Wittgenstein's Perspective on the Arbitrariness of Grammar: A Cross-Linguistic Study

WANG Wei[a],*; ZHOU Weihong[b]

[a] School of Interpreting and Translation, Beijing International Studies University, Beijing, China.
[b] Department of College English Education, Beijing City University Beijing, China.
*Corresponding author.

Abstract

The current research explores Ludwig Wittgenstein's philosophical insights on the arbitrariness of grammar and the concept of language games. Wittgenstein's influential ideas revolutionized the understanding of language, emphasizing the role of social practices and language games in shaping meaning. Through a detailed analysis of Wittgenstein's influential works the current paper aims to shed light on Wittgenstein's fundamental arguments on the arbitrary nature of grammar and the significance of language games in understanding language use.

Key words: Wittgenstein; Arbitrariness of grammar; Philosophy; Language game

1. INTRODUCTION – A PHILOSOPHICAL APPROACH

Ludwig Wittgenstein, one of the most influential philosophers of the 20th century, challenged traditional views on language by highlighting the arbitrariness of grammar and the importance of language games. This article aims to provide a comprehensive analysis of Wittgenstein's thoughts on these concepts, examining their implications for our understanding of language and communication. According to Ferdinand de Saussure (1983:67), the link between signal and signification is arbitrary. Or it can be more simply expressed as: the linguistic sign is arbitrary. Unlike de Saussure's (1983) clear and firm assertion about arbitrariness presented above, Wittgenstein's interpretation about the arbitrariness of grammar is a little bit complex, ambiguous, less systematic, and even contradictory. But it should be especially pointed out that the primary difference between Saussure and Wittgenstein is that their objects are different: the former focuses on the linguistic sign, and the latter concentrates on grammar.

In linguistics, conventionalism and arbitrariness are two important concepts that help explain the relationship between language and meaning. Conventionalism refers to the idea that the meaning of linguistic signs, such as words or symbols, is determined by social convention or agreement among language users. This means that the connection between a word and its meaning is not inherently logical or necessary, but rather established through cultural and social practices. For example, the word *chien* in French conventionally refers to a specific type of domesticated animal, but there is no inherent reason why this particular combination of sounds should have that meaning. Arbitrariness, on the other hand, refers to the lack of any inherent connection between a linguistic sign and its meaning. According to the principle of arbitrariness, there is no logical or necessary relationship between the form of a word and its meaning. For example, the word *chien* in French could have been assigned any other combination of sounds or symbols to refer to the same concept, as long as there is a shared agreement among language users.

Thus, the relationship between conventionalism and arbitrariness is that conventionalism explains how arbitrary linguistic signs acquire meaning through social agreement. Language users agree to assign specific meanings to

certain sounds or symbols, and this agreement becomes conventionalized over time. Without this conventional agreement, the arbitrary nature of linguistic signs would make it difficult for communication to occur effectively. It is also important to note that while many aspects of language are conventional and arbitrary, there are also cases where the relationship between form and meaning is motivated or iconic. For example, onomatopoeic words like "buzz" or "hiss" imitate the sounds they represent, showing a motivated relationship between form and meaning. However, the majority of language is based on conventional and arbitrary associations between linguistic signs and their meanings. Therefore, conventionalism and arbitrariness are fundamental concepts in linguistics that help explain how language users assign meaning to linguistic signs through social agreement, despite the lack of any inherent logical connection between form and meaning.

2. THE ARBITRARINESS OF GRAMMAR

Wittgenstein (1953,1956,1967) ever argued that grammar is not a fixed set of rules but rather a collection of language practices that are shaped by social conventions. He believed that the meaning of words and sentences is not determined by their inherent properties but by the way they are used within a specific language game. To illustrate this, consider the word "game" itself, which can refer to various activities such as sports, board games, or even language games. Wittgenstein's insight challenges the notion of a universal grammar and emphasizes the contextual nature of language. The rules of grammar emerges from daily usage and habits of a speech community (eg, French speakers in France vs. French speakers in Québec, English speakers in Ireland vs. English speakers in New Zealand, etc.). Therefore, the connection between words and meaning could be both conventional and arbitrary, which means that the meaning of words and sentences is not fixed or determined by some inherent essence, but rather by the way they are used and understood within a specific social and linguistic context. The rules of grammar, then, are not imposed from above but emerge from the shared practices and habits of a particular speech community. For example, the word *game* can have different meanings depending on the context in which it is used. In the context of sports, it refers to organized physical activities with specific rules and objectives. In the context of board games, it refers to activities that involve playing with pieces and following certain rules. And in the context of language games, it refers to the use of language in a particular way, such as in jokes, riddles, or wordplay. Wittgenstein's argument challenges the idea of a universal grammar that applies to all languages and cultures. Instead, he emphasizes the diversity and variability of language practices and

the importance of social conventions in shaping the meaning and use of words and sentences. This means that the connection between words and meaning can be both conventional, in the sense that it is determined by social agreements and conventions, and arbitrary, in the sense that it is not based on any inherent properties of the words themselves. Hence Wittgenstein's view of grammar as a collection of language practices shaped by social conventions highlights the contextual nature of language and the importance of understanding language within its specific cultural and linguistic context.

Wittgenstein believed that both the arbitrary and non-arbitrary aspects of grammar have similar properties. In the first part of his book, the author's interpretive work primarily involves distinguishing and explaining these aspects. According to Wittgenstein (1953, 1956, 1967, 1969), the most fundamental concept of grammar is that it consists of rules that govern the use of vocabulary, thereby forming meaning or concepts. In this way, he roughly equates grammar with "the rules for the use of a word." Wittgenstein firmly believed that the relationship between grammar and language is similar to the relationship between game rules and the game itself. In the theory of "language games," grammar plays the role of governing the rules of language games. The "truth-false game" model consists of two basic parts - one part consists of true or false a priori or empirical judgments, while the other part consists of the grammar rules that control them. Grammar rules form their concepts and establish standards for judging their truth or falsehood. Wittgenstein believed that all rules have the characteristic of necessity, and "the only rule in language that is related to inherent necessity is an arbitrary rule." Accordingly, all rules of formal logic and pure mathematics belong to grammar. Essentially, Wittgenstein's concept of "grammar" is different from the ordinary concept of grammar. We can say that the grammar we refer to is not the same as the grammar referred to by (linguists). Wittgenstein believed that grammar describes the use of words in language, so in a sense, the relationship between grammar and language is like the description of a game, that is, the relationship between game rules and the game itself. In Wittgenstein's (1953, 1956, 1967, 1969) series of works - he pointed out that in a certain sense, grammar is arbitrary. Wittgenstein ever asserted, "Is grammar arbitrary? Yes, it is unprovable, in this sense grammar is arbitrary". Once grammar is touched upon, "the argument is over"; "rules do not follow ideas... they constitute ideas"; "these rules are arbitrary, because it is these rules that originally constitute symbols" (Wittgenstein, 1975); "descriptions of the world cannot prove grammar" (Ibid). Wittgenstein also implies that facts about the world can make grammar rules incorrect (or less correct) but we can never use facts about the world to deny grammar rules: "Grammar has no obligation to explain any reality. Grammar rules

determine meaning (or constitute meaning), therefore they are not responsible for any meaning themselves, in this sense grammar rules are arbitrary" (Wittgenstein 1974). Wittgenstein pointed out that grammar rules cannot be proven by describing the things they represent. Any such description already presupposes these grammar rules. "Just as the choice of units of measurement, grammar rules are also arbitrary" (Wittgenstein 1975). Wittgenstein believes that grammar rules constitute all meaning or concepts, including those used to express a priori or empirical statements. Essentially, a grammar rule is "fixed, like a component of a machine, and immovable, all modes of expression revolve around it" (Wittgenstein 1956). He also compares grammar rules to hardened channels that function to maintain the flow of a priori propositions (Ibid). In short, grammar rules can never be proven with factual evidence. The current analysis presents the following cross-linguistic evidence of how grammar arbitrariness manifests in human languages.

2.1 Word order

Different languages have different conventional word orders. For instance, English predominantly follows a Subject-Verb-Object (SVO) order: "I (subject) eat (verb) pizza (object)." However, in Japanese, the typical sentence structure is Subject-Object-Verb (SOV): "Watashi wa (I) pizza o (pizza) tabemasu (eat)." There's no logical reason why one language should use one word order over another; it's simply a matter of grammatical tradition within each language community. Word order arbitrariness could also be detected in morphology. For example, if we adopt factorial notation to calculate the possible combinations of the three Chinese characters BING, JIA, CAI, the outcome could be like this: $3! = 3 \times 2 \times 1 = 6$, which could be illustrated by the following table. The flexible word order of the first four legitimate combinations (a taco-like food) implicate the arbitrariness of Chinese word formation, while the last two agrammatical combinations can not be accepted by most Chinese speakers. However, we are still not clear the deep mechanism of this unique language facts in Modern Chinese.

Table 1
Possible combinations of BING, JIA, CAI in Chinese compounding

Possible combinations	Grammaticality
CAI JIA BING	√
JIA CAI BING	√
BING JIA CAI	√
CAI BING JIA	√
BING CAI JIA	×
JIA BING CAI	×

2.2 Gender systems

In languages like Spanish, French, and German, nouns have grammatical gender, which does not necessarily relate to natural gender distinctions. For example, a table is feminine in French (*la table*) but masculine in German (*der Tisch*) and Spanish (*el mesa*). This gender must then agree with adjectives and articles, which also have no inherent basis but follow arbitrary rules. Nouns in Spanish are either masculine or feminine. "Mesa" (table) is feminine (*la mesa*), but to clarify, it should be 'la mesa' instead of "el mesa", as "el" is the masculine article. The grammatical gender of a noun must match the gender of the articles and adjectives used with it. This agreement affects not just articles but also pronouns, possessive adjectives, and sometimes verb forms, depending on the language. In Spanish, nouns ending in "-o" are often masculine, while those ending in "-a" are often feminine. In French, nouns ending in "-tion" or "-sion" are typically feminine. In German, nouns ending in "-ung", "-schaft", "-keit", or "-heit" are often feminine. The patterns do have their outliers, so one must be careful and often resort to memory or reference materials.

2.3 Cases

Latin, Russian, Polish, and many other languages use a system of cases where the role of a noun in a sentence is indicated by its ending. This contrasts with English, which largely relies on word order and prepositions to indicate these relationships. The specific cases used and the endings that correspond to them vary from language to language, underscoring the arbitrariness of their grammar. Traditionally Latin has six cases (nominative, genitive, dative, accusative, ablative, and vocative) used for various purposes, including indicating the subject, possession, the indirect object, the direct object, the means or manner of an action, and direct address. Russian has six main cases (nominative, genitive, dative, accusative, instrumental, and prepositional). Each case serves different grammatical functions, such as expressing the subject of a sentence, the recipient of an action, or the means by which an action is performed. Similar to Russian in that Polish also has seven cases (nominative, genitive, dative, accusative, instrumental, locative, and vocative). The cases are used for marking the roles of nouns similarly, although there are differences in specific endings and uses.

2.4 Tense and aspect systems

Different languages express time and the aspect of actions in various ways. English, for example, has progressive aspect ("I am eating") to denote an ongoing action, whereas in Mandarin Chinese, there is no direct grammatical element to express this; context or additional words provide this information. The ways that languages mark past, present, and future can be quite different. English uses a combination of verb tenses and aspects to express time and the nature of actions. The progressive

aspect (also known as the continuous aspect), as in "I am eating," indicates an action that is currently ongoing. The perfect aspect, as in "I have eaten," describes an action that occurred at an unspecified time in the past and is relevant to the present. English conveys time primarily through a mix of auxiliaries ("am," "have"), modals ("will," "would"), and verb endings ("-ed" for past, "-ing" for continuous). Mandarin Chinese, by contrast, does not inflect verbs for tense or aspect in the same way that European languages like English do. Instead, it relies more heavily on context and the use of temporal adverbials to indicate time. For ongoing actions, it often uses aspect particles like "正在" (*zhèngzài*) or "在" (*zài*) (e.g., *Wǒ zhèngzài chīfàn / Wǒ zài chīfàn* for "I am eating"). To denote completed actions, Mandarin adds the particle "了" (*le*), which signals a change of state. Time expressions and other context clues are crucial in Mandarin to indicate time frames more precisely.

2.5 Counting systems

Most of the world's languages use a base-10 (decimal) system for counting, likely due to humans having ten fingers, which naturally lends itself to ten-based counting. The decimal system is prevalent in languages such as English, Mandarin Chinese, Russian, and Hindi, among others. These languages have distinct words for each digit from one to nine, and they combine these in various ways to form numbers beyond ten. Even something as seemingly universal as counting can differ. Many languages use a base-10 (decimal) counting system, but others, like the French, mix base-10 with base-20 (vingt for 20, and soixante-dix for 70, literally *sixty-ten*). Other languages like Danish or Ancient Mayan have counting systems with bases such as 20 (vigesimal).

2.6 Agreement rules

Languages also differ in whether and how subjects must agree with verbs or how adjectives agree with the nouns they describe. For instance, Slavic languages like Russian require extensive agreement among case, number, and gender across words in a sentence, while languages like Chinese have minimal inflection and require no such agreement. Slavic Languages require verbs to agree with their subjects in person and number, and past tense verbs also agree in gender. Moreover, adjectives and past participles must agree with the nouns they modify in case, number, and gender. In Modern English, SUBJ-VERB agreement is relatively straightforward, focusing mostly on the present tense and the third person singular, which adds an -s or -es to the verb (e.g., "he runs"). Past tenses do not change according to the subject. While Modern Chinese, along with many other East Asian languages, does not conjugate verbs for person or number, which means there is no change in the verb form regardless of the subject.

Each of these examples demonstrates that grammatical rules are not universally decided by some linguistic logic. Instead, they are established by the specific linguistic community's traditions and the historical evolution of each language. Therefore, if one were to design a language from scratch, there would be countless viable options for each grammatical feature, showing the arbitrary nature of grammar across different languages.

3. CONVENTIONALISM AND GRAMMAR ARBITRARINESS

According to Wittgenstein (1953, 1956, 1967, 1969), language is not a private mental phenomenon but a social activity governed by specific rules and practices. He introduced the concept of "language games" to describe the various forms of language use within specific contexts. Language games are rule-governed activities that involve the use of language to achieve specific purposes. For instance, the language game of giving orders has its own set of rules and conventions, distinct from the language game of telling a story. Wittgenstein argued that understanding language requires grasping the rules and practices of the relevant language game. Conventionalism holds that the meaning of words and sentences in a language arises from social convention rather than from any inherent relationship between a specific signifier (the form of the word) and that which is signified (the concept or meaning). This means that language is based on an agreed-upon system within a speech community where members have a shared understanding of the meanings associated with words and grammatical structures. For instance, there is no intrinsic reason why the concept of "dog" is represented by the sound /dɔg/ in English, /perro/ in Spanish, or /chien/ in French. It is simply a matter of convention agreed upon by speakers of each language. While arbitrariness, on the other hand, refers to the principle that there is no natural or necessary connection between the linguistic sign (the word or symbol) and its referent (the object or idea it represents). The relationship is arbitrary because the sound or form of the word has no direct relationship to its meaning. For example, nothing about the sound sequence [kæt] inherently suggests the animal we recognize as a *cat* in the English language, or *chien* in French, so to speak.

One key implication of both conventionalism and arbitrariness is that language is a human construct subject to change. Since there is no necessary linkage between signifier and signified, languages can evolve as conventions shift over time. Words can be coined, meanings can change, and grammatical rules can be modified as language users continue to negotiate and renegotiate their linguistic contracts. The conventional and arbitrary nature of linguistic signs is crucial for understanding linguistic diversity and language change.

It also has significant implications for areas of study such as semantics (the study of meaning), sociolinguistics (the study of language in society), and language acquisition, as it highlights the role of culture and society in shaping the mechanisms through which we communicate with one another. The relationship between grammar arbitrariness and conventionalism can thus be described as follows:

3.1 Mutual dependency

Grammar is arbitrary in the sense that the specific rules we follow are not determined by any natural laws; their choice and acceptance are guided instead by social conventions. In this way, the arbitrariness of language reinforces the need for convention, because without agreed-upon conventions in grammar, communication would be inordinately difficult. In the case of grammar, the rules and structures we use are not inherently determined by any natural laws. Instead, they are established and accepted through social conventions. The arbitrariness of grammar highlights the importance of convention in facilitating effective communication. Without agreed-upon rules and structures, understanding and conveying meaning would become extremely challenging. Mutual dependency, therefore, emphasizes the symbiotic relationship between language and social conventions, as they rely on each other for successful communication.

3.2 Dynamic stability

While grammar is conventional, it is not permanently fixed. Over time, the arbitrary nature of language allows for changes and shifts in grammatical conventions. Languages evolve, and what is deemed grammatically correct in one era may become archaic in another. This fluidity reflects the arbitrary potential for language change within the boundaries set by social convention. As society and culture change, so does language. New words are created, old words fall out of use, and grammar rules may adapt to better reflect the way people communicate. These changes can be influenced by various factors, such as technological advancements, globalization, and cultural shifts. For example, consider the buzzword word *selfie*, which did not exist a few decades ago, but with the rise of smartphones and social media, it became necessary to have a word to describe a self-portrait taken with a mobile device. This addition to the language reflects the evolving nature of communication and the need to adapt grammar to accommodate new concepts. Similarly, grammar rules can also change over time. For instance, the use of the singular "they" as a gender-neutral pronoun has gained acceptance in recent years. While traditionally, "he" or "she" was used to refer to a person of unknown gender, the increasing recognition and inclusivity of non-binary individuals has led to the acceptance of "they" as a valid pronoun. This shift in grammar reflects a broader societal change towards recognizing and respecting diverse gender identities. However, it is important to note that while

grammar can change, it is not a free-for-all. Language change occurs within the boundaries set by social convention and the need for effective communication. There are still rules and structures that help maintain clarity and coherence in language. Deviating too far from these conventions can lead to confusion and hinder effective communication.

Thus, grammar is not a rigid and unchanging set of rules. It is influenced by the evolving nature of language and the needs of its users. While grammar can and does change over time, it does so within the boundaries set by social convention and the need for effective communication. This fluidity reflects the arbitrary potential for language change and adaptation. Grammar is arbitrary because there are no inherent reasons behind grammatical constructions, and it is conventional because it relies on social agreement to maintain the communicative function of language within a community. Understanding both aspects helps to explain why languages are so diverse and why they can undergo transformation while still providing a stable medium for communication across time.

4. IMPLICATIONS

Wittgenstein's ideas on the arbitrariness of grammar and the concept of language games have significant implications for our understanding of language and communication. They challenge the notion of a fixed and universal language structure, emphasizing the importance of context and social practices in shaping meaning. By recognizing the role of language games, we gain a deeper understanding of how language is used in different contexts and how meaning is constructed through shared conventions. Wittgenstein's ideas about language games shift the focus from seeking meaning in the abstract relationship between words and the world to looking at the practical use of language in specific situations. Language is not a rigid, universal system; it is dynamic and influenced by human activities and forms of life. This approach has the following implications.

4.1 Context matters

The context in which language is used greatly influences its meaning. What is said in one language game may not make sense or might have a different meaning in another. For example, the English word *grill* might be used to mean cooking food over fire or hot coals. Meanwhile, in the sentence "Japan's leader grilled in parliament over widening fundraising scandal, link to unification church," the word *grill* means asking someone a lot of question in serveral hours. Words have meaning not in isolation but as part of a broader system of language that includes rules and conventions for use. Language games can differ markedly across contexts—a scientific discussion, a legal

argument, a political debate, or casual conversation are all different language games, each with its own rules and norms for how words should be used and understood. Understanding the context in which a statement is made or a word is used is essential for proper interpretation. An utterance that makes sense within one language game might not even be a valid move in another. The change in meaning illustrates how versatile language is and how human communication relies heavily on shared understanding and context. This property of language allows for rich and dynamic expression, but it can also lead to confusion or ambiguity if the listener is not privy to the context or the "rules" of the language game being played.

4.2 Shared conventions

The members of a linguistic community must share an understanding of language game conventions for effective communication. This shared understanding is often implicit and learned through participation in the language community. In order for effective communication to take place within a linguistic community, its members need to have a shared understanding of the conventions and rules that govern language use. These conventions include things like grammar, vocabulary, pronunciation, and the meanings of words and phrases. This shared understanding is often acquired implicitly through participation in the language community. As individuals grow up and interact with others in their community, they observe and imitate the language use of those around them. They learn the appropriate ways to use language in different contexts, such as formal or informal settings, and they develop an intuitive sense of what is considered grammatically correct or socially acceptable. This process of learning language game conventions is ongoing and dynamic. As language evolves and changes over time, community members continually adapt and update their understanding of the conventions. New words and expressions emerge, and old ones may fall out of use. For example, the Covid-19 pandemic brings a new word into Japanese – "新型コロナ"(*novel coronavirus*), which means Covid-19 in English. Through continued participation and exposure to the language community, individuals maintain and expand their shared understanding of language game conventions, enabling effective communication within the community.

4.3 Multiple forms of language

There isnt one monolithic language structure but rather numerous ways in which language can be organized and employed across different contexts and for different purposes. Rather than being a single, fixed system, language is multifaceted, dynamic, and adapted to the needs and practices of its users. This view recognizes that the way people communicate varies considerably depending on a range of factors. Variations of a language that are specific to certain regions. These can include

distinct vocabularies, grammars, and pronunciations. For example, the sentence "We like scallion pancake very much" could have two Chinese translations depending on dialects (as illustrated in Table 2).

Table 2
Word order differences in Mandarin and Shanghainese

Mandarin	*Wo men hen xi huan cong you bing.*
Word order	SUBJ VERY VERB OBJ
Shanghainese	*Cong you bing a la lao huan xi.*
Word order	OBJ SUBJ VERY VERB

The example quoted above reveals that SVO is a mainstream word order in Mandarin while there are lots of SOV sentences in Shanghainese. The dialectal differences are quite natural in the Chinese language, which further confirms Wittgenstein's argument on grammar arbitrariness.

5. REFLECTIONS

Wittgenstein's thoughts on the arbitrariness of grammar and the concept of language games provide valuable insights into the nature of language and communication. By highlighting the contextual nature of language, he challenges traditional views on grammar and emphasizes the importance of social practices in shaping meaning. Understanding language games allows us to appreciate the diversity and complexity of language use, ultimately enriching our understanding of human communication. Ludwig Wittgenstein's later philosophy profoundly impacted our understanding of language and meaning. His thoughts on the arbitrariness of grammar and the concept of language games offer a new perspective that questions traditional, rigid views on the structure of language, focusing instead on its use and the role of context and social interaction in generating meaning. Wittgenstein saw grammar not as a set of necessarily logical rules derived from a universal linguistic structure but as an arbitrary collection of guidelines that are rooted in convention and practice. The rules of grammar are not immutable truths but rather the product of human activities. They arise from and are maintained by the ways in which people use language in various contexts — these rules vary across communities and over time, reflecting their conventional basis. Language games are diverse activities involving language, such as giving orders, telling jokes, asking questions, praying, greeting, reporting an event, or speculating. Each game has its own specific rules and norms which may differ vastly from those of another game. This makes the meaning of a word or phrase highly dependent on the language game it is part of. Wittgenstein's view highlights the centrality of social practices in shaping the rules of grammar. Social conventions and agreements form the backdrop

against which language and meaning are constructed. Language and its grammar are thus seen as inherently social and shared; they are the products of intersubjective engagement rather than solitary reflection. By acknowledging that language use varies across different social contexts and that these varieties are legitimate in their own rights, we can better understand the complexity of human communication and the richness of linguistic expression. In conclusion, Wittgenstein's philosophy helps us realize that language is a living, breathing entity that is inseparable from our activities, our forms of life, and our interactions with one another. It encourages us to adopt a more nuanced and flexible approach to the study of language and communication, one that is open to the dynamic interplay of language, context, and community.

REFERENCES

de Saussure, F. (1983). *Course in general linguistics*. (R. Harris, Trans.). London: Duckworth.

Wittgenstein, L. (1922). *Tractatus Logico-Philosophicus (TLP).* (C. K. Ogden, Trans.). London: Routledge & Kegan Paul. (Original work published 1921)

Wittgenstein, L. (1953). *Philosophical Investigations.* (G.E.M. Anscombe & R. Rhees, Eds. & Trans.). Oxford: Blackwell.

Wittgenstein, L. (1956). *Remarks on the Foundations of Mathematics.* (G. H. von Wright, R. Rhees, & G. E. M. Anscombe, Eds. & Trans.). (Revised ed.). Oxford: Blackwell. (Original work published 1921)

Wittgenstein, L. (1964). *Philosophical Remarks.* (R. Rhees, Ed.). (R. Hargreaves & R. White, Trans.). Oxford: Blackwell.

Wittgenstein, L. (1965). A Lecture on Ethics. *The Philosophical Review, 74*, 3–12.

Wittgenstein, L. (1966). *Lectures and Conversations on Aesthetics, Psychology and Religious Belief.* (C. Barrett, Ed.). Oxford: Blackwell.

Wittgenstein, L. (1967). *Zettel.* (G. E. M. Anscombe & G. H. von Wright, Eds. & Trans.). Oxford: Blackwell.

Wittgenstein, L. (1969). *On Certainty*. (G. E. M. Anscombe & G. H. von Wright, Eds.). (G.E.M. Anscombe & D. Paul, Trans.). Oxford: Blackwell.

Wittgenstein, L. (1971). *ProtoTractatus—An Early Version of Tractatus Logico-Philosophicus.* (B. F. McGuinness, T. Nyberg, & G. H. von Wright, Eds.). (D. F. Pears & B. F. McGuinness, Trans.). Ithaca: Cornell University Press.

Wittgenstein, L. (1973). *Letters to C. K. Ogden with Comments on the English Translation of the Tractatus Logico-Philosophicus.* (G. H. von Wright, Ed.). Oxford: Blackwell.

Wittgenstein, L. (1974). *Philosophical Grammar.* (R. Rhees, Ed.). (A. Kenny, Trans.). Oxford: Blackwell.

Wittgenstein, L. (1975). *The Blue and Brown Books.* Oxford: Basil Blackwell.

Wittgenstein, L. (1980). *Culture and Value.* (G. H. von Wright, Ed.). (P. Winch, Trans.). Oxford: Blackwell.

Wittgenstein, L. (1982, 1992). *Last Writings on the Philosophy of Psychology.* (G. H. von Wright & H. Nyman, Eds.). (C. G. Luckhardt & M. A. E. Aue, Trans.). (Vols. 1-2). Oxford: Blackwell.

Wittgenstein, L. (1993). *Philosophical Occasions.* (J. Klagge & A. Nordmann, Eds.). Indianapolis: Hackett.

Wittgenstein, L. (2003). *Ludwig Wittgenstein: Public and Private Occasions.* (J. Klagge & A. Nordmann, Eds.). Lanham: Rowman & Littlefield.

Wittgenstein, L. (2005). *The Big Typescript: TS 213. German English Scholars' Edition*. (C. Grant Luckhardt & Maximilian E. Aue, Trans.). Oxford: Wiley-Blackwell.

Wittgenstein, L. (2009). *Philosophical Investigations (PI).* (P.M.S. Hacker & J. Schulte, Eds. & Trans.). (4th ed.). Oxford: Wiley-Blackwell.