## Wittgenstein, Ludwig. *Philosophical Investigations*. Translated by G. E. M. Anscombe. Malden, Massachusetts: Blackwell Publishing Ltd., 2001.

"An attempt to summarize the Investigations would be neither successful nor useful. Wittgenstein compressed his thoughts to the point where further compression is impossible."

> Norman Malcolm, "Wittgenstein's Philosophical Investigations," in *Ludwig Wittgenstein: The Man and His Philosophy*, K. T. Fann, ed., New York: Dell Publishing, Inc. (1967), at 181.

Ludwig Wittgenstein (1889-1951 A.D.) emerged from Viennese wealth to study mathematics under Bertrand Russell. During World War I, Wittgenstein served in the Austrian army. He was captured in 1917 and sat out the remainder of the war in prison camp, where he began is first major work, *Tractatus Logico-Philosophicus*, in support of the analytic tradition. Wittgenstein left academic philosophy for a period of ten years, during which time he taught, gardened, and designed buildings. Upon his return to Cambridge, Wittgenstein repudiated his *Tractatus*, finding it, like most of philosophy, pretentious. In *Philosophical Investigations*, his second major work, Wittgenstein ruminates broadly on language, psychology, consciousness, philosophy, and mathematics.

[I have added section titles to assist the reader. Wittgenstein's work contains only Preface, Part I, and Part II, and section numbers as guidance. My inserted titles mislead the reader to believe that Philosophical Investigations is laid out in subject sections. Wittgenstein's work has fuzzy, poorly-delineated, structure. The reader should ignore my section titles whenever they fail to help.]

**Preface.** For sixteen years, Wittgenstein has mulled meaning, understanding, propositions, logic, mathematics, consciousness, and various other topics. His results do not cohere, and so his book is a pastiche of thoughts. Wittgenstein quit the effort several times, but distortions of his thought by others drove him back to the work. Wittgenstein finds fundamental missteps in his earlier *Tractatus Logico-Philosophicus*, The present work may influence some, but is not likely to do so. Wittgenstein hopes to stimulate thought in others. He is not pleased with this book.

## PART I.

§1: [Language-games.] Augustine of Hippo describes a correspondence theory of language learning in his Confessions, according to which theory each word corresponds to an object; we learn them sequentially. This view is inadequate. Even the simplest versions of such a theory fail to describe the actual wealth of language. §2: The block, pillar, slab, and beam language. Words are embedded in a language-activity social context, which gives them their meaning. Words are an element of "language-games." Language-games give any single word many different meanings, and those playing the language-games employ words creatively and loosely. There are as many language-games as there are human activities and interests. Language resembles an ancient city, now surrounded by newer suburbs. The meaning of language emerges from various forms of life. Some language-games blossom, others wilt with disuse. Speaking is a component of a way of behaving or living.

§24: **[Descriptions.]** Many different sorts of locutions are called "descriptions." Humans naturally speak; animals do not. Humans give names to objects and events. For what are they preparing these labels? Interjections are not labels, but remain language. Names also get used in non-naming manners, for example, using a person's name to call him to you. All definitions and labels have various interpretations, depending on the understanding of the hearer. One cannot define oneself out of this problem. The definitions are given in words of shifting meaning, and new words are always possible. One never knows how a hearer took a definition until one sees him use the word in life. What does one have to know in order to ask the name of a thing? One must know how to do something with the named object in order to inquire its name. Augustine is wrong in his correspondence theory of language (section 1) because he assumes that a child thinks to himself in a language, and is now engaged in learning another language. This is not so. The child is acquiring a language for the first time. Directing one's attention to a thing consists in many different sorts of activities. Were attention chess, then directing attention would be moving a chessman, one component of the larger activity of playing the chess game. Even the clearest definitions, with full descriptions of the process the definer intends for his learner, may still lead to misunderstanding. Despite characteristic ways of communicating one's intention in defining, all definitions still depend upon the circumstances in which they are made, and entail the possibility of misunderstanding. When many different actions may indicate a meaning, we are tempted to retreat to calling the meaning a mental matter. Naming indicates the use of a word in its language-game: hear the name, imagine the thing named, writing the name on the thing named, saying the name when the thing is pointed at.

§38: **[This.]** The demonstrative pronoun "this" holds a queer place in language, not a name but still a name. When we use language loosely, these distinctions slide past us unnoticed. Some wish to object to names that identify composite or imaginary objects (Excalibur) that a name ought to indicate a simple, real thing (simples). But we understand sentences about imaginary objects. Still, doubt lingers. Words continue to have meaning even after their referents no longer exist. A tool may be broken, but its name may continue to have meaning to the workers. A joke between workers might consist in using a name that has never been attached to a tool. For many words, their meaning lies in their use in language, one points to a name's bearer. We can imagine language-games in which names only designate when their bearers exist. Using names without bearers clarifies "this." "This" always has a bearer.

§46: **[Names.]** Those who want names to identify simples rely on Plato's *Theaetetus*, where Socrates asserts that the primary elements yield to no analysis. They are merely named. But simples do not exist; all are composite. Then again, we use the words "simple" and "composite" in a vast number of different ways. Wittgenstein constructs a simple language-game to expose that we conceive complexity in the simple and various complexities in the complex. §48: The nine-block square language. Naming does nothing but prepare for play of the language-game of which the name is a part. When something is named, it makes no sense to speak of its existence or non-existence. Named things form the language-game. They are originals, and cannot not exist, just as the standard meter, kept in Paris, cannot cease to exist without the game of measuring by meters collapsing. Symbols name in the way the game says they name. One cannot know beforehand; one must observe close up how the rules of each game apply in specific. One asserting spontaneous generation of mice from dust and rags should closely examine his mice and rags, unless he has philosophical reasons for rejecting the possibility of spontaneous generation. What hinders us in making close up philosophical examination of concepts?

§53: [Complexes.] In naming, we might correlate the elements of a language-game in a table, to which one refers in making that game's distinctions. Complexes emerge as the player looks up the meanings of the elements on the table and applies the rules of the game. Then we learn that the game's rules play various different roles in the game. We actually learn languagegames from listening to other speak, that is, play the game. We distinguish right play, from mistakes in play, by the players' own reactions to mistakes. When we speak of a thing destroyed, its name is not by the speaking also destroyed. We cannot hack off the limb on which we sit. There is a paradigm in language for retaining the meaning of destroyed referents. Our judgments of the truth of assertions (this color is red) fluctuate. We do not know whether to trust memory or exemplars, both of which fail us occasionally. When we forget the meaning of a word, we lose the ability to play the language-game of which it is a part. We lose its paradigm in the game. To say a thing exists is to say it has meaning in some language-game. We describe not the thing's essence, but it relational role in certain circumstances to other fragments of our speaking. The things in our language-game are destructible in the sense that they can be dismantled. We construct reality from many component bits.

§60: **[Analysis.]** Linguistic deconstruction of complexes into their components (analysis) rankles the rules of language-games. "Bring me the broom" means bring me the broomstick and attached bristles, but is more elegant. Analysis does not necessarily result in synonyms of the same language-game. Analysis introduces subtle changes. The resulting games are the "same" only if the language-game remains unchanged. The uses and purposes of objects are inherently various. Any may play several roles in any given language-game, and it is not clear which role defines the use of the object. Analysis reveals something more in what is analyzed, but obscures something as well. Analysis creates a related, but different, language-game from the

game analyzed. Even when analytic translations appear to have the same effect, we may ask questions about the process we used in reaching that conclusion. We frequently lack clarity about what the purpose of a thing is, and about what is essential and non-essential. Analysis buries as much as it exposes. Analysis creates a new language-game related to the old one.

§65: [Semantic Relations.] Critics argue that Wittgenstein fails to describe the essence of language by refuge in "language-game" talk. Wittgenstein agrees. The components of language have no one characteristic, but all the components are related in some way. That is what makes them language. One must look, not suppose. The word "game" describes many activities, none of which share characteristics with every other game. In the end, concepts overlap to greater and lesser degrees and no one element describes them all. The games share family characteristics. The concept spins many fibers into a thread. No fiber extends the length of the thread. Words are used indeterminately. We can make them rigid, but in normal use they lack frontiers. Some rules apply to some parts of the game; others are left free-floating. This semantic indeterminacy does not cripple language; it is its nature. Normal descriptions convey meaning. More exact descriptions convey more exact, and slightly different, meanings. Even exact pictures of things described, with myriad details, change the language-game. The game entails semantic indeterminacy. Frege argues that indistinct concepts are useless. Wittgenstein responds that indistinctness is exactly what we need sometimes. We explain games by showing in a general sort of way how they are played; then we play and others join in.

§72: **[Commonality.]** We learn the idea of "commonness" by a process of being told the common item, seeing it, and pointing to it. Then the examples change, and the process begins again. So, we slowly eliminate misunderstandings. When we see things differently, we employ them differently in language-games. We know what games are in general by playing games, explaining them to others, introducing new parts of the games, and noting that some actions are not games. Someone may define a picture's elements sharply, while I define them vaguely. His is a sharp picture, mine blurry; our pictures share kinship. In ethics or aesthetics, one has the blurry picture. Attempting definitions creates sharp boundaries inconsistent with the blurriness of ethics. We must ask, How did we learn this word? In what language-games? From what examples? Then a family of meanings emerges.

§78: **[Supra-Linguistic Experience.]** We know things we cannot say. Imagine describing how clarinets sound.

§79: [Meaning.] We prop up our use of words with many possible meanings. If a few fall away, the use stands anyway. Meanings are fluid, not fixed. One may use words flexibly, taking care to see facts. Seeing facts, one speaks less. Today's observations become tomorrow's definitions. We lack rules governing word use for disappearing chairs. Nevertheless, the word "chair" has use, despite this low-frequency defect. Philosophers seek ideal languages, and imagine that their constructs work better than ordinary talking. They are wrong. Language does not approximate (poorly) some imagined calculus, despite the conclusions of philosophers (including the young Wittgenstein) to that effect. Speakers do not follow rules. When asked, they proffer something they are willing to amend; they do not know their own rules. In ball games, we play without finishing, change games, interact aimlessly, change rules, and make up rules for the moment. Language is like that. Rules creating boundaries require further rules about the rules. Imagined doubts demand nothing of most people. §85: The four lines signpost. Rules are sign posts, occasionally ambiguous. If the sign post serves its function most of the time, it is working properly. We need further explication only if misunderstandings emerge. Rules or definitions that are exact enough have utility. One never knows exactly, only exactly enough for the circumstances.

§89: **[Logic.]** Logic once seemed to Wittgenstein (in his *Tractatus*) the most certain rudiment of all factual knowledge. He likens logic to time, citing Augustine to the effect that we know it, but cannot explain it. Thinking about logic, one imagines he penetrates events, peers beneath events to "event-ness" itself. Logic is conceived as grammar analyzed, purged of misleading analogies. Having succeeded with analysis of one statement, one hopes for exactness in all statements, and makes this the goal. Logic seems to penetrate the essence of language once for all. The thoughts of logicians stand in the way of seeing how language works empirically. Logic imagines facts expressed in propositions in need of clarification. Logic blinds the logician to the ordinariness of language, makes him vaunt the sublimity of logic. The guts of the logical

problem lies in the possibility (frequently realized) that we can think in error or in imagination. The logician imagines that thoughts and facts correlate: fact, thought, word, and proposition. Logic reveals the archetypal common ground of all talk. Logicians miss that their talk is also a language-game. Their super-ideas are as common as the names "chair" and "window." Logicians imagine the vaguest sentence coming to have perfectly lucid meaning. Logicians argue that imprecision renders language nonsensical. Logicians love the ideal; they cannot see the ordinariness of language. Logicians believe the ideal *must* underlie ordinariness with a faith for which no evidence exists. Logic is rose colored eyeglasses which logicians never take off. Logicians mistake their theories for reality, and grow dissatisfied with everyday language. They imagine themselves plumbing the depths of mystery, at a loss for language. They think themselves repairing a spider's web with clumsy fingers. We must not be logicians; we must examine ordinary talking. Everyday language is rough, not ideal. Logic is frictionless, for lack of roughness. Logicians cannot walk upon the ice of logic. Language consists in loosely related families of meaning structures. The imagined purity of logic has no place, and must be abandoned. Words are like chess pieces when one describes the game to another.

§109: [Philosophy.] The work of philosophy is to describe language. There is nothing new. Philosophy organizes what we already know. Philosophy battles mystical misunderstandings created by our use of words. Language is not the impressive thing; the mysteries that emerge from our misunderstandings are interesting. Philosophy consists in grammatical puns, but we want to believe philosophy is deep. Similes are especially disturbing to philosophers. We must take them as they are. Philosophers (including the young Wittgenstein) examine words to find their essence, but end up seeing only frames and outlines. Philosophers seek to wriggle out of their skins, to see more than what humans see. Our task should be to see language's everydayness. We understand sentences in their life context. Philosophical analysis destroys the ordinary, leaving nothing interesting in its wake. Philosophers bump blindly against the boundaries of language exploring the meaningless content that context-less language generates. Philosophy examines nonsense. Philosophers mistakenly think that a word is one thing, its meaning another. Philosophy does not reach such meta-levels. In a dictionary, the word "orthography" is one among all, not a word reserved for a special section of the dictionary. Philosophy seeks clarity about our use of words. Its job is to see linguistic connections, which Wittgenstein calls "perspicuous representations." These connections expose how we see things, our world view. The prime philosophical attitude must be, I am lost. Philosophy leaves language as it finds it. So too mathematics. The philosopher describes affairs that lead to a problem. We set rules, things go astray, and we are tangled. We say we did not mean that. Philosophers describe linguistic contradictions. Familiarity deadens us to language. A philosopher scribbles post-its about words, little reminders. Various language-games compare one word use with another. Philosophers are prone to dogmatism. Philosophers listen to the idling engine of language, not to its working roar. Philosophical insight ends philosophy, so clear is its observation. Philosophy is not one method, but a spectrum of approaches.

§134: [Propositions.] Propositions such as "This is how things are" are the form of all declarations. Since the statement is a form, one might be tempted to think that it is of a different order than other statements. It is not. It is just another sentence. Propositions are recognized We define "proposition" by giving a list of propositions because they sound like propositions. and inducting. We are tempted by the picture that propositions present true or false definitions. We wish that propositions correspond or fail to correspond with truth and falsity (the analytic tradition). We cannot say this much. A proposition plays a role in our language-game, one in which the words "true" and "false" also play a part. These ideas are related in uses. They have "fit." Words "fit" in language when using them together sounds right. We understand words instantly, but their meaning consists in their uses over time. So, understanding and meaning differ, but are related. What we picture when we hear a word does not necessarily reflect the uses to which the word may be put. Philosophical argument reminds us that words have meanings other than the first we seize upon. Sometimes we think an idea in response to a word but use the word differently than when last we heard the word and thought the idea. Words and our attendant ideas may clash. One understands when words elicit common pictures and applications. But there are the unusual uses of words and applications as well. Meanings pertain to normal uses. Under abnormal circumstances, language-games fall apart.

§143: [Understanding.] In attempting to teach another to write numbers zero to nine, we guide his hand, then let him write the numbers independently. If he writes them wrong (either random error or systematic error), communication breaks down. We try other tacks, but our student's capacity to learn may fail. In so saying, the teacher's view of possibilities changes. When the student succeeds with zero to nine, we move on to higher orders, pointing to the repetitions and novelties. He begins to generate the system independently and accurately. When is enough to say he has learned? When the student shows action in conformity with the idea, he has understood. When understanding happens, the student generalizes from his application to all possible applications. (This series is infinite, my application necessarily finite.) What is the student's knowledge? When does it happen? Knowing connects ability to do a thing and understanding a technique. One teaches another the series 1, 5, 11, 19, 29. When has the other learned to go on with the series? The student may have used one of several different approaches. Understanding means more than knowing a formula. Looking for "hidden" mental processes just creates confusion. Understanding is not a mental process, but rather an activity in a context. Pain and hearing are mental processes.

**§156: [Reading.]** What is reading? A mature reader skims material and digests rapidly, using skills of summary and shortcuts. A beginner reads laboriously, word by word, letter by letter. Are both reading? We imagine the word being used differently, since the mental experiences of the mature and beginning readers are so different. But this is just theory, not observation. If we imagine a non-reader reading his first word, how will we know when he begins to read? We make up mental theories about what was going on in the young reader's mind at that point. We imagine mental states. What we know is that the reader's behavior changed. We may say that the change reflects brain wiring changes invisible to men, and it must be so (a priori). This only means that the theory is very persuasive to us. We are tempted to think reading is a conscious act. But we cannot know that. A person may deceive us and only appear to be reading. We know nothing of the deception, but the faux-reader does. But then, a fluent reader might be drugged so he felt he was deceiving us by reading, when it was not so. Or another person might be drugged so he thinks himself reading when what lies before him is no language whatsoever. People might disagree about whether this is reading or not. The "mental event" description fails. Reading is many things on a spectrum of activities. Consider a person who has learned a foreign alphabet and the sounds associated with those letters. He "reads" a text to us. Did he derive the sounds from the text? §166: The curlicue letter. We can say he followed the rule we gave him. If the "reader" now alters the rule in a predictable manner, is that still "deriving"? "Deriving" falls apart as we examine the concept. "Read," like "derive," represents a family of activities with no thread common to every instance. Reading is not one thing. Words come to one's mind, but not like imagination or recollection. Words, when read, slip into the mind. They sometimes sound inwardly. But we do not know how that happens. We can create new symbols, associate sounds, and shortly those nonsensical symbols elicit the sound inwardly in a way we cannot comprehend. We grow accustomed to the look of printed words, as with their sounds. No one feature of reading characterizes all cases of reading. When reading a sentence, we feel the symbols connected to words and sounds. When we read gibberish, we feel no such connection. These ideas of causation or connection express our feeling about the relations between written words and their spoken sounds. We might also speak of the connection between word and speech at one intimating the other or being a unity with the other. But we don't really experience this. This is after-the-fact justification.

§172: [Mental States and Being Guided.] Many experiences are called "being guided." They have no single common thread. When we think that we have grasped the essence of being guided, inspection of it causes that essence to vanish. Descriptions of inner experiences add nothing to definitions. When guided, the process seems simple. Upon reflection, no description satisfies. We feel there must have been more to it. Being guided is being influenced or being connected, but no single experience is this influence or connection. One's mental and emotional experiences when one thinks he has "gotten it" while being guided mean nothing, unless having "gotten it" one correctly performs the act that is being guided. If one fails to perform the act, we may say he did not understand, or that he suddenly lost ability to perform the act, after understanding. The essence of philosophy is to grasp that the ways in which we use words are much more complicated than we are at first tempted to believe. We say things that

seem to cover all the possibilities of a matter, but there are other alternatives we have not yet conceived. We say we don't know something, then it pops into our heads, but perhaps only fractionally. Do we know that thing? When? Someone might fundamentally misunderstand our direction, despite understanding our instructions to their own satisfaction. They might think to follow the tail, rather than the nose, of an arrow. What does a formula tell us? How does it guide us? Are its instructions at great distance prescribed in the here and now? Do we require new decision each time we employ the formula? A formula does not "mean" all of its possible solutions, and the purveyor does not "know" all such solutions at the time of promulgating the formula. We can be fooled by the way we use these words. We like to think that, without expressly thinking a solution, the formula has predetermined solutions for us; that is, the formula guided us. Some formulae seem to predetermine the solutions for those trained in the formulae. Untrained others reach chaotic solutions upon the same formula. Even relatively simple formulae may be used to test different things, for example, the solution to equation, the words contained in the spoken formula, or whether one is paying attention. We learn new terms in formulae by working solutions with various interpretations, and then asking if that is correct. We think we understand, we associate pictures in our minds, but we have no systematic understanding of the process. A machine seems to have prescribed activity. We see its plan and watch it work, and its future workings seems predetermined. We are surprised when parts wear out, or it melts, or it functions oddly, though, we knew such events were themselves inevitable. Our machine idea has a certainty the actual machine never has. §194: That is what philosophy is, asserting greater predictability than reality warrants. We think our formula to be a shadow reality lurking just beneath everydayness. Our formula confuses us; we draw fantastical conclusions from our confusions. We think our formulae "true" in a queer way, a philosophical way. But there is nothing "queer." There is only the language-game we play in the here and now. Our formulae and interpretations of those formulae do not determine action, except insofar as we are trained to follow a custom they describe. §199: To "follow a rule" is to master a customary technique such as language, reporting, ordering, or playing. One game may derive from another in a predictable manner, and we can interpret the new game as a form of the old. But interpretations can be multiple and contradictory. Interpretation should mean substituting one rule for another. Obeying a rule is doing as the rule states, not thinking about the rule. Language is a deep maze; parts of it we fail to recognize. Thinking an intention requires no game to be played, which makes it queer as philosophy is queer. We learn new languages by referencing our knowledge of human behavior and integrating sounds with behaviors. We can imagine a society in which their utterances do not match up intelligibly with their activities; they may lack language, or we may be unable to grasp it. If teaching someone a language or concepts, one associates sounds with activities or objects, and then responds to the learner's attempts. We also teach ongoing series (formulae). Teaching formulae differs from teaching concrete activities. We think (wrongly) that in teaching formulae, we teach deeper explanations. In fact, we make suggestions and the learner guesses. We confirm or disconfirm his estimation of our intention. There is mystery in how one knows that a formula means he is to continue a series. Our reasons for doing so are few. When threatened, we follow the formula without reasons other than the threat. In being guided, there is an atmosphere of the mind that is characteristic. We think we are to follow a formula. But we may be wrong. §215: "Identity" might be an exception. We know that the same is the same (identity) with seeming certainty, but this is a generally useless piece of information. Our sense of identity pertains to "fitting." Ultimately, we cannot give good reasons for following formulae. We just do it. One can conceive being guided by a rule as an infinite rail line; one starts here and now and just keeps going on blindly, following where lead the rails. This is a mythic description of being guided. A rule relieves us of listening; it always says the same thing, we always comply. The ideas of agreement and sameness are related to the concept of rule. We say we see the pattern of a segment of a rule's application, and we shall go on the same. The rule prescribes for us, and we agree to follow it; we let the rule decide for us. It compels us. Being guided differs from inspiration; inspired people await guidance; it is individualized. That large numbers of persons agree in following a rule seems miraculous. We cannot always state how we are following a rule. We are like calculating prodigies or people following a rule but exhibiting no regularity of process. We call the rule a "matter of course." Following a rule is a deeper part of our minds than thinking; obeying formulae is a life structure.

243: [Sensations.] A person could invent a language to speak of his inner experiences, such as sensations. No one else could understand it. Yet, we speak of sensations every day. How does a person learn the names associated with emotions or experiences? Perhaps adults teach children to substitute language about sensations for more primitive behaviors related to the sensations. Others may doubt my pain, but I cannot. We learn our sensation languages. §249: The bamboozling babes speculation. Perhaps infants lie when they smile; but dogs don't (except upon unusual training). §251: We cannot imagine the negation of propositions that state definitions. In what sense are "my" pains mine? When we speak of them, they are shared. If shared, then others may feel "my" pain. The way we talk about such things is the raw linguistic material of philosophy. Philosophers treat the oddnesses of language as doctors treat diseases. How does one name his pain? The word "pain" is a language post to which the new term is tethered. We make sensation names by concentrating attention on the inner experience; it is the same for all names. There is no way out of the philosopher's trap; all use words to explain words. The explanation of linguistic difficulties contains linguistic difficulties. One cannot use memory to check the accuracy of memory. Memories shift as we approach them with different purposes. \$268: Private language is impossible; language is shared. When we think of private language, we think a confused thought. Private language could have shifting meanings but no way to verify that the shift happened. If a word has no linguistic implications, it is not a word. In private language, one never knows if another shares the private meaning. §275: Our use of words is public and transparent. We do not muddle over describing our inner experiences or demonstrating concentration of attention. We just speak without hesitation. Sense impressions seem to mean two things: what we agree they mean in language and what I experience privately. We are led by others to notice our feelings, which we then project onto other humans. Only living humans have the sense experiences of the sort we project. We can imagine "stones with pains," but our language becomes confused. Humans are deeply linked, able to imitate another without practicing, especially in facial expressions and bodily actions. When we feel sympathy, we are saying that another experiences pain as I experience pain. We comfort the person, not the fragment of the body that has been injured. When people say odd things about their sensations, we think they do not know the meaning of the words, and that the rules of our language-game are being suspended. With all sense talk, language has a problem of confirmation. One can speak aright, but without justification (since all the evidence is private). Our descriptions of inner experience create a map, but also mislead, since they are static. When we think we perceive a fact, and express it in language consistent with the rules, we tend to forget that we are applying the rule for the first time in these particular circumstances. §293: The beetle box metaphor. Since the referents of sense perceptions are private, we might all be using the terms differently. Still, our language-game perseveres and has utility for us. Philosophy often consists in drawing pictures of language surrounding unavailable referents. Philosophers map grammar. The referents (such as pain) are very real, but inaccessible to others. We infer the pain of others, but may be misled. We feel compelled to make this inference. As philosophers, we must take care not to let these compulsive leaps cause us to believe things for which we have no evidence. From another's pain, we summon an image; we may render the image as a picture. It is our images, not the pictures, that form parts of our sensation language-game. We cannot feel others' pain directly; it is subjective. But that is a philosophical thought; practically, we do not deny the sensations of others. §304: Philosophically, one can say nothing about the sensations of others. Our grammar attempts to force another conclusion upon us. We have to admit that language functions in many different ways, some of them incommensurate with others. Our grammar and the pictures it promotes obstruct our grasp of the way words are really used. Wittgenstein denies being a closet behaviorist. He is not doing metaphysics, but grammar. We name things we do not understand; the picture language creates fools us. §309: The fly and fly-bottle metaphor. Language is, philosophically, trapped in its own otherwise-appropriate structure; philosophers free it. Private sensations cannot be shared; they can be pretended and may be illusory. We can point to pain in others, as we do to redness or crookedness. We confuse ourselves if we think to "point" to the headache we presently feel.

§316: **[Thinking.]** Just as with pain, one cannot grasp thinking by observation of one's internal states. Thinking does not express how one is, as might a cry of pain. We say we think at different speeds, and that some thoughts can be summarized briefly. We may be unaware of

changes in our expressions or posture when we reach sudden understanding. Our difficulties in explaining what it means to think may cause us to wrongly define it as an indescribable experience. We sometimes think we understand when it turns out we did not. The acid test of our various certainties is success in employing them. We accept as justification those limited number of elements that our culture specifies as providing justification. The chain of reasons is finite. We learn about thinking simply by observing ourselves thinking. But the learning proves difficult. What sorts of behaviors get included in "thinking"? Is thinking just speaking without utterance? Wittgenstein explores various permutations of thinking/speaking/acting combinations to sort out how we speak of thinking. Speaking a language makes possible thinking in that language. But beware language traps. Ill-framed coinages perpetuate confusions. To determine a word's function, the only route is to learn its use in real life. Memory of pre-linguistic thoughts (in deaf people), subsequently expressed in words, puzzle Wittgenstein. What would such pre-lingualism be? Speaking to oneself silently presupposes that one speaks to others audibly at other times. Speaking to oneself must be the exception; if it were the rule, then the idea of speaking would be meaningless. §346: Parrot cognition. Wittgenstein contemplates that God could make linguistic parrots who might then speak to themselves. In such thoughts, we invoke one fantasy in support of another. Even for ourselves, we speak to ourselves but know only our own experience of that, not the experience of others. All words require a context in life. Absent context, they lose meaning and lead to philosophical conundra. Lifted from their contexts in life, words make perfect grammatical sense but convey nonsense. "The stove and I are in pain." At this juncture, people quote the law of the excluded middle: either the stove is in pain or it is not; no third possibility exists. The picture bewitches. The law of the excluded middle does not map all possible answers; it only claims to do so. Requests for verification are the same as asking for explanations. Both clarify grammar. §355: Language shapes our perceptions. We learn to perceive. Even our "empirical" observations are stylized in learned conventions. We see what we learn to see. We might say "dogs talk to themselves," based on observations of their behavior. We do not, however, observe ourselves and conclude we talk to ourselves. Meaning is intangible, like consciousness itself. Both are "dreams" of language. Words are tools. We learn them as children in their uses. It is so with "thinking to oneself." We imagine a teacher taught the student this phrase. But that is an illusion. We think we know more than we really do about the process of language, communication, and thinking. Ideas about mental processes are philosophically odd. §364: Consider a person who makes a "mental" calculation and uses it in constructing a bridge which turns out well. What, if anything, went on in this person's head? Might he have merely been trained to think he thought, when the reality is that the sum he calculated is incomprehensible? One goes wrong by thinking that multiplication on a piece of paper corresponds to the mental process of calculating in one's head. When we speak of our imaginations, we describe a "mental picture." But what we really want to know about imagination is how the word "imagination" is used. Pointing to something in our heads misleads.

§371: [Grammar.] Grammar exposes the essence of things. The rules of grammar are arbitrary, and yet determine the structure of our propositions. Grammar makes it possible for us to speak of things that do not exist, such as gods. We cannot avoid this pitfall. We must speak in this manner, and then turn to examine how we used the words of our speaking. Grammatically, how do we compare mental images? In others, we watch their actions. Within ourselves, we have no way to compare. One continually wants to say that privately, within one's head, he knows redness, and then expresses what he knows. How would such judgments have become public? Knowing "red" is entailed in speaking English. We learn concepts from within a language. Words used without external criteria by which to judge their use may shift paradigms almost without notice. They are ungovernable. The problem is that we do recognize and express these judgments so easily. §387: Something essential is quite beyond us in this regard. We point to things as similar to our images. But they are imperfect representations. Our image is more like the thing in our mind than is anything external. Proof that stones think would only provide a reason to reject the form of language used to make the proof. We imagine the true and the false; imagining a thing offers nothing about its reality or its sense. To accept thought-without-words forces one to do both philosophy and science fruitlessly. Perception and imagination are private; one cannot "own" them because they cannot be shared. §400: Our perceptions and imaginations are new ways of speaking. We mistake our new ideas as new objects; a grammatical move

becomes a metaphysical one. "Seeing something new" is merely speaking differently. Changing language (grammar) offers no practical advantage. Our numerous ways of denominating identity do not include me; no criteria identify me for me. Our use of personal and demonstrative pronouns is problematical. They identify, but not by name. Philosophically, self-reflective consciousness as a product of brain states puzzles, especially when such consciousness of consciousness is not experimental but merely the product of daydreaming. §415: Wittgenstein's ruminations are thoughts about extremely common matters, so commonplace that they have escaped notice until the present. When, philosophically, we assert that we have consciousness, we say nothing, except in a few odd circumstances. When we speak of souls or atomic structures, we employ pictures whose applications are elusive. It is the application of words that matters.

§426: [Expectation.] Our pictures deceive us. They seem to fix meaning, but their import is beyond human capacity. Consider infinite series. We understand their direction, but can never actually consider more than a few numbers. Our pictures point where we cannot go. We make do with crumbs and detours. Our language confuses us. We speak pictures that lead us to think our minds capture reality, as though in a net, or a ruler "says" something is so long. Orders and signs are dead until we use them. How does the orderee know what the orderer wants? From what source derives the hardness of "must" in logic, or "truth" in propositions, or "fulfillment" in wishing? When we expect something, is there a form of the expected thing in our head? A thing and its expectation meet in language. People make use of symbols in real life. They are moving rapidly, using symbols, each of which is like rushing up to the thing symbolized. Wittgenstein considers an order as a form of prophecy, predicting what another may do. Our imperative talk conceals odd ideas. Sometimes we do not even know if the thing we order is possible. §464: Patent nonsense goal. Wittgenstein's purpose is to expose linguistic nonsense, to strip its disguise. Expectations specify because we hope our thoughts will help us avoid previous pitfalls. But still, sometimes we fail. Our belief in natural laws is a form of expectation. We avoid putting our hands in flames. Our expectations are often identical with learned fears. All people rely on experience to form beliefs about future events. But the past does not perfectly predict future outcomes. Expectations are justifications for beliefs, and fall short of compelling the future, no matter how convincing their grounds. When we describe actual language-games, we learn that justifications matter deeply to those games.

§494: [Nonsense.] The word "language" refers first to words and their uses, and comes to include by analogy actions, gestures, and other non-verbal communications. Learning a language merely adjusts one's responses to that language's sounds. Grammar does not tell why or how language works; it merely describes that working. We distinguish between the grammar of language and intention of the speaker. One may use language ungrammatically for a purpose. The symbols of an order or question expect symbols in return. It is yet another step to undertake action in response to the symbols. §508: The "a-b-c-d" weather language. We invent languages and grow accustomed to their use. We also invent nonsense, and it looks on its surface just like meaningful talk. §514: The "red rose in darkness" example. There is no sense in sentences apart from their actual use in life. We grasp the gist of some questions without really being able to specify their answers. We sometimes imagine what, in further reflection, proves unimaginable. An order depicts its fulfillment as both present and future. Philosophers err when they neglect the uses of words in real life. We see fanciful pictures that we do not believe to be literal depictions; yet, the picture communicates something, but something difficult to describe. Isolated sentences open many diverse paths for understanding. Understanding language is akin to recognizing musical themes. We use the word "understand" differently in various circumstances. Imagined contexts determine interpretations, where the circumstance of a sentence is indeterminate. §543: When the context is know, otherwise ambiguous action (e.g., laughing) communicates meaning. \$544: Evocative talk finds meaning in the feeling that underlies it; feeling, here, is also truth.

§547: **[Negation.]** Observe yourself negating an idea; what happens? Various uses of the word "not" are not identical. Primitive people might negate differently. We could construct a different language-game with "not" concepts that operate differently. (§556: X and Y mean "not." XX means affirmative. YY means emphatically "not.") This same diffidence affects other words as well.

§558: **[Essentials.]** Uses of "is" example. The rule that exposes different meanings is this: Does a synonym of one use work equally well substituted for the second use? Words

function in sentences; their meaning lies in how the word works here. §561: When one word has two functions, it is really two words. What is essential to a word's use? Wittgenstein considers arbitrary details of checkers and chess play. Knowing a game's point allows one to distinguish essential from nonessential.

§569: [Feelings.] Language and its concepts are tools; some concepts work better than others. Some concepts lead us where we want to go. Psychology's object is inferred; the object of physics is observed. A person has states: expectation, opinion, belief, hope. §574: These states are not thinking. These states may associate jumbled thoughts or none at all. States have a tone. §580: We need behavioral criteria to give substance to psychological states. Expectations and other emotive expressions have contexts in which they make sense, without which they make none. §584: The "one minute cuts" scenario. Change the setting of an event, and its meaning shifts, perhaps to its opposite. An intention is, behaviorally, tending toward some action. Beneath our intention and emotive statements, there is an undertone, but that tone, even using identical words, may differ from circumstance to circumstance. §593: Philosophical disease. Philosophers focus on one sort of example, to the detriment of their thought. Words have usual contexts. Uttering them outside those contexts makes their use seem unnatural. But even our sense of unnaturalness fluctuates. We sometimes make up feelings to underpin the things we think. §599: Philosophers assert only the obvious; they do not draw debated conclusions. We are much more likely to notice missing things than things that are expected. When we claim to recognize a thing, it is as though we were carrying a mental picture to which we claim to be comparing the thing recognized, but the picture and the thing merge in our mind. §607: The "characteristic atmosphere" of guessing time. A certain aura surrounds time guesses. We think in a particular mode when doing so, and the language employed, if surrounded by a different aura, would have a completely different meaning. The smell of coffee cannot be described linguistically. Why? Under what conditions would language adequate to the task of describing coffee's aroma emerge?

§611: [Willing.] To will is to do the act willed. One cannot, under ordinary circumstances, try to will something. Under laboratory experiment, one might be induced to falsely think that one raised his arm when he did not, or vice versa. When we touch something with a stick, it seems as though we sense the end of the stick touching its object. Surprise does not attend normal voluntary movement. Willing differs from observed regularities in nature. We recognize greater contingency in willing, its fragility. We do use statements of decision as predictors of a person's upcoming behaviors. When interrupted, we think we recall what we were going to say. But we have only bits and pieces in the dark, and yet proceed confidently. We sometimes misinterpret our bits and pieces. It seems (wrongly) as though an opinion were taking shape over time. We think one thought connected to another, but cannot state the connection. Because of these uncertainties, express intention is still uncertain. When we hate, we conjure scenes and talk appropriate to the hating. If we feel shame about this, the shame attaches to all of the hating. §645: The intention microscope. Our intentions seem to dissolve, upon reflection, into the actions, feelings, and thoughts anticipated. How do we know that some particular experience is our intention? We could be confused. Intention shows in behaviors. We remember them linguistically, even when we cannot recall the actual words used. When reading, one often guesses the intentions of characters, awaiting further developments to confirm or modify the initial guess. §653: The private map. Intention is like a private map one follows on a long walk. When showing the map to others, it cannot be explained. §654: Proto-phenomena. Intention talk is misleading. We should say that what happens before I act is an unseen precursor, and what happens after is a component of a language-game. Intention talk reduces, upon reflection, to action and mystery. §663: Statements of intention are like narrative illustrations-one does not know their import without knowing the story context. The surface grammar of intention words differs from the depth grammar, in a confusing manner. §665: The abracadabra toothache. Language fails to describe the interior aspect of our intentional events. §666: The pain-pianotuning indecision. One may describe differing internal states ambiguously by identical language. In intention talk, we describe something we, and no one, can see, so our words suffer ambiguity or failure of reference. Descriptions of internal states lack utility. Wittgenstein considers whether one's reports of internal states of intention are reliable. Do intentions exist, or do they come into existence only as one speaks words conjuring intentions? We know what someone intended when

they undertake action consistent with the supposed intention. Talk about mental activity produces only confusion.

## PART II.

§i: **[Dog Hope.]** Can dogs hope? Perhaps hope is a linguistic phenomenon of a more complicated life, so dogs fail to hope. Grief differs from sensations. We may shudder in fear; we may report fearfulness. Does the former lead to the latter?

§ii: [Meaning Shift.] When we translate, we identify core meanings to render in our usual ways. Some words have multiple uses: "till," "is," "hail." Meaning and imagining differ; what one means lacks enduring content and may shift unpredictably. One changes the meanings with some effort, forcing a different meaning to parade before the mind. Yet, an outsider perceives no change.

§iii: **[Recognition.]** How does one recognize the image of a face? How does one know a mental image identifies a particular person? One might be confused or mistaken. Yet, we feel decisive.

§iv: **[Souls.]** Why do we presume that human beings are not automatons? From the belief that others experience mental events, we draw the conclusion that we are inhabited by a soul. We say so, and we even draw pictures of the soul and body segregated (each is a good way to say this). That we think this does not make it so. The body is the soul's best image.

§v: [Mind Reports.] In any observation, we may be interested in only one part of what is observed. We focus interest in observing humans. Psychologists think they report on mental events, but in fact they observe behaviors, some bodily, but most linguistic. A psychological experiment has a completely different meaning when context shifts, for example, when one learns the experiment is part of a scene in a play. We cannot reduce language-games to one another; their relations are inherently complex.

§vi: **[Word Faces.]** We might presume that words have auras of common uses surrounding them. If it were true, we would still not know if others saw these auras or different auras or none at all. The explanation by inner experience fails to explain. Even if mental states consistently accompany a skill, the mental state is not the skill. Words have different uses in various contexts, but remain facially the same. Words have multiple meanings and uses, and people experience them variously. Still, if one uses the words correctly, we do not wonder. The feelings that accompany a word may change or differ among people. Such feelings are like feelings that accompany musical phrases. Such feelings may or may not accompany the music. When we regularly feel something in conjunction with a word, we think they fit together. We get past this association only with difficulty.

§vii: **[Dream Pictures.]** In dreaming, we seem to have waking experience. We are taught the "dreaming" language-game. We know nothing of whether the dreams occur during sleep or not. Dreams might be memory oddities of wakeful persons. We tend to be misled by the pictures we use in language. Most of language is pictures. The pictures point a direction; we follow.

§viii: **[Feelings.]** We believe that sensation tells us about ourselves: our arm motions, where and when a pain exists, and so forth. But is this so? Wittgenstein wants to correlate such sensations certainly with language uses. Our feelings aim to describe intensity, location, and relation to other feelings.

§ix: **[Cries.]** The act of observation creates nothing. The observed matter exists independent of observing. That grief or pain lessens with time is a function of observing. In observation, one positions himself to receive specific impressions for a purpose. In describing, one points out some arrangement in space or time. Calling a red object "red" is not a description. One might, in various contexts, use many different phrases to describe one's fear. Describing the internal state helps little or not at all. We need to know the context of the fear. To define fear, one should act it out for another. A cry is more ancient, pre-linguistic than description, and yet reveals. Speaking about internal states approximates a cry.

\$x: **[Belief.]** Assertions of belief communicate nothing. One cannot doubt one's own belief or simultaneously entertain a fact and belief in its contrary (Moore's Paradox). Asserting belief hints at a mood. Belief is a state of mind persisting through time, all apart from its

expression in language. We see belief in the words and actions of others. Our paradoxical beliefs are as though two speakers used one's mouth.

[Seeing Aspects.] Noticing likeness between objects highlights an aspect. §xi: Wittgenstein introduces a three-dimensional box line drawing illustration, noting many interpretations of the drawing. Wittgenstein introduces the *duck-rabbit* illustration, which is ambiguously either animal's head. When one recognizes the alternation possibility, one may report what one sees or one may report the shift in one's perception, the change in aspect. Aspect change creates new perception without an underlying sensory difference. Changes of aspect are not alternate mental images. The organization of perception is not sensory itself. Changes of aspect seem partly visual, partly thought. Consider seeing someone you have not seen for years, and then suddenly recognizing him. Representations tell others what we see. We see threedimensionally, and must be taught to render two dimensionally. Wittgenstein offers inverted objects side-by-side with their originals. One responds differently to the inverted versions, as to inverted faces, though they are visually very similar. When one finds a figure in the midst of another figure, one is surprised. A large number of concepts meet in such perceptions. One sees a smiling face; the smile materializes, but the friendliness inferred is no part of the perception. We see raggedly, clear on some parts of our visual field, brushing aside much as unimportant. There is no sorting this out. We must play the usual language-games and then recognize false accounts created by those language-games. Wittgenstein offers multiple interpretations of a *line triangle* illustration. He notes that each seems natural; no forcing is required. We can look for different dimensions where there seems no room in a view. Wittgenstein tries the idea that aspects can be represented in a picture. But there are some aspects he cannot see. Enculturation plays a part in that incapacity. Our experience of aspects boils down to this: we describe what we see differently. Where will the reach of aspect's end? Wittgenstein introduces the step-line illustration, which aspect alternates from concave to convex step. Part of our problem with this image may be lack of familiarity. How can we conceptually justify what we are doing as "seeing" and also as "not seeing"? One cannot answer by introspection. Concepts compel us. We are trying to grasp how they assert themselves. Pictures have diverse roles in our lives. Most view pictures of humans as that human. But not all. Wittgenstein introduces the child's chest-house illustration. When a child interprets a chest as a house (for the sake of play), the chest becomes a house to him. That is an aspect shift. Aspect shifts represent fine shifts of behavior in the perceiver. Wittgenstein introduces the double-cross illustration. He notes its difference from duck-rabbit. Descriptions of aspects differ in kind from case to case. One ceases the philosophical confusion of believing in private mental objects by assuming the perception changes constantly, but you failed to notice the changes because memory failed you. In organization aspect changes, parts fit where previously they did not. Recognizing aspect change often requires experience. Admitting this changes the concepts of experience and seeing. We talk, then learn how our words fit into life. We say we hear a thing, but find we have contributed most of the perception from within, not sensed it. This is a change in our understanding of sensation. Wittgenstein introduces the defective-H illustration, imagining various explanations for its appearance. Aspects change with the various fictions surrounding the symbol. Aspects fade with time. We can see things without noticing them. Aspects emerge not from objects but from relations among objects. We persistently underestimate the complexity of seeing, and then are surprised by its complexity. We can will to see various aspects of images. Wittgenstein imagines an aspect-blind human, and how such a person might differ from aspect-seeing persons. The relationship to pictures would differ. Wittgenstein explores differences in reading for information or reading with feeling, unfounded convictions, names fitting their referents, words with ambiguous uses, and whether Wednesday is fat and Tuesday lean. Neither meaning nor intention are experiences. A psychologist might be informed by our intentions about our unconscious. Primal reactions to the glances, gestures, and words generate language-games. As we use words, their facial appearance feels familiar and they soak up the meanings for which they stand and become those meanings. What happens when a word is "on the tip of one's tongue"? What interests is not consciousness but behavior. The use of words teaches us their meaning. Psychological events are not logically mandated, and may be philosophical nonsense. Wittgenstein considers, Roses lack teeth. We do not know where a rose's teeth might be found. Perhaps in the cow' mouth whose manure feeds the rose? One can know what others think

(because they speak), but cannot know what one himself thinks (because he has not yet spoken). Much of philosophy is distilled in this idea. One may not know his own thoughts, because memory may fail him, or they may change an instant before speaking. One might make a game of guessing another's thoughts. We could never understand talking lions. We do not wonder if a person writhing in pain is having a feeling. We can know others' sensations, but this knowledge differs from math or historical knowledge logically. What counts for certainty and knowing depends upon the language-game played. Language-games are myriad, but we miss that fact because they all dress alike. Every new thing generates a unique language-game. Different forms of life give rise to different language-games, and so different criteria for certainty, meaning, intention, and so forth. The big challenge is to capture the flexibility of words accurately in words. When judging the internal experience of others, evidence that is difficult-to-describe (imponderable) may play an important part. Pretending requires a great deal of learning.

§xii: [Concept Formation.] Our concepts are related to facts of nature. A different natural world would result in concepts not presently comprehensible. Concepts are not infinitely flexible, not like the choice of style in painting.

\$xiii: [Memory.] Memory is associated with remembering, but is not a present experience. We reconstruct memories from other psychological materials.

§xiv: [Psychology.] Psychology suffers deep confusions and a methodology that does not address those confusions. Math could be approached as is psychology. That subject would be "foundations of mathematics."