyte's Nonplussed Traverse

Analogies

3. **INCREDULOUS : INCREDIBLE ::**
   a. shock : disaster
   b. animus : hate
   c. perplexed : nonplussed
   d. microcosm : macrocosm

4. **BIBLIOPHILE : BOOK ::**
   a. music : audiophile
   b. book : page
   c. gastronome : food
   d. philosopher : logic

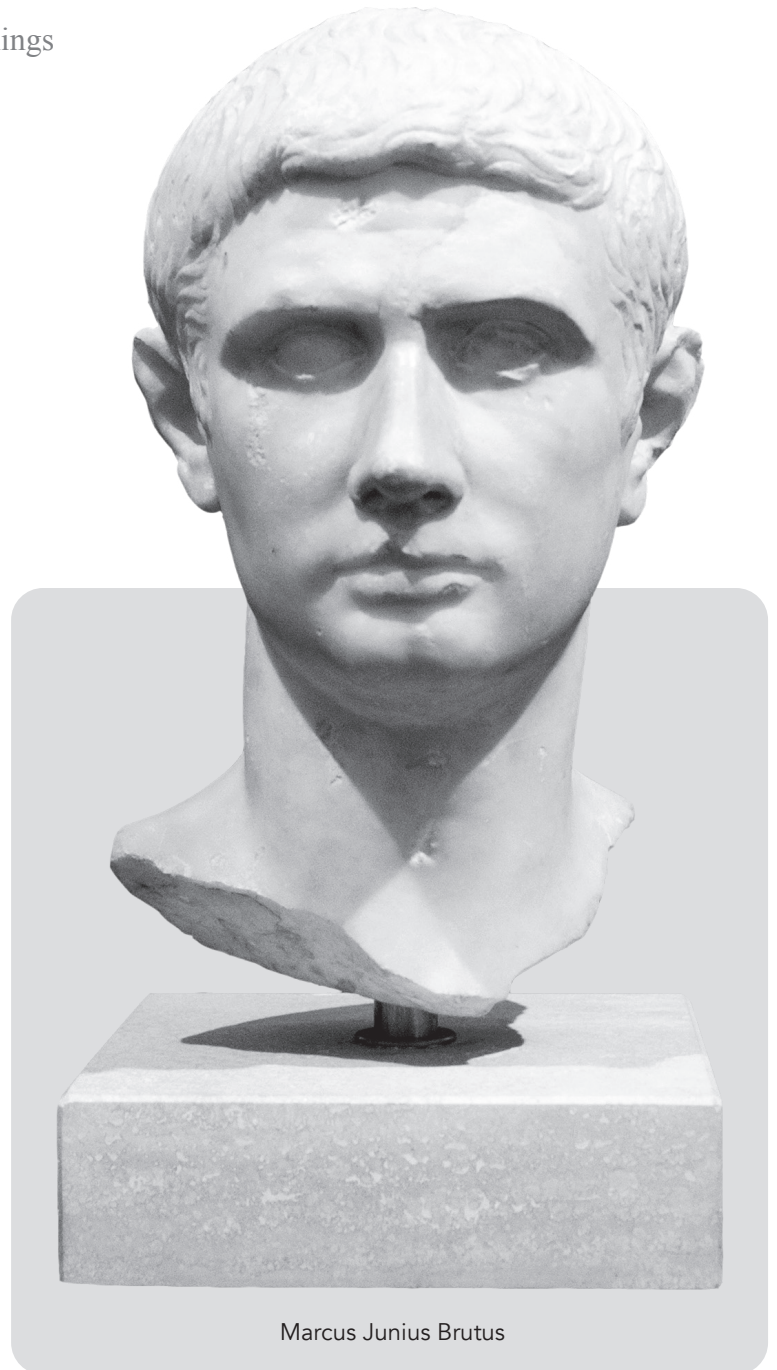**Antonyms**

5. **NEOPHYTE :**
   a. tree
   b. virtuoso
   c. stoic
   d. phytotoxin

6. **COPIOUS :**
   a. myriad
   b. gnostic
   c. nonplussed
   d. sporadic

The logic behind the analogies answers is presented in the Assessment Materials section of this book.

Marcus Junius Brutus

convergence

Of the words in List #61, select the one term that would be the best addition to your own frequently used vocabulary, and explain why. In what situations do you envision yourself using the word?

analysis

Using a dictionary for etymological assistance, explain why the word **ostentatious** means what it means, considering its Latin origins.

synthesis

We refer to the teeming microbiotic life in a drop of pond water as a **microcosm**, but we also use the word to describe such things as the small, self-contained community of an established college, where a professor might live, dine, work, and find most of the amenities and enjoyments of the academic life. As you think about society, history, and other world views, what other situations can you think of that would be aptly described by the word *microcosm*?

application

In brief definitions, the words **perplex** and **nonplus** seem to be perfect synonyms, but actually these two words are part of a family that includes **puzzle**, **confuse**, **confound**, **bewilder**, and **dumbfound**. A **perplexed** person is not only puzzled but may even be worried, whereas a **nonplussed** person is so perplexed as to be completely unable to proceed. *Nonplussed*, therefore, is a stronger term than *perplexed* and denotes a more affected state. Many dictionaries have synonym discussions explaining the fine differences between such near-synonyms. Find a dictionary that contains a discussion of the words mentioned above, and then use *perplex*, *nonplus*, and a few other synonyms in a paragraph.

imagination

Write a short story in which the primary scene concerns a person in a frenzy of **defenestration**.

Neologist's Lexicon

Use the stems in this list to create a new word (neologism). Give the word, the pronunciation, the part of speech, the etymology, and the definition(s). Keep a record of the neologisms you create from list to list. Here are some examples using stems from this week's list:

cosmoplexity (koz mo PLEX ih tee) n. [*cosmo* (universe), *plex* (weave)] 1. chronic befuddlement over the meaning of life 2. extreme obsession with the size and scale of the universe, resulting in overwhelming feelings of insignificance

sanguigraphy (san GUI graff ee) n. [*sangui* (blood), *graph* (write)] 1. writing in blood, as pirates' oaths and boys' sacred pacts

Sesquipedalian Emily Dickinson

Some people believe that Emily Dickinson is the greatest poetic genius that the United States has produced. My own view is that this status likely belongs to Walt Whitman, but if it is not Whitman, then Dickinson would be a powerful candidate for the honor. Certainly, her poetry is of first-magnitude genius. It is original, unique, filled with condensed flashes of unexpected sound and insight. And in her poetry, Dickinson consistently revealed a tough and unsentimental mind that stared powerfully at the truth of the world, however bitter or unpalatable it may be. In style, Dickinson was fond of brilliant rhymes and near-rhymes, in contrast to the *moon-soon* obvious rhymes used by lesser talents. Her large ideas were condensed into a poetic succinctness that at first seems almost sketchy but that magically expands to elaborate fulfillment in the process of going from the page to readers' minds. Dickinson often used dashes rather than commas or periods—an idiosyncratic punctuation that has been properly restored to her published poems in recent years. She frequently used lines of iambic tetrameter followed by iambic trimeter, which, remember, is also the pattern of a ballad, though Dickinson did not confine herself to ballad quatrains. If she had used the words in List #61 to write a poem, the result might have been something like this:

A Neophyte's Memories

A neophyte incredulous,
My sanguine mind—perplexed—
I gaze nonplussed—sans animus—
Defenestrated wrecks
Abound, a copious debris—
My former lives traverse my mind—
So ostentatiously!

Latin stems are in standard style; Greek stems are in *italics*; new stems are in **bold**:

• re	(back)	riposte	• **noct**	(night)	nocturne
• ate	(cause)	truncate	• dict	(say)	dictum
• **trunc**	(cut)	truncate	• in	(not)	ineffable
• trans*	(over)	transcend	• ex	(out)	ineffable
• **scend**	(climb)	transcend	• *eu*	(good)	euthanasia
• pro	(before)	prostrate	• *thanatos*	(death)	euthanasia
• ad	(to)	adventitious	• **spatium**	(space)	expatiate
• ven	(come)	adventitious	• spec	(look)	specious
• **vitium**	(vice)	vituperate	• ous	(full of)	specious
• man	(hand)	amanuensis	• *xeno*	(stranger)	xenophobia
• ambul	(walk)	ambulatory	• *phobia*	(fear)	xenophobia

riposte (swift retort) The members of Parliament laughed at Churchill's devastating riposte.

truncate (to cut short) The building's new wing had an unpleasant, truncated appearance.

transcend (go beyond) The gymnast transcended the previous limits of her endurance.

prostrate (lying face-down) Henry Fleming lay prostrate in fear as the bullets whizzed overhead.

adventitious (accidental) There were adventitious problems in addition to those we expected.

vituperate (to violently revile) Ares had to endure Zeus's contemptuous vituperations.

amanuensis (secretary) She wanted a competent assistant, not merely a scribe or amanuensis.

ambulatory (able to walk) Beauregard sent the ambulatory wounded to the rear of the field.

nocturne (painting of a night scene) Whistler's nocturne drew ridicule from John Ruskin.

dictum (pronouncement) Alexander issued a dictum on the respectful treatment of foreigners.

• • •

ineffable (inexpressible) In many religions, the name of the deity is considered ineffable.

euthanasia (mercy killing) "Is assisted suicide a form of euthanasia?" she asked.

expatiate (to elaborate) Polonius expatiated to the king and queen on what majesty should be.

specious (false) A charismatic demagogue agitated the crowd with specious attacks on minorities.

xenophobia (fear of foreigners) The skinheads violently acted out their ignorant xenophobia.

*We introduce a new definition of *trans*.

trans
across • over • through

The Latin stem **trans**, which we define as meaning *across*, actually can have a wide variety of meanings and is sometimes shortened to **tra**. Though **trans** often means *across*, it can mean *over*, *beyond*, *through*, or *on the other side*. In chemistry, **trans** refers to isomers that have certain atoms or groups of atoms on opposite sides of a molecule. Here are some of the interesting words that contain **trans** in its various shades of meaning:

transalpine:	across the Alps. The Romans never suspected a transalpine invasion.
transect:	to cut across. The line he drew transected the polygon.
transitory:	not permanent. It was an intense but transitory romance.
transmute:	to change form. The transmutation in his personality amazed us all.
transpicuous:	clearly understandable. The transpicuous explanation settled the point.
transilient:	leaping from thing to thing. It was a day of abrupt, transilient changes.
transgress:	to overstep. Their reactions showed that he had transgressed some invisible line.
transfix:	to impale. Prufrock felt transfixed and wriggling on the wall.
transmigration:	reincarnation. They believed in the transmigration of souls.
transubstantiate:	change in substance. She accepted the transubstantiation of the bread and wine.
travesty:	a farcical imitation. The grotesque travesty distorted his good intentions.
transverse:	crosswise. The transverse beam gave a cross-like appearance to the pillar.
transcribe:	write out. They carefully transcribed the conversation for distribution.
transpontine:	across the bridge. She gazed at the transpontine bustle across the Thames.
transpire:	to release vapor. The spacesuit recycled the body's transpired moisture.
transit:	passage. Something happened to the letters in transit; they never arrived.
transfigure:	change appearance. The frog was transfigured into a handsome prince.
traduce:	to defame. He was vilified and traduced by the obnoxious Philistines.
traffic:	wrongful trade. The traffic in surplus weapons benefited the rebel force.
trajectory:	flight path. He studied the trajectories of the cannonballs.
trance:	a fixed consciousness. He gazed at the scene with a trance-like expression.

1. The noun **riposte** refers to a swift retort, an immediate, sharp response to someone else's words. A riposte is what we often later wish we had said but couldn't think of at the time. When we use *riposte* this way to refer to a quick answer, we are being metaphorical because the word comes through the Italian *riposta* and is a term used in fencing, where a riposte is the sharp thrust made after parrying another fencer's lunge. "A touch, a touch, I do confess it," said Laertes after receiving Hamlet's riposte. Spontaneous ripostes, of course, are what the wit, poet, playwright, and novelist Oscar Wilde was famous for. He was known to have said that "Nowadays, the British and the Americans have everything in common, except, of course, language." The word *riposte* appears in Wilde's *The Picture of Dorian Gray*: "'Pace gives life,' was the riposte." If you like literature and biography, you might enjoy reading Richard Ellman's masterpiece of biography, *Oscar Wilde*.

2. The adjective **ineffable**, which comes from the Latin *in* (not), *ex* (out), and *fari* (speak), can be defined as inexpressible, but it has the particular meaning that what is to be described is simply magnificent or sacred beyond the ability of language to capture it in words. An inarticulate person who is merely tongue-tied is not struggling with the ineffable, but the Grand Canyon has an ineffable magnificence, and the name of God in many religions is regarded as ineffable because it is so sacred that it would be blasphemy to utter it. In *Paradise Lost*, Milton described the ineffable sense of joy that diffused into the blessed spirits. Jane Eyre sighed a sigh of ineffable satisfaction. Melville mentioned the ineffable heavens. And best, in *The Great Gatsby*, F. Scott Fitzgerald wrote, "A universe of ineffable gaudiness spun itself out in his brain."

3. A **Micropoem**: The verb **expatiate** means to elaborate, but it comes from the Latin *ex* (out) and *spatiari* (to walk). The Latin *expatiari* meant to roam, to wander. When we elaborate or enlarge on a theme, we are walking around in the mind, exploring the possibilities of ideas, wandering down new strings of sentences. To expatiate in writing is to take a nice walk, to walk out. In *Moby Dick*, Melville wryly noted that "From his mighty bulk the whale affords a most congenial theme whereon to enlarge, amplify, and generally expatiate."

4. A **Classic Word**: The adjective or verb **prostrate** comes from the Latin *prostratus*, containing the stems *pro* (before) and *stemere* (to stretch out). We find *prostrate* in *Romeo and Juliet*, in *Paradise Lost*, in *Walden*, in *The Red Badge of Courage*, and in *The Wind in the Willows*. Characters fall prostrate, sink prostrate, prostrate the resistance, lay prostrate on conveyances, and trample on prostrate bodies. There are prostrate rats (from Kenneth Grahame, of course), prostrate forms, prostrate companions, and prostrate comrades. We find *prostrate* in *Robinson Crusoe*, where Robinson is "prostrating myself on the ground with the most serious humiliation," in *Gulliver's Travels*, where Gulliver is "going to prostrate myself to kiss his [a Houyhnhnm's] hoof," in *Ivanhoe*, where Scott noted that "the lion preys not on prostrate carcasses," in *The Last of the Mohicans*, where "Magua buried his weapon in the back of the prostrate Delaware, uttering an unearthly shout as he committed the dastardly deed," and in *Wuthering Heights*, where "Linton had sunk prostrate again in another paroxysm of helpless fear, caused by his father's glance towards him." Jane Eyre "sank prostrate with my face to the ground." In *Silas Marner*, George Eliot (Mary Ann Evans) wrote, "Yes, there was a sort of refuge which always comes with the prostration of thought under an overpowering passion." In *The Mayor of Casterbridge*, Hardy described the plight of those whose lives were at the mercy of the weather: "Their impulse was well-nigh to prostrate themselves in lamentation before untimely rains and tempests." And in Never Never Land, Peter Pan's boys "called Peter the Great White Father, prostrating themselves before him."

MARCUS VIPSANIUS AGRIPPA
Dr. Thomas Milton Kemnitz

Marcus Agrippa was the indispensable man in the reign of Augustus. He was the man who fought and won the battles, built the buildings, and transformed Rome. Without him, Octavian would not have become Augustus. Agrippa was a contemporary of Octavius, and it is likely that Julius Caesar identified his ability in the 46/45 B.C.E. campaign against Pompey and his followers that ended in the battle of Munda. Agrippa was with Octavian in Macedonia when they learned of the assassination of Caesar.

Agrippa was the military man Octavian was not. It was he who planned the brilliant strategy that quickly ended the uprising by Mark Antony's wife and brother in 40 B.C.E., who put down the Gauls in 38 B.C.E., and who then dealt with Sextus Pompey. The young Pompey had control of the seas from his base in Sicily, and Agrippa took over the task of defeating him after Octavian had failed to do so for years. He built a navy that included a new larger ship, and he trained for battle on an inland body of water that he created by cutting through the strip of land between two lakes. There he developed a new piece of equipment for Roman ships that would enable them to snare and hold Pompey's ships with more efficient grappling hooks. He then cut a channel from his lake to the sea, and he and Octavian set out to meet Sextus. However, their fleet was badly damaged in a storm and had to withdraw for repairs. Agrippa set out again, this time without Octavian, and defeated Sextus in two battles at sea. Octavian participated in that campaign in the land war but needed Agrippa's help to extricate himself from a dangerous situation.

Agrippa was responsible for Octavian's final victory over Antony at Actium. Antony and Cleopatra had elected to fight a decisive naval battle instead of relying on their army of 100,000. Agrippa commanded the navy and decisively defeated Antony's forces in the skirmishes before the final great battle at Actium, from which Cleopatra and then Antony fled, followed by just seventeen ships of their navy. The rest of the fleet was destroyed or surrendered; all of Antony's legions surrendered within a week without ever fighting a battle.

In the years between defeating Sextus and defeating Antony, Agrippa's attention turned to the city of Rome. Having been a consul with Octavian, he became an aedile, an unusual backward step in the *cursus honorum*. In this post he was able to oversee construction and refurbishment of buildings in Rome. He repaired aqueducts and built two new ones. He restored a number of temples, and he cleaned and repaired the Cloaca Maxima, the great sewer of Rome. He built Rome's first public baths. He constructed the first Pantheon in commemoration of the victory at Actium over Antony and Cleopatra. He laid out gardens and porticos.

Agrippa was the man Augustus could trust. He alone was given the same powers as Augustus, and he was the man who would take over if Augustus—always frail—should die young. To cement the alliance between Augustus and his most trusted second-in-command, Agrippa was married to Claudia Marcella Major, the niece of Augustus. Later Augustus asked Agrippa to divorce Claudia and marry instead Julia the Elder, his daughter. Augustus wanted Agrippa to be part of this family. He valued both Agrippa's unwavering loyalty and his great ability. Wherever there was significant trouble in the Roman world, it was usually Agrippa who was sent to end it forcefully. He saw service in Gaul, Spain, the Eastern provinces, and along the Danube. It made Augustus's life significantly more difficult when the robust Agrippa died in his early fifties, twenty-six years before Augustus.

As the practical man in Augustus's inner circle, it is likely that Agrippa was responsible for the standardization of Roman building materials and buildings that occurred during the Augustan Age, and it was within his purview that the Romans began to build with bricks and mortar. Because the autobiographies of Augustus and Agrippa have not survived, we do not know the details of their working relationship, but it is reasonable to surmise that much of the greatness that was Rome in the Imperial Age was founded on Agrippa's contribution to standardization and efficiency in materials and construction techniques, as well as on his oversight of infrastructure, particularly roads and harbors.
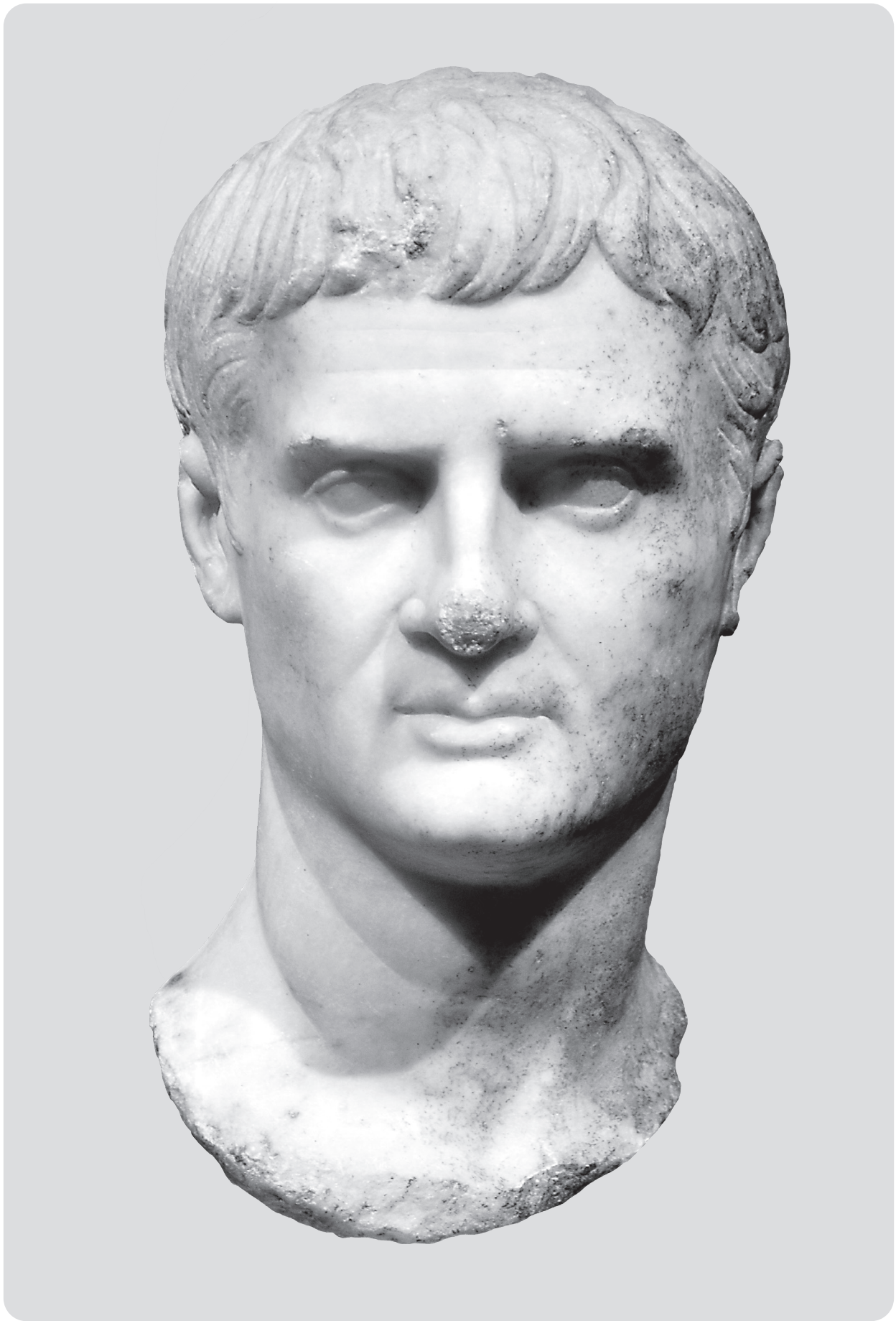
CONCRETE TRANSFORMS THE ROMAN WORLD

Dr. Thomas Milton Kemnitz

The development of concrete was the most important factor in allowing the Romans to shape their empire. For more than a century before the time of Augustus and Agrippa, Romans had been using concrete to build in ever more extensive and complex ways. But in the hands of Agrippa, concrete combined with brick transformed the civilized world.

The one written document that has survived on Roman building is *De Architectura* by [Marcus] Vitruvius [Pollio]. We know little with any certainty of the author, including his full name and the dates of his birth and death. We learn from the text that he was an artillery officer with Caesar, which meant that he likely had a great deal of experience in the massive military engineering works of the legions under Caesar. He seems to have been a member of Legio VI and fought in Gaul and then with Caesar throughout the civil wars against Pompey and the senators, including the battles of Pharsalus and Thapsus. He codified in ten books what he and his contemporaries knew about architecture, building construction, and many related fields of planning and engineering, and he dedicated, if not presented, the work to Augustus in the period between 30 and 20 B.C.E. He wrote about working on a basilica completed in 19 B.C.E. at Fanum Fortunae, now called Fano. Unfortunately, nothing of the building survives, and it is even unclear where it was located. Concrete was well known to Vitruvius, and he instructed his readers in the proper proportions of the mixture for buildings and for underwater work.

Roman concrete was based on mixing lime, an aggregate of rocks, and volcanic ash, which had a high content of alumina and silica. Roman concrete has proved durable and resistant to salt water and other elements at a level far beyond modern mixtures. The Romans were fortunate in that large quantities of the volcanic ash—called *pozzolana*—were found around Naples and Rome. Moreover, they understood that the best concrete was made with as little water as possible and was applied sparingly and tamped down vigorously. It was not poured from massive vats as is the case today, nor would a great gob of it have been plopped by a Roman mason onto a layer of brick and then spread wetly from brick to brick across many feet.

The concrete dome of the Pantheon viewed from Capitoline Hill as seen in modern Rome

CONCRETE TRANSFORMS THE ROMAN WORLD

Dr. Thomas Milton Kemnitz

The Romans did not reinforce their concrete as we do now with steel bars, so the survival of their concrete structures is all the more remarkable. The most spectacular pure concrete structure to have survived is the dome of the Pantheon, built by Hadrian and dedicated about 126 C.E. The earlier Pantheon of Agrippa had been destroyed in a fire in 80 C.E., was rebuilt by Domitian, and burnt again in 110 C.E. The dome of Hadrian's Pantheon is a coffered concrete construction; the coffers are indentations used to lighten the amount and hence the weight of the concrete in the dome. The builders also made the concrete with progressively lighter aggregate as the dome went higher; the heavy gravel of the lower part was replaced by light and porous rock in the upper tiers so that the weight of the concrete is about half as much per cubic foot at the top as at the bottom. The concrete was mixed by hand and compacted into wood molds held in place by scaffolding. The exterior view on the previous page plainly shows the steps up that decreased markedly in the upper half of the dome. The dome is half a sphere, 145 Roman feet wide and 145 feet high (141 feet 8 inches in modern measurements). At the top is an opening, called an *oculus*, to let in light and to lighten the load. The *oculus* is nearly thirty feet in diameter and is stabilized by a bronze ring that the Romans employed to hold its shape. The floor is slightly concave, and rain disappears in thirty-two almost imperceptible holes to a still-functioning Roman drainage system.

The dome of the Pantheon has endured for nearly 1,900 years through two world wars, countless military actions and invasions, untold building projects, uncounted earthquakes, and innumerable millions of awe-struck tourists. It is the largest unreinforced dome in the world. Its very existence today is the result of the ability of the Romans to take the lucky accident of their volcanic ash and utilize it to its maximum extent for their needs. While the Pantheon dome is the most spectacular use of concrete, it was not by any means the most important. Concrete allowed the Romans to use existing materials and structural formations in new ways to transform their way of life.

CONCRETE MAKES THE ARCH POWERFUL

Dr. Thomas Milton Kemnitz

The Romans learned much of their architecture from the Greeks. When the Greeks built larger structures, they used columns and architraves—the connecting pieces on top of the columns. Such buildings are limited in shape and size. The weak point in the building is the center of the architrave between two pillars. The lintels over doors and windows suffer from this same weakness, as do the beams in post-and-beam construction. The stress on the horizontal is straight down; the top of the beam sustains compression stress, and its bottom sustains tensile stress. Under too much weight for the distance between the pillars, the beam will break. The arch is one device that can transfer the direction of stress from vertical to lateral, from the top of an opening to the sides of an opening. The great advantage of the arch is its ability to sustain stress and thereby to span far larger distances than a beam without collapsing.

Arches were known throughout the ancient Near East for more than a thousand years before the mythical founding date of Rome. When an arch transfers stress to the sides, the problem becomes how to keep the sides from spreading, allowing the center to fall. The ancients used arches underground because there the sideways thrust could be contained by the earth. The Greeks brought the arch to Magna Graecia, where it became known to the Etruscans, from whom the Romans learned of it. Once the Romans had concrete, they were able to bind the stones to one another in the arch and thereby stabilize the vertical portions of arch. They could contain the outward thrust, and thus they were able to employ the arch to solve the structural weakness of Greek architecture.

No part of the Roman infrastructure was more dependent upon the arch than the aqueduct, which had to maintain precise levels of incline over many miles of terrain. The earliest aqueducts were underground for most of their distance, but with the development of concrete and the use of the arch, it became possible to move water for miles high above ground level, thus enabling the Romans to bring water from sources far from the city. A row of arches neatly dispenses with sideways thrust on the pillars of the arch; each arch thrusts against the equal and opposite thrust of its neighbor. Only for the arches on either end of the line is there a potential problem, and that was generally resolved because the row of arches was in a valley or dip in the land, and the end arches were braced by the hillsides that were on either side of the valley the aqueduct was crossing. A row of arches was preferable to a solid wall in that it required far less material, and it did not form a solid barrier to the movement of people, animals, and water. Agrippa immediately seized the opportunity to use the arch with concrete and added two major aqueducts to those serving Rome; an additional two shorter aqueducts were constructed to facilitate the movement of water within Rome. A few years after the reign of Augustus, two additional major aqueducts were built, one of which is pictured above: the Claudio Aqueduct, named after the emperor Claudius (a grandson of Agrippa), in whose reign it was completed.

Once the Romans understood the power of the arch, they used arches in all kinds of ways in their buildings. A small but significant example on the next page illustrates how they embedded arches in their buildings to distribute stress that otherwise would have made the structures unstable or unsafe.

Though it is good to have a rich vocabulary, it is not good to abuse that vocabulary by writing verbose, sesquipedalian sentences. Those who overuse their vocabularies often do so at the expense both of clarity and of others' patience. Translate the following ostentatious, ponderous passage into graceful, direct English.

With ineffable courage Harriet Tubman risked capture and execution to return again and again to the slave states in order to lead slaves to freedom. Despite the cupidity (the dissembling and pontificating rationalizations for slavery denied the obvious dichotomy between democracy and the prodigious pecuniary profits of slavery) and xenophobic vituperations of nullifidian slave holders attempting to maintain a moribund and evil social system, and a tangible reward of $40,000 for her capture, she succeeded in her *idée fixe* of freedom, leading more than 300 slaves to safety in the free states.

Slipping silently through dark paths like numinous figures in a mythical nocturne, Tubman and her Underground Railroad "passengers" transcended manifold dangers, sometimes circumventing capture through adventitious circumstances, sometimes traversing icy and roaring rivers, sometimes lying prostrate to let the slave holders' scouts pass by. When there was no time to expatiate, Tubman with stern sagacity would force her frightened and tremulous charges forward with the laconic barrel of a gun when they resisted her dictum to keep moving and to follow the "Drinking Gourd" of the north star.

Specious and mendacious reports of Tubman's putative "crimes" were circulated, and every ambulatory soldier was sometimes assigned to truncate her career, but with stoicism and myriad creative escapes, Tubman always eluded her incredulous enemies with impunity and never lost a slave to her odious pursuers.

In the internecine Civil War that followed and that terminated the perfidious hegemony of slavery, Tubman served as a Union spy, an army cook, a nurse, and a guide for Union troops.

Described as the Moses of her people, Tubman's modern exodus is a manifestation of what can be accomplished when great talent is commensurate with the sublime purpose of profound altruism.

This is the lintel of a door to a passageway to the theater at Pompeii. Note how the builder has relieved the stress generated by the weight of the building above it by the use of an arch to distribute the force to either side of the doorway. Note also how the wooden lintel gives a hint of a downward bow from the weight of the building above it. The force on the beam and the sag would have been much greater without the arch above it.

Reading Comprehension

1. A primary idea of Translation #71 is:
   a. Harriet Tubman publicly vituperated the slave holders.
   b. Tubman's ability and dedication allowed her to transcend obstacles.
   c. Tubman had to cease her mission when she was no longer ambulatory.
   d. Tubman's success was due to adventitious events.

2. The most important idea of Translation #71 is:
   a. Those who prostrate themselves before injustice will eventually succeed.
   b. Official state dictums are those that are best for all citizens.
   c. It is better to expatiate than to act against the law.
   d. People give specious rationalizations for their odious ways.

Analogies

3. **SPECIOUS : VERIDICAL ::**
   a. truncate : pare
   b. adventitious : serendipitous
   c. prostrate : rampant
   d. vituperate : excoriate

4. **VITUPERATE : REBUKE ::**
   a. euthanasia : salvation
   b. perplexed : perspicacious
   c. ambulatory : adroit
   d. truculent : pugnacious

Antonyms

5. **TRANSCEND :**
   a. prostrate
   b. circumscribe
   c. truncate
   d. expatiate

6. **TRUNCATE :**
   a. protract
   b. bisect
   c. delimit
   d. desist

In the Forum of Pompeii, we can see another example of a builder using embedded arches to relieve the load on the lintels of a series of openings in the front of a building.

reason: *post hoc, ergo propter hoc*

The adjective **adventitious** means accidental, but that synonym fails to convey quite the nuance of the word. *Adventitious* comes from the Latin *adventicius*, a combination of *ad* (to) and *venire* (come); *adventicius* meant coming from abroad, and similarly, *adventitious* indicates qualities or aspects that are not actually inherent, not true parts of something but additions, add-ons, things added from outside. These adventitious things may appear to be truly inherent, but they are imports that have come (*ven*) to (*ad*) the scene late. The apparent benefits of a procedure may actually be only adventitious qualities, accidents of the local situation that are not inherent to the procedure and would not be experienced if the procedure were repeated elsewhere. Perhaps the most famous example in literature of an adventitious phenomenon occurs in Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*, in which the chemical potion that Dr. Jekyll thinks is responsible for his metamorphosis into the odious Mr. Hyde is actually contaminated by an adventitious unknown chemical that is the true active ingredient. Dr. Jekyll is unable to discover the nature of the adventitious chemical, and he dies horribly in his Mr. Hyde alter ego. In a sense, Dr. Jekyll has fallen victim to the famous ***post hoc, ergo propter hoc*** logical fallacy—after this, therefore because of this—he has assumed that since his metamorphosis followed immediately upon his taking his potion, it was caused by the potion, whereas it was actually caused by the adventitious chemical contaminant, of which he was unaware. Of course, every *post hoc* error does not arise from an adventitious element; we can mistakenly assume that almost anything is somehow caused by the thing that precedes it, but an adventitious element is one cause that might lead us into the *post hoc* error. Can you think of another example, either historical or from your own imagination, of an adventitious element creating a *post hoc, ergo propter hoc* error?

Another interesting logical fallacy is the **genetic fallacy**, which is the logical error of assuming that the explanation for anything is to be found in its origins, its *genesis*. One typical example of the genetic fallacy is the overuse of biographical background in literary interpretation, as though: (1) a writer's previous life could account for all of that writer's creative inspiration, and (2) demonstrating, say, that a certain character was based on that writer's father would somehow constitute an interpretation of the character and his motivations. In interpreting literature, we must remember that writers' works are more than creative bulbs protruding from their biographies; the literature is also a thing-in-itself, a world to itself that must be interpreted in its own terms. That is the beauty of literary criticism, such as A.C. Bradley's masterpiece S*hakespearean Tragedy*. If you are not familiar with Bradley's amazing critical work but you like Shakespeare (of course you do, for Pete's sake), then reread *Hamlet*, go get *Shakespearean Tragedy* from your library or bookstore, and read Bradley's brilliant essays on *Hamlet*. Bradley's complete command of detail; his graceful presentation of facts, short quotes, and insights; and his perfect realization of Coleridge's dictum of the *suspension of disbelief* (*muy importante*; look Coleridge's idea up if you do not know about it) are classic paradigms of literary thought. In analyzing *Hamlet*, Bradley did not seek for his interpretation in the biographical genesis of Shakespeare's early years, for to know Shakespeare is not the same as to know Hamlet.

Now, carefully consider these two fallacies—the genetic fallacy and the *post hoc, ergo propter hoc* fallacy—and write a clear statement that explains how they are different from each other. Since the two fallacies do resemble each other, you may find this distinction confusing, but with some precise thinking, you will be able to distinguish them from each other.

Neologist's Lexicon

Use the stems in this list to create a new word (neologism). Give the word, the pronunciation, the part of speech, the etymology, and the definition(s). Keep a record of the neologisms you create from list to list. Here are some examples using stems from this week's list:

xenoscendence (zee no SEND ence) n. [*xeno* (strange), *scend* (climb)] 1. overcoming one's fear of the unusual, foreign, or strange 2. overcoming prejudice through knowledge

noctiphobia (nock tih FO bee uh) n. [*noct* (night), *phobia* (fear)] 1. fear of the night 2. fear of darkness

Sesquipedalian Poe (Faux Poe)

Can you write a *faux Poe*? Edgar Allan Poe (1809-1849), in his short and troubled life, wrote some of the most memorable short stories and poems in American literature. Poe's poetry displayed an ostentatious technical virtuosity that pleased the public but sometimes drew the scorn of other writers. Emerson, for one, called Poe "the jingle man." Even so, Poe's work, buoyed by an intense talent, has endured; his horror stories still thrill readers, and his poetry remains among the favorite poetry of American literature, perhaps especially for those who are being drawn to poetry for the first time. If Poe had used words from our lists to write "The Raven," the result might have been something like this (a *maven*, by the way, is a self-proclaimed expert):

The Maven

Once upon a sad life truncate, while I languished weak and prostrate,
Staring at the nocturne hanging just above my study door,
Suddenly there came a specious promise of some adventitious
Fortune tapping quite mendacious—tapping at my study door.
"'Tis some mendicant," I muttered, "tapping at my study door—
Only this, and nothing more."

Xenophobia notwithstanding, I crawled out onto the landing,
Seeking for the source (is a source, of course, of course) and branding
All this tapping force as nothing but my mind transcending
Limits, limits at my study door, but then the tapping never ending
Came again, again demanding, and I whispered,
"'Tis the wind—just the wind and nothing more!"

But through the open door, clean-shaven, in there stepped an erudite maven,
Supercilious, uncraven, expatiating heavenly about the word *sublime*.
"The literati," then quoth he, looking down patricianly, "vituperate (in the first degree)
That nocturne hanging ponderously upon your study wall. Its time
Has passed; you must transcend it," was his dictum condescended;
I, his victim, wished to end it, looked aghast, my ego rended,
Cast in vain for some riposte, and euthanasia crossed,
Or wended, suddenly across my mind.
Lost was I, and ostentatious persiflage was all that I could find:
"Get thee gone, Pontificator," shouted I, "You are a traitor
To ineffable profundities, you rater, take your form from off my door!"
Quoth the maven, "Nevermore."

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Assessment Materials

Define the stems:

1. BIBLIOphile _____
2. DEMOgraphy _____
3. NEOphyte _____
4. neoPHYTE _____
5. biblioPHILE _____
6. COpious _____
7. SANGUIne _____
8. demoGRAPHy _____
9. inCREDulous _____
10. INcredulous _____

11. nonPLUSsed _____
12. NONplussed _____
13. Ostentatious (ob) _____
14. ANIMus _____
15. comMENSurate _____
16. MICROcosm _____
17. TRAverse (trans) _____
18. osTENtatious (tens) _____
19. perPLEX _____
20. PERplex _____

Define the words:

21. defenestrate _____
22. demography _____
23. animus _____
24. incredulous _____
25. perplex _____
26. interdiction _____
27. nonplussed _____

Write the word for each definition:

28. showy _____
29. abundant _____
30. beginner _____
31. cheerful _____
32. small universe _____
33. cross _____
34. book lover _____

Define the stems:

1. BIBLIOphile *book*

2. DEMOgraphy *people*

3. NEOphyte *new*

4. neoPHYTE *plant*

5. biblioPHILE *love*

6. COpious *together*

7. SANGUIne *blood*

8. demoGRAPHy *write*

9. inCREDulous *believe*

10. INcredulous *not*

11. nonPLUSsed *more*

12. NONplussed *not*

13. Ostentatious (ob) *against*

14. ANIMus *mind*

15. comMENSurate *measure*

16. MICROcosm *small*

17. TRAverse (trans) *across*

18. osTENtatious (tens) *stretch*

19. perPLEX *weave*

20. PERplex *through*

Define the words:

21. defenestrate *toss out the window*

22. demography *study of populations*

23. animus *intent or hatred*

24. incredulous *not believing*

25. perplex *confuse*

26. interdiction *prohibition*

27. nonplussed *perplexed*

Write the word for each definition:

28. showy *ostentatious*

29. abundant *copious*

30. beginner *neophyte*

31. cheerful *sanguine*

32. small universe *microcosm*

33. cross *traverse*

34. book lover *bibliophile*

Define the stems:

1. aMANuensis _____

2. AMBULatory _____

3. RIposte (re) _____

4. euTHANAsia (thanatos) _____

5. adVENtitious _____

6. PROstrate _____

7. TRUNCate _____

8. ADventitious _____

9. xenoPHOBIA _____

10. SPECious _____

11. XENOphobia _____

12. NOCTurne _____

13. DICTum _____

14. INeffable _____

15. exPATIate (spatium) _____

16. VITUperate (vitium) _____

17. tranSCEND _____

18. TRANScend _____

19. PERIpatetic _____

20. SUPERcilious _____

Define the words:

21. transcend _____

22. ineffable _____

23. vituperate _____

24. adventitious _____

25. dictum _____

26. prostrate _____

27. euthanasia _____

28. specious _____

29. stoicism _____

30. ambient _____

Write the word for each definition:

31. to cut short _____

32. fear of foreigners _____

33. painting of a night scene _____

34. secretary _____

35. swift retort _____

36. able to walk _____

37. to elaborate _____

38. just begun _____

39. farewell speech _____

40. an obsequious parasite _____

Define the stems:

1. aMANuensis *hand*

2. AMBULatory *walk*

3. RIposte (re) *back*

4. euTHANAsia (thanatos) *death*

5. adVENtitious *come*

6. PROstrate *before*

7. TRUNCate *cut*

8. ADventitious *to*

9. xenoPHOBIA *fear*

10. SPECious *look*

11. XENOphobia *stranger*

12. NOCTurne *night*

13. DICTum *say*

14. INeffable *not*

15. exPATIate (spatium) *space*

16. VITUperate (vitium) *vice*

17. tranSCEND *climb*

18. TRANScend *over*

19. PERIpatetic *around*

20. SUPERcilious *over*

Define the words:

21. transcend *go beyond*

22. ineffable *inexpressible*

23. vituperate *to violently revile*

24. adventitious *accidental*

25. dictum *pronouncement*

26. prostrate *lying face-down*

27. euthanasia *mercy killing*

28. specious *false*

29. stoicism *indifference to sensation*

30. ambient *surrounding*

Write the word for each definition:

31. to cut short *truncate*

32. fear of foreigners *xenophobia*

33. painting of a night scene *nocturne*

34. secretary *amanuensis*

35. swift retort *riposte*

36. able to walk *ambulatory*

37. to elaborate *expatiate*

38. just begun *inchoate*

39. farewell speech *valediction*

40. an obsequious parasite *sycophant*