

Wittgenstein's Conception of the Autonomy of Language and its Implications for Natural Kinds

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Wittgenstein's Conception of the Autonomy of Language
And its Implications for Natural Kinds

A Thesis

Presented in Partial Fulfillment of Requirements for the Degree of Master of Arts in the
College of Arts and Sciences Georgia State University

2002

by

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Abbreviations

- AWL *Wittgenstein's Lectures, Cambridge 1932-35*, ed. Alice Ambrose. Rowman and Littlefield, Totowa, 1979.
- BB *The Blue and Brown Books*, Ludwig Wittgenstein. Harper Torchbooks. Basil Blackwell, 1958.
- BT *The Big Typescript*, Ludwig Wittgenstein. The Bergen Electronic Edition. The Wittgenstein Trustees. Oxford University Press, University of Bergen, 2000.
- CD *The Cambridge Dictionary of Philosophy*, ed. Robert Audi. Cambridge University Press, 1995.
- CFL *This Complicated Form of Life: Essays on Wittgenstein*, Newton Garver. Open Court, 1994.
- CM *A Companion to Metaphysics*, ed. Jaegwon Kim and Ernest Sosa. Blackwell Publishers, 1995.
- INS *Insight and Illusion*, P.M.S. Hacker. Revised Edition. Oxford University Press, 1986.
- LFM *Lectures on the Foundations of Mathematics: Cambridge 1939*, Ludwig Wittgenstein. Ed. Cora Diamond. University of Chicago Press edition, 1989.
- LG *Langenscheidts Großwörterbuch: Deutsch als Fremdsprache*. Ed. Dr. Dieter Götz, et al. Langenscheidt, 1998.
- LTR *Language, Thought, and Reality; Selected Writings*, Benjamin Lee Whorf. Ed. John B. Carroll. [Cambridge] Technology Press of Massachusetts Institute of Technology, 1956.
- LW *Last Writings on the Philosophy of Psychology*, Ludwig Wittgenstein. Vol I, ed. G.H. von Wright and H. Nyman. Trans. C. G. Luckhardt and M.A.E. Aue. Blackwell, 1982.
- MFN *Mathematics for the Nonmathematician*, Morris Kline. Dover Publications, Inc., 1967.
- NN *Naming and Necessity*, Saul Kripke. Harvard University Press, 1980.
- OC *On Certainty*, Ludwig Wittgenstein. Ed. G.E.M. Anscombe and G.H. von

- Wright. Trans. Denis Paul and G.E.M. Anscombe. Harper Torchbooks. Blackwell, 1969.
- PG *Philosophical Grammar*, Ludwig Wittgenstein. Ed. Rush Rhees. Trans. Anthony Kenny. University of California Press Berkeley and Los Angeles. Basil Blackwell, Oxford, 1974.
- PI *Philosophical Investigations*, Ludwig Wittgenstein. Trans. G.E.M. Anscombe. Reissued German-English Edition. Blackwell Publishers, 1998
- PO *Philosophical Occasions: 1912-1951*, Ludwig Wittgenstein. Ed. James Klagge and Alfred Nordmann. Hackett Publishing Company, 1993.
- RC *Remarks on Color*, Ludwig Wittgenstein. Ed. G.E.M. Anscombe. Trans. Linda L. McAlister and Margarete Schättle. University of California Press, 1978.
- RFM *Remarks on the Foundations of Mathematics*, Ludwig Wittgenstein. Ed. G.H. von Wright, R. Rhees, and G.E.M. Anscombe. Trans. G.E.M. Anscombe. Revised Edition. The MIT Press, 1996.
- RGN *Wittgenstein: Rules, Grammar, and Necessity*, G.P. Baker and P.M.S. Hacker. Basil Blackwell, 1995.
- RPP I *Remarks on the Philosophy of Psychology I*, Ludwig Wittgenstein. Ed. G.E.M. Anscombe and G.H. von Wright. Trans. G.E.M. Anscombe. The University of Chicago Press. Basil Blackwell, 1980.
- WD *A Wittgenstein Dictionary*, Hans-Johann Glock. The Blackwell Philosopher Dictionaries. Blackwell Publishers, 1996.
- WP *Wittgenstein's Place in Twentieth-Century Analytic Philosophy*, P.M.S. Hacker. Blackwell Publishers, 1996.
- Z *Zettel*, Ludwig Wittgenstein. Ed. G.E.M. Anscombe and G.H. von Wright. Trans. G.E.M. Anscombe. University of California Press. Basil Blackwell, 1967.

Introduction

Wittgenstein writes: “Do not believe that you have the concept of colour within you because you look at a coloured object—however you look” (*Zettel* [Z] §332). To show that this is true, to understand why it is true, and to investigate the implications of its truth for natural kind terms will be, in essence, the aim of this thesis. In truly understanding this remark and grasping its implications, one needs to understand what Wittgenstein means by the term ‘grammar’ and what he means by saying that grammar is arbitrary and language autonomous. The autonomy of language is a direct implication of Wittgenstein’s latter conception of meaning. In direct contrast to his early philosophy, Wittgenstein asserts that the meaning of a term is not an object for which the term stands. The meaning of the color term ‘red’ is neither an instance of red in the world, nor the sum of all red colored things. Rather, a red object may be used as a sample to explain the meaning of the term ‘red’—as part of the explanation of how the term ‘red’ is used. This reflects Wittgenstein’s conception that the meaning of a term is what is given by an explanation of its meaning. Such an explanation gives the rules for the use of the term, i.e., grammatical rules.

This conception of meaning comes into direct conflict with Saul Kripke’s conception of natural kinds and how natural kind terms refer—what we mean by natural kind terms. For Kripke, the true meaning, as determined by the essence, of a natural kind is to be discovered by scientific investigation. This essence is then true of the kind in all possible worlds, i.e., it is necessarily metaphysically true. *Pace* Kripke, Wittgenstein

holds that the meaning of a sign, symbol, word, term, etc., is not to be discovered by scientific investigation; rather, we will get at the meaning of a sign, symbol, word, term, etc. through an investigation of the multifarious uses we make of it. Such an investigation involves an exposition of grammatical rules—rules that govern the use of the term and determine its meaning.

We can generally say that since, for Wittgenstein, what a word means is determined by the use made of it, words have the meanings that we give to them. Therefore, grammar is arbitrary and language autonomous. *A fortiori*, meaning is antecedent to scientific investigation, and necessity will be internal to a particular system of language, of meaning. What exactly is meant by claiming that grammar is arbitrary and language autonomous is not so simply said. Understanding what Wittgenstein could have meant by this claim will require a good deal of work.¹

I will first explicate Wittgenstein's conception of grammar and then present his arguments for why and how grammar is arbitrary. Next, I will more briefly explain the main points of Kripke's understanding of proper names, rigid designation, and natural kinds. With both Wittgenstein and Kripke's views presented, I will argue that Kripke is fundamentally mistaken about natural kinds, especially in regard to rigid designation and meaning. Finally, I will briefly survey further implications of the autonomy of language.

¹ I say 'this claim' because the one follows from the other. The arbitrariness of grammar implies the autonomy of language and the autonomy of language implies the arbitrariness of grammar. Given this, I will use the two terms interchangeably throughout this work.

One Grammar

In this first chapter, we will examine Ludwig Wittgenstein's conception of grammar that is found in his later work. This will be in preparation for chapter two, where we will explicate what Wittgenstein means by claiming that grammar is arbitrary. The idea that grammar is arbitrary is complicated and difficult enough, but it is even more so without a proper understanding of what Wittgenstein means by grammar. Thus, in this chapter we will concern ourselves with how Wittgenstein uses the term 'grammar'. To this end, we will do the following: (I) We will look at the following non-exhaustive list of grammatical elements in order to effect a conceptual foundation upon which to build the rest of our investigation: (A) Particular statements, propositions, and remarks that Wittgenstein either labels expressly as grammatical or which can be seen to be such based on their role and context. (B) Mathematical propositions. And (C) ostensive definitions. (II) We will discuss what differentiates a grammatical remark from an empirical remark. (III) We will examine grammar and language as systems that are intimately connected with human action and behavior. (IV) We will investigate the occasional indeterminacy of grammar in the application of concepts. (V) To make clear the role of grammar in language use, we will examine what it means to say that language is a rule governed activity, i.e., that we are following the rules of grammar when we use language. (VI) To complete the preparation for the explication of the autonomy of language, we will compare Wittgenstein's conception of grammar with the ordinary conception of grammar.

I

Grammatical Elements

(A) Particular Statements, Propositions, and Remarks

“‘A sofa is longer than a chair’—is grammatical” (*Lectures on the Foundations of Mathematics: Cambridge 1939* [LFM] p250). To those unfamiliar with the later Wittgenstein, this remark may be enigmatic, cryptic, and not related to what one might ordinarily conceive of as grammar. Indeed, how is this a grammatical proposition? To answer this, let us ask another question: “What might we answer if a child learning English asked, ‘What is a sofa?’” We might respond by saying, “A sofa is something comfortable you can sit on,” to which the child might further ask, “So a sofa’s a chair?” To this we might respond, “No, a sofa is longer than a chair.” This is a grammatical remark, for it is part of the explanation one might give for the meaning of the word ‘sofa’; and in giving an explanation of meaning, we give rules for the word’s use. The concept of a rule is of principal significance for Wittgenstein. A part of this significance lies in the correspondence between the concepts of ‘rule’ and ‘meaning’ (*On Certainty* [OC] §62). This correspondence is found in grammar. That is, for Wittgenstein, grammar describes the use of “signs” (PI §496) by articulations of rules for the use of words (signs); in turn, the use described is the meaning of the word (PI §43).² Given this,

² The idea that the use of a word in language *is* its meaning is controversial, as is deciding what exactly Wittgenstein meant by saying that the use is the meaning. Earlier in the Nachlass, specifically, in what is now known as *Philosophical Grammar*, Wittgenstein says: “The use of a word in the language is its meaning” (*Philosophical Grammar* [PG] p60) which is stronger than what he says in the *Philosophical Investigations*, where he restates it as “For a *large* class of cases—though not for all . . .” (§43). H.J. Glock in “Abusing Use” settles on the conclusion that “use determines meaning, rather than being identical with it” (p209). And both Glock and P.M.S. Hacker conclude that, “A difference in meaning entails a difference in use, not vice versa,” (Glock, *Dialectica* 209-210) and “Not every difference in use is tantamount to a difference in meaning. . . . However, every difference in meaning *is* a difference in use” (*Wittgenstein’s Place in Twentieth-Century Analytic Philosophy* [WP] p125-126). But even if ‘meaning’ is not equivalent

we can see how the relationship of grammar to our language is akin to that of the rules of a game, like chess, to the game itself (*Philosophical Grammar* [PG] p59-60). That is, grammar stipulates what “moves”, so to speak, can be made. We could have said to the child, “You use ‘sofa’ to talk of a piece of furniture that is longer than a chair”; stated like this it becomes clearer that we are giving a rule for the use of the word ‘sofa’. For Wittgenstein, this is analogous to when we say, in teaching someone chess, “The king can move only one square in any direction each turn.”

Another example of grammar:

We use the phrase “two books have the same colour”, but we could perfectly well say: “They can’t have the *same* colour, because, after all, this book has its own colour, and the other book has its own colour too”. This also would be stating a grammatical rule—a rule, incidentally, not in accordance with our ordinary usage. (*The Blue and Brown Books* [BB] p55)

This is stating a grammatical rule concerning the use of the phrase ‘the same color’. It rules out talking of different things as having the same color. As Wittgenstein says, this is not a rule of *our* grammar; rather, it is an example of a possible one. To formulate the corresponding grammatical rule for our actual language, we might say, “Two different books can have the same color, for the quality of being red, blue, brown, etc., can be had by multiple objects at the same time,” or, “An object’s color is not unique to that object, i.e., different objects can have the same color.” These articulations of grammatical rules determine how color concepts can be used in terms of sameness by specifying what it makes sense to say. For example, with our actual grammar, if someone said that one scarlet red book does not have the same color as another scarlet red book, we would say that that is nonsense or we might not know precisely what to say.

Let us look at another example: “‘Only you can know if you had that intention.’

One might tell someone this when one was explaining the meaning of the word

to ‘use’, but rather determined by use, the connection between ‘grammar’, ‘use’ and ‘meaning’ still holds.

‘intention’ to him. For then it means: that is how we use it. (And here ‘know’ means that the expression of uncertainty is senseless.)” (PI §247) It is perhaps not entirely clear how such a proposition helps explain how ‘intention’ or ‘having an intention’ is used. Perhaps it explains its use by determining that ‘intentions’ are not something that we find out that we have from other people, as we could find out that we have a piece of food between our teeth from others, or that we don’t say that it is public knowledge—unless one expresses the intention—that a person definitely has this or that intention. That is, it says that the grammar of ‘intention’, unlike, e.g., ‘skin color’, is such that we do not talk about knowing another person’s intention unless they tell us about it first or give some behavioral clue.³ That one must give either a verbal or behavioral clue before others can know about a particular intention is analogous to the following remark: “Sensations are private”, which is “comparable to: ‘One plays patience by oneself’” (PI §248), which is an observation on the nature of the game *solitaire*. It rules out talking of a game of *solitaire* played by several people. Similarly, ‘Sensations are private’ and ‘Only you can know if you had that intention’ give rules for the use of the words ‘sensation’ and ‘intention’ respectively.

Let us look at still another of Wittgenstein’s examples. He writes: “A proposition, and hence in another sense a thought, can be the ‘expression’ of belief, hope, expectation, etc. But believing is not thinking. (A grammatical remark.)” (PI §574). That ‘believing is not thinking’ is a grammatical remark can be seen by looking at what might be an explanation of meaning for the words ‘believe’ and ‘belief’. We *might* say, e.g., to a child, that to believe something is to have a belief about something, and to have a belief is to hold something in a certain regard, to be disposed in a particular way

³ Thus, Wittgenstein is not denying that we may be able to guess someone’s intentions from her actions, and *a fortiori*, he is not saying that we cannot ever know what someone else’s intentions are.

towards something. The child might already know what the word ‘thinking’ means, might already know that we express our beliefs through the various thoughts we articulate in speech, writing, etc., and thus she may take the expression of the belief to *be* the belief and thus ask, “So believing is thinking about something in a particular way?” at which time we correct her saying, “No, believing is not thinking; though a proposition, and ‘in another sense a thought’, can be about a belief.” Here we are expressing a rule for the use of the words ‘belief’ and ‘believe’. We are saying that, along with the other rules expressed in the above explanation of the meanings of ‘belief’ and ‘believe’, part of their grammar is that they are not so much like ‘thought’ and ‘thinking’ as they might appear.⁴ The border between these concepts is not always clear. We can say, “I thought yesterday that you were telling the truth,” and, “I believed yesterday that you were telling the truth.” This vagueness partially stems from looking at only one kind of example. We also say, “I believed you yesterday, but I don’t today,” but we don’t say, “I thought you yesterday, but I don’t today.” We say, “I was thinking about you yesterday,” but we don’t say, “I was believing about you yesterday.” Further, we say, “I stopped thinking about it while we played chess and resumed thinking about it after the game,” but not, “I stopped believing it while we played chess and resumed believing it after the game.” Certain aspects of the concept of ‘thinking’ touch and mingle with the concept of ‘believing’, but when we look at different examples of their use, we see that they do not mean the same thing—that they do not have the same grammar.

⁴ Note: here we have discussed ‘belief’ and ‘believe’ as though they share *exactly* the same grammatical rules. This is misleading, for while they may share some grammatical rules they are used differently, e.g. “He believes her” and “Her belief in God has waned”, and thus some of the rules describing their use are different.

(B) Mathematical Propositions

According to Wittgenstein, mathematical propositions are in a particular sense grammatical rules. Specifically, Wittgenstein takes such propositions as ‘ $2 + 2 = 4$ ’ to be rules, as being grammatical (*Remarks on the Foundations of Mathematics* [RFM] p320, LFM p251). This is in the sense that ‘ $2 + 2 = 4$ ’, used as a rule, sets a norm, a standard of correctness; it determines the correctness of replacing ‘ $2 + 2$ ’ with ‘ 4 ’. Thus, mathematical rules determine that it makes sense to say that if we have two apples and someone gives us two more, we have four apples. Hence, mathematical rules form the numerical bounds of sense for talking about and describing reality. “For the mathematical proposition is to show us what it makes SENSE to say” (RFM p164). These rules are normative. In fact, “mathematics forms a network of norms” (RFM p431), an interrelated network of rules that determine what constitutes correct addition, subtraction, multiplication, division, etc.⁵ The normative status of mathematical rules makes it senseless to divide zero by any other number and determines that we are in error when we add two positive integers and we get a negative result.

Similarly, geometry⁶ gives the rules for talking about spatial relations. “Applied geometry is the grammar of statements about spatial objects” (PG p319). Geometrical propositions also ‘show us what it makes sense to say’. “You can describe a circular surface divided diametrically into 8 congruent parts, but it is senseless to give such a description of an elliptical surface” (PG p319). Just as the rule: ‘ $25 \times 25 = 625$ ’ makes us disregard a count of 25 rows of 25 objects coming to 615 objects, so too:

The proposition ‘Vertically opposite angles are equal’ means that if they

⁵ For further remarks on mathematical propositions as rules, see e.g.: RFM pp 327, 358, 404; *Lectures on the Foundations of Mathematics* (LFM) pp 33, 44, 55, 82, 98, 100, 134-35, 256-57, 268.

⁶ In the following discussion we are considering Euclidean Geometry, but the same would hold for non-Euclidean Geometry.

turn out to be different when they are measured, I shall declare the measurement to be in error; and ‘The sum of the angles of a triangle is 180° ’ means that, if the sum doesn’t turn out to be 180° when measured, I shall assume an error in the measurement. (*Philosophical Remarks* [PR] p218)

Geometrical propositions are norms of description and as norms they draw the lines of sense and correctness. That is, to speak of a triangle is to speak of something whose angles equal 180° , to speak of a circle is to speak of something with a radius. Because of the grammar of geometry, it does not make sense to speak of squaring the sides of a circle or of giving the radius of a triangle. As norms, geometrical propositions also determine points of error when making measurements. If we measure a circle as having 362° , we know we have measured incorrectly; though we have of course not measured senselessly.

(C) Ostensive Definitions

Up to this point, we have seen that by explaining the use of a word to someone—in giving an explanation of meaning—we are giving grammatical rules; we are *describing* how the word is used in our language. In addition, mathematical propositions are rules of grammar, rules that determine the meaning of mathematical signs, equations, etc. We now turn in our investigation to another way that grammar determines meaning—the ostensive definition. We will examine the following: (1) The components of an ostensive definition. (2) What is required of the recipient of the ostensive definition in order for her to understand it. (3) In what sense ostensive definitions are rules. And (4) the inherent ambiguity of an ostensive definition.

(1) An ostensive definition, as Glock points out, “typically involves three elements: a demonstrative, ‘This is . . .’, ‘That is called “ . . . ”’; a deictic gesture (pointing); and a sample, the object pointed at” (*A Wittgenstein Dictionary* [WD] p274). Wittgenstein gives several examples of what an ostensive definition can be used to define: “a proper name, the name of a colour, the name of a material, a numeral, the

name of a point of the compass and so on” (PI §28). To take one of Wittgenstein’s examples just mentioned, we may explain to someone what the direction ‘north’ means by saying, “*That* is north,” while pointing to the north.

(2) But before the other person can make sense of this ostensive definition, there is at least one prerequisite that must be satisfied. That is, the person must first be “fluent” in the language-game of asking for a thing’s name, which involves an understanding of what kind of thing is being talked about. In our case, the question: “What direction is that?” needs to make sense to, and be capable of being asked by, the recipient of the ostensive definition (PI §§6, 27). This idea may at first be confusing or questionable, but it is analogous to the following: we are teaching someone to play chess and we point to or hold up the queen and say, “This is the queen” or “This piece is called the queen.” This would only make sense to her if she already knew the place of the queen in the game, or could pick up, or point out, a piece and ask, “Which piece is this?” (PI §31). That is not to say that she must have already learned all the rules of the game, e.g., if she knows about board games in general, knows what a ‘piece in a game’ is, etc., she could come to a game of chess and ask questions like: “What is this piece called?”, “What can this piece do?”, or “What is the goal of this game?” (PI §31). Thus, Wittgenstein remarks: “So one might say: the ostensive definition explains the use—the meaning—of the word when the overall role of the word in language is clear” (PI §30). Thus, if the recipient understands what ‘direction’ means we can point and say, “*That* direction is called north.” Here, ‘direction’ shows “the post at which we station the word” ‘north’ (PI §29).

(3) As a part of the grammatical explanation of certain words, ostensive definitions are rules. We can conceive of them as substitution rules licensing “the substitution of a demonstrative together with a gesture indicating a sample of the

definiendum” (PG p202; WD p276). So, instead of saying, “We’re going in this direction,” we can say, “We’re going north,” once we have ostensively defined that *this* direction is called ‘north’. Or again, in chess, instead of always pointing and saying, “This piece . . .” or “That piece . . .” we ostensively define them by saying, “*This* piece is the queen.” Thereby, we replace the ostensive gesture with the name ‘queen’, allowing us simply to say ‘queen’ instead of using the demonstrative and the gesture. To iterate, the ostensive definition is a rule; generally speaking, a rule incorporating a gesture (pointing) with a sample, e.g. a queen in chess, a patch of red, etc. The ostensive definition determines “what counts as the correct application of signs” (WD p276). Importantly, the ostensive definition cannot be introduced into a grammatical vacuum, i.e., pointing to a red object and saying, “*That* is red,” is for naught if the recipient has no conceptual grasp of what a color is, i.e., if she cannot ask, “What color is *that*?”.

(4) A further point to be made is that there is no assurance, or guarantee, that an ostensive definition will be understood as the one giving it intends. Ostensive definitions neither mystically impart to the recipient the use of a word nor is there a guarantee that the recipient will understand what is being ostensively defined (PI §28; PG p71). The latter stems mainly from the possible ambiguity involved in the use of a deictic gesture. “That is to say: an ostensive definition can be variously interpreted in every case” (PI §28). This means, e.g., that when we say, “That is north” while pointing, we may at the same time be pointing in the direction of a forest, and in doing so, the deictic gesture could be interpreted as stipulating that large groups of trees are called ‘north’, or that that group of trees is called ‘north’. To avoid this situation, we can of course say, “That *direction* is north,” but as Wittgenstein points out it is even possible to misunderstand what is meant by such terms as ‘direction’—do we mean *that* direction through the forest

or *that* direction in general?⁷ Whether it is necessary that we say ‘direction’ “depends on whether without it the person takes the definition otherwise than [we] wish. And that will depend on the circumstances under which it is given, and on the person [we] give it to” (PI §29). If we have already been discussing various directions and geographical matters, then it is probably not necessary to say ‘direction’, nor is it as likely that the ostensive definition will be misinterpreted. In walking through a forest, we may discuss what lies on the other side of some hill, which direction the town is in, the names of various trees, etc. In such a case, there may be more of a chance that the ostensive definition is misunderstood. Take, for example, a father and young son in the woods: “Over there’s Camborough, over there’s Mill Creek, and that’s north.”

“Oh, there’s a town called ‘North’?”

“No, that’s a direction; we call that direction ‘north’.”

“That direction through the woods?”

“No, that direction in general. If you were able to keep walking in that direction you would eventually reach the north pole.”

II

Empirical vs. Grammatical

We have begun to see what Wittgenstein means by ‘grammar’⁸ and its significance, but there is an important aspect of grammar that we have not yet touched upon. This aspect comes out when we consider possible objections to the above

⁷ Though *we* know that a northward direction through the forest is the same direction as northward in general that does not mean that someone unfamiliar with, or still learning, the concept ‘direction’ or the ‘general directions of north, south, east, and west’ would know this.

⁸ For further examples of grammatical remarks not given here, see e.g.: PG pp 82, 127-129; BB p30; PI §§199, 251, 458; Z §§208, 294, 427, 491, 717; *Last Writings on the Philosophy of Psychology I* (LW) §188; OC §468.

examples as to whether they actually can be conceived of as grammatical rules. That is, one might object by saying that at least some of the earlier examples are just empirical propositions, i.e., they aren't rules; rather, they are propositions taken from consulting one's experience, conducting surveys, performing tests, etc. For example, to say that a sofa is longer than a chair is to check one's experience, or one looks at sofas and chairs, thereby concluding that sofas are indeed longer than chairs; to say that believing is not thinking is to actually make a report based on either one's looking inward to observe and examine one's thoughts and beliefs, or on research done by surveying a representative group of the population to see whether or not when people believe something they are doing the same thing as thinking; to say to someone that only they can know if they have a particular intention is again to report on one's experience. Let us answer these objections by showing that they rest on the deceptive similarity of the form of certain propositions and our not looking at how these propositions are variously employed.

While it is true that we might say, "All sofas that I've seen have been longer than chairs," which is a report of one's experience, the use of 'a sofa is longer than a chair' in our earlier example was as part of an explanation of meaning. "And an explanation of meaning is not an empirical proposition and not a causal explanation, but a rule" (PG p68). The contexts of the various remarks about sofas, believing, and intentions were such that the remarks were given as explanations of meaning—as rules. It is the proposition's role in language use that makes it a rule. Our method of distinguishing rules from empirical statements is not that of looking for a particular propositional form that we take to be essential to a rule. Rather, if we want to see if something is a rule, we need to look at how a sign or expression is being used. Let us take for example the pointing out of a color. In one case, someone who is color blind looks at a sweater and asks, "What color is that? Is it red or is it green?" and we answer "Red." Here we are

making an empirical observation. If the person were not color blind, he would be able to see the color of the sweater for himself. In another context, we are out for a walk with a child and we come across, for the child, a strange colored flower, one the child has never seen before, and he asks, “What color is that?” and we answer “Cerulean.” Here we are not merely looking at the flower and reporting its color; instead, we are instructing the child that this particular color is called ‘cerulean’. By saying ‘cerulean’ in response to the child’s question we are effectively saying, “That is called ‘cerulean’” or “That color is called ‘cerulean’,” which is an ostensive definition of the color. In this situation, it is not a matter of some test that can be done by the child to discover the flower’s color. No degree of examination would tell the child what color concept to use to describe the flower.⁹ In both of the above circumstances, that of the sweater and that of the flower, we may say, “That color is . . .” even though in one instance it is a description and in the other it is a grammatical remark. We know this, not from looking at the form of the propositions, for as we see it is the same in both instances, but from looking at how the proposition is being used.¹⁰

That it is the use of a proposition that characterizes it as a rule, and not the form, is of great import. To make the point as clear as possible, let us return to our earlier example of ostensively defining ‘north’. We see that the form of such propositions as: “*That* direction is north” or “*That* color is red,” is one that makes them appear to be empirical statements; perhaps answers to such questions as: “What direction is *that*? My

⁹ Although the child could avail himself of a book with a color chart, the child would then need to understand how to use the chart. At some point examination—explanation—will come to an end, and one is left with being trained in a particular practice of acting in such-and-such ways.

¹⁰ “Compare: A language-game: Report whether a certain body is lighter or darker than another. – But now there’s a related one: State the relationship between the lightness of certain shades of colour. (Compare with this: Determining the relationship between the lengths of two sticks – and the relationship between two numbers.) – The form of the propositions in both language-games is the same: “X is lighter than Y”. But in the first it is an external relation and the proposition is temporal, in the second it is an internal relation and the proposition is timeless.” (*Remarks on Color* [RC] I §1)

compass is not working,” said while pointing, or “What color is *that*? I can’t see it very well from here,” respectively. In such contexts, though, the one stating the question could make a further investigation in order to answer the question for herself. This is not the case when the propositions are used grammatically—as when employed as part of an ostensive definition. By saying ‘*That* direction is north’ in the context of an ostensive definition, we are explaining what counts as ‘north’, and by saying ‘*That* color is red’ in the context of an ostensive definition, we are explaining what we call ‘red’ (WD p275). Therefore, grammatical rules are not empirical; rather, they determine the sense of propositions, including empirical propositions. Further, while some things, propositions for example, may at one time function as rules of grammar and at other times as empirical propositions—as a result of the proposition’s variable role in language—they cannot be grammatical and empirical at the same time. To further clarify this idea of a proposition’s role, let us look at something that functions purely as a grammatical rule, i.e., its role is not variable. Wittgenstein writes: “There is one thing of which one can say neither that it is one metre long, nor that it is not one metre long, and that is the standard metre in Paris.—But this is, of course, not to ascribe any extraordinary property to it, but only to mark its peculiar role in the language-game of measuring with a metre-rule” (PI §50). The standard meter in Paris is used as a standard of correctness for something being a meter. Other things are measured against it; it has a permanent grammatical role. To say that the standard meter in Paris is a meter long is to try to make an empirical remark about it. But how do we know that it is a meter long? Do we measure it? Any meter stick we use to measure it will be a correct meter stick by virtue of being the same length as the standard meter. That is, the standard meter determines what is a meter long. Therefore, it does not make sense to say that the standard meter is a meter long. To do so is analogous to taking a meter stick, measuring a string out to a

meter, cutting the string off at a meter, and then using the string to check to see if the meter stick is really a meter.

Questions could also be raised to the idea that mathematical propositions are actually grammatical. One could raise the objection that Wittgenstein's conception of mathematical propositions as rules is rather myopic, for we surely aren't stating a rule when we write down that we spent \$12.60, \$5.35, and \$2.29 at the store and thus we spent a total of \$20.24. But this objection shows a misunderstanding of what Wittgenstein means by mathematical propositions being rules, standards, and norms; for he is not asserting that one is stating a rule when one adds 2 apples to 2 apples and gets 4 apples. Rather, that it makes sense to say such things, to apply mathematics in such ways, is determined by the rule ' $2 + 2 = 4$ '. Wittgenstein admits, "If I told a mathematician that $2 + 2 = 4$ was a rule for the use of signs, he would feel uncomfortable. . . . But to say something is a rule of grammar is not to say it is always so used" (*Wittgenstein's Lectures, Cambridge 1932-35* [AWL] p156). Again, we see that it is a matter of how the proposition in question is used. It is "*in certain language-games* [that] mathematical propositions play the part of rules of description, as opposed to descriptive propositions" (RFM p363). When children write out arithmetical propositions, such as ' $2 + 2 = 4$ ', over and over again in order to learn them, they are writing out rules; when one child says that $2 + 2$ is 5 and the teacher corrects him saying, "No, $2 + 2$ is 4," the teacher is using the mathematical proposition as a rule. The teacher is making a normative statement. But when a child adds 2 black marbles and 2 white ones and says, "Ah, I've got 4 marbles," then the child is making an empirical statement about the number of marbles he has. Such statements are licensed by the normative arithmetic propositions he has previously learned, the overall language-game of arithmetic.

One might further object to the idea that mathematical and geometrical

propositions are rules by saying that, in general, mathematical propositions merely reflect how things are in the world. That is, we have the arithmetic and geometry that we do because of our experiences as humans, and our noting how things stand in the world.

Just as the study of numbers and its extensions to algebra arose out of the very practical problems of keeping track of property, trading, taxation, and the like, so did the study of geometry develop from the desire to measure the area of pieces of land (or geodesy in general), to determine the volumes of granaries, and to calculate the dimensions and amount of material needed for various structures. (*Mathematics for the Nonmathematician* [MFN] p123)

We have measured land and noted relations of angles to shapes in constructing buildings, and in doing so we could not help but conclude, e.g., that a triangle has 180° . We put four bars of gold on one end of a scale and then put two of the same size on the other end and then two more and they balanced out. Therefore, we might conclude, mathematical and geometrical propositions are read off the world. They are not rules but descriptions of how things are in the world.

But this objection ignores the fact that there are circumstances where we use mathematical propositions as standards of correctness—as rules. That is, rules that determine the sense of saying, e.g., the corner of a room is a right angle. Wittgenstein though does deal with the idea that mathematical propositions have an empirical origin. An arithmetical proposition is:

so to speak an empirical proposition hardened into a rule. It stipulates that the rule has been followed only when that is the result of [addition]. It is thus withdrawn from being checked by experience, but now serves as a paradigm for judging experience. (RFM p325)¹¹

That is, at one point we might have experimentally arrived at the result that $25 \times 25 = 625$, but now we take $25 \times 25 = 625$ as “unshakably certain,” which means for

¹¹ Wittgenstein makes many similar remarks, see e.g.: RFM pp 170, 432, 437; LFM pp 44, 55, 98, 99; OC § 95 ff.

Wittgenstein that we take it as a grammatical rule (RFM p170). The related idea of a proposition at one time serving empirical duty and at another grammatical duty occurs in some of Wittgenstein's last writings before his death. In *On Certainty* he writes: "the same proposition may get treated at one time as something to test by experience, at another as a rule of testing" (§98).¹² Arithmetical propositions may have come from some experiment, some empirical investigation, but they have, then, become hardened into rules that allow us to make certain experiential statements, e.g., the statement: "We have 25 boxes here and they each weigh 25 pounds so they should weigh altogether a total of 625 pounds," is an experiential proposition that is either true or false (LFM p41). Whereas, when someone asks, "What is '25 × 25'?" and we answer that '25 × 25 = 625', our answer, as long as we have not misspoken, is neither true nor false. It is a rule—it has been taken out of the testing grounds. "Much seems to be fixed, and it is removed from the traffic. It is so to speak shunted onto an unused siding" (OC §210). It is so removed because of the use we make of it as a rule, a standard of correctness, and a norm of expression. We would not accept anything as showing it to be incorrect, for it is what we regard as "correct multiplication"; it is what can show other things to be correct or incorrect. For example, when we individually weigh each box and find that each weighs 25 pounds and then we add up all the weight and we get 635 pounds, we can see that we must have made a mistake somewhere given the rule, our standard of correctness, '25 × 25 = 625' (LFM p291).

¹² See further: OC §§ 95-99

III

Grammar and Language as Systems

So far, we have examined Wittgenstein's conception of grammar from up close, looking at the various ways that grammar determines meaning and examples thereof. To complement this examination of grammar and in order to effect a more perspicuous understanding of Wittgenstein's conception of grammar, we will now examine grammar in its relation to life and action. "We see that what we call 'sentence' and 'language' has not the formal unity that I imagined, but is the family of structures more or less related to one another" (PI §108). Language is itself a family resemblance concept in that "there is no essence of language, but only different phenomena related in various ways" (WD p120). Wittgenstein calls the whole of language "and the activities into which it is woven, the 'language-game'" (PI §7). The whole of language—the language-game—consists of a multifariously interconnected multiplicity of language-games; in this sense, language forms a system. It is of fundamental importance to understand that when we say that language forms a system—a system of grammatical rules—it is not a system that stands isolated and detached from our actions and activities, as it were, able to breathe on its own. We now turn to why this is the case.

There are several key themes that relate to language as a grammatical system embedded in our daily activities: (1) Language is an activity, it is something we actively participate in; (2) Language, which is analogous to a game and described by grammatical rules, is an institution, a custom, a technique; (3) Language, as an institution, is tied up with our culture; it 'relates to a way of living'; (4) It is within the system of language, interwoven into our practices and way of life, that a word has meaning.

(1) Wittgenstein remarks that "the term 'language-game' is meant to bring into prominence the fact that the *speaking* of language is part of an activity, or of a form of

life” (PI §23). We not only talk about things or pass on information to one another by using language. We use language in a variety of ways—to do a variety of things:

Review the multiplicity of language-games in the following examples, and in others:

Giving orders, and obeying them—
 Describing the appearance of an object, or giving its measurements—
 Constructing an object from a description (a drawing)—
 Reporting an event— Speculating about an event—
 Forming and testing a hypothesis—
 Presenting the results of an experiment in tables and diagrams—
 Making up a story; and reading it—
 Play-acting—
 Singing catches—
 Guessing riddles—
 Making a joke; telling it—
 Solving a problem in practical arithmetic—
 Translating from one language into another—
 Asking, thanking, cursing, greeting, praying. (PI §23)

Here we see a variety of things we do with language and the accompanying activities, e.g., when giving the measurements of an object we “actively” measure it; in play-acting we (usually) speak and perform certain actions, make certain movements; etc. To further emphasize this point, imagine the possible contexts and actions for “exclamations alone, with their completely different functions. Water! Away! Ow! Help! Fine! No!” (PI §27). These sentences, these exclamations, are connected to certain behaviors and actions, e.g., acting desperate, pushing someone, jerking back from a thorn, trying to escape, acquiescence, and taking the cookies out of the child’s reach—respectively.

(2) For Wittgenstein, “To understand a sentence is to understand a language. To understand a language means to be master of a technique” (PI §199). The English word ‘technique’ is a translation of the German word ‘Technik’, which according to the Langenscheidts German dictionary means “a particular method of doing something

<technical, artistic, sport techniques. . .>.”¹³ When we play chess, we do so with a certain technique of moving the figures—a particular way of proceeding according to the rules. Similarly, with words we learn a technique—a method of speaking, writing, manipulating signs—of using language in various situations. As we mature and receive further education (training), we learn various strategies for employing language in more and more particular and specialized ways—“Lying is a language-game that needs to be learned like any other one” (PI §249). Through our education and multiplicity of experiences as children, we develop a mastery of language, we practice various activities over and over again, developing our technique.

Wittgenstein writes that following a rule is a practice (PI §202); this is related to the idea that following a rule, and hence, being able to speak, write, and generally operate within a language, involves a mastery of a technique. As Baker and Hacker write: “A technique is exhibited in a pattern of *behavior* or *activity* (RFM 331), a practice” (*Wittgenstein: Rules, Grammar, and Necessity* [RGN] p163). The German word translated as ‘practice’ is ‘Praxis’, which means “the way that something is done everywhere over a rather long period of time.”¹⁴ Here, ‘everywhere’ is in the sense of “everywhere within” a society, culture, or context specified group.¹⁵ As a language group this is what we do—we engage in a regular technique of using language in multiple ways.

“A game, a language, a rule is an institution” (RFM p334); the German word translated as ‘institution’ is ‘Institution’, which means “a custom, practice, or something similar, which has already been established for some time. . . <a fixed social institution;

¹³ “eine bestimmte Methode, etwas zu tun <handwerkliche, künstlerische, sportliche Techniken. . .” (Langenscheidts Großwörterbuch: Deutsch als Fremdsprache [LG] p975)

¹⁴ “die Art und Weise, wie etwas über einen ziemlich langen Zeitraum überall gemacht wird.” (LG p767)

¹⁵ I am indebted to Professor Eike von Savigny’s feedback regarding this section and for this last point concerning ‘a society, culture, or context specified group’.

the institution of marriage, of family, of baptism>”¹⁶ We speak, write, and generally operate with signs and symbols within the established institution of language. Our speaking, writing, employing language in the diverse ways that we do is a particular aspect of our relation to one another in our society and culture.¹⁷ We have certain fixed (though this does not mean they cannot evolve) ways of doing things as a society that constitute particular institutions. These institutions make up, we could say, a frame of reference for our actions: verbal, written, behavior, etc., without which such actions would be random and meaningless.

Finally, “To obey a rule, to make a report, to give an order, to play a game of chess, are *customs* (uses, institutions)” (PI §199), and “The words ‘language’, ‘proposition’, ‘order’, ‘rule’, ‘calculation’, ‘experiment’, ‘following a rule’ relate to a technique, a custom” (RFM p346). The German word translated as ‘custom’ is ‘Gepflogenheit’, which has several related meanings: 1) custom, tradition: something that one regularly does at a particular time because it is tradition. 2) habit: an action, behavior, or something similar that usually has become automatic and unconscious through regular repetition.¹⁸ Meaning ‘2’ is particularly relevant to language use, for

¹⁶ “eine Gewohnheit, Sitte, oder Ähnliches, die es schon lange gibt. . . <eine feste, soziale Institution; die Institution der Ehe, der Familie, der Taufe>.” (LG p517)

¹⁷ There is a question as to whether or not Wittgenstein “held a community view, according to which rule-following is possible only within a social community.” Glock answers this writing: “firstly, there is no plausible rationale for restricting rule-following to a community; secondly, the *Nachlass* explicitly condones the possibility of a solitary person like Robinson Crusoe following and inventing rules. . . . Wittgenstein rightly insists that whether someone follows rules depends on what he is capable of doing, not on how he acquired that capability (MS124 213-21; MS165 103-4; MS166 4; PG 188; BB 12, 97; PI §495). Yet Wittgenstein also suggests that rule-following is typically social, and that some rule-guided activities - including not just those which are communal by definition like buying and selling, but also doing mathematics - require the context of a social and historical ‘way of living’ (RFM 335-50; PI §§200-5, 337). (WD 329) For our purposes we may leave this question undecided.

¹⁸ 1) Brauch: etwas das man bei bestimmten Gelegenheiten gewöhnlich tut, weil es Tradition ist. (LG p183) 2) Gewohnheit: eine Handlung, eine Verhaltensweise oder Ähnliches, die durch häufige Wiederholung meistens automatisch und unbewusst geworden ist. (LG p413)

through our inculcation in the use of language, language has, generally speaking, become something we use—an action we do—automatically and unconsciously. We may have to consciously think about what we are going to say, but sentence formation, how we are to form our lips, write out words, etc., is (generally speaking) automatic.

(4) “Only in the practice of a language can a word have meaning” (RFM p344), and “Our talk gets its meaning from the rest of our proceedings” (OC §229). It is within the system of language, interwoven into our practices, our daily actions, our way of life, that a word has meaning. It is not simply a word’s place in the grammar of the system that gives a sign meaning, but the use we make of a word, a concept, an expression, etc., woven into our daily activities—in language-games. For example, we might say that the following is a grammatical rule: “As a greeting, ‘hello’ is said when first seeing or talking to someone.” Here ‘hello’ is given a use through the fact that we come in contact with one another at various times and we break contact sometime later. If we were somehow in constant contact with everyone, then ‘hello’ as a greeting would have no meaning. As we have seen, there is a multitude of language-games; each with unique grammatical rules and relevant contexts. We can easily regard the asking of someone’s hand in marriage as a language-game. Certain things come with this language-game. When asking for someone’s hand we have the right to expect some kind of response—whether it be a ‘yes’, ‘no’, ‘maybe’, ‘I need to think about it’, or even a refusal to give an answer. But if she follows our asking by asking if we have heard what the weather will be like tomorrow, then either she has not understood what is going on or she is refusing to acknowledge what we have asked. Additionally, this language-game cannot be played out anywhere at any time. We have not asked for someone’s hand if she cannot hear us and is incapable of replying. We do not ask for her hand if she is under anesthesia and having her gallbladder removed. Similarly, outside of a wedding, something that may

have the appearance of a marriage ceremony does not have the consequences of a marriage ceremony: change of status in the eyes of the IRS, the right for the man to remain in the United States if he is of another nationality, etc. The surroundings and context of what we say and do are vital for the things that we say and do to be what they are, to mean what they do (PI §§583-84).

The customary use of language, language as practice provides the necessary normative context for meaning. Our linguistic behavior has the meaning it does because of the customary use we make of words and signs. Wittgenstein writes:

Let me ask this: what has the expression of a rule—say a sign-post—got to do with my actions? What sort of connexion is there here?—Well, perhaps this one: I have been trained to react to this sign in a particular way, and now I do so react to it. (PI §198)

And “a person goes by a sign-post only in so far as there exists a regular use of sign-posts, a custom” (PI §198). If there were no custom or institution of stopping at red octagonal signs with white borders that have ‘STOP’ written across them and someone proceeded to stop at seeing the sign we may say he stopped because of the sign, but we could not say that he followed the rule of stopping at stop-signs, or obeyed the sign. Without the established practice of stopping at such signs there is no obeying or disobeying. Similarly, without the regularly custom of greeting someone and having our greeting returned we could not say that the other person is rude if they do not return our greeting; we would have no right to expect our greeting returned. For example, imagine a case where upon seeing someone I flapped my arms and she did nothing but stare at me, whereby I scold her for being rude. If she asks me what my problem is, and I say that I gave here the good-day greeting and the least she could do is return it by flapping her arms as well, we can only say that she has not been rude, and that I am off base and have no right to expect such a flapping of arms in return, for such behavior is not customary.

Such flapping of arms is not an established practice, and even if I am attempting to establish the practice of flapping arms in greeting, since it is not yet established it cannot be considered rude to not flap your arms in return.

IV

The Indeterminacy of Grammar in the Application of Concepts

We have seen how the grammar of various language-games, and language in general, is enmeshed in our actions, our lives. In addition, we have talked of grammar forming a kind of system. This system, though, could be said to have rough edges in the sense that the grammar of a concept is not necessarily complete, such that it has something to say for every contingency. That is, while we could say that “the ‘meaning’ of a mathematical sign [or a word], like that of a chess piece, is the sum of the rules that determine its possible ‘moves’” (WD p193) this does not mean that (all) our words have a complete list of rules that determines their applicability for every possible situation.

Wittgenstein expresses this idea in the following remark:

I say “there is a chair”. What if I go up to it, meaning to fetch it, and it suddenly disappears from sight?—“So it wasn’t a chair, but some kind of illusion”.—But in a few moments we see it again and are able to touch it and so on.—“So the chair was there after all and its disappearance was some kind of illusion”.—But suppose that after a time it disappears again—or seems to disappear. What are we to say now? Have you rules ready for such cases—rules saying whether one may use the word “chair” to include this kind of thing? But do we miss them when we use the word “chair”; and are we to say that we do not really attach any meaning to this word, because we are not equipped with rules for every possible application of it? (PI §80)¹⁹

¹⁹ Further, Wittgenstein writes: “How should we have to imagine a complete list of rules for the employment of a word?—What do we mean by a complete list of rules for the employment of a piece in chess? Couldn’t we always construct doubtful cases, in which the normal list of rules does not decide? Think e.g. of such a question as: how to determine who moved last, if a doubt is raised about the reliability of the players’ memories?” (Z §440)

The answer to Wittgenstein's last question is a definite 'No!' Here we can say, as Wittgenstein does, that the concept of language is analogous to the concept of a game. Looking at games we see that they are not completely circumscribed by rules. If we take chess as an example, we admit that every move—e.g., moving the queen diagonally four squares—is constrained by a rule. Any position that a piece can be in is provided for by the rules. But while the chess pieces' movements are bounded, there are no rules in chess forbidding someone's picking up the chess piece and rolling it between his hands and then kissing it before completing the move, or how fast one must execute a move once it is initiated. In the case of tennis, there are not "any rules for how high one throws the ball in tennis, or how hard; yet tennis is a game for all that and has rules too" (PI §68).

Another analogy:

The regulation of traffic in the streets permits and forbids certain actions on the part of drivers and pedestrians; but it does not attempt to guide the totality of their movements by prescription. And it would be senseless to talk of an 'ideal' ordering of traffic which should do that; in the first place we should have no idea what to imagine as this ideal. If someone wants to make traffic regulations stricter on some point or other, that does not mean that he wants to approximate to such an ideal. (Z §440)²⁰

With the grammar of our concepts, in the language-games within which words are used, certain moves are allowed and certain others forbidden. For example, it would be nonsensical to say something like, "My brother sprained his ankle so I put a cold compress on my ankle to keep his ankle from swelling" or "I took some aspirin to make my brother's pain go away." While it would make sense to say, "I had the worst headache so I took two aspirin," or "I put a cold compress on my sprained ankle to keep the swelling down." But there are in-between cases that do not so precisely fit within what is allowed and disallowed, e.g., there may be some material whose color appears to

²⁰ See Z §441 as well.

shift and shimmer from an orange to a red in such a way that it can at no time be described as definitely one or the other; such a material might be painful to look at—as a stroboscope is for some people. Perhaps we then give up and agree to call it ‘red’, or we invent a new name for the color calling it ‘redage’. Either way we see that the moves in the language-game of color-words are not so completely fixed; but in adding the color term ‘redage’ we are neither necessarily aiming to fix all possible moves ahead of time, nor trying to correct something that is broken or unusable. For Wittgenstein, the point is that the questionable cases that may arise need not threaten nor undermine the rest of the language-game.

V

Following the Rules of Grammar

As playing a game need not involve a consultation of rules, neither does speaking, conversing, or writing—using language. Once learned, such activities are a matter of being engaged in a practice (LFM pp237-8), taking part in an institution, a custom, as we saw above. According to Wittgenstein, we neither learn language by being taught strict rules, nor do we, in general, use language according to strict rules. We don’t have to have the rules, the definitions, of the words in mind as we use them in conversation, writing, reading, etc. Further, if we were asked to give the rules, we often would not be able to do so (BB p25); when asked for a justification, we may be left to say that using the words, signs, expressions, etc. thus and so is just what we do (PI §217). Similarly, one may learn and understand a game without being told the rules.

What’s the sign of someone’s understanding a game? Must he be able to recite the rules? Isn’t it also a criterion that he can play the game, i.e. that he does in fact play it, even if he’s baffled when asked for the rules? Is it only by being told the rules that the game is learnt and not also simply by watching it being played? Of course a man will often say to himself while

watching “oh, so that’s the rule”; and he might perhaps write down the rules as he observes them; but there’s certainly such a thing as learning the game without explicit rules. (PG p62)

Further, it does not follow that if someone is able to give a rule or rules at a particular time, e.g., if one is questioned about a move, that he has any of them in mind while playing; rather, “that just shows that in certain circumstances he can enunciate the rules, not that he makes explicit use of them while playing” (PG p86).

Someone might question the idea that language is a rule-governed activity, for how is it that we are following rules when we use language if we do not have the rules in mind as we speak, write, etc.? Well, how is it with chess? For we say that we play chess by following the rules of the game, even though we do not call the rules to mind for each move. Let us look at a possible instance of learning to play chess. We initiate someone in the rudiments of chess, saying that the pawns can move *so*, the bishops *so*, etc. If the initiate moves a pawn two squares on its second move, we correct him saying that a pawn can only move two squares on its first move; we continue in this way, correcting his various slips throughout the game. Occasionally, we may hear the initiate say to himself, “Let’s see, the bishop can move diagonally on its own color . . . hmm . . .,” but after a while, once he has become more familiar with the rules, he will neither necessarily need to say any of the rules to himself, nor will he necessarily need to think about them before making a move. However, we still say that he follows the rules of the game when he makes a move. Similarly, with language, we need not call the rules to mind nor say them to ourselves for it to be said that language is a rule governed activity. We are involved daily in various activities in which we use words in multiple ways; we are masters of the various techniques of their use and have been inculcated in the practice of doing various things with words. Through their use as norms of expression and standards of correctness, the rules of grammar govern these techniques, this practice—the various

languages-games in which we engage.

In the earlier discussion of the difference between the empirical and grammatical use of a proposition, we noted that the difference comes from the use made of the word and the context in which that use is found. Likewise, that someone can be said to be following a rule depends on the context of the activity.

. . . tying the concept of following a rule to acts which ‘involve’ rules is the natural thought that following a rule is doing something *more* than merely acting in accord with it. The question to be answered seems to be ‘What more?’ Apart from a misguided detour into a mythology of psychological processes, this question seems to leave no acceptable answer. The point then to appreciate is that the fault lies in the question itself. The illusion that there is something more arises from the platitude that it is possible to act in accord with a rule without following it. We are tempted to conclude that the difference must be intrinsic to the act, whereas in fact it turns on the circumstances that surround the act. (RGN p159)

Someone who has never played chess and who is completely ignorant of the rules of the game can by chance move the chess pieces in accord with the rules of the game; but in doing so she certainly isn’t following the rules. Thus, it seems that someone who is following the rules of chess, or the rules of grammar, must be doing something more than merely acting in accord with the rules. But it is not a matter of the person doing something more; rather, it is a matter of the surrounding context. Wittgenstein remarks: “What, in a complicated surrounding, we call ‘following a rule’ we should certainly not call that if it stood in isolation” (RFM p335). To clarify this remark, let us pose two intimately related questions: (1) What does he mean by ‘complicated surrounding’? and (2) What does he mean by ‘isolation’?

(1) In answering the first question, let us turn to another remark that occurs shortly before the one above:

What surrounding is needed for someone to be able to invent, say, chess? Of course I might invent a board-game today, which would never actually be played.

I should simply describe it. But that is possible only because there already exist similar games, that is because such games *are played*.

I may give a new rule today, which has never been applied, and yet is understood. But would that be possible, if no rule had *ever* actually been applied? (RFM p334)²¹

If no rule had ever been previously applied, then there would be no regular practice of following a rule, and thus no possibility of applying a rule. If there had never been any rules and I put up an arrow pointing in the direction of my house so people can find it more easily, all that other people can do is look at it and perhaps wonder what it is. There is no following the arrow or not following the arrow without the surrounding institution and practice of rule following. Assuming for the present point that language is not rule governed, if someone complains that they could not find my house and I tell them that the arrow pointed the way, they may rightly ask what an arrow has to do with my house. From this we can see that a part of the ‘complicated surrounding’ is that of a regular practice; in the above case it is the regular practice of playing games and applying rules. Wittgenstein remarks that, “The rule governed nature of our language permeates our life” (RC III §303), and it does so in the regular and customary use we make of language and the actions to which it is tied in the various language-games in which we engage. We have seen this above in our discussion of language, following rules, obeying orders, etc., as customs, techniques, institutions: “a person goes by a sign-post only in so far as there exists a regular use of sign-posts, a custom” (PI §198). If there is no regular use of sign-posts, then it would not make sense to say that someone is following a sign-post, regardless of what they do. For, if there is no regular use of following sign-posts, then there is no connection between a person’s behavior and a supposed sign.

(2) In regard to the second question:

²¹ Cf. PI §204

Let us imagine a god creating a country instantaneously in the middle of the wilderness, which exists for two minutes and is an exact reproduction of a part of England, with everything that is going on there in two minutes. Just like those in England, the people are pursuing a variety of occupations. Children are in school. Some people are doing mathematics. Now let us contemplate the activity of some human being during these two minutes. One of these people is doing exactly what a mathematician in England is doing, who is just doing a calculation.—Ought we to say that this two-minute-man is calculating? Could we for example not imagine a past and a continuation of these two minutes, which would make us call the process something quite different? (RFM p336)²²

One might object that since it is an ‘exact reproduction of a part of England’, the people are doing the exact things that the original people are doing, and thus the question is moot. But this objection shows a misunderstanding of Wittgenstein’s point—an action in isolation from the appropriate context need not be the action it appears to be. For example, if after the two minutes were up and the man doing the calculating were to go from writing: ‘ $2 + 2 = 4$ ’ to ‘ $2 + 2 = 3$ ’, and then a moment later: ‘ $2 + 2 = 2$ ’, we would not say that he was performing addition. It was in accord with our calculations when he correctly wrote during the two minutes: ‘ $2 + 2 = 4$ ’, just as in our earlier example the woman was ignorant of chess and yet managed to move the pieces in accord with the rules of chess. The ‘two-minute-man’ may be isolated by the lack of a calculating language-game, or by the possibility of the context being other than that of what we call calculating, e.g., prior to the two minutes he may have been totally ignorant of calculating, but had been given a calculating drug that allows one to give the appearance of calculating for a short period. In the first case, a regular practice of operating with signs is missing. In the second case, he cannot be said to participating in the calculating practice because he has not previously calculated, and making calculations is not a matter of course for him (PI §238). Without the existence of such a practice, there is no criterion for the correct use of the signs, even if the manipulation of the signs appears to

²² Cf. PI §584

be in accord with our practice. And if he is not following any rules but only artificially responding due to the calculating drug, then he cannot be said to be correctly or incorrectly calculating—only his marks can be said to be or not to be in accord with what we would consider to be correct calculations. We now see some of the elements that form a ‘complicated surrounding’, and how, without that surrounding, an activity may stand in ‘isolation’ and thus not be a rule governed activity. There has to be a language-game of ϕ ing in order for someone to be able to ϕ , for outside of the language-game of ϕ ing, ϕ does not have a sense or meaning.

So if we are to say that there is something *more* to following the rule than merely acting in accord with it, then this would be the circumstances of someone’s actions that entitle us to say that he has followed the rule (cf. PI §§154f.). (RGN p159)

This leads us now to our last point about following a rule as it relates to language-games and grammar.

In addition to the above, that someone can be said to be following a rule depends on whether the rule is a part of the reason for his actions. “Whether someone has followed a particular rule depends on what he would have done if he had been challenged or called upon to make his behavior intelligible. His having followed the rule presupposes the truth of certain hypotheticals (cf. PI §187), and the support for these encompasses earlier and later behavior” (RGN p159). That is not to say, e.g., that if challenged as to why we just called a particular marker ‘yellow’ that we have to say that we thought about the rule that such a color is called ‘yellow’; rather, we can simply say that that is what we learned to call ‘yellow’—that is what is called ‘yellow’ in the English language and there was never any question as to what color it should be called. This is something the two-minute-man would not necessarily be able to do, especially in the case of his being given a calculating drug. We ask him why he wrote ‘ $2 + 2 = 4$ ’ and he would

not be able to give any reason other than saying that he had had a strange sensation and desire to write those symbols, though he does not know what they mean. ‘There is no such thing as someone’s following a rule who lacks all of the abilities bound up with understanding or intending to conform with [the] rule’ (RGN p159). We ask someone who is actually calculating why he wrote ‘ $2 + 2 = 4$ ’ and he may respond by saying that that is the next step in the proof he is working on and that it follows from what he has already written. If we were to question why he wrote *that* $2 + 2$ is equal to 4 he would most likely give us a puzzled look and question our intentions. When asking for such justification for why one has acted as they have, why they have followed a rule in a particular way, it can suffice for them to simply say that that is just what you do when following the rule (PI §217). “Why did you stop at the red light?” An answer for us would be: “Because it was red.”

Therefore, language is a rule-governed activity and we can be said to be following the rules of grammar when we use language—we engage in a practice that occurs within particular and complicated surroundings, in contextual situations befitting the various language-games in which we engage. And though we need not refer to rules of grammar when we are using words in our everyday activities, this is not to say that the rules of grammar are hidden. As we have seen from our previous examples, rules of grammar come out “in the ways in which a language is taught, in explanations of word-meaning that speakers give, in the ways in which they criticize and correct misuses of language, in the justifications they give for using expressions thus or otherwise” (*Insight and Illusion* [INS] p183).

VI

Two Conceptions of Grammar

We will conclude this chapter with a discussion of Wittgenstein's conception of grammar compared to what we might call the 'ordinary conception of grammar'. It is, perhaps, understandable that Wittgenstein's conception of grammar is questioned in regard to its correspondence with what is usually conceived of as grammar. This was the case for G.E. Moore, leading him to write:

With regard to the expressions "rules of grammar" or "Grammatical rules" he [Wittgenstein] pointed out near the beginning of (I), [298] where he first introduced the former expression, that when he said "grammar should not allow me to say 'greenish-red'", he was "making things belong to grammar, which are not commonly supposed to belong to it". . . In the interval between (II) and (III) I wrote a short paper for him in which I said that I did not understand how he was using the expression "rule of grammar" and gave reasons for thinking that he was not using it in its ordinary sense: but he, though he expressed approval of my paper, insisted at the time that he was using the expression in its ordinary sense. Later, however, in (III), he said that "any explanation of the use of language" was "grammar", but that if I explained the meaning of "flows" by pointing at a river "we shouldn't naturally call this a rule of grammar". This seems to suggest that by that time he was doubtful whether he was using "rule of grammar" in quite its ordinary sense; and the same seems to be suggested by his saying, earlier in (III), that we should be using his "jargon" if we said that whether a sentence made sense or not depended on "whether or not it was constructed according to the rules of grammar".
(*Philosophical Occasions* [PO] p69)

This questioning of how Wittgenstein's conception of grammar fits with the ordinary conception of grammar provides further opportunity to elucidate our understanding of what Wittgenstein means by 'grammar'. Such questioning presents us with the opportunity to take note of certain aspects of Wittgenstein's conception of grammar that we might otherwise overlook. It appears that Moore has a right to doubt the appropriateness of Wittgenstein's insistence that he is using the term 'grammar' as it

is ordinarily used. Wittgenstein uses the term ‘grammar’ to mean rules for the use of signs—words, numbers, symbols, etc. These grammatical rules determine meaning and sense, and both license and exclude certain forms of expression. They are norms of expression, standards of correctness. For example, if someone says, “I saw the pain in my arm,” we correct him by saying, “Unless you are speaking figuratively, one does not see pain, pain is felt.” Thereby, we give expression to a rule for the use of the term ‘pain’. Another example would be: “Gray is lighter than black and darker than white.” This excludes as nonsensical, e.g., talk of fresh black charcoal being lighter than gray leftover ashes. However, when we ordinarily speak of ‘grammar’ we are, in general, talking about rules for the construction of sentences, expressions, etc. For example, we say, “It is correct to say, ‘The cat is lying in the sun’ and wrong to say, ‘The cat are lying in the sun’.” We also speak of ordinary grammar as dealing with the kinds of words, adjectives, nouns, verbs, etc., and their proper use. For example, we say that an adverb like ‘quickly’ modifies a verb like ‘to run’ but it does not modify a noun like ‘cat’. Hence, we can say, “The cat runs quickly,” but not “The quickly cat runs.” To modify a noun, we need an adjective. The question now is: how does Wittgenstein’s conception of grammar compare with the ordinary conception of grammar? There are two relevant points to look at: (a) The scope of the two conceptions of grammar, and (b) The content of the two conceptions.

(a) The ordinary conception of grammar deals with rules for the construction of sentences and the proper use of the kinds of words (nouns, adjectives, verbs, etc.). It is clear that these rules are language specific, i.e., English, German, French, etc., are each going to have their own grammars. When we say, “It is incorrect to say, ‘the barked dog’” or “It is incorrect to say, ‘the dog is quickly’,” it is evident that these are grammatical remarks relevant only to English. This is because the sentences ‘the dog

barked' and 'the dog is quick' are English, and the word order and proper word use of an English sentence are going to be governed by English grammar.²³ However, when Wittgenstein makes the remark, "Aber Glauben ist nicht Denken. (Eine grammatische Bemerkung.)" (PI §574) we readily translate it into English as: "But believing is not thinking. (A grammatical remark.)" Wittgenstein is not making a grammatical remark that need only be relevant to German. Wittgenstein's conception of grammar and the grammatical remarks he makes are relevant to conceptually similar languages—languages that generally conceive of the world in similar ways though they use different words and have a different syntax. Let us look at an example: Wittgenstein investigates our talk of time in the *Blue and Brown Books*, where he writes: "We talk about the flow of events; but also about the flow of time—the river on which the logs travel. Here is one of the most fertile sources of philosophic puzzlement: we talk of the future event of something coming into my room, and also of the future coming of this event" (BB p108). Such a remark is applicable to German, English, French, etc.—languages that are conceptually similar. It can be difficult to overcome the bias we have for our concepts, to become comfortable with the idea that other peoples, cultures, etc. may not conceive of things as we do. But it is quite possible for there to be other peoples, languages, and cultures that operate with a grammar—in Wittgenstein's sense of the term—that is different from our own. In such a case Wittgenstein's investigation and remarks about certain confusions, e.g., about 'time', would not be relevant. Regardless of the veracity of Benjamin Lee Whorf's observations, he provides us with a good example of this.²⁴ He

²³ A German could also say that it is not correct to say: "Der hat Hund gebellt," but that it is correct to say: "Der Hund hat gebellt." In this way English and German have similar grammars, i.e., the verb or part of the verb does not go between a definite article and its noun. But this is not what we customarily think of when we speak of grammar, for we usually speak of English grammar, German grammar, etc., and in doing so we typically are speaking of each language's syntax, or something similar.

²⁴ 'Regardless' because Wittgenstein's understanding of and arguments for grammar, and its arbitrariness, are not dependent upon whether or not we can actually find a language in the world that is conceptually different from our own.

writes the following about the Hopi Indians:

I find it gratuitous to assume that a Hopi who knows only the Hopi language and the cultural ideas of his own society has the same notions, often supposed to be intuitions, of time and space that we have, and that are generally assumed to be universal. In particular, he has no general notion or intuition of time as a smooth flowing continuum in which everything in the universe proceeds at an equal rate, out of a future, through a present, into a past; or, in which, to reverse the picture, the observer is being carried in the stream of duration continuously away from a past and into a future. (*Language, Thought and Reality; Selected Writings* [LTR] p56)

It is such conceptual possibilities that help to demonstrate that Wittgenstein's conception of grammar will be relevant to languages that are conceptually similar. Although, what will be relevant to all languages is the method that Wittgenstein demonstrates—a method of looking at the rules for the use of terms, their grammar, to clear up conceptual confusions (Compare: PI §133). Thus, we could say that the various examples of grammatical remarks that Wittgenstein gives do at least two things: (1) They help clear up conceptual confusions in the German language and languages conceptually similar to German, and (2) They are part of a demonstration of a particular means of dissolving, or eliminating, problems in philosophy. Thus, there could be a conceptual confusion in the Hopi language, e.g., as regards their concept of time, to which we could apply a Wittgensteinian method—dissolution via making perspicuous the grammar of the problematic concept. But, given Whorf's comment, any application of Wittgenstein's method to clearing up a confusion about time in the Hopi language would probably not be applicable to English, German, French, or many other conceptually similar languages. From this, we see that the ordinary conception of grammar, as it concerns syntax, is language specific, whereas Wittgenstein's grammatical remarks are generally specific to conceptually similar languages; languages where similar "misunderstandings concerning the use of words, caused, among other things, by certain analogies between the forms of

expression in different regions of language” (PI §90) occur. What is not language specific about Wittgenstein’s conception of grammar is the method it espouses. As Glock comments: “Wittgenstein used the term ‘grammar’ to denote both the constitutive rules of language and *the philosophical investigation or tabulation of these rules*” (WD p150. Emphasis mine). Therefore, the scope of the ordinary conception is limited to each language and the scope of Wittgenstein’s conception is limited to conceptually similar languages.

(b) The content of Wittgenstein’s conception of grammar is rules for the use of signs, rules that determine meaning and sense. These rules concern all of the various uses of language, e.g., communicating, building, measuring, composing, playing, doing math, influencing, investigating, etc. Something is a grammatical rule if it is used as such—as a norm of expression, a standard of correctness. Such rules can be found “in a host of pedagogic and critical activities, some of which are institutionalized (education, dictionaries): the teaching of language, the explanation of particular words, the correction of mistakes, the justification of uses, the acquisition of higher linguistic skills” (WD p152). The ordinary conception of grammar is language specific and determines the correct structure and formulation of sentences, paragraphs, etc., as well as correct agreement between noun and verb, etc. Concerning these two conceptions, Glock writes: “Both deal with rules for the use of words, . . . ‘both kinds of rules are rules in the same sense. It is just that some have been the subject of philosophical discussions and some have not’” (WD p153). This is an important point, for though the scope of the two grammars differs and though the content of the rules differs, both conceptions of grammar are concerned with rules for the use of signs, terms, expressions, etc. Newton Garver writes: “Grammar describes language by showing how it is articulated.” He then says regarding ‘grammar’:

The word is normally applied . . . to only two or three of the four levels of articulation, morphology (the construction and transformation of words) and syntax (the construction and transformation of phrases), with the recently more frequent extension to phonology. Wittgenstein's grammar concerns what is said or done through uttering words or sentences in various circumstances. . . . Close attention to what linguists do when they set out to describe a language enables us to see that Wittgenstein really is using the word 'grammar' in its ordinary sense but applying it where it is not commonly applied. (*This Complicated Form of Life: Essays on Wittgenstein* [CFL] pp227-28)

We do not have philosophical discussions about, "The cat are lying in the sun," as we do about remarks such as, "I know that I am in pain." But we can say that both are grammatically problematic. It is just that the former is more obvious and the latter requires investigating the uses of the word 'to know' before it becomes clear that something is awry. In correcting both, one is giving a rule of grammar—"The cat *is* lying in the sun, not the cat *are* in the sun" and "Except for in very particular instances, it only makes sense to make a knowledge claim about someone else's being in pain, but not about myself being in pain." The areas of language that concern Wittgenstein's conception are different than those that concern the grammarian, who is generally interested in the rules that define the syntactical structure of language. "But this does not indicate that there are two kinds of grammar (or two different senses of 'grammar'), ordinary grammar and philosophical grammar. It indicates two kinds of interest in rules of a language" (INS p182). Contrary to Moore's conclusion, we need not say that Wittgenstein's conception is one of a grammar different in kind from that of the ordinary conception, even though Wittgenstein may have said that we might not naturally think of his comments as grammatical, or that we would be using his "jargon" if we said that whether a sentence made sense or not depended on "whether or not it was constructed according to the rules of grammar".

Though I have concluded that Wittgenstein is not deviating from the ordinary use

of the term 'grammar, whether Wittgenstein is using the term 'grammar' in a way wholly different from the ordinary conception of grammar seems relatively unimportant as long as one understands what both conceptions of grammar involve. It is of greater consequence that we understand how and why they can be considered both similar and different from one another. In this last section, it has been our aim to emphasize the following points: (1) Wittgenstein's conception of grammar concerns rules for the use of words, rules that determine meaning and sense; whereas, ordinary grammar concerns rules for the proper construction of sentences, expressions, etc., as well as proper use of the different kinds of words. (2) Wittgenstein's conception of grammar is specific to conceptually similar languages, i.e., languages that consist of similar language-games; whereas ordinary grammar is language specific, concerning the syntax of a particular language. (3) While the scope and content of the two conceptions of grammar differ, both conceptions are concerned with rules of language.

Wittgenstein's conception of grammar and grammar's place in our lives is very complex. Grammar determines the meaning of terms and expressions, determines what it makes sense to say. It is the role that a proposition, sign, symbol, etc., has that makes it a grammatical rule. For example, the proposition 'That is red' can either be a grammatical rule or an empirical proposition, depending on the circumstances and manner in which it is employed. In order to mean something, one does not need to have a rule of grammar or a list of rules in mind. Rather, our use of language involves the mastery of a technique, the engagement in a practice, of using signs in particular ways. This is similar to the relationship that the rules of chess have to playing the game of chess. The rules of grammar "come out" in such activities as teaching and correcting mistakes. Additionally, the system of grammatical rules is not something fixed and complete. There will always

be occasions of uncertainty in the application of some words in certain circumstances.

As well, the meaning of words changes over time. Wittgenstein's conception of grammar is like that of the ordinary conception in that both concern rules for the use of language.

However, Wittgenstein's conception does have a different scope and content than that of the ordinary conception. Wittgenstein is concerned with conceptual confusions, which concern any number of conceptually similar languages, where ordinary grammar is concerned mainly with structural issues of particular languages. We are now well prepared for understanding in what sense, according to Wittgenstein, grammar is arbitrary.

Two

Autonomy of Language

When Wittgenstein says that language is autonomous, he means this in a very particular way. As we will come to see, he neither means that it is a matter of caprice which grammar we have, nor does he mean that anyone can simply change an existing grammar or implement a new one. The latter one could do, but no one else would understand him unless the new grammar was adopted by others. Rather, when Wittgenstein writes that language is autonomous, he means the following: (1) Grammar determines meaning; meaning is not read off the world. (2) Grammar is unverifiable, i.e., any attempt to justify a choice of grammar by verification will be circular. (3) Like a choice of measurement, grammar is neither right nor wrong, correct nor incorrect, though there may be practicable or practical requirements that may *influence* a choice of grammar, as there may be ones that influence a choice of measurement. (4) Grammar is not justified by bringing about certain effects, since grammar has nothing to say about effects, i.e., grammar gives the rules for the use of words, but what is effected through their use is a contingent matter, which grammar says nothing about. (5) Grammar is not *determined* by various goals or aims we might have; though, as in (3), grammar may be influenced by various goals or aims.

(1) As we saw in chapter one, according to Wittgenstein, the meaning of a word, sign, etc., is determined by the grammatical rules for the use of the word, sign, etc. An implication of meaning being determined not by the world but by rules of grammar is that these rules are arbitrary—language is autonomous. Wittgenstein writes: “Grammar is not accountable to any reality. It is grammatical rules that determine meaning (constitute

it) and so they themselves are not answerable to any meaning and to that extent are arbitrary” (PG p184). If meaning were something that our language and grammar had to try to emulate or match up with, i.e., if meaning were out there in the world and determined how we were to use our words, what concepts to employ, then grammar would not be arbitrary, language would not be autonomous. In examining this point, let us first ask what the opposite view has going for it; what makes it appealing?

First, let us briefly spell out the opposite view. When we use words, when we talk about things, the meaning of our words is that to which they refer. We can see this when we look at a sentence like, “My dog is brown.” The meaning of ‘my’ is the relation of ownership that exists in the world between me and the dog; the meaning of ‘dog’ is simply the animal that I am talking about; the meaning of ‘is’ is the state of being of the dog’s hair color; and the meaning of ‘brown’ is that quality of color which the hairs of my dog have. We have these words and concepts from our looking at the world and seeing how things in the world stand. What is appealing about this view? Perhaps, that it is on the surface somewhat intuitive. It may be more intuitive when we consider nouns, for we could easily ask ourselves, e.g., “What gives meaning to the word ‘dog’?” and an obvious answer is that animal that we call ‘dog’. The word ‘dog’ means what it does by virtue of the particular animal existing to which ‘dog’ refers. We learn these meanings and concepts by reading them off of the world. Let us now return to why this is problematic.

According to Wittgenstein, a sign, a word, by itself is not alive, does not have meaning—regardless of how things stand in the world. What brings a sign to life is not a mental accompaniment, an idea in the mind, or an object in the world, but its use as governed by grammatical rules (BB p4-5). Wittgenstein’s argumentation implies that if meaning were to be read off the world, then we should be able to point to this meaning.

However, in pointing to an object and saying, “That is what x means,” one is actually giving an ostensive definition. And while an ostensive definition can be used to point to a sample of a term, an ostensive definition cannot be used to point to the meaning of a term. This is for the following two reasons, at least. One, an ostensive definition is a rule that itself determines a part of a term’s meaning. Two, in order for an ostensive definition to be intelligible, the one giving it must already mean the concept of what is pointed at (Z §333). Hence, the meaning could not originally have been in the world, so to speak, waiting to be first read off and then used. Therefore, it is not possible to simply point to the meaning of a word, for the meaning is already in use with the pointing. But even if it were possible, not all, if even a majority of words could be so defined. For example, how do you point to the power of the government, somebody’s creative energy, or to such things as atoms and electrons?²⁵ Again, it is grammar that determines meaning, a grammar that is connected in a most intimate way with our actions. As we recall from chapter one, “Our talk gets its meaning from the rest of our proceedings” (OC §229). It is within the system of language, interwoven into our practices and way of life, that a term has meaning. It is the use we make of a term—a use that is normatively governed by grammar—woven into our daily activities that constitutes the various language-games we take part in on a daily basis. And it is through these language-games that we give meaning to our terms, signs, etc. If we are to look for the meaning of our terms, signs, etc., the place to look is in these language-games, not at the various physical objects in the world, or their qualities and relations to one another, which we refer to by some of our terms.

(2) Reality cannot be consulted to justify grammar, for in doing so, one would

²⁵ One could, of course, point to some act that one takes to be exemplary of the government’s power, or one’s creative energy. But in so doing, one is not pointing to something in the same way that one does in pointing to a pencil and saying: “That is what we mean by the word ‘pencil’.”

either have to describe reality, which would employ the grammar in question or one would have to point to reality in some way, which would also employ the grammar in question. For example, to point to the greenness of an object, one must use the color grammar of green, for otherwise there is no sense to the deictic gesture. As Wittgenstein writes:

The rules of grammar cannot be justified by shewing that their application makes a representation agree with reality. For this justification would itself have to describe what is represented. And if something can be said in the justification and is permitted by its grammar—why shouldn't it also be permitted by the grammar that I am trying to justify? (PG p186)

When we talk about a room and say, “The room is small with a brown wooden desk on the left wall as you walk in, while on the far wall there is a comfortable looking green chair with a reading light next to it,” we are representing the room with words. If we try to justify the grammar of colors and directions that is used to describe the room we would have to do so by, e.g., saying, “You see *there* is the color green and brown and *that* is to the left of that and *that* is to the right of that,” but in doing this, we have spoken in accordance with the grammar that we were supposedly justifying. Might we not just point to the brown and then point to the left and point to the right? One problem with this is, as we learned in chapter one, that in order for the ostensive definition to function, in order for the pointing to make sense, one would have to already be able to ask, “What color is that?” or “What direction is that in relation to that?” But, again, this uses, is in accordance with, the grammar that is supposed to be justified. These attempts at justification are analogous to the following: “I’m justified in believing that the train leaves at ten o’clock because I believe the train leaves at ten o’clock.” This is no justification at all; however, the following would be a justification: “I’m justified in believing that the train leaves at ten o’clock because I just looked at a train schedule a few minutes ago.” But this cannot be done for grammar. There is nothing analogous to a

train schedule to which one can turn to justify a grammatical rule. One is tempted to say that there is something indeed that can be turned to and that something is reality. But as we have seen, to point to reality in order to justify grammar, either by physically pointing or pointing through a description, one must use the grammar in question, and again this is like saying, “I’m justified in believing that this train schedule is correct because I made a copy of it and checked it against the copy.”

One might suggest that we use one grammar to justify another. That is, if we cannot justify our own grammar without circularity, then we should employ another grammar to show that ours is correct. This, however, is misconceived. First, one grammar cannot be used to justify another, for the one that is to justify ours is itself unjustified and is therefore not in a position to offer justification. Thus, as we saw above, Wittgenstein pointedly asks, “And if something can be said in the justification and is permitted by its grammar—why shouldn’t it also be permitted by the grammar that I am trying to justify?” Second, the other grammar will be irrelevant to the one it is supposed to be justifying. For Wittgenstein’s conception of grammar concerns the meaning of terms. Therefore, another grammar may involve different conceptions of how things are in the world. To take our earlier example of the Hopi Indians, the grammar of their language in regard to the conceptualization of time could not be used to justify our conception of time, for the two grammars are different, and thus the meanings involved are different. Different meanings cannot be used to justify one another, just as the rules of chess cannot be used to justify the rules of checkers.

If one wants to justify something, there is usually a possibility that what is being justified could come out wrong. That is, if we feel the need to justify our belief that the train will be leaving at ten o’clock, there is a chance that our belief is mistaken and that the train could really be leaving at nine o’clock. For grammar, however, it does not make

sense to say that there is a chance that grammar will turn out to be incorrect. When we speak of grammar we are talking about rules that determine the meaning of signs. It does not make sense to speak of grammatical rules that do not determine the sense or meaning of some sign. For example, if one wants to justify the grammar of the language-game of talking about shapes one might point to a square and say, “See, that shape *there*, that’s what justifies our talk of squares, and that shape *there*, that’s what justifies our talk of circles,” but in order to point to something and say that it is a shape, one must already be familiar with and employ the grammar of the language-game of shapes. But this means that the grammar has to already make sense, i.e., be in working order. If it did not make sense, then it would not be grammar. Since it must already be in working order, it could not be shown not to work or to be nonsense. To show that a particular grammar is inappropriate, i.e., does not represent the world as the world really is, or nonsensical, would require showing that the real meaning is something else. However, there is no meaning prior to that which is determined by grammatical rules, and different grammatical rules would not show others to be wrong. Rather, different grammatical rules would determine a different meaning, but not the correct or better one. As Wittgenstein writes:

Grammatical conventions cannot be justified by describing what is represented. Any such description already presupposes the grammatical rules. That is to say, if anything is to count as nonsense in the grammar which is to be justified, then it cannot at the same time pass for sense in the grammar of the propositions that justify it (etc.) (PR p55).

That is, there cannot be a justification via a verification of grammar, for any proposition, sign, gesture, etc. used to justify the grammar will employ the very grammar it is to justify. Therefore, if that justificatory sentence has a sense, then the grammar it is to justify will also have a sense (for they are part of the same). If reality were the determinant of sense and meaning, which is supposed by the one pointing to reality for

justification, then there would be a possibility for reality to show a particular grammar to be nonsense. But, as we have seen, to try to demonstrate this requires that one use a grammar to either describe or point to the world. Either the grammar that is to be shown to be nonsense will be employed, in which case it is clearly not nonsense, or another grammar will be employed, which would beg the question in favor of that grammar. For example, it is not possible that 'square' could turn out to be senseless if it already makes sense to say, "*That* is a square," which is the type of proposition that would be used to try to justify the grammar of squares. A child could mistake a triangle for a square, i.e., she could say, "*That* is a square," which as a proposition makes sense, but is just false. The reason she can do so is that there exists the shape grammar of squares and triangles. But that '*That* is a square', used as an empirical proposition, makes sense, i.e., has meaning, cannot be shown to be correct, cannot be justified, by pointing to reality. Wittgenstein makes a remark relevant to this:

That one empirical proposition is true and another false is no part of grammar. What belongs to grammar are all the conditions (the method) necessary for comparing the proposition with reality. That is, all the conditions necessary for the understanding (of the sense). (PG p88)

It is grammar that determines how the proposition is to be compared with reality. What the words mean is determined by grammar, but whether a proposition is true or false is determined by comparing the proposition to reality, which is made possible by the grammatical system within which the proposition, so to speak, exists. From chapter one we remember that what differentiates an empirical proposition from a grammatical one is how the proposition in question is used. Earlier, the proposition '*That* is a square' was used empirically by a child to talk about her surroundings. But if the child makes a mistake by calling a square a 'triangle', someone who has mastered the language can say, "No, that's not a triangle, it's a square," and this is a grammatical remark setting up the

conditions that allow one to talk about squares and triangles in empirical, true or false, propositions. But the grammar of shapes cannot be shown to be correct or incorrect, justified or unjustified, for any such attempt to justify or disprove grammar would employ either the grammar in question or another unjustified grammar.

(3) According to Wittgenstein, the arbitrariness of grammar means that one grammar is not correct and another wrong, just as it is not correct to use inches and incorrect to use centimeters as a choice for a unit of measurement.²⁶ One does not represent the length of an object badly if one uses centimeters instead of inches, and one does not represent the world badly if one uses a grammar that divides up the phenomena of pain differently from our grammar. As Wittgenstein writes:

The rules of grammar are arbitrary in the same sense as the choice of a unit of measurement. But that means no more than that the choice is independent of the length of the objects to be measured and that the choice of one unit is not ‘true’ and of another ‘false’ in the way that a statement of length is true or false. (PG p185)

Just as one can be wrong in calling a circle a square, one can be wrong in saying that a five foot long pole is four feet long; but it is neither correct nor incorrect to use feet instead of meters as a unit of measurement. “A *method* of measurement—of length, for example—has exactly the same relation to the correctness of a statement of length as the sense of a sentence has to its truth or falsehood” (PG p130). The method of measurement is antecedent to talking about correct or incorrect measurements; so too, a method of representation, i.e., a grammar, is antecedent to the correctness or incorrectness of a statement about reality. Therefore, we can use a variety of units to represent the length of

²⁶ This is not necessarily to say that one could change or modify the rules of grammar as quickly or easily as one could change the choice of a unit of measurement. This is easily seen, as we saw in chapter one, from, among other things, the intimate connection that exists between our actions and the meanings of words: the fact that to use language is to be involved in a practice, to be a master of a technique, and to engage in customary actions. Practices, techniques, and customs are not, of course, so easily changed or abandoned.

a rod, e.g., inches or centimeters, and we can use a variety of grammars to represent the phenomenon of what we call 'pain', e.g., a grammar that distinguishes pain from visible injury and pain from some internal malady as different things, or a grammar that makes no such distinction. Neither method of representing what we call 'pain' is correct or incorrect, just as neither method of representing length is correct or incorrect. It is the grammar that allows one to make true or false statements about a person's pain.

The arbitrariness of grammar is not an unqualified arbitrariness. Wittgenstein writes: "There is . . . [a] sense in which it is arbitrary which unit of measurement we use to express a length, and another sense in which the choice of units is limited or determined" (PG p193). Wittgenstein gives us several ways in which the choice of units could be determined. In giving a lecture he, presumably, holds up a piece of chalk and says that if we found that ordinary objects could be measured in multiples of this piece of chalk, it would be natural for us to choose the length of this piece of chalk for our standard unit of measurement. "Our unit of length is in that case dependent upon experience, in the sense that it is experience which makes us choose it. But if we later came across objects whose lengths were not multiples of this piece of chalk, we should not give up that unit of length" (LFM p42). This last part, while not necessarily germane to the present point, is worth iterating. It is the point made in chapter one regarding the distinction between a grammatical proposition and an empirical one. There we saw the idea that mathematical propositions, like ' $2 + 2 = 4$ ', might have originally been an empirical observation, but after a while it became hardened into a standard of addition. This hardening comes about from the use made of the proposition as a standard of correctness. We could say that just as nothing would make us give up the rule " $25 \times 25 = 625$ " (LFM p41), we would not give up our chalk unit of measurement even if things

started to not to be multiples of the chalk length.²⁷ Thus, analogous to a choice of a unit of measurement, grammar is neither right nor wrong; though there may be facts in the world that influence our choice of grammar or factors that make one grammar seem more natural than another. But such facts and factors do not necessitate a particular grammar.

There is another way that our unit of measurement is not arbitrary. Wittgenstein writes:

Language is an instrument. Its concepts are instruments. Now perhaps one thinks that it can make no *great* difference *which* concepts we employ. As, after all, it is possible to do physics in feet and inches as well as in meters and centimeters; the difference is merely one of convenience. But even this is not true if, for instance, calculations in some system of measurement demand more time and trouble than it is possible for us to give them. (PI §569)

Thus, in some ways, we can say that it is more convenient to measure our room in feet than it is in millimeters or miles, but in another sense it might not be a matter of convenience, e.g., if we had a job of measuring the free space left in warehouses and we were paid by the amount of free space we could calculate in an hour, we would surely not use square millimeters or light years as our unit of measurement. But to say that there is a sense in which grammar is not arbitrary, just as a unit of measurement is not entirely arbitrary, is to say only that there may be certain general facts, e.g., time constraints or other such limitations, that might make one choice practicable in comparison to another. But whatever these general facts might be, they do not necessitate a particular unit of measurement, and more importantly, they do not necessitate a particular grammar. For to say that, given our time restraints, we cannot use millimeters does not necessitate our using meters or yards; similarly, given our inability as humans to tell the exact quantity of large amounts of things by sight alone, a concept of a ‘heap’ that is too exact would not

²⁷This is not to deny the possibility of something occurring that would give us reason to change our use of these propositions.

be readily usable, but this does not necessitate an open ended conception of ‘heap’, nor does it necessitate any particular range of quantity that should be used. Further, it does not necessitate that the quantity that makes up a heap be the same for every kind of thing that composes a heap, e.g., the number of boards that could be said to make a heap could be different from the number of grains of sand that could make a heap, or it could be that the quantity must be the same regardless of the size of the constituent parts.

Above we said that, for Wittgenstein, one way that grammar is arbitrary is that one grammar, like one choice of a method of measurement, is neither right nor wrong in comparison to another choice of grammar. This is a very strong claim and one that still may not be entirely clear. To help facilitate an understanding of this claim, let us imagine a people different from us. We will call these people tribe X. These people are different from us in respect to the language that they speak. Let’s say that an explorer from our culture, call him Russell, comes upon tribe X. After a time, he acquaints himself with them to the point where he can understand parts of their language. He discovers that they do not seem to have separate color and shape concepts. Rather, they have a different word for a red circle and a blue circle, but also for a blue circle and a blue triangle, and they call two red circles by the same word.²⁸ We can imagine how odd this would seem

²⁸ Compare: “And what about people who only had colour-shape concepts? Should I say of them that they do not *see* that a green leaf and a green table—when I show them these things—have the same colour or have something in common? What if it had never ‘occurred to them’ to compare differently shaped objects of the same colour with one another? Due to their particular background, this comparison was of no importance to them, or had importance only in very exceptional cases, so that no linguistic tool was developed.” (RC III §130)

“If people only had colour-shape concepts, they would have a special word for a red square and one for a red circle, and one for a green circle, etc. Now if they were to see a new *green* figure, should no similarity to the green circle, etc. occur to them? And shouldn’t it occur to them that there is a similarity between green circles and red circles? But what do I want to say counts as showing that this similarity has occurred to them?

They might, *for example*, have a concept of ‘going together’; and still not think of using colour words.

In fact there are tribes which only count up to 5 and they have probably not felt it necessary to

to Russell, for they conceive of one square that is of one color as being a different kind of thing from another square of a different color. That is, where we distinguish between colors and shapes, they have only one concept that takes color and shape together. To many observers, tribe X would not just have a strange conception of colors and shapes. Rather, they would have the wrong conception, for *if we only look at the world, we can see that there really is a difference between shapes and colors*. It is in relation to this way of thinking that Wittgenstein writes:

One is tempted to justify rules of grammar by sentences like “But there really are four primary colours”. And the saying that the rules of grammar are arbitrary is directed against the possibility of this justification, which is constructed on the model of justifying a sentence by pointing to what verifies it. Yet can’t it after all be said that in some sense or other the grammar of colour-words characterizes the world as it actually is? One would like to say: May I not really look in vain for a fifth primary colour? Doesn’t one put the primary colours together because there is a similarity among them, or at least put *colours* together, contrasting them with e.g. shapes or notes, because there is a similarity among them? (Z §331)

Indeed, one wants to say, there are similarities among the colors that make us group colors together, just as there are similarities among shapes that make us group shapes together. It is because we recognize these similarities that our grammar is better, more complete, than tribe X’s. We distinguish between ‘red’, ‘yellow’, ‘blue’, etc., and our grammar correctly makes the distinction between shapes and colors, we want to say. One way to justify this is that our color grammar is supported by scientific investigation. For example, through scientific practices, we have discovered that different colors are just different frequencies of electromagnetic radiation. We could further say that we are justified in our conception of primary colors because there really are a group of colors

describe anything that can’t be described in this way.” (RC III §155)

that can combine to make any of the other colors. The problem with the former is that it is because of what we mean by ‘color’ that we can say that we discover that colors consist of different frequencies of electromagnetic radiation. With the latter, the problem is that the existence of colors that can be combined to form the rest of the color spectrum neither justifies our color grammar, nor the specific grammar of primary colors, for it is the color grammar that determines what a color is and what constitutes a primary color, which then allows us to talk about the number of primary colors. Wittgenstein writes:

It’s clear that a mistake arises from, e.g., saying: grammar would have to speak of four primary colors (words), because there were four primary colors. As if the case would be comparable to: Astronomy must speak of the four moons of Jupiter, because there are four moons. (*Big Typescript* [BT], backside, p193. My translation)²⁹

The mistake lies in the idea that grammar is analogous to astronomy and that it must speak of there being colors. But grammar and astronomy are not analogous; grammar is on a different level, for it determines what the terms used in astronomy mean. Since grammar is involved in astronomy, in the meanings of its terms, it is not something that can be compared with astronomy. What further shows the dis-analogy between astronomy and grammar is that while grammar determines the meaning of concepts, e.g., those used in astronomy, there is nothing analogous that determines grammar. What we might call ‘color talk’ and ‘astronomy talk’, however, are on the same level. Both are governed, given sense, by rules of grammar. For color talk, the rules of grammar determine the meaning of the terms ‘color’, ‘primary color’, etc. For astronomy talk, the rules of grammar determine the meaning of the terms ‘moon’, ‘planet’, etc. Given these rules of grammar, we can look at the world and count the number of primary colors and

²⁹ Es ist klar, daß es einer Verwechslung entspringt, z.B., zu sagen: die Grammatik müsse von vier primären Farben <<Wörtern>> reden, weil es vier primäre Farben gäbe. Als wäre der Fall vergleichbar dem: die Astronomie muß von vier Jupitermonden sprechen, weil es vier Jupitermonde gibt.

the number of Jupiter's moons. Grammar is antecedent to astronomy's talk of the number of Jupiter's moons and our talk of the number primary of primary colors. Thus, saying that because there are four primary colors grammar must speak of four primary colors shows confusion, for it is because of grammar that we can say that there are four primary colors. Analogously, that we say that Jupiter has four moons is because of the grammar of astronomy talk. Given the grammar of astronomy talk, one must speak of four moons orbiting Jupiter, but grammar itself does not have to speak of anything. That is to say, it is not necessary that grammar distinguish, e.g., colors from shapes, one color from another, or moons from planets. We do not read off the world that there are such-and-such colors, or that there are such things as moons, in the same way that we read off a description of what color an object is or how many moons a particular planet has.³⁰

Therefore, instead of saying, "Because of the inherent combinatorial nature of particular light waves, we are correct to say that there are primary colors," we should say that given what we mean by 'color', 'combination', 'mixing', 'primary', etc., it makes sense to speak of such things as primary colors. But that it makes sense does not mean that it is correct in the way that a description of reality is either correct or incorrect. Further, that tribe X's conception of colors and shapes makes little sense to us does not mean that their grammar is incorrect. The lack of sense that it holds for us is the result of a difference in grammar, in meaning—in language-games played.

Wittgenstein's elucidation of the arbitrariness of grammar goes against the idea that one grammar is right and another wrong. By grammar being arbitrary, he means that, as one choice of a unit of measurement cannot be criticized as being incorrect, we cannot, e.g., criticize tribe X's grammar as being incorrect in comparison to ours. As we

³⁰ Compare: ". . . the rules must be laid down arbitrarily, i.e. are not to be read off from reality like a description. For when I say that the rules are arbitrary, I mean that they are not determined by reality in the way the description of reality is. And that means: it is nonsense to say that they agree with reality, e.g. that the rules for the words "blue" and "red" agree with the facts about those colours etc." (PG p246)

have seen, part of the reason why one grammar is not correct and another correct is because there is nothing in reality that necessitates any particular grammar, nor can reality be consulted to check the correctness of grammar. To further explicate the idea that grammar is neither correct nor incorrect, let us look at several remarks that Wittgenstein makes to help prod us loose from the idea that our conceptualization of reality is necessary and correct. Wittgenstein writes:

Must people be acquainted with the concept of modesty or of swaggering, wherever there are modest and swaggering men? Perhaps nothing hangs on this difference for them.

For us, too, many differences are unimportant, which we might find important. (Z §378)

Indeed, there are many differences that could be important for us but which are not. For example, we conceive of light from the sun and the light from our electric light bulbs, from fires, from iridescent materials, etc., as all being light. We believe that we are justified in doing so because they all illuminate. Further, science has discovered that these sources of what we call 'light' all give off electromagnetic radiation produced by subatomic particles emitting energy. Though this is so, we still could have conceived of a difference between sun light and all other sources of light. To help see the possibility of this, we can imagine that sun light is the only light source available to us that feeds the process of photosynthesis. Given this difference, we might naturally consider sun light to be the only 'light', while all other sources of electromagnetic radiation might be conceived of as something entirely different than 'light'. People might insist on filling their homes only with (sun) light, using mirrors to direct the light from outside into the interior of their homes, or they might build their homes entirely out of glass. At night, people might only use moonlight and if none were available, they might just go to bed. Would such a culture or society resemble ours? Probably not, but we need to remember that our society, our culture, is not the paradigm to which all others need to aspire.

Indeed, this kind of example emphasizes the connection between our actions and our concepts. Though the above example may seem far-fetched, such examples may help to dissolve our prejudices in favor of our own language-games. It is the idea of imagining different cases that presumably led Wittgenstein to write:

Can I say, however, that if *these* were the facts, men would have these concepts? Certainly not. But one can say this: don't think that our concepts are the only possible or reasonable ones: if you imagine quite different facts from those with which we are continually surrounded, then concepts different from ours will appear natural to you. (*Remarks on the Philosophy of Psychology I* [RPP I] §643)³¹

In arguing for the autonomy of language, Wittgenstein is not setting forth a hypothesis about what would happen to our grammar had the facts been different. Rather, he wants to show that there is nothing sacrosanct about our grammar or any grammar; that reality does not necessitate any particular grammar.

The importance of our current discussion is such that we cannot give too many examples of how grammar is neither correct nor incorrect. There are only different grammars and thus different meanings. Wittgenstein writes:

A tribe has two concepts, akin to our 'pain'. One is applied where there is visible damage and is linked with tending, pity etc. The other is used for stomach-ache for example, and is tied up with mockery of anyone who complains. "But then do they really not notice the similarity?"—Do we have a single concept everywhere where there is a similarity? The question is: Is the similarity important to them? And need it be so? And why should their concept 'pain' not split ours up? (Z §380)

We may be tempted to insist, though, that there really is a similarity between the two different conceptions of pain that this tribe has, they just aren't seeing it. But we already saw above that this insistence on one grammar over the other cannot be justified. What

³¹ For very similar remarks, see: PI p230, and RPP §48

we call a similarity is a difference to the tribe. Therefore, the tribe's conception of similarity and difference of pain is different from ours—not incorrect, just different. In continuation of the earlier citation of *Zettel* §331:

Or, when I set this up as the right way of dividing up the world, have I a pre-conceived idea in my head as a paradigm? Of which in that case I can only say: “Yes, that is the kind of way we look at things” or “We just do want to form this sort of picture.” For if I say “there is a particular similarity among the primary colours—whence do I derive the idea of this similarity? Just as the idea ‘primary colour’ is nothing else but ‘blue or red or green or yellow’—is not the idea of that similarity too given simply by the four colours? Indeed, aren't they the same?—“Then might one also take red, green and circular together?”—Why not?! (*Z* §331)

The point is that there is not some paradigm of similarity inherent in reality or elsewhere to which we compare colors to justify our grouping the colors together as colors, or to which we are justified in taking shapes together as shapes, or what we take to be one kind of pain with another kind of pain. Nor is there some inherent similarity between the various ‘colors’, ‘shapes’, or ‘pains’, that justify our conceiving of them as similar. Rather, it is our conceptual groupings of colors as ‘colors’, shapes as ‘shapes’, and pains as ‘pains’, that determine what in our language is a ‘color’, ‘shape’, or ‘pain’. The grammar of the various language-games determines what is to count as ‘similarity’, ‘difference’, ‘color’, ‘shape’, etc. We may find this difficult to accept, but we should ask ourselves what it is about colors that makes us group them together as the same kind of thing or as being different from shapes. In our age of science, one might be tempted to answer that colors have quantifiable electromagnetic frequencies that distinguish them from one another as well as from shapes and sounds. For shapes do not have electromagnetic frequencies, and sounds are waves of compressed air as opposed to waves of electromagnetic radiation. Unfortunately, there is much confusion in this line of thinking. For one thing, the grammar of our color words came about before the

discovery of electromagnetic radiation and the various wavelengths of color. Further, what we call colors are not the only things that consist of electromagnetic radiation, e.g., x-rays, ultraviolet light, etc., do too. One could argue, though, that the discovery of electromagnetic radiation *further* supports, *further* justifies, the grammar of colors. Thus it could be said that science ultimately justifies the distinction made in grammar between various colors, and the distinction made in grammar between colors, shapes, noises, etc. While this line of argument might seem plausible on the surface, it still fails to overcome the problem that the justificatory importance and relevance that a discovery such as electromagnetic radiation has is dependent upon the concepts that are in place. If a people were to conceive of shapes and colors together, in a way similar to that which we discussed earlier, then the discovery of electromagnetic radiation and the various frequencies of light might not be connected in the same way to their “color-shapes” as it is to our concept of color. That is, the importance of electromagnetic radiation might be different from the importance that we give to it, given our conception of colors. If light and sound were taken to be the same kind of thing because we took both sounds and colors to be loud or quiet, and then we found out that both light and sound are waves, we might not take note of the fact that sound is a wave of compressed air and light a wave of electromagnetic radiation. Such a difference might not be important given the original conception of light and sound being the same kind of thing. This last example may seem quite absurd, for we are tempted to say that we never would have taken light and sound to be same the kind of thing. But if we leave this bias for our grammar behind, then we can see that the point is that what is to count as a justification is contingent upon how things are conceived in the first place. We can say this generally: that A justifies B will depend on what exactly A and B are, which will be determined by grammar. We can speak of things being justified given a particular grammar, but there is no justification for the

grammar itself. Grammar is antecedent to meaning and is therefore antecedent to justification.

Despite earlier arguments, the antecedence of grammar may be hard to accept and we might find ourselves wanting to ask: What else might be called upon to justify a conception of colors as being different from shapes? Is there not some property that colors have that distinguishes them as a different kind of thing than shapes? This question is misguided, for the fundamental reason that what determines a color as a color, as distinguished from a shape, is the meaning of 'color' being different from that of 'shape,' and it is grammatical rules for the use of the words that determine meaning. Meaning is not found in the world such that it could determine the use of a word.

Connected to this Wittgenstein says:

We talk of kinds of numbers, kinds of propositions, kinds of proofs; and, also, of kinds of apples, kinds of paper, etc. In one sense what defines the kind are properties, like sweetness, hardness, etc. In the other the different kinds are different grammatical structures. (BB p19)

In one sense, we define the kind of thing an apple is by reference to its color, shape, texture, taste, etc., but in the other sense, these properties are what they are due to the grammar of colors, shapes, etc. That an 'apple' is different from an 'orange' is determined by grammar, by what we mean by 'different', 'same', 'apple', and 'orange'. That what we call a 'Golden Delicious' is the same kind of thing, namely an apple, as a 'Granny Smith' is determined by grammar. Similarly, the difference in kind between colors and shapes is a difference of grammatical structure. There are no properties of shapes or colors that can be used to define them that do not assume the grammar of shapes and colors. We feel the pull to say that there is something about colors that makes us distinguish them from shapes, or something about shapes that makes us distinguish them from colors. We might say, e.g., that a square is defined by having four sides of

equal length, with each pair of sides parallel. Colors, though, don't have sides, and we cannot talk of colors being parallel. Therefore, we might conclude, shapes really are different from colors. This is the same trap that we keep falling into; the reason why squares have sides and colors do not is because of what we mean by 'square' and 'color'. And, again, meaning is given by grammar. It is grammar that determines the differences between colors and shapes. There are neither grammatically independent properties, nor is there some language-independent paradigm that determines what we mean. Grammar is not required to emulate, or correspond to, an underlying super-paradigm to which all languages are supposed to approximate more or less, against which all languages are to be judged and justified. There is not some essence in reality that language tries to, so to speak, match up with or represent. Rather, it is grammar that expresses essence and says what kind of object something is (PI §§371, 373). Why do we say that white is lighter than black? We are tempted to answer, "Look, you see that it is so." This begs the question in favor of our color grammar, and is thus no answer. We might want to say that it is part of the essence of white that it is lighter than black. But in as much as it is possible to speak of the essence of 'white', we are speaking of grammar. Someone asks what the essence of white is and we answer that it is part of the essence of white that it is the lightest color. Then she asks what 'lightest' means, and we are forced to give an example. We point to something white and then to something black and say that the first is lighter than the second. In fact, the former is the lightest color and the latter is the darkest color. In doing this, though, we have not pointed out any essence; rather, we have ostensibly defined what 'lighter than' and 'darker than' mean. According to Wittgenstein, a black patch and a white patch can simultaneously serve as a paradigm of what we take to be 'lighter than' and 'darker than', and for what we take to be 'black' and 'white' (RFM p76). And so, in giving the example of white and black, we are giving

a paradigm, a standard for the correct use of 'lighter than' and 'darker than'. Imagine another case: a child has a workbook on the cover of which it reads: "Teach Your Child Colors," and on the inside there are various colored objects and sometimes just patches of color with the color's name just above. There is a black patch above which is the name 'black', and similarly, there is a white patch above which is the name 'white'. Next in the book, there is a drawing of a black dog next to a white cat. Above the two animals reads: "The dog is darker than the cat." This is followed by other examples to reinforce the ideas of 'darker than' and 'lighter than'. These grammatical examples are used to set up possibilities of meaningful comparisons and judgments involving experience. The child learns that black is darker than white and then, as she develops her technique, she can compare this to the evening and the sun going down, whereby she makes the judgment, "It's getting darker."

A child looks at a book of animals and above one of them he writes the word 'dog', and above another he writes the word 'cat'. In doing so, he is describing what he sees, but when the child sees in a book, like the one described above, a picture with the word 'dog' above it, this is not a description of what is there. It is a rule. As Wittgenstein writes:

In one case we make a move in an existent game, in the other we establish a rule of the game. Moving a piece could be conceived in these two ways: as a paradigm for future moves, or as a move in an actual game. (Z §294)

The child writing 'dog' and 'cat' above the pictures is making a move in an existing language-game. In the case of the books for teaching, a paradigm is given for future moves. We saw this difference in our discussion of the difference between a grammatical rule and an empirical proposition in chapter one. Tying it in here with the arbitrariness of grammar, we see that Wittgenstein's point is that the paradigm case is not a paradigm because it corresponds to how reality really is; rather, it is a paradigm because of the role

it plays as a grammatical rule determining meaning. Since it is a paradigm as a result of its role, which could have been otherwise, and not its fidelity to reality, it is arbitrary and language is autonomous.

(4) A woman is tapping her foot in an annoying manner and we say, “Stop!” She gives us a dirty look, but stops. The meaning of “Stop!” is not determined by the effect it has on the woman. A word’s meaning is independent of the effects brought about by its use. The rules of grammar do not say anything about bringing about certain effects. Rather, for Wittgenstein, the rules of grammar determine the meaning by the way the word ‘stop’ is used in the various language-games in which it has a place. To further explore the idea that meaning is independent of desired effects, let us ask the following question: What would it be like if there did not exist in our language the use of the word ‘stop’ as an imperative, as an order; if there still existed, say, talk of things stopping, and we still described people as stopping what they were doing, just that there was no use of “stop” as an imperative? In such a case perhaps, instead of saying ‘stop’ to one another, people described the thing that should be stopped. For example, in our case of the woman tapping her foot we might say, “The sound of your foot tapping is particularly disturbing right now.” At this, she decides whether or not to continue the tapping. In this language, if someone were simply to say “Stop!” to another, they would not know what is meant. They might react by looking around and saying, “What thing is stopping?” or something similar. Viewing this language from the perspective of our own, it might seem deficient; we might say that they *cannot* tell each other to stop doing something with the directness and urgency that we can—they can only intimate that something should be stopped. But it is questionable that we should say that they ‘cannot’ do something, for it is not that they cannot do something but that they do not do

something.³² It is not that they wish they could tell someone directly to stop and just cannot; rather, there is no imperative conception of using ‘stop’. Their “inability” to say, “Stop!” is not the same as their inability to fly by flapping their arms. In checkers, one cannot castle, but this does not reflect on the adequacy of the game. It is within chess that castling makes sense, as it is within our language that imploring or ordering someone to stop doing something makes sense. The effects that one desires to bring about by using language do not determine the grammar of the language. It is within the language that such effects are conceived. If there is no grammar, no conception, of ordering someone to stop doing something, then it does not make sense to say: in order to make someone stop doing something we must have the grammar of ordering someone to stop doing something (BT, back side, p191). For, as Wittgenstein writes: “To invent a language in order to express something in particular: but this something must already be expressed if I can say that I want to express it” (BT, back side, p191. My translation.).³³ While needs and desires are expressed in language, they do not determine a language.³⁴

We use language to do many things, e.g., influence others, build things, teach, etc., and to this extent we might say that language has a purpose. Nevertheless, grammar

³² Compare: “Do not say ‘one cannot’, but say instead: ‘it doesn’t exist in this game’. Not: ‘one can’t castle in draughts’ but—‘there is no castling in draughts’; and instead of ‘I can’t exhibit my sensation’—‘in the use of the word “sensation”, there is no such thing as exhibiting what one has got’; instead of ‘one cannot enumerate all the cardinal numbers’—‘there is no such thing here as enumerating all the members’.” (Z §134)

³³ Eine Sprache erfinden um mit ihr etwas Bestimmtes auszudrücken: aber dieses etwas muß schon vorher ausgedrückt sein, ~~er~~ <<wenn>> ich sagen kann, daß ich es ausdrücken will.

³⁴ This is, of course, not to say that our concepts are not influenced by goals, aims, needs, or desires. For example, if we had a number grammar that went, 1, 2, 3, 4, 5, many, and we aspired to fly into space, we might find that we could not reach the necessary precision with this number scheme. We might then reform the grammar of our numbers. Or we might decide that flying into space is not possible, for all our calculations show that it is not possible to achieve such precision, i.e., we might hold to our grammar come what may. The main point to understand is that a goal or aim is not going to necessitate any particular grammar, though it may influence a choice of grammar or encourage us to make refinements.

does not concern itself with whether or not the language is understood, who understands it, or whether or not, e.g., an order is followed. That is to say, grammar does not concern itself with the purposes to which the language is put (BT, back side, p192). For Wittgenstein, grammar is a description of the language, as the rules of chess are a description of the game of chess. But just as whoever describes the rules of chess does not talk of the application and usefulness of chess, neither does the description of a language concern itself with the application or usefulness of the language (BT p192). Grammar determines meaning and does not say anything about what effects will come about through one's using language in accordance with the grammatical rules. That this arrow \leftarrow means 'go left' and this arrow \rightarrow means 'go right' is determined by the rules of grammar. Whether they are correctly followed is independent of what they mean. That someone goes left at this arrow \leftarrow does not determine what the arrow means; rather, it is a criterion for his having understood and followed the arrow.

It does not count as a justification in all cases for someone to react in the desired way or when something has the desired effect. If we are carving a block of wood into a statue of the Virgin Mary, we call it the correct cut that brings forth the image we are trying to achieve. We might say the particular cut is justified by its bringing about the desired results, the desired effect. But as Wittgenstein points out, we do not call an argument a good argument or a calculation correct because of the results, the effects, that are brought about by it (PG p185). Wittgenstein makes a pertinent reference to a joke to help illustrate this: A person wins the lottery and he tells another that he chose the winning number because he saw a box with the numbers 5 and 7 on it. He then worked out that when multiplied the product is 64. The other person corrects him, saying that 5 times 7 is not 64, to which the winner says, "I've hit the jackpot and he wants to give me lessons!" (PG p185). Though the results in such a case are positive, they do not make it

correct to say that the product of 5 times 7 is 64. Analogously, we do not call grammar correct because of the effects it brings about. Effects that are brought about by means of language are dependent upon context and the intentions of those involved—not grammar. We may know that if we ask someone to do something it will make him angry, and because we want to make him angry, we ask him to do it. Here, a request is being used to anger someone, but the grammar of ‘requesting’ has nothing to do with causing anger (Compare: PI §498). Rather, grammar gives the rules for the use of terms, e.g., in the language-game of making and fulfilling requests.

(5) In order to cook a quiche you must cook the eggs until they harden. If you do not, it won’t really be a quiche, and if you eat what is there, it won’t taste very good. This rule for cooking a quiche is not arbitrary. If you want to have a quiche, you must follow it. In cooking, the desired end product determines what rules must be followed to achieve it. The rules of grammar are not like this. They determine what makes sense and are not determined by some preexisting meaning. Unlike in cooking, with grammar the purposes to which language may be put do not determine which rules have to exist. If there is a rule stating that an egg will only be soft boiled if cooked for no longer than three minutes, yet due to some peculiar circumstances, one cooks an egg for five minutes and it comes out as if it had only been cooked for three minutes under normal conditions, we would not say that the egg is not soft boiled (BT p236). But if one wants to make someone stare and gape and so one says “Milk me sugar” this does not mean that we call ‘milk me sugar’ an order to stare and gape (PI §498). Wittgenstein says that “The rules of grammar may be called ‘arbitrary’, if that is to mean that the aim of the grammar is nothing but that of the language” (PI §497). As far as grammar has a purpose, that purpose is to determine the meaning of signs, terms, expressions, etc. But in determining meaning, grammar does not say anything about the goals or purposes to which one might

use language.

Unlike cooking, whose rules can be justified by the end result of the cooking, namely food that is edible and palatable, language cannot be justified by the ends of its use. For example, with cooking one can ask why we add eggs to the dough, and we can justify the action by saying that the cake tastes better when we do so (we experience an effect and give it as a reason for doing what we do) (BT p235). But if we ask why we have grammatical rules that separate colors from shapes, it is no justification to say it is because the world is better represented through the grammatical division of colors and shapes. The world is not represented badly if language does not distinguish between colors and shapes, but one cooks badly or one's dough will not taste good if one does not add eggs to it. As Wittgenstein says: "You cook badly if you are guided in your cooking by rules other than the right ones; but if you follow other rules than those of chess you are playing another game; and if you follow grammatical rules other than such and such ones, that does not mean you say something wrong, no, you are speaking of something else" (PG p184-85). Further:

The connection between the rules of cookery and the grammar of the word "cook" is not the same as that between the rules of chess and the expression "play chess" or that between the rules of multiplication and the grammar of the word "multiply". (PG p185)

When we cook, we have to follow particular rules—a recipe—if we want to cook an appetizing version of a particular dish. If we do not follow these rules of cooking, we would still say that we are cooking, just that we are not cooking very well. If we say we are going to play chess, then we follow the rules of chess. If we do not follow the rules of chess, e.g., if we allowed a white pawn to jump over a black rook, queen, and then the knight, thus removing them from the game as is done in checkers, we would not say that we are playing chess badly; rather, we would either be playing another game or no game

at all. Similarly, if we say we are going to multiply, then we must follow the rules of multiplication. If someone says that he multiplied 10 times 10 and got 20, we could correct him by saying either he added the two numbers, thus not multiplying them, or simply that that is not multiplication. It is in this sense that the concept of 'cooking' is connected differently to cooking than the concept of 'playing chess' is connected to playing chess, and 'multiplying' to multiplying. We cook badly if we don't follow particular rules of cooking, but we neither play chess badly if we do not follow the rules of chess, nor do we multiply badly if we do not follow the rules for multiplication. To play chess and to multiply are to necessarily follow the rules of chess and multiplication, regardless of whether one has fun or wins the lottery by using the product of a multiplication for the winning number. In cooking, it is the goal of palatable food that determines the requisite activity, the rules to be followed. But one still cooks if the rules are not followed exactly. With grammar, that one is giving an order is not determined by the goal of producing a particular effect in the recipient. Rather, one is giving an order because in the English language saying such-and-such in such-and-such circumstances is *ipso facto* giving an order.³⁵ But not following the rules of grammar of a particular language-game exactly does not mean that one still says something meaningful. In such a case nothing is said or something else is said. If one says, "Bring me a red flower," and the recipient does nothing, then one has not given the order badly or followed the rules of grammar of ordering badly. If someone says to us, "I wanted him to bring me a red flower!" and we ask, "Did you ask him to?" and she says, "I didn't just ask him to, I ordered him to." If we then ask, "What exactly did you say?" and she answers, "I said 'Oh, how a red flower would make me so happy right now'," then she did not order him

³⁵ Compare: Arrington, Robert. P 71ff. in: *Wittgenstein's Intentions*. Ed. John V. Canfield and Stuart G. Shanker. "The Autonomy of Language." New York: Garland Pub., 1993. Pages: 51-80. I am very much indebted to both Dr. Arrington and this article.

badly. Rather, she did something other than giving an order, namely she expressed a desire.

We see, then, that when Wittgenstein talks of grammar being arbitrary and language being autonomous he means: (1) Grammar determines meaning—meaning is not read off the world. (2) Grammar is unverifiable, i.e., any attempt to justify a choice of grammar by verification will be circular. (3) Like a choice of measurement, grammar is neither right nor wrong, correct nor incorrect; though there may be practical or practicable requirements that may influence a choice of grammar, as there may be ones that influence a choice of measurement. (4) Grammar is not justified by bringing about certain effects, since grammar has nothing to say about effects, i.e., grammar gives the rules for the use of words, but what is effected through their use is a contingent matter, which grammar says nothing about. (5) Grammar is not determined by various goals or aims we might have, though such goals or aims may influence the formation of a particular grammar.

Three

Kripke and Natural Kinds

Not many people have argued explicitly for or against Wittgenstein's idea of the arbitrariness of grammar and the autonomy of language.³⁶ Despite this fact, there are still writings in the body of philosophical literature that come into conflict with his conception of the autonomy of language. Specifically, Saul Kripke's understanding of natural kinds seems to go against the arbitrariness of grammar, against the idea that grammar tells us what kind of object something is (PI §373). Kripke's conception of natural kinds is exemplified by his saying that gold is necessarily, in a metaphysical sense, just that substance with the atomic number 79 (*Naming and Necessity* [NN] p125); all other properties being contingent. An investigation of Kripke's idea of proper names and how they refer will help to engender an understanding of his conception of natural kinds. For as he writes: "terms for natural kinds are much closer to proper names than is ordinarily supposed" (NN p127). To begin with, then, I will present a basic explication of Kripke's view of proper names before going into his conception of natural kinds. Once this is done, we will enumerate the differences between Kripke and Wittgenstein before examining the reasons why Kripke is mistaken about his conception of natural kinds.

According to Kripke, many philosophers take *a priori* truths and necessary truths as equivalent. Kripke finds this problematic, emphasizing the distinction between epistemological necessity—a prioricity—which has to do with truths that "can be *known* independently of any experience" (NN p34. My emphasis), and metaphysical necessity, which does not require knowledge of any particular fact of the necessity. Kripke is interested in this latter notion of necessity. If Φ is false, then it is certainly not

³⁶ See Arrington for very good arguments for the autonomy of language.

necessarily true, and if Φ is true, the question arises as to whether it could have been otherwise. If it is not possible that the world could have been different in respect to Φ being true, then Φ is necessarily true. That is, if Φ is true in all possible worlds where Φ occurs, then Φ is necessarily true. On the other hand, if it is possible that Φ could have been false, then Φ is contingent. Rephrased, if Φ is not true in all possible worlds, then Φ is contingent. But whether something is necessarily true or contingent is independent of whether or not it is known to be so. The domain of this necessity is thus different than the domain of *a priori* necessity. Kripke gives Goldbach's conjecture that every even number greater than 2 is the sum of two prime numbers as an example of a necessary truth. This conjecture is either necessarily true or necessarily false. If it is true, then it is true in all possible worlds, and if false, then false in all possible worlds. For assuming that it is true means that if every even number greater than 2 is the sum of two primes, it does not make sense to say that there is an even number greater than 2 that is not the sum of two primes. Another way to say this is that given Goldbach's conjecture assumed true and given what is meant by a prime number, it is necessarily true that any even number greater than 2 is the sum of two primes. It is not a contingent truth based on what is going on in the world, i.e., the world could have been different than it is, but given Goldbach's conjecture and what we mean by 'prime number', it is true in all possible worlds—it is necessarily true (NN pp36-37).

This leads us to Kripke's understanding of what it means to talk of 'possible worlds'. According to Kripke, the wrong way to understand 'possible worlds' is to think of them as other countries that we view as an observer, where we look at a 'possible world' and rely on a description of the things in it to identify what is what. According to this way of understanding 'possible worlds', we know who Wittgenstein is in our world, but in order to pick him out in another possible world, we must rely on a description of

how he looks, of the things he does, or of some other property of Wittgenstein that allows us to know that *this* person in *this* other possible world is the same person as Wittgenstein in the actual world (NN p43). The correct way to understand what is meant by ‘possible worlds’ is to see that they are not like distant countries that we observe. Rather, “a possible world is *given by the descriptive conditions we associate with it*” (NN p44). That a particular person is Wittgenstein in a possible world is not given by our recognizing him as such via certain properties that identify him. Wittgenstein is identified in a possible world as the person we stipulate as Wittgenstein. We say that in another possible world Wittgenstein did not write any philosophy, and we know that we are talking about Wittgenstein because we describe the counterfactual situation such that *this* person *is* Wittgenstein (NN p44).

Now we turn to an idea of fundamental importance for Kripke, namely the idea of a rigid designator. Something is a rigid designator “if in every possible world it designates the same object . . .” (NN p48). For Kripke, the name ‘Wittgenstein’ is a rigid designator for a particular person, namely the person we know as Wittgenstein in the actual world. Regardless of what we might have Wittgenstein do in another possible world, the name ‘Wittgenstein’ picks out *this* person. Conversely, the description: “The man who wrote the *Tractatus Logico-Philosophicus*,” is not a rigid designator, for in another possible world G.E. Moore could have written the *Tractatus Logico-Philosophicus*, or it may not have been written at all. However, in that same possible world Wittgenstein, the same man we mean when we talk of Wittgenstein in the actual world, could have been around working as an engineer, or he could have killed himself while first studying with Bertrand Russell (NN pp48-49). Anything that we identify Wittgenstein as having done in the actual world does not rigidly designate, refer to, or pick out, Wittgenstein in another possible world that we might describe. But, as we

stipulate who or what is in a possible world, the person we refer to as Wittgenstein in the actual world is necessarily the same person we refer to in another possible world when we use the name 'Wittgenstein' to mean the same man we mean when we talk of Wittgenstein in the actual world.

What we mean by a proper name can usually be shown by ostensively pointing at it, by "baptizing" it ostensively (NN p96). But in lieu of pointing at Wittgenstein in the actual world—since he is deceased—and saying, "That is who I mean by 'Wittgenstein'," we have to say something like, "By 'Wittgenstein' I mean the man who, in the actual world, wrote the *Philosophical Investigations*, and who was a professor in England and who was born in Austria, etc." For Kripke, this description is not synonymous with 'Wittgenstein', nor does it rigidly designate him in all possible worlds. In terms of rigid designation, we use such a description to "fix the referent" of the name 'Wittgenstein' in the actual world. Once the referent is fixed, the name 'Wittgenstein' rigidly designates the man referred to in the actual world by 'Wittgenstein' in all possible worlds. Thus, when we say, "By 'Wittgenstein' we mean to refer to the Austrian who wrote the *Tractatus Logico-Philosophicus*," the name 'Wittgenstein' means *that* man who wrote the *Tractatus Logico-Philosophicus* in the actual world, even if we have Wittgenstein being a priest in a counterfactual situation (NN pp57, 96). To iterate, what Wittgenstein did or did not do in the actual world, or what we have him do or not do in a possible world, is contingent, but that 'Wittgenstein' refers to *this* man is necessary in all possible worlds, *this* man being the reference of the name 'Wittgenstein', which we fix by a description used to identify him as whom we mean in the actual world (NN pp106-7).

For Kripke, a description of Wittgenstein by his actions is contingent, for such a description does not necessarily pick out Wittgenstein in all possible worlds. Indeed, in another possible world we can mean by 'Wittgenstein' the same man we mean by

'Wittgenstein' in the actual world, even when *that* man does nothing that we know Wittgenstein to have done in the actual world. However, there are certain properties, according to Kripke, that could be necessary conditions of someone being the reference of a rigidly designating name. More precisely, Kripke writes, "If we can't imagine a possible world in which [Wittgenstein] doesn't have a certain property, then it's a necessary condition of someone being [Wittgenstein]" (NN p46). That is, supposing that Wittgenstein is truly human, in any possible world where Wittgenstein exists, he will necessarily be human and not an inanimate object, a robot, etc. (NN p46). It is a separate and epistemological question as to whether we know that Wittgenstein is human. In talking of possible worlds, we are not engaged in epistemological fact finding. We simply say that assuming the man we mean by the name 'Wittgenstein' is human, he is human in all possible worlds. We can speak of Wittgenstein the man as not being a philosopher in another possible world, but we cannot speak of Wittgenstein the man as not being a man in another possible world when it is a man that we have been calling 'Wittgenstein'. This is the same necessity that we saw in regard to Goldbach's conjecture where we said that, given the supposition that the conjecture is true and given what we mean by 'prime number', it is necessarily true that any even number greater than 2 is the sum of two primes. Similarly, that Hesperus is Phosphorus is necessarily going to be true in all possible worlds, given what we have fixed as the reference for these names. That is, in the actual world we say that 'Hesperus' is the name for the planet Venus seen at night, and 'Phosphorus' is the name for the same planet Venus seen in the morning. Thus, Hesperus is Phosphorus. We may describe another possible world where two different planets take the same position in the night and morning sky and that are both called 'Hesperus' and 'Phosphorus' respectively, but these planets will not be the 'Hesperus' and 'Phosphorus' that we mean by the same names, for 'Hesperus' and

'Phosphorus' are used to rigidly designate a particular planetary body, independently of what that body does in any possible world.

We now turn to Kripke's discussion of natural kinds, which we will find to be connected with the above discussion of proper names and rigid designators. Natural kinds are such things as gold, water, tigers, light, and heat. It is argued that these natural kind terms pick out a particular kind of something that is necessarily that something by virtue of certain essential characteristics or properties. A natural kind is "a category of entities classically conceived as having modal implication; e.g., if Socrates is a member of the natural kind *human being*, then he is necessarily a human being" (*The Cambridge Dictionary of Philosophy* [CD] p521). Kripke writes that philosophers have "been very interested in statements expressing theoretical identifications; among them, that light is a stream of photons, that water is H₂O, that lightning is an electrical discharge, that gold is the element with the atomic number 79" (NN p116). In beginning his discussion to clarify such statements, Kripke asks, "What's gold?" In answering this, he brings up Kant's discussion of the distinction between analytic and synthetic judgments, where Kant says an example of an analytic judgment is: "Gold is a yellow metal" (NN pp116-17). For Kant, this statement would be *a priori*, and thus necessarily true, based on what is meant by 'gold' and 'yellow metal'. Kripke takes Kant to be saying that "it's a *part* of the concept that gold is to be a yellow metal. [Kant] thinks we know this *a priori*, and that we could not possibly discover this to be empirically false" (NN p117). But, Kripke asks, is it true that gold could not turn out to be another color? We can imagine a possible world where an elaborate illusion had been propagated by a demon such that gold had always appeared to be yellow, but then the demon is somehow killed, allowing the true color of gold to be seen, namely blue. According to Kripke, newspapers would announce that gold actually turned out to be blue, not that it actually turned out there was

not any gold. Thus, just as it is a contingent fact that the person that the proper name 'Wittgenstein' refers to wrote philosophy, it is a contingent fact that what we take to be gold has the color yellow. The kind of thing that gold is, is not determined by its yellowness. Rather, the yellowness is part of the description that fixes the reference of the term 'gold' to a particular kind of thing, just as the description of Wittgenstein as the philosopher who wrote the *Philosophical Investigations* fixes the reference. Further, we might find a bunch of rocks that have "all the identifying marks we commonly attributed to gold and used to identify it in the first place," but which are not actually gold (NN p119). We would not say, according to Kripke, that this substance is another kind of gold; rather, it is what we call 'fool's gold' or 'iron pyrite'. We can say that the one substance is fool's gold and the other substance real gold, not because the meaning of the word 'gold' has been changed, but because we discovered that true gold has particular properties that we originally did not use to identify the substance as gold, but which, once discovered, are used to differentiate it from fool's gold (NN p119). Similarly, we can fix the reference of the term 'tiger' by describing tigers as having various characteristics such as four legs, a tawny color, etc. But once the reference is fixed, what the term 'tiger' refers to does not necessarily have these characteristics in all possible worlds. We may come across a three legged animal that is actually a tiger, or, due to some illusion that we overcome, we discover that tigers really only have three legs. Or something could have all the characteristics that we usually use to identify a tiger, namely four legs, tawny color, etc., and yet when we look at it closer, perhaps by looking at its insides, we find out that it really is a reptile. According to Kripke, we would not say that some tigers are reptiles; rather, reptiles and tigers are different species of animal, which we knew even before looking at the internal structure of the animals. The terms 'tiger' and 'reptile' designate natural kinds rigidly. What we call a tiger is *this* kind of thing, said

while pointing to a “paradigmatic” sample or while giving a reference-fixing description. For anything to be a tiger, it has to have what is essential to *this* thing. This is in the same way that in a possible world, something must be human for it to be the same thing that we refer to in the actual world by the name ‘Wittgenstein’, since Wittgenstein was human in the actual world (NN pp120-22). Thus, the contingent properties that were initially used to identify a substance or kind of creature fix the reference. The term, whether it be ‘gold’ or ‘tiger’, rigidly designates the kind of thing that is paradigmatically exemplified. If gold is *this* substance, said while pointing to a paradigmatic instance, and *this* rock here is not the same as *this* substance (the paradigmatic instance), then *this* rock is not gold, even though they have all the outward appearances of being the same substance. Kripke asks us to imagine that scientists have established that it is part of the nature of gold that it have the atomic number 79. If this is true, then what the kind term ‘gold’ rigidly refers to is any instance of a substance with the atomic number 79. Gold is thus necessarily that substance with the atomic number of 79, just as Wittgenstein is necessarily *this* particular man, and Goldbach’s conjecture is necessarily true, if true at all. Thus, if there were a blue substance in any possible world with the atomic number 79, then it would be correct to say, with our meaning of gold as fundamentally defined by the atomic number 79, that it is the same kind of substance that we refer to with the term ‘gold’ in the actual world. Further, if a substance that had all the identifying characteristics that we normally use to identify gold were to be found in the mountains and places that were gold mines in the actual world, but this substance did not have the atomic number of 79, we would not, and should not, say that it was gold (NN p124).

So if this consideration is right, it tends to show that such statements representing scientific discoveries about what this stuff *is* are not contingent truths but necessary truths in the strictest possible sense. It’s not just that it’s a scientific law, but of course we can imagine a world in which it would fail. Any world in

which we imagine a substance which does not have these properties is a world in which we imagine a substance which is not gold, provided these properties form the basis of what the substance is. In particular, then, present scientific theory is such that it is part of the nature of gold as we have it to be an element with atomic number 79. It will therefore be necessary and not contingent that gold be an element with atomic number 79. (NN p125)

That is, given that we take gold to be that substance with the atomic number 79, anything that we come across in any possible world that does not have the atomic number 79 is not going to be the same kind of substance that we call 'gold' in the actual world; this is true regardless of any other identifying properties it might have, e.g., yellowness, metallic properties, etc. Similarly, if it is true that cats are animals, then it is part of the nature of the referent of the term 'cat' that it is an animal. Cats, if they are animals, are thus necessarily animals. If we came across something that appeared to be a cat, but was actually a demon, we would not say that cats are not in fact animals. Rather, we would say that the demon appears to be a cat but is not. Cats could have turned out to be demons of a certain cat-like shape, but once we discover that cats *are* animals, then they are necessarily animals in all possible worlds (NN p126).

Kripke holds, as can be gleaned from the above, that science can empirically discover the necessary properties of things (NN p128). He specifically mentions that science can discover the necessary properties of cows and tigers, but given what we have seen above and what we will see below, it is correct to take him to believe that science can empirically discover not only the necessary properties of things such as cows, but also natural kinds such as gold and water. According to Kripke, it was a discovery that water is H₂O, prior to which water was identified by "its characteristic feel, appearance and perhaps taste, (though the taste may usually be due to the impurities)" (NN p128). But now we identify the molecular composition of a substance as essential to what constitutes its kind. That is, we rigidly designate by the term 'water' *this* substance, said while pointing to a paradigmatic sample consisting of H₂O. We could come across

another possible world where there was, at room temperature, a liquid that looked, felt, tasted, and behaved like what we call water, but which upon analysis was not composed of H₂O. In such a case, Kripke says, we would not then say that some water is not composed of H₂O, rather we would call this liquid ‘fool’s water’ or something else (NN p128).

Science has identified heat as molecular motion, though originally we identified heat as a particular sensation. But in some possible world, our bodies might have been so constructed that we did not have this particular sensation and yet molecular motion could still cook food and so on. What we refer to by ‘heat’ is originally fixed by a particular sensation, but what is essential to heat in all possible worlds (what we mean by ‘heat’) is molecular motion. So in a world where a people did not have nerves that were sensitive to what we call ‘heat’, molecular motion would still be what *we* mean by ‘heat’. In a possible world where light produced in these people the sensation that we call ‘heat’ (and molecular motion did not produce such a sensation), we would not call this phenomenon ‘heat’. To restate, we rigidly designate heat as molecular motion, whose reference was originally fixed by a particular sensation, but this sensation does not identify heat in all possible worlds (NN pp131-33). Once we have discovered that heat is molecular motion, “we’ve discovered an identification which gives us an essential property of this phenomenon. We have discovered a phenomenon which in all possible worlds will be molecular motion—which could not have failed to be molecular motion, because that’s what the phenomenon *is*” (NN p133).

There are two points that need to be emphasized: (1) It is scientific investigation that discovers the essential characteristics of kinds, such as gold—‘essential’ in the sense that they are true of the kind in all possible worlds. It is science that tells us that for something to be gold it must have the atomic number 79. And in all possible worlds,

what we mean by ‘gold’ will necessarily have the atomic number 79, regardless of such phenomenal characteristics as color. “In general, science attempts, by investigating basic structural traits, to find the nature, and thus the essence (in the philosophical sense) of the kind” (NN p138). Science empirically discovered that molecular motion or ‘mean molecular kinetic energy’ is what we mean by ‘heat’. We rigidly designate molecular motion through the fixing of it as the reference of the term ‘heat’ by such things as the sensation that we call ‘heat’. (2) Taking species essences as an example, discoveries made by science do not change the meaning of the terms. That the biologist denies that whales are fish does not show that the layman and the biologist mean two different things by ‘whale’. Rather, both biologist and layman mean *this* by the word ‘whale’, said while pointing at a paradigmatic instance. The biologist is merely correcting the layman by informing him that whales are necessarily mammals and not fish (NN p138). That is, if *this* is what we mean by the term ‘whale’, then if in another possible world something has the same shape and feel as *this*, but is a fish and not a mammal, it is not what we call a ‘whale’, even though it may have the characteristics that we usually use to fix the reference of the term ‘whale’.

Kripke and Wittgenstein give two different ways of looking at essence, necessity, and the proper understanding of what science does. We have seen these differences in chapters one and two, where we explicated Wittgenstein’s idea of grammar, and just above, where we explicated Kripke’s understanding of proper names and natural kind terms. Let us now make these differences explicit before we turn to the discussion of how and why Kripke’s understanding of natural kinds and rigid designation is problematic. For Kripke: (1) Natural kinds have metaphysical essences that are discoverable by science. Thus, (2) we could say that what kind of object or thing something is, is determined by science. (3) Once science discovers the essence of a











natural kind, then whatever has that essence is necessarily of that kind and whatever does not have that essence is necessarily not of that kind. (4) The reference of a natural kind term is fixed by an initial baptism or by a contingent description—a description that is not synonymous with the natural kind term. That is, the description is not necessary for something to be of a particular kind. Rather, the description is used only contingently to pick out an object or thing that has the essence of the natural kind in question. In contrast, for Wittgenstein: (1) Essence is given through grammar. Thus, (2) what kind of object or thing something is, is determined by grammar. (3) Science may make discoveries about the things we group into kinds, but the categorization of things in such-and-such ways, and the taking of scientific discoveries as giving more information about the kind of thing in question, is a grammatical matter. (4) What Kripke calls a reference-fixing initial baptism and description are grammatical rules for the use of a term—rules that determine the meaning of the term. A grammatical rule may be contingent from the standpoint that it is not necessary that the rule exists, but a grammatical rule will not be contingent in the sense that it is inessential to the meaning. Dropping or changing a grammatical rule results in a change of meaning, a change in the use of the term.





Four

Wittgenstein and Kripke

As we saw from chapter three, Kripke and Wittgenstein offer conflicting viewpoints. In this chapter, I will argue for the following three points to resolve the conflict between the views of Kripke and Wittgenstein: (1) Neither essence, nor what kind of thing something is, is determined by science—both are determined by grammar. (2) The necessity that Kripke points to is not metaphysical—it is a necessity within a particular system of language. (3) A description of what a natural kind term refers to does not fix a reference—it gives rules for the use of the term.

(1) Essence is conceptually related to the idea of ‘identity’, which in turn is conceptually related to the idea of ‘sameness’. This is in the following sense: To inquire about the essence of something one must know what that thing is, e.g., in order to inquire about the essence of a circle, one must be able to identify what a circle is, be able to distinguish a circle from an oval, a square, a color, etc. But, that a circle is different from, i.e., not the same as, an oval will depend on grammar making a distinction between the two. That one object, or thing, is the same as or different from another is not determined by reality. As we learned in chapter two, when one tries to verify that a circle *really* is different from an oval, one would have to, e.g., point first to a circle and then to an oval and say, “The first is different from the second.” The problem with this is that it begs the question in favor of the grammar to be verified. Additionally, we might respond, “Okay, the one is different from the other, but what is the difference?” One might answer that the difference is that the circle’s radius is the same all the way around, whereas the oval’s radius varies. This is indeed a difference, but that we take it to be a difference is given by grammar, for we might now ask, “Why does the one having a

uniform radius and the other a varying radius constitute a difference?" What shall one answer to this question? One will be left to say that *that* is just what we call a difference. What has happened is that we have hit the bedrock of the language-game; this bedrock consists of arbitrary grammatical rules. Saying that this  is different from this  gives an example, a paradigm, of what we mean by 'difference'; just as saying that this  is the same as this  gives a paradigm of what we mean by 'sameness'. This is in the same sense that a swatch of black and one of white can be used as a paradigm for what we mean by 'lighter' and 'darker' (RFM p75-76). Thus the grammar of 'sameness' and 'difference' determines what we consider to be the same kind of thing or a different kind of thing; at the same time the grammar of sameness and difference is exemplified by the distinctions we draw between kinds of things. This might seem to leave language without a foundation, but the foundation, if we are to speak of one at all, is in the practice of using words thus and so, which we are inculcated in as we learn a language. We have mastered a technique of using language in various situations—we learn that the letter A is different from B, that A is the same as A, etc. But are T, I, and L the same or different? This will depend on what we learn to take as differences. We could say that they are different or we could say that they are the same because they all have this  in common; whereas the letters A, R, and O might be different because only one has this . However, we could also conceive of A and R as being the same because they have this  in common, for we have not yet said whether or not this  is different from this  or this . We can point out features that we take to be different, but at some point we will no longer be able to give reasons for why we

take those features to be different. When this point is reached, we are left with giving a rule of grammar, a norm of description. However, we might be able to say that we have the distinctions and similarities that are made in language because of what we take to be important. That is, we might say that the distinctions exist in our language because of particular aims or goals we could have, e.g., this board  might be said to cover this hole  better than this board , depending on how we needed the hole covered, thus inspiring us to treat the one differently than the other. Nonetheless, it is not necessary to distinguish between them, even in the case where we could say that the one is more useful to us than the other. We might just say that some of *these*  shapes work better than others, but not that they are different shapes. In the following passage, Wittgenstein is speaking of words, but the idea expressed is relevant to our present discussion: “how we group words into kinds will depend on the aim of the classification,—and on our own inclination. Think of the different points of view from which one can classify tools or chess-men” (PI §17). Just as we can group chess pieces in many different ways—e.g., by those figures that can move more than one space at a time or more than three spaces at a time compared to those that can move only one space at a time; by those figures that can move only forwards compared to those that can move forward and backward; by deciding that some pieces are better used offensively than defensively; by those figures that have a rounded tip compared to those that have a kind of pointed or edged tip, etc.—what we consider to be the same kind of thing as another depends on what our goals are or is simply an arbitrary decision. If we group the chessmen together that only move forward as being the same kind, we can then ask what is essential to these pieces being the same kind. Here the answer is seemingly obvious, for

what is essential to these figures being the same kind is that they can only move forward. But one might say, since it is just the pawn that only moves forward, that what makes these figures the same kind, what is essential to them, is that they are all pawns, which is what makes them able to move only forward. But what determines that they are able to move only forward are the rules of chess. Let us extend these points to our discussion of the classification of the kinds of shapes. We consider a square to be different from a triangle. But this is only partially true, for we consider a square to be the same thing as a triangle in that they are both polygons; though a square is a rectangle, whereas a triangle is not. A square and a rectangle are both parallelograms and a square is a kind of rectangle. What makes a square a rectangle and a rectangle a parallelogram is the grammar of the language-game of geometry, of shapes. We distinguish between acute triangles, right triangles, obtuse triangles, etc.—distinctions that lie in grammar, not in the shapes themselves. That is, what we mean by ‘difference’, ‘sameness’, ‘triangle’, ‘square’, etc. determines the distinctions between these shapes. What we mean by ‘difference’, ‘sameness’, ‘triangle’, ‘square’, etc. is determined by grammar. If we had had another conception of ‘sameness’ or if the kinds of angles, e.g., acute, right, obtuse, etc., were unimportant, we might not distinguish acute triangles from obtuse triangles, etc. In the other direction, if the kinds of angles had been more fundamental and the number of sides not as important, we might say that what we now call an ‘acute’ triangle and what we call a ‘scalene’ triangle are not the same kind of shape at all, i.e., they would not both be triangles.

There are various features that we use as criteria to differentiate one shape from another. We distinguish a triangle from a square, e.g., by the number of sides each has, by whether the sides are parallel, and by the inner angles of the shapes. However, this is not to say that when we usually work with shapes we employ such criteria. That is, when

we see a triangle or a square, or we see a triangle next to a square, we do not bring to mind the grammatical rules for what makes a square a square, a triangle a triangle, or a square different from a triangle. We simply see that *that* is a square and that *that* is a triangle. The criteria usually only come out in cases where there is some question as to what something is, or when we are teaching, e.g., a child about various shapes. A child calls a square a 'triangle' and we say, "No, that's a square. See, it has four sides." We do not consult the rules of chess every time we go to make a move. Similarly, we do not consult or bring to mind the grammar—we do not look at the criteria—for the use of certain words, unless there is some question of uncertainty or we are teaching someone how to play chess, how to talk about shapes, etc. This stems from our language being a practice, a custom. Using language, doing math, playing games are not a matter of consulting rules to decide how to proceed. Once learned, it is a matter of being involved in a practice (LFM pp237-8), it is a matter of course (PI §238).

With the above well in mind, let us now turn to the distinction between gold and pyrite—their criteria of identity, their grammar. Other than doing a chemical analysis of a substance suspected to be gold or pyrite, there are various ways to tell if something is one or the other.³⁷ The following categories are some of those used to describe or determine what kind of mineral one has in hand: (1) color, (2) streak, (3) hardness, (4) specific gravity, (5) fracture, and (6) tenacity. The first is clear; the second is the color that results from the mineral being rubbed against a hard white porcelain object; the third is how hard the mineral is based on a scale of 1 to 10, where 10 is the hardest; the fourth "determines how heavy [a mineral] is by its relative weight to water," i.e., the specific gravity reflects the density of the mineral; the fifth is the characteristic way a mineral breaks when put under stress"; and the sixth is "a mineral's physical reaction to stress

³⁷ All of the following information on minerals is from Friedman, as cited in the Works Cited.

such as crushing, bending, breaking, or tearing.” One can do a chemical analysis of a substance that appears to be gold and if it has the formula Au, we then know that it is ‘gold’ and if it has the formula FeS₂, we know that it is ‘pyrite’. However, such an analysis is usually unnecessary, for the above six categories can be used alone to distinguish ‘gold’ from ‘pyrite’. Comparing gold to pyrite, we have the following chart:

	<u>Gold</u>	<u>Pyrite</u>
1. Color:	Golden yellow to brass yellow	Yellowish gray to gray
2. Streak:	Golden yellow	Black with a slightly green tinge
3. Hardness:	2 1/2 - 3	6 - 6 1/2
4. Specific Gravity:	15.5 - 19.3	4.9 - 5.2
5. Fracture:	Hackly	Conchoidal
6. Tenacity:	Ductile and malleable	Brittle

In regard to the fracture category, ‘hackly’ means that the fracture is jagged with sharp edges; ‘conchoidal’ means the “fracture has an indentation [that] resembles a shell.” In regard to the tenacity, ‘ductile’ means that the mineral can be stretched into a wire; ‘malleable’ means the mineral can be flattened by the pounding of a hammer; and ‘brittle’ means that the mineral, upon being hammered, turns to powder or small pieces. A further difference between gold and pyrite is that, unlike pyrite, gold conducts electricity very well.

It is through grammar that these various features are distinctive criteria, criteria with which we identify gold or pyrite. The way these differences are brought out and used is, in part, influenced by the various goals that humans have had combined, perhaps, with the availability of the minerals. It is in grammar that the distinction between brittle and malleable is determined. We can say that it is, e.g., our desire to shape the substance we call ‘gold’ into various things and the ability of gold to be shaped that perhaps influences us to distinguish between malleability and brittleness. If we used what we call

‘gold’ and ‘pyrite’ only as decorations hung from trees in their naturally found forms, then we might not make any distinction between the two. We might take them, then, to be the same kind of substance. In such a case, 2-6 would not necessarily be criteria, or they might be taken as joint criteria, e.g., any yellowish substance that either streaks black or yellow, or any yellowish substance that is either brittle or malleable, would be the same kind of substance. To insist that one substance that streaks black and one that streaks yellow really are different substances begs the question in favor of the grammar that makes such a distinction. The conception of what we call ‘gold’ and ‘pyrite’ as being the same substance is neither right nor wrong in comparison to our conception of them as different substances. The one conception, the one grammar, is simply different than the other. Again, this is not to say that those using a language may have particular aims that draw forth the conceptualization of a distinction between pyrite and gold.

That we identify gold and pyrite as different substances is neither correct nor incorrect. Doing so simply reflects the grammar of ‘substance’, ‘difference’, ‘gold’, ‘pyrite’, etc. of our language. Criteria 1-6 are taken to be distinguishing and have probably been used for some time to identify these substances. Now though, we have science, which tells us that these criteria are secondary to the real distinction that exists in the atomic structure, the chemical makeup of these substances. Gold is the element Au with the atomic number 79, pyrite is the compound FeS_2 —this, science tells us, is the real distinction between the two substances. At this point, one might be tempted to say that science has discovered what gold and pyrite *really* are, that when we talk about gold and pyrite *this* is what we are *really* talking about. Wittgenstein does not deny the importance of the role that science plays in our lives. But he is concerned about the attitude that science fosters, especially in regard to philosophical investigations. Wittgenstein writes: “In science it is usual to make phenomena that allow of exact measurement into defining

criteria for an expression; and then one is inclined to think that now the proper meaning has been *found*" (Z §438). We must not forget though that we do not discover the meanings of words by examining the world.

Philosophers very often talk about investigating, analysing, the meaning of words. But let's not forget that a word hasn't got a meaning given to it, as it were, by a power independent of us, so that there could be a kind of scientific investigation into what the word *really* means. A word has the meaning someone has given to it. (BB pp27-28)

The meaning that someone has given to a word is given through an explanation of meaning, which gives the rules for the use of the word. As part of a language, these rules are part of a regular practice of using a word in such-and-such ways—the technique of its use mastered by those using the language. Wittgenstein is not denying that science influences our conception of the world, nor does he deny that science helps to shape and refine some of our concepts. In fact, he admits that our concepts change, that we alter them as we learn new things, as certain things become more important and others less important (Z §352).³⁸ The scientific community strives for exactness, thus adopting atomic theory and applying it to the identification of elements and compounds. Thus, gold's having the atomic number 79 has become the scientist's ultimate criterion of gold. However, when the assayer, the hobbyist, and perhaps the layman, distinguish gold from pyrite, the chemical makeup of the pieces in question is not used as a criterion—rather, such criteria as 1-6 are employed. Further, it is doubtful that scientists actually use chemical analysis to distinguish gold from pyrite. While scientists could identify substances by testing each time for their atomic number, it is doubtful that they do so. Rather, it seems more likely that in the past scientists identified a particular substance as

³⁸ "It is a fact of experience that human beings alter their concepts, exchange them for others when they learn new facts; when in this way what was formerly important to them becomes unimportant, and *vice versa*. (It is discovered e.g. that what formerly counted as a difference in kind is really *only* a difference in degree.)" (Z §352)

gold, performed a chemical analysis, and thereby concluded that what we call 'gold' has the atomic number 79. Since this was done, scientists do not need to perform such chemical analyses every time they want to work with gold. Gold is either bought as gold, in which case an assayer, e.g., used criteria 1-6 to identify the substance, or, if some substance is, e.g., brought in directly from a mine, such criteria as 1-6 are used determine its identification. Of course, if some substance is brought into a lab and it satisfies the criteria 1-5 for gold but it is brittle, then a chemical analysis might very well be undertaken. While Wittgenstein would not deny that we can rightly say that the atomic composition of various substances has become a very important part of their identification, what kind of thing the term 'gold' refers to is determined by how we use the term 'gold', not by virtue of a scientific discovery. A scientific discovery might influence how we use a term, but it will not necessitate any particular use. For Kripke, however, science discovers naturally occurring necessities in the world. Atomic composition is *the* fundamental criterion that gives the essence of, e.g., gold, thus making gold necessarily that substance with the atomic number 79. To this sort of thinking, Wittgenstein writes: "Consider: 'The only correlate in language to a natural necessity is an arbitrary rule'" (PI §372. My translation.). To say that gold must be that substance with the atomic number 79 is to give an arbitrary rule; it is to give a grammatical rule for the use of the word 'gold'. Similarly, Wittgenstein remarks that, "The statement that there must be a cause shows that we have got a rule of language" (AWL p16). That we call the substance with the atomic number 79 'gold' and only this substance 'gold' is determined by grammar, determined by the criteria we use to identify gold, determined by what we take to be differences and the importance we give to such differences. If we were to take Au and FeS₂ as being the same substance, then the essence of gold would not be its having the atomic number 79. In this case we would mean something else from

what we presently mean by the term ‘gold’. To say that gold is necessarily that substance with the atomic number 79 is merely to say that what we mean by ‘gold’ is that substance with the atomic number 79, and if something does not have the atomic number 79, then it is not what we mean by ‘gold’. Wittgenstein writes that, “*Essence* is expressed by grammar” (PI §371) and “if you talk about *essence*—, you are merely noting a convention” (RFM p65). Given the above discussion, we should be able to see clearly what he means by this. It is not reality, but grammar that tells what kind of object something is (PI §373). Grammar does this by determining what we mean when we speak of a kind of something, when we speak of identity, sameness, and difference. That we take a particular criterion, or criteria, to be essential is determined by our using it as a rule of language—that a criterion or proposition is essential is determined by its role. Science may discover new things about the substance that we call ‘gold’, it may give us more exact criteria, but these are criteria by virtue of our using them as rules, as norms of identification. One might want to object that, (a) since we identify gold through such criteria as 1-6 above and have found that that which satisfies these criteria also always has the atomic number 79, we don’t have a choice about taking the atomic number of gold as an essential criterion. It is at least partially this line of thinking that leads one, as it seems to have Kripke, into saying (b) that gold is necessarily that element with the atomic number 79. In answer to (a), it may be true that given our practices, given the established role that science has in today’s world, we may have very little choice in what, given our language and its grammar, is added to that grammar as defining criteria. Given that we mean *this* by ‘gold’, we seem to have to accept the further things that science tells us about it. But we must not forget that what we *mean* by ‘gold’ in the first place is determined by arbitrary grammatical rules. Thus, in the end, any further criterion that is added to what we mean by ‘gold’ is itself an arbitrary rule, though one that has the

appearance of necessity given the system of grammatical rules that is already in place. These grammatical rules do not operate in a vacuum—they are enmeshed with our lives, in the language-games that we play day in and day out. This contributes to the idea, the feeling, that things *really* are the way we describe them through our language, that reality *really* is like *this*. In one sense, things really are the way we describe them, but this ‘really’ is one that exists within our system of language. In a different grammatical system, a different system of meaning and sense, the way things are is different. However, this difference is a difference in meaning and sense, and as such does not lead to a contradiction. Within our language, the meanings that our words and expressions have create a necessity, but one that is of the following form: *given* what we mean by *x* and *y* from this follows *z*. Outside the system, though, *x* and *y* do not mean anything and *z* does not follow. For example, given what we mean by ‘gold’ and ‘atomic theory’, it follows that gold *really* has the atomic number 79. In a different grammatical system this would not necessarily have any meaning. This leads us to (b), from above, and to Kripke’s mistake in taking the necessity he describes as being metaphysical necessity.

(2) Kripke is interested in metaphysical necessity, not epistemological, physical, or logical necessity (NN p35). He is interested in saying that once science discovers that gold is that substance with the atomic number 79, it is metaphysically necessarily so. For Kripke, given that we mean *this*, pointing to a paradigmatic sample, by ‘gold’, and given that this sample is the substance with the atomic number 79, gold is necessarily that substance with the atomic number 79. Phenomenal properties, such as yellowness, are not necessary for something to be what we mean by ‘gold’, for in another possible world a substance could be blue, have the atomic number 79, and still be gold. It seems reasonable, then, to assume that the other criteria, 2-6, would also be contingent for Kripke. But he is mistaken in thinking that once we take something to be, once we find,

the essence of some natural kind, we have found a metaphysical necessity. Wittgenstein points out a fundamental problem that comes with metaphysical issues: talk of metaphysics leads one to confuse conceptual conclusions for factual ones. Wittgenstein writes:

Philosophical investigations: conceptual investigations. The essential thing about metaphysics: that the difference between factual and conceptual investigations is not clear to it. A metaphysical question is always in appearance a factual one, although the problem is a conceptual one. (RPP I §949)

Philosophical investigations: conceptual investigations. The essential thing about metaphysics: it obliterates the distinction between factual and conceptual investigations. (Z §458)

Asking, “What *is* gold?” appears to be asking a question of fact, but, for Wittgenstein, it is really a conceptual question—a question to be answered by becoming clear on the use of the word ‘gold’. Gold is that which we mean by ‘gold’, and what we mean by ‘gold’ is determined by grammar, as given by an explanation of meaning. This explanation of meaning gives the rules for the use of the word ‘gold’. Therefore, questions that appear to be asking for factual answers that will give metaphysical properties, properties that for Kripke will be fundamental in all possible worlds, are actually questions to be answered by a conceptual investigation. But, one might object, doesn’t science have a say here? Yes, it does, as Wittgenstein notes: “The fluctuation of scientific definitions: what today counts as an observed concomitant of a phenomenon will to-morrow be used to define it” (PI §79). But as we saw above, the taking of concomitant phenomenon as defining, while seeming to be necessitated by our scientific practices, is ultimately the introduction of a grammatical rule into the system of other grammatical rules. But let us give in to Kripke a little for a moment in order to bring out the confusion of his talk of metaphysical necessity. Let us say that the criteria 1-6 for something being gold are not

necessary to what we mean by 'gold'. Further, the only criterion for something being gold is that it have the atomic number 79. Thus, we would say that, as part of the explanation of what gold is, gold is essentially the substance with the atomic number 79, all other characteristics being secondary to this one. Given this, what we mean by 'gold' is just that substance with the atomic number 79. So, in another possible world where a substance was abundant, blue, and had the atomic number 79, we would say that it is the same thing we mean by 'gold'; whereas, a substance that streaked (what we call 'golden') yellow, was malleable, ductile and a good conductor of electricity, but did not have 79 as its atomic number, is not what we mean by 'gold'. This would reflect our rule that gold is necessarily that substance with the atomic number 79. But how is it necessary? Since we have stipulated the grammar of gold to be just that substance with the atomic number 79, only that substance with an atomic number of 79 will be gold. But the taking of the substance's atomic number as essential to it is arbitrary; that we conceptually take Au and FeS₂ to be different substances is a grammatical matter, not something that reality necessitates. So, given our grammatical rule, gold is necessarily that substance with the atomic number 79, but this grammatical rule is not necessary. We see here a distinction between the necessity created by the rule system and the necessity of the rule system. As Wittgenstein writes: "We must distinguish between a necessity in the system and a necessity of the whole system" (LFM p241). Using chess to make this clear, we say that it is necessary given a particular positioning of the white king, the black queen, and the black bishop that the white king is in check—only two moves away from check mate. This is necessarily the case given the rules of chess, but these rules certainly are not necessary. It could have been a rule that the first time a king is in check he may change places with any pawn remaining on the board. Given this rule, the white king might necessarily be in check, but not be two moves away from check mate. Similarly, given

the system of grammatical rules of our language, we might say that gold is necessarily *this* substance, said while pointing to a sample. If we say this, then this necessity is one that exists in the system. If grammar were otherwise, then what we meant by ‘gold’ would be otherwise, and the former necessity would no longer be applicable. For example, if we were to conceive of Au and FeS₂ as being the same substance, i.e., ‘gold’, then we might say that gold is necessarily a yellowish looking mineral that streaks either yellow or black, or has any of a disjunction of the characteristics given in the earlier chart for what we call ‘gold’ and ‘pyrite’. In such a case, gold would not be just that substance with the atomic number 79. Kripke, however, does not see this; he believes he is pointing out metaphysical necessity. But, as has just been argued, the necessity he points to is one within the system of our language, not of the system of language. Thus, as far as it can be called metaphysical, the necessity involved is conceptual, not factual. We now turn to the idea that what we call ‘gold’ is determined by its having the atomic number 79—regardless of its phenomenal qualities.

(3) According to Kripke: “terms for natural kinds are much closer to proper names than is ordinarily supposed” (NN p127). I will argue that Kripke’s thinking this is one of the reasons that he is mistaken about natural kind terms. Kripke is taken in by the analogy between (a) the idea that a proper name necessarily refers to *this* person, *this* body, in all possible worlds; that the actions, and I imagine to a certain extent the physical characteristics, of this person, this body, are contingent in all possible worlds, and (b) the idea that a natural kind term, such as ‘gold’, rigidly designates *this* substance, said while pointing to a paradigmatic sample; that what we mean by ‘gold’ will necessarily be any “body” of material that has the atomic number 79, while the other characteristics, hardness, streak, color, etc., are contingent in all possible worlds. That is, for Kripke, the body of a person rigidly designated by a proper name is analogous to any

sample of a substance, e.g., gold, whose essence is a particular chemical make up, rigidly designated by the term ‘gold’. The contingent actions, and to an extent the physical characteristics of the person’s body, are analogous to the contingent characteristics, such as streak, color, etc., of what we mean by ‘gold’. What we mean by a proper name is *this* person, regardless of what he might have done in the actual world or other possible worlds; and what we mean by ‘gold’ is *this* substance with the atomic number 79, regardless of what other phenomenal characteristics it might have in the actual world or other possible worlds.

I do not want to argue for or against the merits of Kripke’s understanding of proper names, but he is seemingly misled by the symmetry found between his analysis of proper names and natural kind terms into thinking that a natural kind term has a definitive essence, discoverable by science, that is rigidly designated in all possible worlds where the kind exists, and which makes the other phenomenal properties unimportant and contingent. There are several problems here: (A) The initial baptism or description that Kripke takes as contingently fixing a reference is really a grammatical rule for the use of the term; (B) What we mean by a term is not determined by some essential feature of the extension of the term; (C) Kripke overlooks two distinctions vital to the cogency of his arguments. That is, the distinction, (a) between what we would say given a counterfactual involving a possible world and what we would say given a counterfactual involving the possibility of an event in the actual world, and (b) between a difference in some feature of a natural kind and a difference in the people involved in the counterfactual situation—either in a possible world or in the actual world.

(A) The true meaning, the “defining essence” of a natural kind term is not, *pace* Kripke, determined by the extension of the term; the extension which is supposed to have some definitive essential property rigidly designated once the reference is fixed through

an initial baptism or description of contingent properties. Rather, a sample of the extension of a natural kind term may be used as part of an ostensive definition that gives a rule for the use of the term—so used, it determines a part of the term’s meaning. An ostensive definition can be used as a substitution rule, i.e., we point and say, “By ‘gold’ I mean *this* substance,” which licenses the substitution of the pointing gesture with the saying of the word ‘gold’ (PG p202). That is, after we give the ostensive definition we can say, “Gold is very valuable” instead of saying, “*That* is very valuable,” while pointing to a sample of gold. For the ostensive definition to function, the grammar, what we mean by ‘gold’, must already be in place. Thus, Wittgenstein remarks, “So one might say: the ostensive definition explains the use—the meaning—of the word when the overall role of the word in language is clear” (PI §30). Hence, ostensively defining a term does not give the entire meaning. The ostensive definition, when used, works in tandem with the other rules of grammar to determine the meaning of a term. Therefore, what Kripke calls ‘fixing the reference’, whether it be a description or ostensive baptism, is really the giving of a grammatical rule, or rules in the case of a multifaceted description, for the use of a word. None of these rules is inessential in determining the meaning; if any are changed, dropped, or added, then the meaning will change, and, *a fortiori*, the reference will change. Thus, the rule that gold is that substance with the atomic number 79 does not alone determine the meaning, as we now use it, of the term ‘gold’.

Kripke is concerned about a natural kind term being taken to be synonymous with a description of the natural kind. He wants to draw a distinction between a description that means the same as a term and a description that fixes the reference of a term. If the natural kind term is going to rigidly designate, then the description must only fix the reference. If the natural kind term is taken to be synonymous with the description, then

the term will not rigidly designate, since in another possible world the description might pick out something other than what we pick out with the description in the actual world. For example, a sample of gold that we have in the actual world can be talked about counterfactually. We can say that there is a possible world where this sample is blue in color. In this case, a description of gold like, “A yellow, malleable metal,” will not pick out this sample in the possible world. Instead, it might pick out some substance, some thing, that does not have the atomic number 79. Despite its being blue, Kripke wants to say that the sample is still gold in the possible world, for it has the atomic number 79. Thus, for Kripke, gold is not synonymous with a contingent description that fixes its reference (NN p57). While it is correct to say that the description is not synonymous with the term, this is not for the reasons Kripke gives. Rather, the description, in a normative context, determines the meaning—since a description gives grammatical rules—and as such is not synonymous with the meaning. What Kripke calls the ‘fixing of the reference by description or ostensive baptism’ is really the giving of rules for the use of the term, and therefore, the description or baptism, at least partially, determines the meaning of the term. To iterate, the description does not refer to a substance for which we can find some essential property that alone gives the true meaning of the term, for the description itself gives rules for the use of the term—rules that determine the meaning and thus the reference of the term. For example, we say, “Gold is malleable” or “Gold has a specific gravity between 15.5 and 19.3.” These criteria are rules that rule out talk of something that is non-malleable or that has a specific gravity of 5 being called ‘gold’. The “contingent” description, then, does not fix a reference that has some essential necessary property; rather, it gives rules for the use of the term. Anything that is taken to be a characteristic, a property, or the essence of the term ‘gold’ is going to be given by grammar, is going to be a part of grammar. Therefore, it is not the case that natural kind

terms rigidly designate in the way Kripke thinks that they do.

(B) What we mean in the actual world by the term 'gold' is given by an explanation of meaning, which gives the grammatical rules for the use of the word. Kripke wants to say that what we mean by the term 'gold' is simply that substance with the atomic number 79. Thus, in another possible world, any substance with the atomic number 79 will be what we mean by 'gold', regardless of its phenomenal qualities. But the rule that gold is that substance that has the atomic number 79 is not the only grammatical rule for the use of the word 'gold'. For this rule alone is not enough to employ the term 'gold', and it is not the rule we typically follow in using the term 'gold' in our daily discourse. In the actual world, the grammatical rules for the use of the term 'gold' would be such that gold is the mineral that streaks yellow, is ductile and malleable, conducts electricity well, has the atomic number 79, etc. In another possible world, Kripke has it that there is a substance that is blue and has the atomic number 79. He imagines that this substance is what we mean by the term 'gold' in the actual world. The problem is that even if its color were the only difference, this blue substance would still have at least one grammatical rule that would be different from those for our term 'gold' in the actual world. That is, it would be talked about as being blue instead of yellow. Thus, a criterion of what we call 'gold' would not be satisfied by the blue substance. According to Wittgenstein: "Two words have the same meaning if they have the same rules for their use" (AWL p3). Therefore, what we mean by 'gold' would not be that blue substance with the atomic number 79.

(C) (a) There is a fundamental difference between describing a possible world where certain facts are different from what they are, or were, in the actual world and in describing a situation in the actual world where something changes or happens. That is, it is one thing to ask, (i) what would we say if there were a possible world where a

substance looked, felt, and tasted like what we call 'water', but was not H_2O , and another to ask, (ii) what would we say if we were to discover somewhere in the actual world a substance that looked, felt, and tasted like what we call 'water', but was not H_2O ? The difference lies in this: in (i), we ask, "Given the facts of this possible world, is what we mean by 'water' right now this substance that is not H_2O but looks, feels, and tastes like what we call 'water'?" In the case of (ii), the situation would be such that we would be said to have a chance to examine the new substance to decide whether we should adjust our meaning of water to cover this substance or decide that our meaning of water is broad enough that there is not a question that this substance is water. To iterate, the difference lies in the fact that in describing a possible world we are not asking whether what we mean by a term could or could not be changed to cover the counterfactual's new substance; rather, what is being asked is, "Given what we already mean by a term, is this new substance the same kind of thing as what we mean by our term?" In the case where we ask, "What if we were to discover a new substance in the actual world?" we can decide whether or not we should adjust the criteria that we use to identify something or we can decide whether we should say that the criteria of a term are loose enough to cover this new substance as well.

Kripke seems to conflate the difference that is involved here. He gives one example where we are to suppose that in the actual world we have decided that the essence of gold is that it has the atomic number 79, but then we find another substance "with all the properties by which we originally identified gold, and many of the additional ones that we have discovered later" (NN p124). This substance, though, does not have the atomic number 79. We would, Kripke says, not say that this substance is gold. But since he is talking hypothetically about what we would do in the actual world, we could decide any number of ways. We could revise our grammar such that having the

atomic number 79 would not be necessary to something being gold, or we could stick to our grammar and say that the substance is not gold, or any number of other things. Now, if we stipulate a possible world where there is a mineral that has the streak, specific gravity, color, etc., of what we call 'gold', but its atomic number was not 79, we should not say that this is what we mean by 'gold', for the grammar of what this is, is different than the grammar for gold in the actual world. Kripke would also want to say that it is not what we mean by 'gold' because it does not have the one thing essential to something being gold, namely the atomic number 79. Similarly, Kripke talks about a possible world where pyrite is found in all the places that in the actual world have gold, e.g., what are gold mines in the actual world are full of pyrite in the possible world. He then asks if we would say of this possible world that gold wasn't an element since pyrite is a compound. This situation asks us whether or not this substance, in the possible world, is what we mean by 'gold' in the actual world. The answer, again, is that it is not. Though Kripke agrees with this, it is for different reasons. He says it is not gold because it does not have the atomic number 79, whereas we should say it is not gold because it does not meet the other criteria of identity found in our grammar for the term 'gold'. Kripke treats the possible world scenario and the counterfactual involving the actual world the same. In fact, there is a fundamental difference between the two. In the case of the possibility of discovering something new, either about what we call 'gold' itself or about another substance in the actual world, it is a question of what we would decide to do. For the possible world scenario, it is a question of what we should say, given our concept of gold compared to the facts of the possible world described. Thus, we have two different kinds of counterfactual situations that can each be decided in a different way. To further show this point, let us look at a passage from Kripke:

. . . say, that water is H_2O . It certainly represents a discovery that water is H_2O . We identified water originally by its characteristic feel, appearance and perhaps taste, (though the taste may usually be due to the impurities). If there were a substance, even actually, which had a completely different atomic structure from that of water, but resembled water in these respects, would we say that some water wasn't H_2O ? I think not. We would say instead that just as there is a fool's gold there could be a fool's water; a substance which, though having the properties by which we originally identified water, would not in fact be water. *And this I think, applies not only to the actual world but even when we talk about counterfactuals.* (NN p128. My emphasis)

It is certainly questionable whether or not we would decide that a new substance that looks, feels, and tastes like what we call 'water', but which wasn't composed of H_2O , should be called 'fool's water'. In the actual world, we could say whatever we wanted to say—we could change our criteria for a substance being water or decide it should be kept the same. If there were a possible world with a substance that did not look, feel, or taste like water, but was made of H_2O , or one with a substance that looked, felt, and tasted like water, but wasn't made of H_2O , the substance would not be what we mean by the term 'water'. This is because of the difference between our grammar of water as it is now, how we employ it, and the non-applicability of parts of it in the possible world. For example, part of what we mean by 'water' is that substance made of H_2O , and part of what we mean by 'water' is the substance that looks, feels, and taste like what we call 'water' in the actual world. Kripke, however, would want to say that it is just the substance that is made of H_2O that is what we mean by 'water'. To repeat, this is mistaken, for we would not mean by 'water', e.g., a substance that was pure H_2O with nothing else in it, but had a brown color, tasted bitter, and did not flow so much as ooze. This is because part of the meaning of 'water' is given by grammatical rules such as: "At room temperature pure water flows and is a clear liquid." We could even say that water moving down a stream is a paradigm of our language for what we mean by 'flowing'. Hence the importance of water's other characteristics.

(b) Let us look at the case where Kripke takes molecular motion to be the essence of heat. This example is rather unfortunate because there is not some feature of what we call 'heat' that has changed, as was the case for gold. Rather, there are people that are different from us. What Kripke is trying to do is to isolate molecular motion from the things he thinks merely fix the reference of the term 'heat', e.g., the sensation that we call 'heat'. Kripke wants to say that the term 'heat' rigidly designates the phenomenon of molecular motion and that the sensation we call 'heat' only contingently fixes the reference of the term 'heat' in the actual world. With this possible world, he wants to show the contingency of the sensation that we call 'heat' as it relates to what we really mean by the term 'heat'. This is why he stipulates that there are people who are insensitive to molecular motion as the sensation we call 'heat', but who have the sensation we call 'heat' when they are exposed to photons. For these people, the sensation that we call 'heat' designates photons and not molecular motion, thus showing the contingency of the sensation to the reference of the term. According to Kripke, we would still say that what we mean by 'heat' is molecular motion, even though it does not produce the sensation we call 'heat' in this possible world, for we identify heat not as a particular sensation, but as molecular motion. However, this possible world does not isolate molecular motion in the way that Kripke thinks it does, for under examination, the example is unintelligible. Are we supposed to be asking whether or not molecular motion in this possible world is what we mean by 'heat' from our perspective, from their perspective without our concept of 'heat' in mind, or from their perspective with our concept of 'heat' in mind? From our perspective, it does not make sense to answer, for we are not in the possible world. But if we were there, we would presumably sense the molecular motion as the sensation we call 'heat'; thus, there is no question about whether we should call this molecular motion 'heat'. From their perspective without our concept

of 'heat' in mind, they are not going to be aware of the idea of molecular motion causing the sensation we call 'heat', and they will, thus, not be able to answer such a question. From their perspective with our concept of 'heat' in mind, it is unclear what they would say, for they could say any number of things. They could say that what we mean by the word 'heat' is not what they mean by the word 'heat' or, perhaps, they might take the sensation that we both call 'heat' to be the defining criterion of the concept of 'heat', and so they might say that both photons and molecular motion are heat. Such a situation certainly does not help to make Kripke's point. It would make more sense to ask what we would say if in a possible world molecular motion just stopped producing the sensation that we call 'heat' *and* stopped cooking food, boiling water, etc. In such a case, Kripke would want to say that we would still call molecular motion 'heat'. The problem with this is that what we mean by 'heat' is not just molecular motion. We mean that which cooks our food, warms our hands, etc. Sticking with his example of something in people changing, it would make sense to ask what we would say if, *in the actual world*, molecular motion stopped producing in us the sensation we call 'heat' and suddenly photons started producing in us the sensation we call 'heat'. In such a situation, we could decide whether or not we should still call molecular motion 'heat'. We can conjecture as to what we would say, but either way, it does not help Kripke to show that the term 'heat' rigidly designates molecular motion. For even if we intuitively think that we would still call molecular motion 'heat', nothing would necessitate our doing so, since the meaning of a term is given by the grammatical rules for the use of the term, rules that are not read off the world, but which are given by people.

Kripke brings up another example of a possible world where there are people on whom photons do not have the effect of producing visual sensations. However, these same people do receive visual impressions from sound waves. Kripke asks, given this

possible world, would we say that light is actually wave motions in the air, that light was sound? He answers negatively. Kripke wants to point out with this example that what we mean by 'light' is not that which gives us visual impressions, but rather, any stream of photons—photons that we rigidly designate with the term 'light' and whose reference we fix by the visual stimulus of light in the actual world. Thus, in any possible world where there are streams of photons, these streams of photons will be what we mean by 'light', even if there is no one who can receive visual impressions from the light (NN pp129-31). However, this example of the light and people insensitive to photons is poor for the same reasons that the example of heat and molecular motion is poor; for it does not make sense to ask whether we would call streams of photons 'light' in a possible world where there are people who are not sensitive to photons. Is the question supposed to ask: "Would light be air motions?" from our perspective, from their perspective without our concept of 'light' in mind, or from their perspective with our concept of 'light' in mind? From our perspective, nothing has changed that involves our concept of 'light', for if we found ourselves in this possible world, we would see the light. From their perspective, these photon insensitive people are not going to have the same concept of 'light' that we do, i.e., they are not going to be able to say anything relevant about our concept of 'light'. From their perspective with our concepts in mind, it is unclear what they would say; perhaps they would say that what we mean by 'light' is not what they mean (if they used 'light' to talk of air motions) and that what we mean by 'light' are the photons to which they are insensitive and which stimulate us visually. But none of these help Kripke towards his goal of saying that what we mean by a term is rigidly designated and that a natural kind term is not synonymous with a reference-fixing baptism or description. And though Kripke's examples of gold and water are more intelligible than his examples of light and heat, none of his possible world scenarios achieve or show that which he

intends.

We see, then, that Kripke fails to achieve what he sets out to do. This failure is five fold. (1) To speak of the essence of a natural kind, if we can at all, is not to speak of a metaphysical essence discovered by science; rather, it is to speak of a grammatical rule. Hence, (2) what kind of object something is, is determined not by science but is given through grammar. (3) It is not that science discovers the essence of a natural kind, at which point whatever has that essence is necessarily of that kind, and whatever does not have that essence is necessarily not of that kind. Rather, given our concepts and the role of science in our lives, science shapes and influences our conception of things, the grammar of things. But, again, what kind of thing something is, is expressed through grammar; it is not determined by science. (4) *Pace* Kripke, the reference of a natural kind term is not fixed by an initial baptism or by a contingent description that is used to pick out an object or thing that has the essence of the natural kind in question. Rather, such baptisms or descriptions are grammatical rules for the use of a term—rules that determine a term’s meaning. A grammatical rule may be contingent from the standpoint that its existence is not necessitated by reality, but a grammatical rule will not be contingent in the sense that it is inessential to the meaning of a term. Dropping or changing a grammatical rule results in a change of meaning, a change in a term’s use. (5) Kripke is going after metaphysical necessity, but what he is confusedly discussing is really a necessity within a particular grammatical system, outside of which it does not make sense to speak of either necessity or contingency.

Five

Survey of Implications

In chapters one and two, I have presented an interpretation of Wittgenstein's writings on grammar. I have argued that Wittgenstein understood grammar to determine the meaning of signs by being composed of rules for the use of signs. As determinants of meaning, these rules determine what it makes sense to say. Grammar is neither static nor complete. It changes in time as our interests change, as we discover new things to which we give emphasis. The use of a word is at times indeterminate. There are occasions and situations where it is unclear that a word is applicable. This does not mean that the word is without meaning or deficient. Rather, it is merely a consequence of the vast array of possible human experiences to which there do not always correspond grammatical rules to determine how a word or sign is to be used. Language is tied to our daily actions and behavior. Grammar and behavior are enmeshed in the language-games in which we engage. As the movements of chess pieces are governed by rules, so too are the things we say, their formulation, and what they mean. In chess, the governance of the rules is not a result of consultation before every move; so too in language, the moves we make with our words are governed by rules to which we need not give a thought. To speak with meaning is to exhibit mastery of the technique of using language, to engage in a practice in which one has been inculcated.

The concept of meaning here explicated, i.e., that the grammar of a word determines its meaning as opposed to the meaning of a word determining its grammar, has one very important implication. Namely, grammar is arbitrary and language is autonomous. Grammar cannot be justified by consulting reality. Grammar is analogous to a choice of a unit of measurement—it is neither right nor wrong, only practical or practicable. What a word means is not determined by any possible effects its use may

bring about. Grammar says nothing about effects, it merely describes how the words, the signs, are to be used. We cannot say that we want to be able to say *this . . .*, therefore, we need *this . . .* grammar. What *this . . .* is, is determined by grammar: grammar is not determined by what *this . . .* is.

Let us briefly look at some of the implications of this conception of meaning. One of the implications is that in a very particular sense it is misguided to look at the world to find out what something really is. This comes into direct conflict with Kripke's idea that science discovers the essences of natural kinds. Kripke holds that what something is, is discoverable by an empirical investigation of a kind's essence. *Pace* Kripke, the essence of something is not given by science, but by a rule of grammar that says we use this term in such-and-such ways. If we can speak of essence at all, then we are speaking about a rule of grammar that has an essential role in our conception of what something is.

Not understanding the way grammar works leads one to ask such questions as: "How could the way we talk or think make it true that something (infinitely many primes, or God) exists, or that a particular thing (Joe DiMaggio, say) is a member of a particular kind (human being)?" (*A Companion to Metaphysics* [CM] p333). Part of the confusion here is questioning how the way we talk, the rules of grammar, make it such that something exists. It is not that the rules of grammar make it true or false that something exists. The question does not go back far enough. In order to say whether or not God or infinitely many primes exist you first must say what you mean by 'God' and 'infinitely many primes'. To speak about God the term 'God' must have a meaning. To speak about whether or not God exists the term 'God' must have meaning. It is grammar that determines what the term 'God' means. Grammar does not determine whether or not there is a god. Do apples exist? Well, what do you mean by apples? If you mean a fruit

that is usually red, yellow, or green, etc., then, yes, they exist. If you mean a black vegetable that is home to a little blue man, then it is highly dubious. That Joe DiMaggio is a 'particular thing', that he is a 'human' is determined by what we conceive of as a 'thing' and a 'human'. In our system of language with its grammatical rules, Joe DiMaggio is necessarily a human. Outside of our language the 'term' human does not have any meaning and Joe DiMaggio is not necessarily anything.

These confusions point us to the prominent idea that true investigation is a matter of investigating a particular phenomenon and not just a word. Wittgenstein's conception of meaning goes against this idea. Wittgenstein writes: "We are not analysing a phenomenon (e.g. thought) but a concept (e.g. that of thinking), and therefore the use of a word" (PI §383). The reason for analyzing the concept and not the phenomenon is that the phenomenon does not show us what the word means; rather, the meaning of the word shows what kind of thing it is we are talking about. Many concepts have a family of meanings; to get clear on what we are talking about requires investigating the ways we use the concept in various language-games. When a concept has a number of interrelated meanings, it will not help to engage in an empirical investigation of what something is when one's conception of that something is only one part of a family of meanings, e.g., the case of thinking. "'Thinking', a widely ramified concept. A concept that comprises many manifestations of life. The phenomena of thinking are widely scattered" (Z §110). Here we could replace 'thinking' with a number of other concepts, e.g., other psychological verbs (Compare: Z §113). We can say that 'thinking' is just that process of electrical activity going on in certain areas of the brain. But to do so would be to change or fix the meaning of 'thinking'. To use it in such a way is, of course, possible, but if one does so, then one should realize that this is not how we employ the word in our everyday activities and use of language. To see this, though, we do not conduct an

empirical investigation. Rather, we conduct a grammatical investigation, an investigation of all the various circumstances and ways in which we use the term ‘thinking’.

Wittgenstein’s conception of meaning and grammar has consequences for other areas of study as well, e.g., theology, ethics, and aesthetics; taking theology as an example, this is because of the nature of the language-games of religion and belief.

Wittgenstein writes: “‘You can’t hear God speak to someone else, you can hear him only if you are being addressed’.—That is a grammatical remark” (Z §717). It is grammatical because it determines, for one thing, part of what is meant by ‘God’. That is, it says that if you hear something speaking to someone else, that something will not be God.

Wittgenstein also writes: “Grammar tells what kind of object anything is. (Theology as grammar)” (PI §373). What we mean by such terms as ‘God’, ‘belief’, ‘salvation’, etc., will be determined by grammar, by how these terms are used.

Wittgenstein’s conception of meaning and grammar has veritable implications for all aspects of our lives, for the simple reason that the meaning of whatever we talk about will be determined by the grammar of our language—a language that is autonomous, a language that consists of arbitrary rules of grammar enmeshed in the multiplicity of activities in which we engage. It is in language that we conceive of what things are. And it is our conception of things, our concepts, that guide our investigations, and express and direct our interests (PI §570)—and thus our actions.

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