

Transcendental Grammar:  
Chomsky and Bhartṛhari in Dialogue

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## Preface

### *Acknowledgements*

This thesis is the present expression of a line of thinking that has been steadily developing in conversation with friends, family, and mentors for some two and a half years now. It is both a humbling and gratifying experience to reflect on the care and encouragement I've found along the way. I am deeply indebted to President Laurie L. Patton for the doors she opened as a mentor, teacher, and friend. *Sahr̥daya*. I have Professor Maria Hatjigeorgiou to thank for the love she brings to teaching; her example as a scholar, intellectual, and educator is a constant source of inspiration. I'm grateful to Professor John Spackman for sitting with me in meditation and conversation over the years and for fostering my love of philosophy. I'm grateful, likewise, to Professor William Waldron for inspiring me to study religion over the course of four incredible courses and dozens of conceptual seminars over Narragansett. I'm thankful also to Professor Daniel A. Arnold at the University of Chicago for discussing epistemology with me and referring me to Chien-hsing Ho's article on *pratibhā* and to Professor Jeffrey Lunstead at Middlebury College for offering introductory lessons in Devanagari and Sanskrit grammar.

The central ideas in this thesis grew out of a research internship with Professor Anjan Chatterjee at the Center for Cognitive Neuroscience at the University of Pennsylvania, and I am thankful to him and to Dr. Eileen Cardillo for their encouragement and mentorship in the study of the science of the mind. The Department of Religion at Middlebury College is a true community of scholars and I'm deeply grateful for my peers and the departmental leadership for fostering that community through colloquia and symposia over the years. I'd like to thank my friends Tevan Goldberg, Angad Virk, and Thibault Bachelet and my parents Tom and Linda Diak for their kindness, intellectual conversation, and support as I wrote. I'm grateful to my brothers, Nick and Justin, for all they've taught me over the years.

Finally, I'd like to thank Rachel Aurora Nelson from the bottom of my heart. You've taught me more about language, transcendence, and *dharma* than you'll ever know. This one's for you.

### *A Note on Translations and Transliterations*

A critical scholarly edition of the *Vākyapadīya* hasn't been published in English in half a century. Fragments surface in translation as English speaking Sanskritists such as Professor David Carpenter or Professor Jan E.M. Houben conduct studies of the *Vākyapadīya* and critically engage with central passages in the text. The edition used in this study was translated by Dr. K. Raghavan Pillai in 1951 during his doctoral studies at the University of London and published in 1971 by Motilal Banarsidass. Pillai's edition includes a critically edited Sanskrit text of the *Vākyapadīya* with an English translation, notes, introduction, summary of the text, General Index, Sanskrit Index, Index of Kārikās (verses), Bibliography, and list of Errata. I've made use of the numbering scheme of Pillai's edition exclusively. David Carpenter—whose work I use extensively—draws on Wilhelm Rau's 1988 critical edition of the text *Bharṭṛhari's Vākyapadīya*, (originally published 1977)—and which I did manage to acquire—but to my dismay the text is in German and Sanskrit and I was unable to make use of it.

Professor K.A. Subramania Iyer conducted extensive English translations and critical scholarship of the *Vākyapadīya* in context with the commentaries (*vṛtti*) throughout the 1960s and 1970s. While I have made great use of his scholarly work *Bharṭṛhari: A Study of the Vākyapadīya in Light of the Ancient Commentaries*, this thesis doesn't utilize his English translations because they lacked a side-by-side presentation with the Sanskrit text and acquiring the proper editions of the Sanskrit originals promised to be rather difficult. In autumn 2018 I taught myself to read Devanagari, the abugida script used by Sanskrit authors, using Walter Maurer's *The Sanskrit Language: An Introductory Grammar and Reader*. I thus made use of this skill to transliterate many of the passages studied in this text. In March I found a “machine-readable” transliteration of Rau's critical edition compiled by Yves Ramseier and made use of this edition to do some of the later transliterations—double checked of course against Pillai's edition of the text; where there wasn't perfect agreement of the text I've substituted a transliteration of Pillai's text and labelled the transliteration “Author's Transliteration.” Verbatim transliterations of Ramseier's text are credited accordingly.

## Chapter One

### Introduction

The “question of comparison” in the academic study of religion has a troubled past, a polemical present and—I hope—a fruitful future. Reflecting on a formative “moment of despair” from her early years as a scholar, Laurie L. Patton articulated at a Craft of Teaching Seminar held at the University of Chicago that in the late 1980s and 1990s “for many people, to compare *at all* was a moral failing intellectually.”<sup>1</sup> The reasons for this perspective among scholars were undoubtedly heterogenous, but the thrust of the issue she claimed was the fear of doing “violence” to context and the outgrowth of comparative work from the “hegemonic” stance of late 19<sup>th</sup> century Christian thought. The Craft of Teaching workshop presented Patton’s graduate seminar *On the Very Idea of Comparing Religion: “Theoretical” Approaches* which she taught for several years at Duke University. “In the last few decades,” reads the syllabus, “theoretical critiques of comparison have argued that it emerges from an exclusive Christian basis, and that its history is grounded in both colonialism and missionizing.”<sup>2</sup> Out of due respect for the concerns raised by these critiques and for the historical development of the discipline of the academic study of religion, some opening remarks are warranted concerning the method and motivations for this comparative study of the thought of the contemporary American linguist and philosopher Noam Chomsky and the fifth-century Sanskrit poet-philosopher Bhartṛhari.

#### *A Bird’s Eye View*

The comparative mode I propose to use in this study is what Professor Francis X. Clooney, SJ, has christened *comparative theology*. Among the various theological projects, Clooney sharply distinguishes *comparative theology* from the work of *theology of religion*, “a theological discipline that discerns and evaluates the significance of other religious traditions in accord with the truths and goals defining one’s own religion.” Comparative theology for Clooney is a *practice* of “faith seeking understanding... rooted in

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<sup>1</sup> The University of Chicago, 17:20-17:40, 2015

<sup>2</sup> Patton, 2015

a particular faith tradition but which, from that foundation, venture[s] into learning from one or more other faith traditions.”<sup>3</sup> Comparative theology is a receptive response to religious diversity. It is unique among contemporary comparative modes in its ability to field questions of ultimate import—theological, moral, spiritual and metaphysical—arising from religious diversity. Unique, I claim, because of the consciousness it generates of the particularity of one’s own point of view.

Comparative theology is a particularly apt mode for engaging Bhartṛhari and Chomsky, as we will see, because both thinkers are conscious of the limitations of their own perspectives. The central argument of this thesis is that Chomsky and Bhartṛhari both acknowledge and incorporate the limitations of linguistic theory in their metaphysics of meaning and action. Both thinkers, I will claim, nest their theories of language in transcendental philosophies that embrace modes or categories of cognition and perception which are ineffable and beyond the horizons of the sciences they are constructing. Cognizant of the limits of thought and language and their transcendental commitments, Chomsky and Bhartṛhari converge on a *pragmatism* regarding the form and content of linguistic theory. Through a comparative reading of Chomsky and Bhartṛhari we will explore the relation of language and metaphysics and the different points of view generated by the process of abstraction, conceptualization, and theory construction.

While various modes of comparison suggest themselves for a study of Chomsky and Bhartṛhari (such as a cognitive scientific, philosophical, or dialogical mode) the choice to use Clooney’s method of *comparative theology* (and an articulation of what that amounts to in this case) merits some discussion. Clooney’s method is “painstaking and yet rewarding,” write Patton and Paul J. Griffiths in the foreword to *Seeing Through Texts: Doing Theology among the Śrīvaiṣṇavas of South India*. Comparative theology is grounded in the scholar’s theological imagination and tradition and eschews theory insofar as it is morally possible to do so, favoring instead a slow, deliberate reading of texts written in different “religious languages.” The process or practice itself is designed to foster theological reflection.

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<sup>3</sup> Clooney, 10, 2010

The choice to conduct this study in this mode reflects the motivation for conducting it. One of the central questions of comparative theology is the *theological meaning* of “[learning] a new religious language.”<sup>4</sup> Chomsky and Bhartṛhari emerged from pluralistic societies that were attempting to come to terms with the central problems of religious, linguistic, and cultural diversity: does a common human or divine nature underlie the multiplicity of cultures and languages manifested around us? Or is the very idea of human nature or divinity an artifact of the systems of thought and discourse available to us?

Chomsky’s surprising and illuminating response to these questions inspired this thesis. In a series of lectures delivered at the University of Girona in November 1992, Chomsky articulated a research program for the cognitive science of conceptual structures that would trace the contours of what he called the “mystery space” of human cognitive and perceptual abilities. He marked a distinction between “problems” and “mysteries” predicated on the finite nature of human intelligence and perception and argued that those aspects of the world which cannot be represented by the classes of conceptual structures humans are capable of constructing may be “mysteries” outside the scope of possible natural sciences.<sup>5</sup>

“It could come out of cognitive science that humans are capable of constructing certain kinds of conceptual structures, like *determinism* and *randomness*, say, and those are going to deal with certain types of phenomena. And if you can show, empirically, that certain arrays of phenomena don’t have those properties, too bad. Then you’re in the mystery space... that’s a conceivable empirical discovery without paradox. We could discover what’s a mystery for us. We couldn’t solve it, but we could find out where it is.”<sup>6</sup>

As a thoroughly secular thinker Chomsky focused his attention on the construction of scientific theories, but I believe his thought could productively be engaged in the context of constructive and comparative philosophy of religion. I originally intended to study Chomsky in conversation with Nāgārjuna’s *Mūlamadhyamakakārikā* (Verses on the Middle Way), but as I described Chomsky’s project to Professor Laurie L. Patton in September, she recommended Bhartṛhari as a partner in conversation for Chomsky for reasons that would later become clear. I read the first two *kāṇḍas* (parts) of the *Vākyapadīya* in the fall

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<sup>4</sup> Patton and Griffiths, *Foreword* to Clooney, xiv, 1995.

<sup>5</sup> Chomsky, 1:13:12 – 1:31:27; 1:39:08 – 1:42:04, 1992a

<sup>6</sup> Ibid, 1:41:42 – 1:42:18.

while immersing myself in the lectures and writings of Noam Chomsky. The syntheses and convergences were striking, varied, and took place at several levels of resolution. The title of the thesis “Transcendental Grammar” reflects the overall project and argument within which I situate this act of comparative theology: the attempt to develop Chomsky’s theory of conceptual structures into a fully-fledged *transcendental generative grammar*, which is to say, a characterization of the infinite set of human concepts and their possible forms. This infinite set of concepts, beliefs, or images of the world would express itself in patterned forms throughout history and may emerge as an object of study in its own right in various cultures and historical moments. It is an interesting empirical question whether the aperture of the so-called “mystery space” may open or close depending on the paradigms and practices humans use to develop the bodies of doctrine we call “religion,” “science,” or “theory.” Understood as a theory of conceptual structure, this research program is a Chomskyan variant of the “language of thought hypothesis.”<sup>7</sup> Understood as a theory of knowledge, *transcendental generative grammar* could serve as a comparative mode of religious epistemology, examining the conditions for the possibility of certain forms of religious consciousness.

Reflecting the conditions of its moment of origin, Bhartṛhari’s *Vākyapadīya* has a dauntingly complex encyclopedic format known as an “*āgama-saṃgraha*” or “collection of traditions,”<sup>8</sup> and strong and reasonable arguments can be made based on the content of Bhartṛhari’s philosophy that the form of the text is itself part of its argumentative structure (cf. Chapter Three). The text is full of internal contradictions, unspecified interlocutors, overlapping sets of definitions and arguments, and leaves many important questions unanswered, unresolved, or unsaid. Amidst this complexity a tradition of interpreters has developed a reading of Bhartṛhari as expounding *śabdādvaita* or *linguistic monism* or *linguistic absolutism*.<sup>9</sup> Bhartṛhari claims that the origin of all linguistic and worldly phenomena is the “Word-Principle” *Śabdatattva* or *Śabda Brahman* beyond all conceptual constructions (*vikalpa*),<sup>10</sup> and that the study of

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<sup>7</sup> Q.v. Aydede, 2010. *The Language of Thought Hypothesis* in Stanford Encyclopedia of Philosophy.

<sup>8</sup> Kelly, 172, 1993

<sup>9</sup> Houben, 14-15, 1997

<sup>10</sup> Aklujkar, A. in Coward and Raja, 126-128, 1990



grammar (*vyākaraṇa*) is that which brings a seeker into direct contact with the “highest language essence (*mahāntaṃ śabdātmanam*)” by cultivating a form of intuition (*pratibhā*) for purifying knowledge.<sup>11</sup>

While Bhartṛhari was indeed interested in what we would call “religious” and “philosophical” questions he was first and foremost a linguist working in a millennium-old linguistic tradition of profound technical complexity. The early development of a science of language in India was fostered by the monumental work of Pāṇini’s *Aṣṭādhyāyī* (“Eight-Chaptered”) which dates from the fourth or fifth century BCE<sup>12</sup> and is “a complete descriptive analytical grammar of the Sanskrit language”<sup>13</sup> in approximately four-thousand generative rules<sup>14</sup> or *sūtras* “which includes both Vedic Sanskrit and what is called ‘classical’ or ‘laukika’ Sanskrit.”<sup>15</sup> This text was foundational for the Indian grammatical tradition and has been revered by Sanskritists in the West such as Leonard Bloomfield and F. Max Müller, who wrote of the *Aṣṭādhyāyī* that “the Grammatical system elaborated by native Grammarians, is in itself most perfect, and those who have tested Pāṇini’s work will readily admit that there is no Grammar in any language, that could vie with the wonderful mechanism of his eight books of grammatical rules.”<sup>16</sup> The major innovations of Bhartṛhari’s *Vākyapadīya* included his *sphoṭa* theory of sentence-meaning (*sphoṭavāda*) and for “making a case for *vyākaraṇa* as a *darśana*, a view about ultimate things.”<sup>17</sup>

### *A Closer Look*

Unable to incorporate *meaning* within the scope of a formalized theory of language, both Bhartṛhari and Chomsky postulate innate forms of intuition (*pratibhā* and *the creative aspect of language use*, respectively) responsible for our knowledge of sentence-meaning. In Chapter Two we will begin our study of Bhartṛhari by developing the historical, philosophical, and religious context of Brahmanical India and defining Bhartṛhari’s views of language in relief against the prevailing conceptions of the day. Beginning

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<sup>11</sup> Ibid.

<sup>12</sup> Coward and Raja, 14, 1990

<sup>13</sup> Ibid.

<sup>14</sup> Gillon, 467, 2007

<sup>15</sup> Matilal, 8, 1990

<sup>16</sup> Vasu, 1, 1891

<sup>17</sup> Coward and Raja, 18.

with an “Early Background to the Study of Grammar (*Vyākaraṇa*)” focusing on the role of praxis and ritual in the development of the study of grammar (*vyākaraṇa*) we will discuss the role of the *Vedas*, *Prātiśakhyas*, and early grammatical treatises in forming the intellectual milieu of Bhartṛhari’s India. This will lead into an epistemological discussion of the ways of knowing (*pramāṇa*) practiced by the Mīmāṃsā, Nyāya, Yoga, and Sāṅkhya schools of thought (*darśana*) contemporaneous with Bhartṛhari. In particular we will focus on *śabda pramāṇa* or testimony and how the different philosophical projects of the Mīmāṃsā, Sāṅkhya, and Vedānta schools align with their differing definitions and uses of the term. We will then sketch Bhartṛhari’s views of the *Vedas* as “imitative-resemblance” or “*anukāra*” of Brahman (VP I.5-I.6, II.7, II.135) to situate Bhartṛhari’s view on *śabda pramāṇa* in contrast with his contemporaries; Bhartṛhari’s epistemology will be discussed more fully in Chapter Three. After outlining Bhartṛhari’s views on revelatory language and the *Vedas* we will present his *sphoṭavāda* and identify the conceptual presuppositions it aims to ameliorate (using VP I.44-I.45).

Chapter Three opens with a discussion of “perspectivism” in the *Vākyapadīya*, a philosophical position articulated by John D. Kelly and Jan Houben to account for the seeming incoherence and “*āgama-saṃgraha*” form of the text. Perspectivism is the doctrine that every philosophical perspective is necessarily limited, and Kelly argues from this basis that Bhartṛhari is developing such a view to address the limits of a formalizable theory of meaning.<sup>18</sup> We will look at VP II.484-II.485, where Bhartṛhari appeals to the importance of studying multiple systems of thought, and I.8 and I.9, wherein he articulates the epistemic difficulties of coming to true knowledge to flesh out the “perspectivism” described by Kelly and Houben. In the context of Bhartṛhari’s views on the nature of words, these concerns are developed with respect to several metaphysical claims Bhartṛhari articulates in VP I.17-I.22 and with respect to his discussion of the limitations of *anumāna-pramāṇa* (inference) in VP I.34. We will revisit VP I.44-I.45 to discuss Bhartṛhari’s solution to the epistemological inadequacies of the *pramāṇas* of *śabda* (testimony) and *anumāna* (inference) for rendering knowledge of sentence-meanings (*vākya-sphoṭa*) and postulate that Bhartṛhari

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<sup>18</sup> Kelly, 1993

formulated the *sphoṭavāda* to account for the unique epistemic status of intuition (*pratibhā*) for delivering knowledge of the nature of things (VP I.118). Thereafter, we will move in a discussion of Bhartṛhari's view on the nature of sentences culled from his *Vākyakāṇḍa*, focusing on verses II.399-II.404, II.421, and II.468.

Chapter Four burns through the mists of time and opens with a discussion of human nature that took place in November 1971 between Noam Chomsky and Michel Foucault. Using the definition of human nature Chomsky expounded during the debate as a guideline into inquiry, the fourth chapter gives an overview of Chomsky's academic context and the content of the theory of *transformational generative grammar* for which he was credited with "revolutionizing" the study of language. After a fairly technical discussion of the motivations behind the formulation of transformational generative grammar the chapter moves into second-order level concerns relating Chomsky's project to his metaphysics and philosophy of mind, language, and science. We trace Chomsky's use of the *poverty of the stimulus argument* to his views concerning innate knowledge and the place of language both in the sciences and in the universe.

This discussion immediately flows into Chapter Five which opens with a discussion of Chomsky's views on the "unification problem" in the sciences, the problem of whether it will ever be possible to bring two inchoate bodies of empirically derived doctrine together in a common theoretical frame. Framed by a discussion of the distinction of *problems* and *mysteries* we discuss the possibility of the unification of linguistics and biology as conceived by Chomsky and the evolution of the science of the mind since the 17<sup>th</sup> century. One of the crucial innovations of the Scientific Revolution, we note, is the development of transcendental reasoning which sets the conditions for the possibility of certain phenomena. Descartes used this form of reasoning to argue that the all-encompassing *mechanical philosophy* was incomplete; certain empirically available phenomena, such as the normal, everyday use of language and acts of human will, cannot be mechanistically explained in principle. Therefore, Chomsky argues, Descartes as a naturalistic scientist posited a new principle to account for these phenomena. Within a generation Cartesian Dualism succumbed to a paradigm shift, Chomsky contends, as Isaac Newton demonstrated that the mechanical philosophy was wrong. Strangely, however, understanding of the meaning of Newton's advances has diminished in the intervening centuries and so Chomsky attempts a historical reconstruction of the nature

of science since Newton. He distinguishes *problems* and *mysteries* to account for certain empirical phenomena which “keep cropping up” in the sciences: namely the inability of science to yield knowledge of fundamental philosophical issues such as consciousness or freedom of will. Chomsky argues that these “aspects” of the world may fall outside of the purview of possible sciences predicated on the idea that the mind is a computational-representational system and that as such, it’s patterned and finite resources will not be able to represent all of the properties of the world with fidelity. It’s a miracle, for Chomsky, that the human mind is capable of understanding anything at all about the nature of reality. There may be transcendent aspects of the mind/world which are “part of our nature” and form our intuitions, but they may systematically mislead us and therefore, Chomsky contends, we must be pragmatic and empirical in our attempts to construct bodies of doctrine which account for these mysteries. He proposed to do just that in a series of lectures delivered at the University of Girona in 1992 and outlined a research program for the cognitive science of conceptual structures which would delineate the contours of the human cognitive and perceptual mystery space.

Chapter Six is a comparative theology focusing on the role of linguistic knowledge and intuition in Chomsky and Bhartṛhari’s respective systems of thought. Beginning with two passages from their corpuses we trace the sympathies and antipathies in their respective conceptions of and attitudes toward intuition of sentence-meaning. For Chomsky, this intuition is known as the *creative aspect of language use*, a mystery for the formal science of language owing to its being a paradigm case of *freedom of will*. For Bhartṛhari, this intuition is called *pratibhā* and delivers a form of knowledge of the inner nature of reality (because for Bhartṛhari reality is both linguistic and teleological all the way down). Each of these forms of intuition are posited to account for certain epistemic gaps in the sciences they practice, and each plays a foundational role in their respective system of thought concerning the nature of language and meaning. We begin by parsing Bhartṛhari’s conception using an article by Chien-hsing Ho which was recommended to me by Professor Dan Arnold at the University of Chicago. This leads us into a discussion of the resonances between the various aspects of *pratibhā* and the *creative aspect of language use* as conceived by Chomsky.

This is swept up in a discussion of the role of intuition in linguistic theory and practice which attempts to toe the line between the pragmatic and transcendental aspects of Chomsky's and Bhartṛhari's philosophies.

Throughout I argue that these forms of intuition are postulated to close certain gaps in their conceptions of the nature of the universe, but, owing to Chomsky's distinction of *problems* and *mysteries* the gap between sentence structure and meaning is filled with an indefinable and non-naturalizable lacuna. On the other hand, for Bhartṛhari, the form of intuition he posits allows him to develop a coherent theory of sentence meaning within his metaphysical framework. Owing to the fact that Chomsky implicitly rejects any salvific or teleological aspects in the universe (even behind the veil of the mystery space), he fails to fully develop his transcendental philosophy into the kind of "perspectivism" advocated by Bhartṛhari. Chomsky's universe contains mystical forces only insofar as they are mystical to humans and resonates deeply with a mature scientific naturalism that acknowledges the limits of scientific understanding.

Bhartṛhari, on the other hand, observes the teleological function of *dharma* throughout the cosmos and integrates his conceptions of *Brahman* and *sphoṭa* into a fully-fledged *darśana*. We close by developing these ideas in the context of the distinction of *metaphysical* and *epistemological dualism* which Chomsky uses to decry contemporary cognitive science and philosophy of mind. Neither Chomsky nor Bhartṛhari can fully escape their skins, so to speak, but each comes up to the very limits of their respective systems of thought and touches the infinite in stunning and surprising ways.

## Chapter Two

### Grammar as Philosophy I: Bhartṛhari's Conception of Language

“That beginningless and endless One, the imperishable Brahman of which the essential nature is the Word, which manifests itself into objects from which is the creation of the Universe.”<sup>19</sup>

#### *Context of the Vākyapadīya*

In the opening verses of the *Vākyapadīya*, a fifth century CE *Treatise on Sentences and Words*<sup>20</sup> the study of grammar (*vyākaraṇa*) is interwoven with religious and philosophical thought. The text is written in three chapters or *kāṇḍas*: *Brahmakāṇḍa*, *Vākyakāṇḍa*, and *Padakāṇḍa* meaning respectively, “chapter on Brahman,” “chapter on sentences,” and “chapter on words.” Composed of 156 stanzas or *kārikās*, the *Brahmakāṇḍa* begins by describing the essential nature of Brahman through the use of the adjective “*śabdatattva*,” a compound “combining the word *śabda*, literally ‘sound,’ ‘speech,’ or ‘word,’ with the word *tattva*, which refers to the true essence or ultimate reality of something.”<sup>21</sup> The meaning of *śabdatattva*, David Carpenter writes, is elaborated in the next three *kārikās* through a discussion of the powers or *śakti* of Brahman to transform its inner nature into an outward manifestation (*vivarta*) “having the form of the enjoyer, the object to be enjoyed, and the enjoyment.”<sup>22</sup> These first *kārikās* contain the seeds of a dynamic, non-dualistic “metaphysics of identity-in-difference (*bhedābheda*),”<sup>23</sup> which is claimed to be realized in the study and practice of linguistic analysis (*vyākaraṇa*). *Vākyapadīya* I.12 declares *vyākaraṇa* to be “a direct path towards that holiest of lights, that supreme essence of the kind of speech which has

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<sup>19</sup> Author's transliteration of Bhartṛhari, 1, 1971:  
*anādinighana brahma śabdatattva yadākṣaraṃ / vivartateṭharbhāvena praṇīyā janato yata*

<sup>20</sup> Carpenter, 35, 1995

<sup>21</sup> Ibid, 37-38.

<sup>22</sup> Ibid, 36, from Carpenter's translation of *Vākyapadīya* I.4.

<sup>23</sup> Ibid, 38.

assumed distinctions of form.”<sup>24</sup> How is the metaphysical and salvific vision described in the *Brahmakāṇḍa* reflected in the structure of the theory of language developed throughout the *Vākyapadīya*?

In this chapter we will paint a portrait of the philosophical and religious context which gave rise to Bhartṛhari’s thought. The next chapter (Grammar as Philosophy II: Bhartṛhari’s Philosophy of Language) will focus on the transcendental and pragmatic aspects of Bhartṛhari’s metaphysics, soteriology, and theory of sentence-meaning (*sphoṭavāda*) in anticipation of our comparison with the work of Noam Chomsky. A departure from the compositional semantic theories of the day, which viewed the basic, meaning-bearing linguistic unit (*śabda*) as the word (*pada*) or phoneme (*varṇa*) the *sphoṭavāda* as articulated in the *Vākyapadīya* conceived meaning as a “bursting forth” (*sphuṭ*)<sup>25</sup> of the “transcendent ground in which the spoken syllables and conveyed meaning find themselves united as word or *śabda*,” known as *sphoṭa*.<sup>26</sup>

### *Early Background to the Study of Grammar (Vyākaraṇa)*

Tradition has ascribed authorship of the *Vākyapadīya* to Bhartṛhari, about whom, “nothing definite is known.”<sup>27</sup> He is widely regarded as the fourth great Indian grammarian in the tradition initiated by the *Aṣṭādhyāyī*, following Pāṇini, Kātyāyana, and Patañjali.<sup>28</sup> Apocryphal tales scattered throughout Indian literature present Bhartṛhari as a king, a monk and a renunciant<sup>29</sup> but we can be reasonably certain he was a Brahmin owing to the long years of scholastic training required to master the discipline of linguistic analysis (*vyākaraṇa*).<sup>30</sup> The Brahmins of early India were those men “whose right and duty” was to give voice to the sacred literature known as *śruti*, meaning “that which has been heard.”<sup>31</sup> The *śruti* were conceived as “eternally true and infallible,” and therefore, “the measure of orthodoxy was whether one accepted *śruti*.”<sup>32</sup> The earliest known Indian literature is a collection of hymns called the *Ṛg Veda*.

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<sup>24</sup> Bhartṛhari, 3.

<sup>25</sup> Coward, 78, 1980

<sup>26</sup> Ibid, 71.

<sup>27</sup> Iyer, 16, 1992

<sup>28</sup> Coward and Raja, 18, 1990

<sup>29</sup> Iyer, 1.

<sup>30</sup> Carpenter, 23.

<sup>31</sup> Gombrich, 33, 1988

<sup>32</sup> Ibid, 34.

Composed by poet-philosophers known as seers (*ṛṣi*) over 3,000 years ago, the *Ṛg Veda* states that there are “as many words as there are manifestations of Brahman.”<sup>33</sup>

Brahmanical traditions which emerged from the study and worship of the *Vedas* held language (*vāk*) to be of divine origin (*Daivī Vāk*) and conceived the role of the sages who composed the scriptures – the *ṛṣis* – not as the authors but rather as the “hearers” or “seers” of the *Vedas* which were held to exist eternally<sup>34</sup> and were concerned among other topics with developing a grammar for the conduct of ritual.<sup>35</sup> Composed in a pre-classical form of Sanskrit known as “Vedic Sanskrit” the four *Vedas* were the central texts of early Indian religion, but a large number of canonical texts developed around and enriched this corpus<sup>36</sup> into a quaterfoil consisting of the *Vedas*, *Brāhmaṇas*, *Āraṇyakas* and *Upaniṣads*. Bhartṛhari’s *Vṛtti* (commentary) on *Vākyapadīya* I.112 purportedly quotes the *Vedas* in support of the idea that language or *Vāk*, “in which powers of the experiencer and the experienced, the subject and object, are latent” is “the cause of everything” but these quotes haven’t been traced to particular passages in the *Vedas*.<sup>37</sup> Nevertheless, Iyer, Coward and Raja each point out Vedic passages which suggest themselves, notably *ṚV.X.71*, *ṚV.X.114.8* and *ṚV.X.125*.<sup>38</sup>

*ṚV.X.71*, the hymn on the *Origins of Sacred Speech* identifies sacred speech (*vāc*) with a goddess who reveals herself “as a loving wife, beautifully dressed, reveals her body to her husband.”<sup>39</sup> Coward and Raja observe the hymn argues “manifestations of Brahman in language are not equally perceived by all people” and it is the role of the *ṛṣi* to see past the veil language wears to her true nature.<sup>40</sup> Yet by conceiving of sacred speech as a goddess (*devatā*), *ṚV.X.71* imbues language with an agentic and personal dimension. Note also the metaphorical transposition of language to *vision*. That the *ṛṣi* or *vipra* (“literally one who ‘quakes’”) saw a *linguistic vision* of the *Vedas* in “a powerful experience” instead of “a purely mental act

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<sup>33</sup> Coward, 3, 19.

<sup>34</sup> Ibid, 19-21.

<sup>35</sup> Patton, 15, 1996

<sup>36</sup> Gombrich, 33, 1988

<sup>37</sup> Iyer, 99, 1992

<sup>38</sup> By convention *Ṛg Veda* Book A, Hymn B, Verse C is represented *ṚV.A.B.c*.

<sup>39</sup> Doniger, 61, 1981

<sup>40</sup> Coward and Raja, 35.



of conceptualization” Carpenter argues “endowed spoken language with an ontological importance that is perhaps better captured by speaking of ‘speech-acts’ rather than of ‘language’ with its mentalistic connotations.”<sup>41</sup>

Clooney and Patton arrive at similar conclusions regarding the status of language as “praxis” in early Indian religious thought. For the orthodox Mīmāṃsā School, Clooney argues, “the starting point of inquiry must be attention to syntax and definition; such is their firm and consistent commitment to the primacy of language and to a consistent theology based on that primacy.”<sup>42</sup> This commitment is “rooted in the dynamics of language as praxis,”<sup>43</sup> which is important for Patton’s project in *Bringing the Gods to Mind* of deriving the hermeneutical method of *vinīyoga*.<sup>44</sup> Patton writes that “if Clooney is right, then even a primarily verbal view of *devatā* still leaves room for the idea that a mental image produced by language can be juxtaposed to, and associated with, other instruments of ritual in order to help the ritual proceed effectively.”<sup>45</sup> The intertwining of language and ritual in early Indian thought is indicative of an oral and aural tradition where language was “thought to be truly and most fully experienced only in its oral form.”<sup>46</sup> This is clearly visible in the practice of *vinīyoga*, “the use of Ṛg Vedic mantras in ritual... undertaken according to particular hermeneutic principles based on metonymy, or associative thought.”<sup>47</sup>

Unsurprisingly, therefore, the first formulations of Sanskrit grammar focused on perfecting speech, as for example in the *Prātiśākhya*s, the “rules for speaking the *Vedas*” which were composed as early as 600 B.C.E.<sup>48</sup> For instance, the *Ṛk Prātiśākhyā* attributed to Śaunaka, “a work of grammar and correct pronunciation, was composed for the purposes of showing all the changes necessary for constituting the *saṃhitā*, or euphonically combined, version of the *Ṛg Veda* on the basis of the *padapāṭha* version, where

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<sup>41</sup> Carpenter, 28.

<sup>42</sup> Clooney, 379, 1997

<sup>43</sup> Ibid.

<sup>44</sup> Patton, 2, 2005

<sup>45</sup> Ibid, 73.

<sup>46</sup> Coward, 7-8.

<sup>47</sup> Patton, 2, 2005

<sup>48</sup> Ibid, 9.

individual words were not combined in *sandhi*.”<sup>49</sup> These euphonically combined *mantras* were also used to weave the threads of the *R̥g Veda* into daily life through use in “extra-sacrificial” settings, such as “worship of the moon, a walk in the forest, and difficulty in childbirth.”<sup>50</sup> The principles of metonymy and associational thought which Patton argues are constitutive of the method of *vinīyoga* can be used to explain *what it means* to conceive of sacred speech (*vāc*) as a goddess (*devatā*) in R̥V.X.71 or why particular verses of the *R̥g Veda* may be employed during worship of the moon. For instance, in the case of the *Hymn of the Origins of Sacred Speech* we could suppose the “metonymic links” of language and divinity constitute a conceptual structure and thereby a “poetic image” which exercises its phenomenological force in the mystical vision of the *ṛṣi*. The poetic image of a loving wife, beautifully dressed, who reveals herself to the seer conveys the anticipation, the erotic fascination, and the reverie of the mystical vision.

Conscious of the power of language to construct worlds of meaning in ritual, the poet- philosophers who composed the Vedas, the *ṛṣi*, “were greatly concerned with the powers and limitations of language as a means of communicating their mystic, personal experiences of an ecstatic nature.”<sup>51</sup> In an attempt to systematize and codify these experiences for ritual purposes, the *ṛṣi* developed sophisticated epistemological and metaphysical schools of thought (*darśana*) and a set of six auxiliary forms of study to complement the study of the Vedas, known as the *Vedāṅgas*.<sup>52</sup> Literally translated, the *Vedāṅgas* are six “limbs” of the “body of knowledge” known as the Vedas and include grammar or linguistic analysis (*vyākaraṇa*), as well as “phonology, prosody, etymology, and astrology”<sup>53</sup> and “the science (or art) of rituals.”<sup>54</sup> Whereas, among the six *Vedāṅgas*, linguistic analysis (*vyākaraṇa*) and etymology (*nirukta*) studied the nature of language,<sup>55</sup> the *Vedāṅgas* of phonology (*śikṣā*) and prosody (*chandas*) analyzed language in a ritual context.<sup>56</sup>

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<sup>49</sup> Patton, 15, 1996

<sup>50</sup> Ibid.

<sup>51</sup> Coward and Raja, 3.

<sup>52</sup> Ibid.

<sup>53</sup> Patton, 19, 1996 (Footnote 34)

<sup>54</sup> Matilal, 7, 1990

<sup>55</sup> Ibid.

<sup>56</sup> Patton, 19, 1996 (Footnote 34)

Naturally, as the *Vedāṅga* of *vyākaraṇa* developed various schools of thought (*darśana*) emerged regarding the nature of *mantra*, meaning, and language more generally. The early development of a science of language in India was fostered by the monumental work of Pāṇini's *Aṣṭādhyāyī* ("Eight-Chapterred").<sup>57</sup> Dating from the fourth or fifth century BCE, the *Aṣṭādhyāyī* is "a complete descriptive analytical grammar of the Sanskrit language"<sup>58</sup> in approximately four thousand generative rules<sup>59</sup> or *sūtras* "which includes both Vedic Sanskrit and what is called 'classical' or *laukika* Sanskrit."<sup>60</sup> Like the *Vedāṅga* of ritual instruction (*kalpa*) Pāṇini's science of grammar was "essentially rule-governed and injunctive in character" as explained by Carpenter:

"His rules are intended to be present as a whole, as a system, at all times, at every step of the derivational process. This presupposes that the entire system of approximately four thousand *sūtras* be memorized prior to its actual employment. The *whole* necessarily precedes the *part*, and each part, each *sūtra*, and each derivational operation presupposes the whole and is indeed unintelligible if taken in isolation."<sup>61</sup>

Pāṇini's *Aṣṭādhyāyī* laid the intellectual foundations for linguistic analysis (*vyākaraṇa*). However, it was Bhartṛhari who would be credited with the first systematic philosophy of grammar, nearly a millennium later in the *Vākyapadīya* and for "making a case for *vyākaraṇa* as a *darśana*."<sup>62</sup>

### *Historical Context of the Vākyapadīya*

Bhartṛhari appears in the writings of Yijing (I-Tsing), a 7th century Chinese monk who traveled to India and stated "that at the time when he wrote the account of his travels in India, it was forty years since the death of Bhartṛhari" and this history has traditionally placed the death of Bhartṛhari at 651CE.<sup>63</sup> Iyer doubts this traditional dating, writing "H. R. Rangaswamy Iyengar and Frauwallner have definitely shown,

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<sup>57</sup> Coward and Raja, 14.

<sup>58</sup> Ibid.

<sup>59</sup> Gillon, 467, 2007

<sup>60</sup> Matilal, 8.

<sup>61</sup> Carpenter, 29.

<sup>62</sup> Coward and Raja, 18.

<sup>63</sup> Iyer, 2, 1992

on the basis of a Tibetan translation of Diñnāga's *Pramāṇasamuccaya* and the *Traikālyaparīkṣā* now not available in Sanskrit, that Diñnāga has made use of the *Kārikās* of *Kāṇḍas* II and III of Bhartṛhari's *Vākyapadīya*.<sup>64</sup> Iyer therefore suggests Bhartṛhari be dated to somewhere between 450-510 CE. Carpenter concurs and considers I-Tsing's report "erroneous."<sup>65</sup>

Even though almost nothing is known of Bhartṛhari's life, given that he can be dated to the fifth century C.E. and was most likely a Brahmin, we can paint a detailed portrait of his intellectual and historical milieu. In the fifth century C.E. Indian Grammarians found fertile soil for their religious and philosophical development in a "sophisticated, pluralistic society" which was in the midst of a "Hindu renaissance."<sup>66</sup> Under the patronage of the Gupta dynasty, which "arose from a small principality in the region of Magadha in northeastern India to become an empire second in size and power only to the early Mauryan empire," Hindu theisms flourished in the time of Bhartṛhari.<sup>67</sup> This Hinduism, or more accurately *Brahmanism*, was held in philosophical and religious tension with the Buddhist challenge to the authority of the Vedas, a central determining factor in the intellectual milieu of the fifth century C.E.<sup>68</sup>

After a period of "decline" which Bhartṛhari outlines in the closing verses of the *Vākyakāṇḍa*, Carpenter writes that the science of Sanskrit grammar (*vyākaraṇa*) was revived in the mid-fifth century C.E. with the work of Candragomin.<sup>69</sup> As Sanskrit became the *lingua franca* of the Brahmanical elite the "universal acceptance of Pāṇinian grammatical norms during the fifth century" provided a common philosophical and linguistic ground from which Bhartṛhari could cultivate his philosophy of grammar. Carpenter in agreement with Iyer, Coward, and Raja, thus claims that "the *Vākyapadīya* is, in fact, a mature expression of this revival, in which the science of Sanskrit grammar is elevated to the status of an integral metaphysical system."

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<sup>64</sup> Ibid.

<sup>65</sup> Carpenter, 22; Footnote 2

<sup>66</sup> Carpenter, 22-3.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid, 24.

<sup>69</sup> All quotes hereafter until the end of this section refer to Carpenter, 25-32.

Carpenter argues Bhartṛhari's transformation of grammar into a *darśana*, and his concomitant conception of revelatory knowledge and the status of the *Vedas* carves out an intellectual niche not easily accommodated to either of two contemporaneous schools of Brahmanical thought: Nyāya and Mīmāṃsā. While both these schools can be thought of as "orthodox" or "main-line" Brahminism they differ with respect to their conceptions of Vedic authority and philosophy of language. The Mīmāṃsā School represented the more conservative wing of the tradition. Their philosophy of language reflected a conscious delimitation of their hermeneutical method to "reflection on the ritual injunctions found in the Vedic texts." Deriving from their view of the *Vedas* as eternal (*nityatva*) and of non-human origin (*apauruṣeyatva*) the Mīmāṃsā claimed experience of the *dharma* is precisely what is "mediated externally through the Vedic institutions of speech and action." For the Nyāya (Logicians) the substance of Vedic authority rested not on Vedic institutions per se but rather on the "*experience* of a trustworthy witness," reflecting the influence of Buddhism and the "apophatic traditions found in the *Upaniṣads*."

On the one hand, Bhartṛhari's *darśana* is a *Vedāṅga* (namely, *vyākaraṇa* or linguistic analysis) and is therefore grounded in the study of the *Vedas* themselves, akin to a Mīmāṃsā position. On the other hand, Bhartṛhari's *darśana* is a philosophy of ordinary language and thereby falls outside the scope of a strictly Mīmāṃsā position. On the third hand as a study of ordinary language Bhartṛhari's *darśana* is concerned with the form of argumentation itself in a manner akin to the Nyāya School. And on the fourth hand, the Nyāya would reject Bhartṛhari's *darśana* precisely because it is grounded in the study of the *Vedas*. Carpenter concludes "Bhartṛhari accordingly develops a quite distinctive view of Vedic revelation, which combines elements that the Nyāya and Mīmāṃsā tend to separate."

### *Philosophical and Epistemological Context of the Vākyapadīya*

In the Brahmanical tradition of Bhartṛhari, various schools of thought (*darśana*) emerged with distinct "conceptions of knowledge (*pramā*) and methods or ways of knowing (*pramāṇa*)."<sup>70</sup> Matilal writes that "what we call the philosophy of language in India has always formed a part of the classical

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<sup>70</sup> Coward, 29.

philosophers' general epistemological inquiry, part of the *pramāṇaśāstra*, the theory of 'evidence' for belief or knowledge."<sup>71</sup> The six orthodox (*āstika*) schools include the aforementioned Mīmāṃsā and Nyāya, as well as Sāṅkhya, Yoga, Vaiśeṣika, and Vedānta.<sup>72</sup> Juxtaposed to the *āstika* traditions which accepted the authority of the *Vedas* are the heterodox traditions (*nāstika*) which rejected the authority of the *Vedas*: Lokāyata (materialism), Ājīvika, Buddhism, and Jainism.<sup>73</sup>

The orthodox Brahmanical philosophers were faced with serious epistemological difficulties regarding the status of revelatory knowledge as *pramā*. "In Sanskrit the word *jñāna* stands for all kinds of cognition irrespective of the question of truth and falsehood, whereas the word *pramā* is used to designate only true cognition (*yathārtha-jñāna*)."<sup>74</sup> The distinctive status of revelatory knowledge as *pramā* arose from the conception of *pramā* as "cognition the object of which is neither contradicted nor already known as an object (*anadhigatābādhitārtha-viṣyam jñānam*)."<sup>75</sup> In other words, whatever the content of the *pramā*, it must be derived from a particular source or *pramāṇa* and cannot contradict knowledge acquired through the method of a different *pramāṇa*. The Mīmāṃsā and Vedānta schools accepted six *pramāṇas*: *pratyakṣa* (perception), *anumāna* (inference), *śabda* (testimony), *upamāna* (analogy), *arthāpatti* (presumption) and *abhāva* (non-apprehension).<sup>76</sup> Sāṅkhya and Yoga only accepted a subset of these *pramāṇas*, namely, "*pratyakṣa* (perception), *anumāna* (inference), and *śabda* (testimony)."<sup>77</sup>

A complicating factor for understanding the philosophical situation of Bhartṛhari's India is the variety of definitions and arguments for the various *pramāṇas*. For instance the Mīmāṃsā definition of *śabda pramāṇa* (testimony) differs substantially from the Sāṅkhya and Yoga interpretations of *śabda pramāṇa* and is premised on different philosophical projects.<sup>78</sup> In general *śabda pramāṇa* can be thought of as an early Indian form of social epistemology, a contemporary philosophical project which seeks, "not

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<sup>71</sup> Matilal, 4-5.

<sup>72</sup> Flood, 231-2, 1996

<sup>73</sup> Ibid, 82; 224.

<sup>74</sup> Coward, 29-30.

<sup>75</sup> Ibid, 30.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

<sup>78</sup> Ibid, 31-36.

only to describe our current social practices of knowledge production, but also to understand how we ought to know and how we can improve our knowledge practices.”<sup>79</sup> The question naturally arose in Vedic India how one was to understand the content of knowledge communicated by trustworthy persons, and whether there was a difference in the form of this knowledge as compared to the seers (*ṛṣi*) who spoke the *Veda* into being.

For the Sāṅkhya, Coward explains, *śabda pramāṇa* was conceived on two levels, as Vedic revelation (*śabda vaidika*) and as the “testimony of ordinary trustworthy persons” (*śabda laukika*).<sup>80</sup> The need to posit a *śabda vaidika pramāṇa* arises from the Sāṅkhya notion of Vedic knowledge as beyond direct perception (*pratyakṣa*) and inference (*anumāna*). Concerning the testimony of ordinary persons who do have access to the “self-evident validity” of Vedic revelation, some Sāṅkhya authors argued that *śabda laukika* was *not* a separate or valid *pramāṇa* because the content of the knowledge depended upon *pratyakṣa* (perception) and *anumāna* (inference); as stated above, for knowledge to be considered *pramā* it had to be a unique result of a single *pramāṇa*. One could also argue that the duality of the *śabda pramāṇa*, divided as it is into *śabda vaidika* and *śabda laukika* follows directly from the dualist metaphysical structure of Sāṅkhya philosophy, which posited “the achievement of discriminative knowledge so that the real separation of *puruṣa* [consciousness] from *prakṛti* [matter] can be realized.” If this is true, one can therefore infer how metaphysical presuppositions shape the form and content of the arguments used for various *pramāṇas*. This isn’t to say that the *pramāṇas* are formulated simply as an apologetic device for various religious positions. Far from it. This is especially so in the case of the Sāṅkhyin philosopher who “formally admits *śabda* as *Veda* as an independent *pramāṇa*,” but with the qualification that *anumāna* or inference “is really the chief Sāṅkhyan *pramāṇa*,” and therefore “Scripture may be said to be subordinate to reason for *Sāṅkhya*.”

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<sup>79</sup> Grasswick, 2018. *Feminist Social Epistemology* in Stanford Encyclopedia of Philosophy.

<sup>80</sup> This section draws heavily on the work of Coward, 31-35 and all quotes on pp. 22-24 are attributed to these pages unless otherwise noted.

Different philosophical projects motivate the Yoga, Mīmāṃsā, and Vedānta Schools and therefore the form and content of the arguments for *śabda pramāṇa* reflect this difference. “Yoga adopts the Sāṅkhyan metaphysics with its three *pramāṇas* of perception, inference, and verbal testimony, but in Yoga the primary concern is the achievement of a practical psychological technique by which the liberation of the *puruṣa* (as described by *Sāṅkhya*) can be achieved.” Whereas the Sāṅkhyan conception of liberation (*mokṣa*) is concerned as stated above with the separation of the two constitutive elements of reality *puruṣa* (consciousness) and (*prakṛti*), reflected in their dualistic conception of *śabda pramāṇa*, the Yogin grounds *śabda pramāṇa* in the teachings of their god and guru Ívara, who was thought to have taught the ancient *ṛṣi* to speak the divine word and “with whom he differs in that they are limited by time while he is not.”

The Mīmāṃsā considers *śabda pramāṇa* their principle means of knowledge as “it is the sole means for knowing injunctions and prohibitions (*dharma*).” Rather than grounding the validity of *śabda pramāṇa* in the word of Ívara as the Yogins do or the dualist metaphysics of the Sāṅkhya School, the Mīmāṃsā instead predicate their arguments on their philosophy of language, which holds “the word, its meaning or denotation and the relationship between these two” to be “inborn, eternal and therefore not subject to creation by any person” which, in the case of Vedic revelation, means that understanding the meaning of the *Vedas* as in a case of *śabda pramāṇa* would be to tap into this eternal verbal reality. Coward notes an objection which the Mīmāṃsāka Śabara fields and answers in his *Bhāṣya*: if a word is understood “by virtue of its ‘inborn meaning,’” then we should expect a word to be “understood by everyone the very first time” they hear that word. This is *prima facie* absurd because one often encounters words they don’t understand and must learn the meaning of unfamiliar words. Śabara answers by appealing to the nature of *śabda pramāṇa* itself, paying close attention to the process by which words are rendered in conversation, thought, and comprehension:

“What happens is that each component letter, as it is uttered, leaves an impression behind, and what brings about the cognition of the denotation of the word is the *last component letter along with the impressions of each of the preceding component letters*. In actual



experience the composite word-unit is never found to be anything entirely different from the component letters; hence there can be no ‘word’ apart from the component letters.”<sup>81</sup>

A Mīmāṃsā philosopher therefore conceives *śabda pramāṇa* as a compositional process following Śabara’s characterization of the compositional, sequentially constructed nature of sentence-meaning.<sup>82</sup> According to the Prābhākara Mīmāṃsākas, a sect of the Mīmāṃsā school, three components were used to determine the meaning of a sentence: *ākāṅkṣā*, a necessary relationship holding between words if they are to be understood in context known as “mutual expectancy” formed from desiderative verbs, *yogyatā* meaning consistency of use to refer to a certain entity, and *āsatti* or contiguity.<sup>83</sup> The Vedānta school will forcefully reply that this compositional semantic theory (“technically called the *Anvitābhīdhāna* Theory”) contradicts the revelatory and self-evident status of the *Vedas*.<sup>84</sup>

The Prābhākara *Anvitābhīdhāna* Theory predicated its analysis on the meaning of a sentence being derived from the “verb or action required from the subject” which makes sense given the hermeneutical focus of the Mīmāṃsā school upon deriving ritual injunctions (*dharma*) from the *Vedas*.<sup>85</sup> This theory was strongly challenged by the Advaita Vedānta philosophers Śaṅkara and Prakāśātman, because the view is “antagonistic to the essence of Advaita Vedānta, which champions the Vedic texts holding reality to be attainable through knowledge rather than action, and philosophically holding the absolute to be ‘being’ rather than ‘becoming.’”<sup>86</sup> Against the instrumentalism of the Mīmāṃsākas, the Vedāntin *Abhihitānvaya* Theory of sentence-meaning holds instead that “the words of a sentence present only their primary isolated meanings” and that “under the influence of factors such as expectancy, compatibility, proximity and purport” the meaning of a particular utterance is rendered.<sup>87</sup> Thereby, “nouns as well as verbs have eternal denotations” and Vedic knowledge and action is intelligible and revelatory.<sup>88</sup>

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<sup>81</sup> Ibid, 36: quoting “Śabara *Bhāṣya* in Jha, *Pūrva Mīmāṃsā*, p. 99.”

<sup>82</sup> Ibid, 38.

<sup>83</sup> Ibid, 41.

<sup>84</sup> Ibid, 40.

<sup>85</sup> Carpenter, 25.

<sup>86</sup> Coward, 45.

<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

### *Bhartṛhari's Doctrine of Revelation*

Distinguished as his views were from his contemporaries in the Mīmāṃsā and Nyāya *pravādas* (schools) by his focus on the salvific and universal power of the study of grammar (*vyākaraṇa*) Carpenter writes that Bhartṛhari “was to examine the problem of revelation from the point of view of the language of revelation *as language*.”<sup>89</sup> He claims the central idea of Bhartṛhari's doctrine of revelation is therefore that of the *Vedas* as *anukāra* or “imitative resemblance” of *Brahman*<sup>90</sup> as found in *Vākyapadīya* I.5-I.6.

I.5<sup>91</sup>

“The Veda is the means for attaining [*prapātyupāya*] that [Brahman] and is its imitative resemblance [*anukāra*]. Although it is one, it is proclaimed again and again by the great seers as having, as it were, many paths.”<sup>92</sup>

I.6<sup>93</sup>

“There are many paths to its divisions; it is the accessory in one rite. The fixity of the powers of its words is seen in its branches.”<sup>94</sup>

Carpenter points out that the term *anukāra* “which is not a particularly common term” in classical Sanskrit and is found in *Vākyapadīya* I.5 in the compound *prāptyupāyonukāraśca* is “formed as a primary derivative of the verbal root *anukṛ*, which is composed of the root *kṛ*, to do or to make, and the preverb *anu-*, meaning after, following, near to, subordinate to, with.”<sup>95</sup> Thus, he concludes the meaning of the term is “either a *doing* or a *making*” in relation to an agent or activity,<sup>96</sup> the form of the relation being suggested by the grammatical case used (e.g. instrumental, ablative, etc.). The significance of this rather obscure term is that throughout the *Vākyapadīya* it is compounded with the terms *bhedā* and *pratyaṃ* meaning respectively,

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<sup>89</sup> Carpenter, 24.

<sup>90</sup> Ibid, 41.

<sup>91</sup> Author's transliteration of Bhartṛhari, 1:  
*prāptyupāyonukāraśca pasya vedo mahārṣabhi /*  
*ekopyanekavanmareva samāmnāta prthavaprthakam*

<sup>92</sup> Carpenter, 40.

<sup>93</sup> Author's transliteration of Bhartṛhari, 1:  
*bhedānā bahumārnatva karmanyekatra cāṇḍatā /*  
*śabdānā yataśavitatvam tasya śakhāsu vartate*

<sup>94</sup> Carpenter, 40-41.

<sup>95</sup> Ibid, 41.

<sup>96</sup> Ibid.; emphasis added.

“difference” and “idea or conception in the mind,”<sup>97</sup> signifying the means by which, respectively, knowledge of Brahman is differentiated into multiplicity (*bhedānukāreṇa*<sup>98</sup>) and is made to fit the forms of the human mind (*svapratyayānukāreṇa*<sup>99</sup>). Two examples illustrating the use of *bhedā* and *pratyaya* are respectively *Vākyapadīya* II.7 and II.135:

II.7<sup>100</sup>

“Just as light, which is one and (illuminates) all objects, is divided by imitating the differences [*bhedānukāreṇa*] of visible objects, so too is the understanding of the meaning of the sentence.”<sup>101</sup>

*Vākyapadīya* II.7 depicts in metaphor how the meaning of a sentence can be conceptualized in a number of different ways depending on the presuppositions of the grammarian. This is a vital passage which will warrant further study in later chapters. The compounding of *bhedānukāreṇa* with the word *dr̥śya*, from the root *dr̥ś* (to see or to visualize<sup>102</sup> and which may share a root with *ṛṣi*) connotes the visual differentiation of light into color but also the reflective “imitative” quality of light as it reflects the properties of the objects by virtue of the differentiation of color. We can apply this image to thought and meaning in VP II.135:

II.135<sup>103</sup>

“(Thus) a word-meaning intended in a certain way by a speaker takes different shapes in different hearers depending upon the comprehension of each”<sup>104</sup>

*Vākyapadīya* II.135 claims, based on a preceding discussion of the failures in perception of deformed sense-organs, that the imitative capacity (*anukāra*) of a word-meaning (*śabdārtha*) declined into

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<sup>97</sup> Ibid, 41-2.

<sup>98</sup> Ibid, 42.

<sup>99</sup> Bhartṛhari, 69, 1971

<sup>100</sup> Author’s transliteration of Bhartṛhari, 37:  
*yathaika eva sarvā tharpratyaya pravibhajyate /*  
*dr̥śyabhedānukāreṇa vākyātharnugamastathā*

<sup>101</sup> Carpenter, 40-41.

<sup>102</sup> Coward and Raja, 31.

<sup>103</sup> Author’s transliteration of Bhartṛhari, 69:  
*vaktrānythaiva prarānte bhinneṣu pratipattṛṣu /*  
*svapratyayānukāreṇa śabdārthaṃ pravibhajyate*

<sup>104</sup> Bhartṛhari, 69.

the accusative case as *śabdārthaṃ*)<sup>105</sup> distorts the meaning of a word with respect to the state of the mind of the hearer (*svapratyayā*). Thus, we come to understand the role of the seers (*ṛṣi*) as explicated in *Vākyapadīya* I.17 – 22 which describes the process whereby the “pure light which is the supreme essence of speech” is revealed to a “soul which has passed beyond errors.”<sup>106</sup> Those *ṛṣi* who have purified the forms of their mind to such an extent that they are able to see the light of Brahman *manifest the pure form of Brahman within their own mind*. It follows that Bhartṛhari’s conception of *Veda* as imitative-capacity (*anukāra*) of Brahman is, as Carpenter suggests, more than to say the *Veda* is a mere representation of Brahman. It is a claim to the immanence of Brahman in the vision of the *ṛṣi* and a claim about how one might prepare their mind for such a visionary experience.

### *Bhartṛhari’s Sphoṭavāda*

Before Bhartṛhari penned his *sphoṭa* theory of language, the two theories of sentence-meaning mentioned above, the Mīmāṃsā *anvitābhīdhānavāda* and the Vedāntin *abhihitānavayavāda* delineated the conceptual space of Indian theories of sentence-meaning as most other theories can be seen as variations on one of these two fundamental themes.<sup>107</sup> On the one hand, the *anvitābhīdhānavādin* will insist that the syntactical relations *ākāṅkṣā*, *yogyatā*, and *āsatti* are conveyed in addition to the meanings of the words in a sentence, at every word in the sentence.<sup>108</sup> On the other hand, the *abhihitānavayavādin* will say that “in a sentence each word gives out its individual isolated meaning (which is universal) and their significative power [*śakti*] is exhausted with that.”<sup>109</sup> Once the power of *śakti* has been exhausted and the meanings (*artha*) are manifested together in a collection words express their secondary meanings (*lakṣaṇā*) and the syntactical elements of the sentence obtain their relations, rendering a sentence-meaning.<sup>110</sup>

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<sup>105</sup> Maurer, 51, 1995

<sup>106</sup> Bhartṛhari, 3-4.

<sup>107</sup> Ibid, 9-10.

<sup>108</sup> Ibid, 10.

<sup>109</sup> Ibid.

<sup>110</sup> Ibid.

A common presupposition unites the *anvitābhīdhānavāda* and *abhihitānvayavāda*. Both theories are predicated on a *compositional semantic theory*: the idea that the basic, meaning-bearing linguistic unit (*śabda*) is the word (*pada*), in the case of the *anvitābhīdhānavāda* or the phoneme (*varṇa*), in the case of the *abhihitānvayavāda*. In such a theory “the individual letters or words of a sentence generate the meaning” by virtue of their *śakti* (significative power), *lakṣaṇā* (secondary meanings) and syntactical relations.<sup>111</sup> Bhartṛhari makes a counterintuitive argument against these compositional theories by claiming that the linguistic elements known as sentences (*vākya*), words or morphemes (*pada*), and phonemes (*varṇa*) are mere abstractions from underlying “unitary entities” known as *sphoṭa* and that “only while being perceived (due to association with sound, which by nature has a sequence) and when conscious or subconscious grammatical analysis is being carried out” do the *sphoṭa* appear to be differentiated into these elements.<sup>112</sup> Of note is the fundamental distinction between word (*śabda*) and sound (*dhvani*) found “in all schools of Indian philosophy.”<sup>113</sup> Given the distinction of word (*śabda*) and sound (*dhvani*) coupled with the idea that “the word, or *śabda*, is only manifested and not constituted by the vocal sounds or *dhvani*,” the nature of *śabda* becomes an object of inquiry in its own right.<sup>114</sup> How *śabda* was conceived differed throughout the various Brahmanical schools of thought, based on how and to what degree syntactical relations figure in the nature of *śabda*.

Bhartṛhari’s conception of *śabda* as *sphoṭa* is quite different from the *anvitābhīdhānavāda* and *abhihitānvayavāda*. Recall that Śābara’s characterization of *śabda pramāṇa* depended on the temporality of the process of understanding a sentence. Each phoneme left a trace in consciousness which contributed to the total meaning of the sentence.<sup>115</sup> The Bhartṛharian response to this theory is to point out “that the letters of a word or the words in a sentence die away as soon as they are pronounced so that when we arrive at the last letter of a word or the last word of a sentence, the previous elements have all vanished.”<sup>116</sup> Where

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<sup>111</sup> Coward, 66.

<sup>112</sup> Ashok Aklujkar in Coward and Raja, 122.

<sup>113</sup> Coward, 63.

<sup>114</sup> Ibid.

<sup>115</sup> See p. 19.

<sup>116</sup> Coward, 66.

are these traces in consciousness? “If it is replied,” Coward writes, “that memory holds the traces of the letters and words, this still does not help since, as only one thing can be cognized at a time in our mind, the memory traces will only replay the serial presentation of the original parts and no whole meaning will be generated.”<sup>117</sup> Bhartṛhari had to find a way to account for the temporality of language production and comprehension in a manner which held true to his metaphysical commitments regarding the nature of time (*kāla*) and the Word-Principle (*Śābdatattva*). Furthermore, Bhartṛhari recognized that “in a speech situation, communication is always through complete utterances. The speaker thinks and the listener understands the utterance as a single unit.” He therefore posited a transcendental, unitary entity called *sphoṭa* which would be cognized in “an instantaneous flash of insight (*pratibhā*).”<sup>118</sup> Bhartṛhari articulates the position as follows:

I.44<sup>119</sup>

“Grammarians consider that there are two ‘word-entities (i.e. two elements) in functional words, one (i.e. the *sphoṭa*) is the cause of the (production) of words and the other (the speech-sound) is used in connection with meanings.”<sup>120</sup>

Bearing in mind the distinction made in Indian philosophy of language between *śabda* and *dhvani*, Bhartṛhari is making a claim about the existence of two word-entities (*śabdeṣu*) and how they function to produce either the speech-sound (usually identified with *dhvani*) on the one hand or the meaning on the other. Here, the crucial word is *nimitta*, which is declined in the genitive plural case and is the metaphysical “ground” out of which these two functions arise.<sup>121</sup> Concerning the ontology of these two word-entities:

I.45<sup>122</sup>

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<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

<sup>119</sup> Author’s transliteration:  
*dvāvupādānaśabdeṣu śabdau śabdavido /*  
*eko nimitta śabdānāmaparorbhe prayujate*

<sup>120</sup> Bhartṛhari, 9. *Nimitta* is parenthetically identified by Pillai as *sphoṭa*.

<sup>121</sup> Notes from conversation with Laurie Patton: November 2<sup>nd</sup>, 2018.

<sup>122</sup> Author’s transliteration:  
*ātmabhedastayo kecidastīnyāhū purāṇagā /*  
*buddhibhedādabhinnsya bhedameke pracakṣate*

“Some, among the teachers of old considered that there was a difference in essence between these two. Others (on the other hand) speak of the same undivided entity being thought various through a difference in conceiving it.”<sup>123</sup>

The two positions Bhartṛhari describes are what I will call, following the American linguist and philosopher, Noam Chomsky, “metaphysical dualism” and “epistemological dualism” with respect to the two word-entities.<sup>124</sup> Metaphysical dualism is a form of inquiry wherein a precise delineation in two categories is necessary for some theory. Epistemological dualism is a form of inquiry wherein a precise delineation in two categories is possible. If a “difference in essence” exists between the two word-entities (*śabdeṣu*), a necessary consequence for linguistic analysis (*vyākaraṇa*) is the formulation of categories to account for this difference. If on the other hand, an “undivided entity” is “thought various through a difference in conceiving it” then the formation of categories to account for the difference is possible. Bhartṛhari’s formulation indicates a move toward pragmatism regarding the content of linguistic analyses: just as Brahman manifests its transcendental unity as Vedic multiplicity and “is divided [in the Vedas] on the basis of the various explanations (of it),” so too, the analysis of the meaning of a sentence changes based on the mode through which one conceives it: as a metaphysical or epistemological dualist.<sup>125</sup>

### *Closing Thoughts*

Thus far we have traced Bhartṛhari’s conception of language from its origins in Vedic exegesis to its fruition as the *śphoṭavāda* in his *Treatise on Sentences and Words*. Bhartṛhari’s *Vākyapadīya* is widely regarded as the fourth great grammatical treatise in the tradition of *vyākaraṇa* initiated by Pāṇini over 2,500 years ago. It is credited with developing *vyākaraṇa* into a *darśana* or “view about ultimate things.”<sup>126</sup> Reflecting its Brahmanical birth, the *Vākyapadīya* presupposes a great deal of knowledge concerning the study of the *Vedas*, the theory of evidence for belief or knowledge (*pramāṇasātra*), and the practice of

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<sup>123</sup> Bhartṛhari, 9.

<sup>124</sup> Chomsky, 1992

<sup>125</sup> Bhartṛhari, 4

<sup>126</sup> Coward and Raja, 17

*dharma*. Bhartṛhari's conception of Brahman as *śabdatattva* finds resonance with ṚV.X.71 and the notion of language as *praxis*. Part of Bhartṛhari's praxis, as we will see in Chapter Three, is the ability to hold multiple truths in tandem while striving after ultimate truth. In the *sphoṭavāda*, ultimate truth bursts forth in the mystical vision as the *ṛṣi* perceives in a flash of intuition (*pratibhā*) the meanings of the sentences constituting the *Vedas*. These sentences are the reflection, image, or imitative-resemblance (*anukāra*) of Brahman, which may be conceived of as many but is ultimately one.



## Chapter Three

### Grammar as Philosophy II: Bhartṛhari's Philosophy of Language

#### *“Perspectivism” in the Vākyapadīya*

John D. Kelly has pointed out that the “perplexing argumentative style” of the *Vākyapadīya* arises from its dual status as a “text delivering wisdom,” and as a “collection of views” (*saṃgraha*) with no clear and settled position on many important matters.<sup>127</sup> Nevertheless, one discernable stance in the *Vākyapadīya* is that all knowledge is mediated by language.<sup>128</sup> From this point of view two forms of inquiry into the nature of language arise: a *transcendental* approach which takes the form and content of language to derive from knowledge, or conversely, a *pragmatic* approach which takes the form and content of knowledge to derive from language. Bhartṛhari uses both. He opens the *Brahmakāṇḍa* with a transcendental depiction of Brahman as *Śabdatattva* (see epigraph of Chapter II and p. 12), and closes the *Vākyakāṇḍa* with a pragmatic plea for pluralism and the importance of studying multiple systems of thought:

II.484 – 485

“Thought becomes clear by a study of different systems of thought [*darśana*]. What points can possibly be contradicted by him who learns (only) his system?”

“The knowledge of people who imagine things to be such and such, without (relying on) the ancient science (in interpreting them) and who have not studied the older teachers, will not be very clear.”<sup>129</sup>

Kelly contends these verses represent a “bridge” between the argument of the text and “its *saṃgraha* form” by virtue of the fact that as a collection of traditions (*āgama-saṃgraha*) it can provide guidance to a student that would be unavailable to one who is confined to a single point of view.<sup>130</sup>

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<sup>127</sup> Kelly, 172, 1993

<sup>128</sup> Iyer, 100-101.

<sup>129</sup> Author's transliterations:

VP II.484: *prajñavivekaṃ labhate bhinnairāgamadarśanaiḥ / kiyadvā śaktamunnetuṃ svatarkamanudhāvatā*

VP II.485: *tattadutprekṣamāṇānāṃ purāṇairāgamairvinā / anupāsitavrddhānaṃ vidyā nātiprasīdati*

<sup>130</sup> Kelly, 172.

Taking his cue from Bhartṛhari, Kelly attempts not to systematize Bhartṛhari's thought into a coherent and totalizing system, but rather to ask two particular questions that raise substantive philosophical issues in the text: whether "all formal analytic systems are limited in their potential to explain or even describe linguistic phenomena: whether the text is an argument for the limits to [any given] formal analysis of meaning" and "whether this argument, or any of the text's arguments, are directed specifically as a response to Buddhist arguments about language and meaning, especially those of Nāgārjuna or the Vijñānavādins."<sup>131</sup> In this chapter we will take up the mantle of Kelly's first question and leave the second question to further and other scholarship.

Jan Houben refers to Bhartṛhari's argumentative approach as "perspectivism" because the term conjures Bhartṛhari's "constant awareness of the 'limits of philosophical and theoretical discourse.'"<sup>132</sup> Houben argues Bhartṛhari's perspectivistic approach "implies that the validity of a single perspective is limited," and affirmatively answers Kelly's first question. Houben contends that such an analysis explains why the *Vākyapadīya* "has become to a very great extent a *saṃgraha*, an encyclopedia of different existing views on linguistic and philosophical issues," and that a general shortcoming in studies of Bhartṛhari has been a disregard for the implications of the form of the text.<sup>133</sup> Whereas the *Vākyapadīya* was traditionally conceived as expounding a school of thought known as linguistic monism or linguistic absolutism (*śabdādvaita*), Houben argues that if expounding such a philosophy was Bhartṛhari's goal he only managed to do so "in a rather incomplete and unsatisfactory way," and that such a reading "would always leave important characteristics of the [*Vākyapadīya*] unexplained."<sup>134</sup> Alluding to the first several verses of the *Vākyapadīya*, Houben describes *śabdādvaita* as a doctrine claiming "that there is only one absolute reality, Brahman or Śabdatattva, the 'language principle' 'having the nature of language', and the phenomenal world comes into appearance through the Śaktis or Powers of this One Brahman Śabdatattva."<sup>135</sup> Houben

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<sup>131</sup> Ibid, 171.

<sup>132</sup> Houben, 17, 1995

<sup>133</sup> Ibid.

<sup>134</sup> Ibid, 14-15.

<sup>135</sup> Ibid, 14.

points out that—aside from the opening verses of the *Brahmakāṇḍa*—the *Vākyapadīya* is *primarily* a study of grammar and therefore one may arrive at a different understanding of the *meaning* of the opening verses if one approaches them from a different point of departure than the *śabdādvaita* theorists. Namely, the discussions of *relation* Bhartṛhari develops in the *Sambandha-Samuddeśa* of the *Padakāṇḍa*.

We will tread a middle way between the methods of scholars like Iyer and T.R.V. Murti who support a *śabdādvaita* reading and Houben’s perspectivism by focusing on several verses from the first two *kāṇḍas* and discussing how they adjudicate between Bhartṛhari’s transcendental and pragmatic perspectives on the nature of words and sentences. To frame Bhartṛhari’s perspective on the nature of words, we’ll begin by discussing verses I.1-22, the metaphysical skeleton of the text, and sketch the relationships between several ideas that suggest a *śabdādvaita* reading of Bhartṛhari. Then we’ll touch on VP I.34 to describe Bhartṛhari’s epistemology of inference (*anumāna*) and how inference as *pramāṇa* differs from intuition (*pratibhā*) and *śabda-pramāṇa*. We’ll then focus on VP I.44-46 to flesh out Bhartṛhari’s conception of words as abstractions derived from unitary and transcendent entities called *spṛṣṭa* and transition into a discussion of the nature of sentence-meanings in the *Vākyapadīya*.

### *Bhartṛhari on Words*

Bhartṛhari balances transcendental and pragmatic perspectives on the nature of words from his opening verses. The first twenty-two verses of the *Brahmakāṇḍa* proclaim that in order to understand Brahman, that “pure light which is the supreme essence of speech...<sup>136</sup> which, though one, is divided on the basis of the various explanations of it,”<sup>137</sup> one must understand *how* the “ways of dividing”<sup>138</sup> (*prarīyabhedairbahūdā*)<sup>139</sup> the word-principle affect one’s understanding of Brahman. Bhartṛhari claims these “ways of dividing” the word-principle derive from the theory *and* practice of linguistic analysis (*vyākaraṇa*). Knowledge of the origins of these conceptual divisions leads to an understanding of the true

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<sup>136</sup> VP I.18

<sup>137</sup> VP I.22

<sup>138</sup> Translation based on Apte, 351, 1976 (*The Student’s Sanskrit-English Dictionary*) entry for *prarīya*.

<sup>139</sup> Ibid, author’s transliteration.

nature of Brahman.<sup>140</sup> On the one hand, this approach is pragmatic because it treats the differences in knowledge attained by the division of words and sentences as a product of the conduct of linguistic analysis. On the other hand it is transcendental because of the content of the ideas Bhartṛhari is propounding: the opening verses of the *Brahmakāṇḍa* describe the “beginningless and endless” Brahman, which is called the word-principle (*śabdatattva*) and the “permanent syllable (*akṣara*),” and which is claimed to manifest itself (*vivartate*) into the multiplicity of objects which constitute the Universe.<sup>141</sup> In these first verses Bhartṛhari makes strong, definite claims about the nature of Brahman and the *Vedas*. What is the relationship between Bhartṛhari’s metaphysical commitments and his pragmatism or—in Houben’s terms—perspectivism? Is the *Vākyapadīya*, as Kelly suggests, an argument for the limits of a formal analysis of meaning? Bhartṛhari suggests in VP I.8<sup>142</sup> that controversies surrounding the interpretation of the *Vedas* have arisen from arguments between dualistic and monistic interpreters and not from the content of the *Vedas* themselves:

I.8<sup>143</sup>

“There are various controversies between the Monists [*ekatvinām*] and the Dualists [*dvaitinām*] arising from their own options [*svavikalpa*] regarding [*Vedic*] explanatory sentences.

Read alongside the next verse, VP I.9, it appears Bhartṛhari is claiming these controversies arise at a second-order level from the “pure knowledge” proclaimed by the *Vedas*, which he claims is “not contradictory to any school of thought.”

I.9

“That true and pure knowledge alone proclaimed by that one word (namely Om̐) is stated there (in the Veda) under the form of the word Om̐—a knowledge which is not contradictory to any school of thought.”

<sup>140</sup> Cf. VP I.17-I.22

<sup>141</sup> Aklujkar, 126, in Coward and Raja, 1990

<sup>142</sup> Pillai, xxxiii, 1971; Bhartṛhari, 2.

<sup>143</sup> Ramseier’s transliterations:

VP I.8: *tasyārthavādarūpāṇi nīśritāḥ svavikalpajāḥ / ekatvinām dvaitinām ca prayādā bahudhāgatā*

VP I.9: *satyā viśuddhis tatroktā vidyaivekapadāgamā / yuktā praṇavarūpeṇa sarvavādāvirodhinā*

In VP I.8-9 Bhartṛhari appears to be making what might nowadays be called a “constructivist” claim regarding the exegesis of the *Vedas*: based on their own “mental constructions”<sup>144</sup> (*svavikalpa*) available in either school of thought (Monist or Dualist), different thinkers arrive at different conclusions when they perceive the same reality which is in some sense beyond these conceptual constructions.<sup>145</sup> In that sense, *śabdādvaita* or linguistic absolutism appears *not* to be the philosophical position Bhartṛhari is advocating, insofar as it requires (as Houben seems to think) a commitment to metaphysical idealism and monism.<sup>146</sup> Contra idealism, Bhartṛhari is claiming there exists something beyond the concepts available in a particular perspective (namely, *śabdatattva*) and contra monism, concepts and the objects of *Vedic* knowledge appear to be of different kinds because the knowledge of concepts can be contradictory but *Vedic* knowledge doesn’t have this fault.

VP I.17-22 articulate these themes with more depth and force as revelatory knowledge is the critical, salvific function of the science of grammar for Bhartṛhari. These verses can provide a useful frame of interpretation for reconstructing Bhartṛhari’s views on the nature of words and sentences, as they foreshadow Bhartṛhari’s conception of a linguistic utterance as a gateway (*uktidvāraṃ*) connecting the *sphoṭa/śabda* to the spoken word (see below with respect to VP II.399-404):

I.17 <sup>147</sup>

“The soul which has passed beyond errors in it [i.e., in grammar] and is capable of studying the *Veda* observes that [*Brahman*] which is the source of the *Vedas* and the very soul of which is constituted by the *Veda*

I.18

“That pure light, which is the supreme essence of speech, free of (any kind of) form, which appears to take several forms in this darkness (of manifestation),

<sup>144</sup> Carpenter (pp. 40, 50, 59) translates *vikalpa* as “mental constructions”

<sup>145</sup> Cf. Robert K.C. Forman “Introduction: Mystical Consciousness, the Innate Capacity, and the Perennial Psychology” pp. 3-6 in *The Innate Capacity* (Ed. Forman, R.K.C., 1998).

<sup>146</sup> Houben, 15.

<sup>147</sup> Author’s transliterations of Bhartṛhari, 3-4:

I.17 *atrātōtavipayarsa kevalāmanupaśayati / chandasyacchandasā yonimānmā chandomayītanum*

I.18 *pranyastamītabhedāyā yadvāce rupamutamam / Yada sminneva tamasi jyoti śuddha vivartate*

I.19 *vaikūta samatīrāntā mūrtavyāpāradaśarnam / vyatītyālokatamasī prakāśam yamupāsate*

I.20 *yatra vāco nimintāni cihrānīvākṣarasamuteḥ / Śabdamūrveṇa yogena bhāsante pratibimbavatam*

I.22 *yadeka prarīyābhedaibarhūdā pravibhajyate / tadvaṇyākaraṇamāgamya para brahmādhiganyate*

I.19

“—which is worshipped by those who have transcended the (manifested) speech showing form and action, and who have passed beyond (the duality of) light and darkness /

I.20

“—in which the symbols of speech, pointers as it were to the ‘one-letter scripture’ (*Oṃ*) shine forth like reflections in association with that (i.e. *Oṃ*) which is antecedent to all (manifested) speech / ... /

I.22

“which, though one, is divided on the basis of the various explanations, – that Supreme Brahman is attained by having recourse to grammar.”

In these passages we catch an early glimpse of why the study of grammar has salvific value for Bhartṛhari: understanding the forms of language allows one to study the *Vedas*, the ultimate source of *revelatory language*. As discussed in Chapter Two, Carpenter (1995) argued that revelatory language has a peculiar status in Bhartṛhari’s thought as the imitative-capacity (*anukāra*) of Brahman. “Bhartṛhari was to examine the problem of revelation from the point of view of the language of revelation *as language*,” Carpenter wrote, “which was for [Bhartṛhari] both a form of *dharma*, the socio-cosmic order of the Brahmanical universe, and a self-manifestation of ultimate Reality that underlay that universe, Brahman.”<sup>148</sup> Carpenter notes that “the precise meaning of these verses is difficult to determine,” and discusses Bhartṛhari’s use of the term “*chandyasa*” in VP I.17 to refer to the capacity of the *ṛṣi* to study the *Vedas*.<sup>149</sup> *Chandyasa* can mean “taking the form of hymns,” writes Carpenter, drawing on Monier-Williams’ discussion of *Taittirīya Saṃhitā* 1.6.11.4, “where this term is used to describe the god Prajāpati... [who in the *Śatapatha Brāhmaṇa* 10.4.2.21-22] sees all beings ‘in the Veda’ and decides to construct for himself a body ‘made of hymns.’”<sup>150</sup> That the mystical vision of the *ṛṣi* is described in this way evokes the

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<sup>148</sup> Carpenter, 24.

<sup>149</sup> Ibid, 69.

<sup>150</sup> Ibid, 70.

mythical image of Prajāpati as a model and “unites the concerns for Vedic *dharma* mediated by the Divine Speech with the concern for spiritual liberation which had originally arisen outside Vedic circles.”<sup>151</sup>

In VP I.18 Bhartṛhari uses the word *rupamutamam* to qualify the “pure light” of *Vedic* knowledge. *Rupamutamam* is a compound of the noun *rupa* (which is a technical term meaning “form”) and *muta* (meaning “woven, bound”) declined into the accusative case and translated here as “free of form” by Pillai. Patton has suggested “undivided” would be a better translation because of the claim Bhartṛhari is making in these passages that what we perceive as different forms of “darkness” are in *fact* the supreme reality of Brahman.<sup>152</sup> Bhartṛhari therefore suggests that to see past the distortions and divisions created by the imitative-capacity in “this darkness of manifestation” requires a kind of cognition (*vijñāna*), such as “discriminates between different diamonds” and that comes “from practice (*abhyāsa*) not from inference [*anumāna*].”<sup>153</sup> *Vijñāna*, Bhartṛhari contends, does not arise from the *pramāṇa* of *anumāna* (inference) because this form of reasoning cannot yield knowledge of the nature of things. In a pithy maxim found in VP I.34: “what is inferred by a clever thinker can always be explained otherwise by one cleverer.”<sup>154</sup>

Iyer notes that the *Vākyapadīya* is not a “regular *dārśinaka* work” and as such “does not contain a systematic discussion of the different means of valid knowledge,” but nevertheless, it seems Bhartṛhari’s theory of sentence-meaning (*sphoṭavāda*) was motivated by rigorous epistemological concerns.<sup>155</sup> Bhartṛhari conceived *śabda pramāṇa* as knowledge which is codified in tradition (*āgama*) and which “does not differ (in certainty) from direct perception (*pratyakṣa*),” because a trustworthy source will represent their experience in words to the best of their ability.<sup>156</sup> The *pramāṇas* of *śabda*, *pratyakṣa*, and *anumāna* are insufficient, however, for reconciling the transcendental claims Bhartṛhari makes and the pragmatic or perspectival approach he takes to revelatory knowledge. According to the *Vākyapadīya* revelatory knowledge of the *Vedas* does not contradict any school of thought (VP I.9) and concerns the ultimate nature

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<sup>151</sup> Ibid, 72.

<sup>152</sup> Conversation with Laurie L. Patton, November 2, 2018.

<sup>153</sup> Aklujkar, 130.

<sup>154</sup> Aklujkar, 130.

<sup>155</sup> Iyer, 83.

<sup>156</sup> VP I.37

of reality (VP I.1-22). The inadequacy of these epistemological tools for creating knowledge of *Oṃ* might have therefore motivated Bhartṛhari's formulation of the *sphoṭavāda*. To see how, let us consider the centerpiece of Bhartṛhari's conception of the nature of words, the distinction of *sphoṭa* and *dhvani*. As noted in the previous chapter, VP I.44-45 posits that there are two aspects of a word (*śabdeṣu*):

I.44<sup>157</sup>

“Grammarians consider that there are two ‘word-entities (i.e. two elements) in functional words, one (i.e. the *sphoṭa*) is the cause of the (production) of words and the other (the speech-sound) is used in connection with meanings.”

I.45<sup>158</sup>

“Some, among the teachers of old considered that there was a difference in essence between these two. Others (on the other hand) speak of the same undivided entity being thought various through a difference in conceiving it.”<sup>159</sup>

The “mental” aspect is known as *sphoṭa*, *buddhista*, or *nimitta* and is conceived by Bhartṛhari as the “cause of expressions that are heard” and the “audible” aspect is called *śruti*, *dhvani*, or *nāda*, and refers to the “sequential sound” which manifests meaning in the manifold of appearances created by Brahman.<sup>160</sup> For the purposes of linguistic analysis, Bhartṛhari maintains *sphoṭa* and *dhvani* are the “meaning element” and “formal element” of words, respectively, but crucially words *do not* have meaning absent a hearer or speaker. Bhartṛhari compares the relationship of *sphoṭa* and speech-sound (*nāda*) to that of a reflection in water: the reflection is distorted by the movements of the water just as the *sphoṭa* is distorted by the temporality of *nāda*, but without a body of water there would be no medium to transmit the reflections.<sup>161</sup> Bhartṛhari's conception of the manifestations of *Brahman* as a trinity consisting of *bhoktr*, *bhoktā*, *bhogya*

<sup>157</sup> Author's transliteration:  
*dvāvupādānaśabdeṣu śabdau śabdavido /*  
*eko nimitta śabdānāmaparorbhe prayujate*

<sup>158</sup> Author's transliteration:  
*ātmabhedastayo kecidastīnyāhū purāṇagā /*  
*buddhibhedādabhinnsya bhedameke pracakṣate*

<sup>159</sup> Bhartṛhari, 9.

<sup>160</sup> Ibid.

<sup>161</sup> VP I.47 – I.48



(VP I.4) embraces and subsumes this dualistic conception of *sphoṭa/dhvani* by accounting for the transcendental subject of experience (*bhoktā*), the objects of experience (*bhogya*), and the form of the relation between the two (*bhoktr*).<sup>162</sup> The transcendent Brahman takes these three forms just as the “reflection” of the *sphoṭa* takes various forms in the “water” of *nāda*. Concerning knowledge of *sphoṭa* Bhartṛhari claims that “just as light has two powers,” the power to illuminate objects and the power to be perceived directly, the *dhvani* can illuminate meaning and the *sphoṭa* can reveal meaning directly.<sup>163</sup>

What kind of *pramāṇa* could provide knowledge of *sphoṭa*? “A *pramāṇa*,” Matilal writes is roughly “the *means* leading to a knowledge-episode (*pramā*) as its end,” and therefore “for each piece of knowledge there is some accredited means.”<sup>164</sup> How would Bhartṛhari adjudicate between the two perspectives proffered in VP I.45 (*metaphysical dualism* and *epistemological dualism*) with respect to the two word-entities? It couldn’t be through inference (*anumāna*) because as Bhartṛhari explained in VP I.34, inference doesn’t yield knowledge of the nature of things (which *sphoṭa* is by definition). It couldn’t be a combination of perception and inference, Bhartṛhari argues, because perception offers no guidance for interpreting its contents and inference can lead to false understanding. In VP II.235-249 in particular, Bhartṛhari discusses how the experience of space and time inform the intuitions of an “untutored” person (*apaṇḍita*) such that they may infer wrongly about the nature of things outside their experience. For example Brahman is beginningless and endless for Bhartṛhari; however, our experience with objects which have spatiotemporal beginnings and endings may lead us to infer (erroneously) that Brahman too has a beginning and ending.<sup>165</sup> Examples to this effect are given throughout the *Vākyapadīya* with respect to language and meaning; we

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<sup>162</sup> VP I.4. The resonances of Bhartṛhari’s dualistic (*vācya/vācaka*), triune (*bhoktr*, *bhokta*, *bhoga*) and quatrefoil (*bhoktr*, *bhokta*, *bhoga*, *prayojana*) metaphysical conceptions merit some discussion. Iyer (pp.101-102) points out that in VP.III pt. i, p. 116 l. 16 (University of Travancore Sanskrit Series No. CXLVIII), Bhartṛhari adds a fourth aspect to his trinitarian depiction of the differentiation of Brahman into “experiencer (*bhoktā*), the things experienced (*bhogya*) and the experience itself [*bhoktr*]” namely, the purpose (*prayojana*) of the experience. Below, we will see that idea prefigured in VP II.399-406, where the speaker must intend (*prayogād*) a word in order for it to be meaningful. Furthermore, relations such as that between an instrument and its object and of signifier to signified emerge from the *act* (*kriyā*) of intending a word in a manner parallel to Brahman’s act of generating multiplicity through the creative power of time (*kartrśakti*).

<sup>163</sup> VP I.50 - I.55; Akujkar, 131.

<sup>164</sup> Matilal, 22, 1986

<sup>165</sup> VP II.237

may by repetition of experience come to infer that a certain linguistic form has a particular meaning, but this is a fruitful error. In Bhartṛhari's phrase: "remaining on the path of unreality (*avidyā*) one strives after reality (*vidyā*)."<sup>166</sup> We know what reality is only through intuition or *pratibhā*, "another kind of knowledge [which] is taking place all the time in us."<sup>167</sup>

The knowledge created by *pratibhā* differs from the knowledge derived by *śabda pramāṇa* or *anumāna pramāṇa*. For one thing *pratibhā* is "indefinable," but in spite of this fact, "we can see its effect, [and] we know where it rests and what manifests it," so Iyer claims.<sup>168</sup> The first mention of *pratibhā* in the *Brahmakāṇḍa* is when Bhartṛhari declares words to be an aperture through which Brahman observes itself as the manifested universe:

I.118<sup>169</sup>

"The power which is based on words controls this universe. This universe which has a single Intelligence as its soul is perceived as manifold through the word as its eye."

Carpenter translates "*pratibhā*" as "intuition" but notes that the word literally means "'shining back,' from the root *bhā-* meaning to shine, be luminous."<sup>170</sup> This has a certain degree of poetic resonance with the idea of the *Vedas* as the imitative-capacity or reflection of Brahman as we've discussed. In this passage Bhartṛhari claims "the word with its many forms is said to have *pratibhā* as its essence (*pratibhātmāyaṃ bhedarūpaḥ*)," because *pratibhā* is knowledge of the meaning of the words themselves and thus knowledge of *Śabda Brahman*.<sup>171</sup> VP II.143-152 declare that the meaning of a sentence is *pratibhā*, "formed from the function of one's inner self" and is therefore an expression of one's nature just as the patterns of behavior of animals are attributed to their nature. Six conceptions of *pratibhā* are listed in VP II.152: (1) *svabhāva* (by nature) (2) *caraṇa* (by action) (3) *abhyāsa* (by practice) (4) *yoga* (by meditation) (5) *adṛṣṭa* (by invisible

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<sup>166</sup> VP II.238

<sup>167</sup> Iyer, 86.

<sup>168</sup> Iyer, 87.

<sup>169</sup> Ramseier's transliteration:

*śabdeṣv evāśritā śaktir viśvasyāsyā nibandhi /  
yannetraḥ pratibhātmāyaṃ bhedarūpaḥ pratāyate*

<sup>170</sup> Carpenter, 65.

<sup>171</sup> Ibid.

causes) (6) *upapāḍita* (as handed down by the wise).<sup>172</sup> “*Pratibhā* is accordingly far more than the ‘meaning’ of the sentence, the specific intuitive insight mediated by articulate speech. It is more fundamentally the luminosity of the True Word [*Śabdatattva*] itself, as the principle of world-order.”<sup>173</sup>

With this picture in mind, when Bhartṛhari set out to divide *sphoṭa* from *dhvani* he intends to show meaning doesn’t *really* inhere in words but rather in the forms of intuition of the transcendental subject (*bhoktā*) who utters and understands the words. Bhartṛhari often speaks of the “meanings” of words and syllables, but he qualifies this idea by claiming “only a technical significance is intended by the statement that syllables are meaningful.”<sup>174</sup> A grammarian can classify words by virtue of their “constitution,”<sup>175</sup> as collections of phonemes (*varṇa*) and *consider* them meaningful for the purposes of grammatical analysis, but this is a stipulated relationship in which case the collection is deemed a “word” (*pada*) if it is “meaningful” and *not a word* if the collection is not meaningful.<sup>176</sup> Some words would thus be considered to have meaningful constituents (e.g. *svabhāva* can decompose into *sva* and *bhāva*) whereas others would not (e.g. *kutīra* doesn’t decompose into “meaningful” phonemes on Bhartṛhari’s account).<sup>177</sup>

Bhartṛhari argues that primary and secondary meanings are analogous to perfectly and imperfectly perceived objects. Bhartṛhari makes this move to posit *meanings* as part of the transcendental reality distinct from the abstractions of grammatical analysis. He uses the image of a turning wheel in continuous contact with a hand to describe how a meaning could be perceived. This is only possible if the wheel is *real*, but “that is not the case with an imaginary wheel of fire caused by a revolving torch, it breaks when it is touched.”<sup>178</sup> Thus, “a thing which appears otherwise, due to differences in time, place, or the sense-organs” is eventually understood to transcend the meanings of words (convenient fictions on the *akhandavādin* account) which are “instruments of empirical knowledge” and nothing more.<sup>179</sup> VP II.233 contends that the

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<sup>172</sup> Iyer, 88.

<sup>173</sup> Carpenter, 65.

<sup>174</sup> VP II.210, Bhartṛhari, 85.

<sup>175</sup> Aklujkar, 145.

<sup>176</sup> VP II.205

<sup>177</sup> VP II.207

<sup>178</sup> VP II.291

<sup>179</sup> VP II 295-6

“science (*śāstra*) of grammar” explains ignorance (*avidyā*) through the variety of “misleading conceptual constructions” (*anāgamavikalpāḥ*)<sup>180</sup> which ultimately have nothing to do with right understanding (*vidyā*) which arises “spontaneously” in intuition.<sup>181</sup> Bhartṛhari applies this model, for example, to cause-and-effect relations to argue that, even though “an effect is not (definably) connected with its cause [*nimittēṣu*]” and is not “describable” (*nirupākhya*) the inexpressible aspect of understanding (*vidyānyanākhyeya*), can be studied using grammar as a means (*upāya*).<sup>182 183 184</sup>

### *Bhartṛhari on Sentences*

Concerned as he was with the proper use of grammar for the conduct of ritual, much of Bhartṛhari’s philosophy of language and linguistic theory attempts to understand the relationship of *meaning* and *action*. At the level of sentence-meaning, Bhartṛhari asks how one should understand the meaning of a verb with multiple arguments, particularly when those arguments are of two different kinds: individuals and groups. Does the meaning of a verb with multiple arguments refer individually to each member of the group or to the group as a whole?<sup>185</sup> In keeping with the *saṃgraha* form of the *Vākyapadīya*, three views are given without noting any particular affinities. The verb is “considered by some to be connected to a group, or an individual, or a *dvandva* compound (as the subject) depending on its ‘meaning-capacity [*śakti*].’”<sup>186</sup> In sentences with actions that refer to groups, some verbs apply individually, such as “*bhuj*” (to eat), whereas others apply collectively, such as “*dṛś*” (to see).<sup>187</sup> Some verbs may apply individually and collectively (as in the case of prohibitions) and technical terms (*vṛddhisamjñā*) refer individually to their stipulated referents.<sup>188</sup> There are differing opinions on the “unity of an action involving many entities,” as Bhartṛhari

<sup>180</sup> Author’s transliteration and translation based on (MacDonnell, 13, 1893).

<sup>181</sup> Aklujkar, 146.

<sup>182</sup> Ibid.

<sup>183</sup> VP II.234: Bhartṛhari, 91.

<sup>184</sup> This argument should be compared with Chomsky’s view of “irreducible, phenomenal knowledge” of free-will (Chomsky, ~16:00-18:00, 1998); in other words, his Kantian *postulate* of free will.

<sup>185</sup> Pillai, xxxi.

<sup>186</sup> VP II.371

<sup>187</sup> VP II.374-5

<sup>188</sup> VP II.377

notes in his discussion of the verb “*bhuj*.”<sup>189</sup> Namely, some view the action of eating in a group as essentially unitary (there is one action), whereas others view the action as essentially plural (there are many individuals eating).

Bhartṛhari transposes these arguments from the level of verbs to the level of clauses to stake a claim against the compositional semantic theory of the Mīmāṃsākas who would hold that each of “the constituent clauses (of a compound sentence) ... accomplishes its meaning separately and in this way the compound sentence is a collection of clauses (each) having different form.”<sup>190</sup> This compositional theory of sentence meaning is premised on the “eternality” (*nityatva*) of the relationship between word (*śabda*) and denotation (*artha*) in Mīmāṃsā philosophy. As the Mīmāṃsā School was chiefly concerned with “[safeguarding] the infallibility of the Vedic injunction as the sole means of knowing *dharma*”<sup>191</sup> they held the relationship of words and their meanings to be eternal or “inborn”: “what is meant by the relation between the Word and its Denotation being ‘inborn’ is that it does not owe its origin to any person, it is primordial, original, self-sufficient, not dependent upon any other Means of Cognition.”<sup>192</sup> Against this picture Bhartṛhari claims one doesn’t need the hypothesis of ‘inborn’ individual word-meanings to make sense of the relation of meaning to action. If the meaning of a sentence is composed purely from the terminal morphemic elements (*atha taireva janitaḥ so’artha bhinneṣu vartate*), then either those individual meanings will accord with the original meaning of the sentence (*pūvasyārthasya*) or they will not (*virodhaḥ*).<sup>193</sup> To illustrate what Bhartṛhari is referring to, consider a sentence such as “colorless green ideas sleep furiously”<sup>194</sup> wherein there is a gross level of contradiction between the meanings of the individual words and the meaning (or lack thereof) of the sentence. In this example, the terminal morphemic elements of the sentence could each be found under linguistic analysis to “have meaning” however the sentence combines those meanings in

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<sup>189</sup> Aklujkar, 149.

<sup>190</sup> VP II.389

<sup>191</sup> Coward, 38.

<sup>192</sup> Jha, 111, 1964: *Pūrva-Mīmāṃsā in its Sources* referencing Śabara’s *Bhāṣya*

<sup>193</sup> Author’s transliteration of VP II.392, Bhartṛhari, 127.

<sup>194</sup> Chomsky’s (1955) famed example of the distinction between *meaning* and *intuitions of linguistic form*.

such a way that they are out of accord (*virodhaḥ*) with the meaning of the sentence. Therefore, the words cannot have an *inborn* meaning because their meanings would have to change to make sense of the sentence. Bhartṛhari then makes an even subtler argument: even in a sentence where the meanings “co-exist” or are “in accord” with the meaning of the sentence, by virtue of being “qualified” by syntactical relationships, word-meanings are shown to change, thereby undermining the Mīmāṃsā doctrine of eternality (*nityatva*).<sup>195</sup>

In his discussions of the nature of sentence-meaning in the *Vākyakāṇḍa*, Bhartṛhari’s view of meaning as a *process* involving action, intention, and linguistic form is contrasted with views that hold that a word “such as *akṣa* (which can mean a fruit, or dice, or an axle) is indeed many linguistic forms” that happen simply to converge in their phonology.<sup>196</sup> If this were so, then factors such as syntactical relations and situation-context would serve to differentiate one form from another and meaning would consist simply in the use of those different forms (and not in the intention to use a form in a particular way).<sup>197</sup> For Bhartṛhari, a necessary condition for a word’s conveying its meaning is the intentional use of the word (*vinīyogādṛte śabda*) by the speaker. In this way, the utterance is conceived as a gateway (*uktidvāraṃ*) for connecting meaning and word.<sup>198</sup>

“Just as the relation between an instrument (*karaṇa*) and its object (*karman*) is brought about through action (*kriyā*), so the relation between designating (*abhidhāna*) and its designatum (*abhidheya*) is brought about through designation (*abhidhā*). And when several (distinct) things might be designated by a certain designating expression, the linguistic form is established in a particular case through its intentional application (*abhisamdhāna*).”<sup>199</sup>

VP II.418-421 flesh out the nature of the speaker. He writes that “the burnt man understands burning [*dāha*] in a certain way” whereas the “meaning ‘burning’ [*dāhārthaḥ*] is conveyed by the word (burning) [*dāhaśabdena*] in a different way.”<sup>200</sup> By analogy the with function of the sense-organs which preside over their “specific sphere of operation” but which cannot function except in consort with the body,

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<sup>195</sup> VP II.393

<sup>196</sup> Aklujkar, 150.

<sup>197</sup> VP II.407

<sup>198</sup> VP II.399

<sup>199</sup> Aklujkar, 150.

<sup>200</sup> VP II.418

so likewise “words which are fixed to their meanings independently of each other have no meaningfulness apart from sentences.”<sup>201</sup>

II.421

“The meaning of the sentence is grasped as of the nature of a synthesis, when the individual word-meanings are in mutual association. Its essential nature is not presented (at the individual word-meanings) since it is seen as not being constituted of word-meanings.”<sup>202</sup>

The two ways meaning can be experienced are as the “essential nature” and “relational form” of a sentence, however, in speech and grammatical analysis they are only cognized as the latter.<sup>203</sup> In VP II.422-430, Bhartṛhari contends that the very idea of “word-meaning” is incomprehensible without association to a verb because all facts are conveyed as “existent or as non-existent” and “existing” is an action. In other words, “the meaning of a word, whether existent or the opposite, is not understood in communication without some connection to an action.” Bhartṛhari uses the example of the one-word sentence “existence” (*bhū*) and claims that this sentence cannot be understood except through association with the action of the verb “there is” (*asti*).<sup>204</sup> The *relational form* of a sentence—the means by which a sentence conveys its meaning—can be conceived in many different ways depending on how the speaker intends to act. In accord with Bhartṛhari’s earlier doctrine concerning the role of action and intention in delineating concepts the author writes:

II.428

“It is only the speaker who conceives the notion of ends and means or desires to construe the meaning (of the sentence) as a system of relations (between the end and means).”<sup>205</sup>

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<sup>201</sup> VP II.420

<sup>202</sup> Transliteration of Bhartṛhari, 133:

*saṃsargarūpaṃ saṃsṛṣṭeṣv arthavastuṣu grhyate /  
nātropākhyāyate tattvam apadārthasya darśanāt*

<sup>203</sup> Akluṅkar, 151.

<sup>204</sup> *tadabhūdasti* in VP II.425, Bhartṛhari, 133. Translation based on MacDonnell, 207, 1893.

<sup>205</sup> Transliteration of Bhartṛhari, 134:

*prayoktaivābhisamdhattu sādhyasādhanarūpatām /  
arthasya vābhisambandhakalpanām prasamīhate*

Bhartṛhari continues his investigation of sentence-meaning by noting two facts about word-meanings in a sentence: 1) objects can be depicted as being in contact with one another even when they are far apart, and vice versa, and 2) objects which are one “may be presented as many,” or vice versa.<sup>206</sup> Ontologically, “[these facts] can be explained through supposing either that an object’s nature is everything or that it has no nature at all,” if words are of the same nature as objects.<sup>207</sup> Bhartṛhari clarifies that words and objects do not partake of a common nature. A word is a mere designator (*upalakṣaṇa*) of an attribute of an object but does not “express the nature” of objects.<sup>208</sup> Furthermore these designations arise from our desires regarding objects (*vastu*),<sup>209</sup> as “the same object is described in different ways according to the use to which it is put.”<sup>210</sup> Once again Bhartṛhari affirms that ordinary usage takes sentence-meanings to be of the same nature as word-meanings (i.e. that meaning is localized *in* some part of the sentence). In VP II.439, he aims to turn this picture inside out by contending rather that it is through “analysis (of the sentence) undertaken to explain it as a means of understanding it [*pratipattinibandhanam*], [that] there is presented *another meaning* (i.e., the meaning of the sentence) the parts of which, when analyzed, show expectancy [*sākāṅkṣāvayavam*] for one another,” (emphasis added).<sup>211</sup> In other words, in an act of linguistic analysis, “parts are distinguished that require each other,”<sup>212</sup> and therefore Bhartṛhari will claim that “it is a meaning which is external to the conceptual meaning that is analyzed whether such (external-meaning) is real or not.”<sup>213</sup>

The *Vākyapadīya* then moves into a discussion of the nature of action from two perspectives which we will call roughly: internal (Aklujkar uses the term “notional”) and external. The “external meaning” (*bāhyo ’arthaḥ*) refers to the objects, properties, and relations a sentence depicts and is distinguished from the “notional” meaning (*saṃpratyaya*), in that the externalized meaning can be “characterized by the

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<sup>206</sup> Aklujkar, 151.

<sup>207</sup> Ibid.

<sup>208</sup> VP II.434, Bhartṛhari, 135: “...*vastupalakṣaṇaḥ*...”

<sup>209</sup> Aklujkar, 151.

<sup>210</sup> VP II.436, Bhartṛhari, 136.

<sup>211</sup> VP II.439, Ibid.

<sup>212</sup> Aklujkar, 151.

<sup>213</sup> VP II.441



analysis” of word-meanings.<sup>214</sup> We may infer that *saṃpratyaya* cannot be so characterized. Dealing with action in an “external” way VP II.442-446 present views on the unity or multiplicity of a sentence based on whether it has one or multiple finite verbs. Against the view that a single finite verb defines a sentence, Bhartṛhari describes a view that takes multiple verbs to be able to constitute a sentence provided the meanings of the verbs have expectancy for one another (*sāmarthyādyatrakāṅkṣyate*) irrespective of whether the *words* have expectancy for one another (*aśabdalakṣaṇākāṅkṣaṃ*).<sup>215</sup> Bhartṛhari next transposes these idea into an “internal” perspective where he examines the nature of actions and relations in themselves.

In VP II.447, he points out that for the same action a shift in the word order and syntax can create a different understanding of the action in question. Conversely, he notes that different actions can be talked about with the same verbal form.<sup>216</sup> Thereafter Bhartṛhari returns to his discussion (VP II.371-398) of how verbs refer to multiple entities, groups, and individuals. How do verbs refer individually to each member of a group if they are uttered only once? Characteristically, Bhartṛhari presents two opposing views and doesn’t explicitly adjudicate between them. On the one hand, “some explain this fact by pointing out that there is no one-to-one correspondence between linguistic utterance (*uccāraṇa*) and comprehension (*pratipatti*) in any case.”<sup>217</sup> On the other hand, by appeal to Pāṇini’s distinction of “general” and “specific” sentences, one could suppose that those meanings which have expectancy (*ākāṅkṣā*) satisfied by a specific sentence may be derived from a more general sentence with a multiplicity of expectancy relationships.<sup>218</sup> Bhartṛhari notes that verbs function heterogeneously “in terms of particulars” (*vyaktibhāga*) or “in general terms” (*sāmānyabhāga*).<sup>219</sup> Given this heterogeneity, some thinkers argue “distinctions of tense” and similar linguistic changes “do not cause the essential verbal word to be divided (in its signification), when it is used to denotes its action as a class,” whereas others believe it does.<sup>220</sup>

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<sup>214</sup> Ibid.

<sup>215</sup> VP II.445, Bhartṛhari, 138.

<sup>216</sup> VP II.447-450

<sup>217</sup> Aklujkar, 152.

<sup>218</sup> VP II.453-455 and Aklujkar, 152.

<sup>219</sup> VP II.457; terms pointed out by Aklujkar, 152.

<sup>220</sup> VP II.458

In VP II.459, Bhartṛhari discusses the “converse case to that stated in [VP II.452-456], that is, the case of a sentence in which there is one noun form and several verb forms.”<sup>221</sup> He develops a view that distinguishes “utterance [*uccāraṇa*] and comprehension [*pratipatti*]” with respect to the noun *akṣā*.<sup>222</sup> That the noun *akṣā* has a “common form” which can enter into relationship with a multiplicity of verbs (such as *bhanj* (break) *bhaks* (eat) and *dīv* (gamble)) indicates that it need not be uttered multiple times, because “words employed one after another have different forms, but words used in union have the same form. But even when words are used in union, the verb follows the pattern of their successive use.”<sup>223</sup> <sup>224</sup> In other words, Bhartṛhari is saying that during an utterance *multiple words with the same verbal form can supervene* on a particular moment of time and intelligibly relate to distinct verbs distributed through time in “the pattern of their successive use.” Curiously, Bhartṛhari attributes this twofold ability of words to be separate or united in time (*bhedasamsargaśaktī*) to something different than the words themselves, and in the same breath attributes this power of differentiation to the act of listening (*śrutiḥ*).<sup>225</sup> The act of comprehension, which exists in a manner “like ‘time’ out-side [of words]” is what differentiates the common form of a noun into its multiplicity of interpretations and relations with actions.<sup>226</sup>

In the closing verses of the *Vākyakāṇḍa* the problem of understanding words or sentences with two meanings is discussed. In this respect, Bhartṛhari’s *akhandavāda* or *sphoṭavāda* is developed in relief against the *bhedavāda* theorists who hold that the distinct meanings of words “which have the same form, and which were originally apprehended as different”<sup>227</sup> depend for their manifestation upon the “understanding of the listener.”<sup>228</sup> The *akhandavāda* position is articulated in VP II.468 and restated in VP II.473-475 as follows:

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<sup>221</sup> Pillai in Bhartṛhari, 141.

<sup>222</sup> Aklujkar, 152.

<sup>223</sup> VP II.463a-b, Bhartṛhari, 142.

<sup>224</sup> Author’s transliteration:

*ka: krame vibhijyate rūpaṃ yaugapadye na bhidyate /*

*kha: kriyā tu yaugapadye ’api kramarūpānupātīnī*

<sup>225</sup> VP II.464b: Author’s transliteration:

*kha: yaugapadye ’apyanekena prayoge bhidyate śrutiḥ*

<sup>226</sup> Pillai in Bhartṛhari, 142.

<sup>227</sup> VP II.470

<sup>228</sup> VP II.469

II.468

“According to those who uphold the sameness of the Word (*śabda*), the meaning-capacity of the single sentence is divided on the basis of the difference (in the aspects) of that capacity, in such sentences as have two meanings.”<sup>229</sup>

Fielding the objection of the *bhedavādin* who would hold that context and listener comprehension are the only means available to determine the meaning of a dual-aspect sentence (*dviṣṭhāni yāni vākyāni*), Bhartṛhari argues that a unitary sentence may present itself as divided “through the principle that several capacities reside in the same form.”<sup>230</sup> This method is traced to the *Mahābhāṣya* in VP II.475 to an “aphorism (of Pāṇini) *dvirvacane ‘ci’* [wherein] there is through the mentioning of a thing once (the conveying of its occurrence twice) on the principle of tantra.”<sup>231</sup>

### *Closing Thoughts*

Beginning with a discussion of the encyclopedic *āgama-saṃgraha* structure of the *Vākyapadīya*, in this chapter we explored the relationship of transcendental and pragmatic elements in Bhartṛhari’s philosophy of grammar. “Perspectivistic” approaches have been developed by Houben and Kelly to account for the apparent disjunction of form and content in the *Vākyapadīya* and argue that the function of the text is to delineate the limits of formal linguistic analysis. In parallel to these observations on linguistic analysis, we noted how Bhartṛhari may have developed the *sphoṭavāda* to account for the limits of the *pramāṇasāstra* of *śabda* (testimony) *pratyakṣa* (direct perception) and *anumāna* (inference) for delivering revelatory *Vedic* knowledge. The underdetermination of knowledge by praxis motivates a transcendental form of knowledge (*pratibhā*) which becomes the epistemic ground of the *sphoṭavāda*.

The distinction between *sphoṭa* as “meaning-element” and *dhvani* as “formal-element” muddies the waters of interpretation. Bhartṛhari claims “only a technical significance” is intended by his discussions

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<sup>229</sup> Transliteration by Ramseier following Wilhelm’s Rau’s 1977 Edition:

*dviṣṭhāni yāni vākyāni teṣv apy ekatvadarśinām /*  
*anekasakter ekasya svaśaktiḥ pravibhajyate*

<sup>230</sup> VP II.473

<sup>231</sup> VP II.475

of word-meaning. Words do not have meanings for Bhartṛhari, so, how then are we to understand the purpose of linguistic analysis? Bhartṛhari claims linguistic analysis studies ignorance (*avidyā*) using misleading conceptual constructions (*anāgamavikalpāḥ*) which are not to be mistaken with the transcendental knowledge of language attained by right understanding (*vidyā*). In this way he promotes a kind of double-edged empirical view which takes the negative results of the misleading conceptual constructions to provide positive information for what language is not.

In the closing section of this chapter we articulated several of Bhartṛhari's claims regarding the nature and functioning of sentences with respect to meaning and action. Sentences with verbs with multiple arguments can be understood as enjoining a single action or many actions; in a similar way, sentences with multiple clauses can be viewed as a single sentence (*mahāvākya*) or as multiple sentences. By conceiving of a verb or sentence in one way or another, different aspects of the behavior of the linguistic form come to light. Words are designators (*upalakṣaṇa*) that do not express the nature of objects,<sup>232</sup> and these designations depend for their origination upon our desires.<sup>233</sup> Therefore linguistic analysis (*vyākaraṇa*) is conceived as a project based upon a certain form of desire, where different schools of thought desire different conceptions of language and the world. Bhartṛhari continues to develop these "perspectivistic" considerations with respect to the ontology of spatial meaning, the universal-particular dichotomy, abstraction and concreteness, and the relation of comprehension to action. As we turn now to develop the linguistics and philosophy of Noam Chomsky in the next two chapters, the dualisms and dichotomies with which Bhartṛhari contended in his *Vākyapadīya* will find resonance in the forms of dualism Chomsky aims to deconstruct. Whether these new forms of dualism share an underlying identity with the problems of theory construction and linguistic practice faced by Bhartṛhari will depend on how we choose to see Chomsky's projects.

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<sup>232</sup> VP II.434, Bhartṛhari, 135: "...vastupalakṣaṇaḥ..."

<sup>233</sup> Aklujkar, 151.

## Chapter Four

### Grammar as Science: Noam Chomsky and the “Cognitive Revolution”

“The MIT Press... has just published a book by a computational linguist on the structure of the lexicon which derives quite self-consciously from Aristotelian roots, and in fact, modern universal grammar, generative grammar—whatever it’s called—actually has close resemblance to the work that was done 2,500 years ago in Indian grammar, which turns out to have been remarkably sophisticated.”<sup>234</sup>

#### *Language and Metaphysics in the 20<sup>th</sup> Century*

In November 1971, the American linguist Noam Chomsky and the French philosopher Michel Foucault were hosted by Fons Elders at Eindhoven University of Technology in the Netherlands for a debate broadcast on Dutch National Television titled *Human Nature and the Ideal Society*.<sup>235</sup> We begin with this strange and cosmopolitan conversation held in French (Foucault) and English (Chomsky and Elders) and broadcast with the Dutch commentary of Professor L.W. Nauta, to highlight a common feature of the intellectual worlds of Chomsky and Bhartṛhari. During the “Hindu renaissance” of Bhartṛhari’s India, as again in the Western hemisphere of the mid-20<sup>th</sup> century, philosophers were reckoning with the meaning of a pluralistic society and the relationship of language and metaphysics. Does a common human or divine nature underlie the multiplicity of cultures and languages manifested around us? Or is the very idea of human nature an artifact of the systems of thought and discourse available to us? The debate between Chomsky and Foucault addressed these questions on two levels, at least: 1) the level of the individual mind: its forms, patterns, and organization, and 2) that of the forms, patterns, organization, *and telos* of an “advanced, technological society.” In his opening remarks at the debate, Chomsky offered a definition of the concept of human nature derived from his work in generative grammar. He began by outlining the

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<sup>234</sup> Chomsky, 4:54-5:33, 1998

<sup>235</sup> Wilkin, 177, 1999 & Chomsky-Foucault Debate on YouTube: <https://www.youtube.com/watch?v=3wfNl2L0Gf8>

“poverty of the stimulus argument” for innate knowledge—to which we will return below—and continued by generalizing from the case of innate linguistic knowledge to other “domains of human intelligence.” This definition is worth reviewing in some detail as it will guide our inquiry for the remainder of the next two chapters:

“... we notice that in a wide range of languages, in fact all that have been studied seriously, there are remarkable limitations on the *kinds* of systems that emerge from the very different kinds of experience to which people are exposed ... to put it rather loosely: the child must begin with the knowledge, certainly not with the knowledge that he’s hearing English or Dutch or French or something else, but he does start with the knowledge that he’s hearing a human language of a very narrow and explicit type, that permits a very small range of variation. And it is because he begins with that highly organized and very restrictive schematism, that he is able to make the huge leap from scattered and degenerate data to highly organized knowledge. And furthermore I should add that we can go a certain distance, I think a rather long distance, towards presenting the *properties* of this system of knowledge, that I would call innate language or instinctive knowledge, that the child brings to language learning; and also we can go a long way towards describing the system that is mentally represented when he has acquired this knowledge.

“I would claim then that this instinctive knowledge, if you like, this schematism that makes it possible to derive complex and intricate knowledge on the basis of very partial data, is one fundamental constituent of human nature. In this case I think a fundamental constituent because of the role that language plays, not merely in communication, but also in expression of thought and interaction between persons; and I assume that in other domains of human intelligence, in other domains of human cognition and behavior, something of the same sort must be true.

“Well, this collection, this mass of schematisms, innate organizing principles, which guides our social and intellectual and individual behavior, that’s what I mean to refer to by the concept of human nature.”<sup>236</sup>

The goal of this chapter is to use this definition to frame our inquiry into the transcendental and pragmatic elements of Chomsky’s philosophy of mind and language. To parse this definition and draw out its consequences, we must first acquire a working knowledge of the context and content of the theory of language for which Chomsky became famous in the late 1950s: *transformational generative grammar*. With a schematic view of transformational generative grammar in hand, we will proceed to a discussion of the “poverty of the stimulus” argument for innate linguistic knowledge and Chomsky’s intellectual

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<sup>236</sup> Chomsky and Foucault, 6:58-9:02, 1971. Author’s transcription. Emphasis added.

motivations for postulating a genetically-determined “universal grammar” which he argues is the biological basis of the “species-specific” ability of humans to acquire and use language. Then, in the conclusion of this chapter we will follow the philosophical moves Chomsky makes in his inferential leap from the existence of an “innate schematism” which defines the “language faculty” to the postulation of a “collection” of innate schematisms in “other domains of human intelligence,” cognition and behavior: what I am calling *transcendental generative grammar*. We will close with a discussion of a research program Chomsky outlined twenty-one-years after his debate with Foucault in the cognitive science of conceptual structures which seems to contradict this definition of human nature and highlight how his notion of the “creative aspect of language use,” the ability of human beings to “freely” express their thoughts is held in tension with an empirical approach to human nature.

### *Context of Transformational Generative Grammar*

Avram Noam Chomsky was born on December 7, 1928, the eldest son of Jewish immigrants in Philadelphia, Pennsylvania. He attended the “Deweyite” Oak Lane Country Day School in Philadelphia<sup>237</sup> and had a “warm, loving childhood,” before attending the University of Pennsylvania at the age of sixteen.<sup>238</sup> While at the University of Pennsylvania he met Zellig Harris, a professor of linguistics at the university, through “political contacts.”<sup>239</sup> Harris’ work in transformational analysis and generative grammar inspired Chomsky to write a thesis on the grammar of Modern Hebrew, a project that catapulted him into his doctoral studies in the Harvard Society of Fellows.<sup>240</sup> Harris’ work was primarily in the field of structural linguistics, however, and represented a development of the early 20<sup>th</sup> century work of the Swiss linguist Ferdinand de Saussure and the American linguist Leonard Bloomfield.<sup>241</sup> The aim of structural linguistics was to classify the elements in a corpus of utterances (e.g. a text, discourse, conversation etc.) into a set of linguistic levels (phonemes, morphemes, lexical items, phrasal categories) and explicitly state

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<sup>237</sup> Lyons, xi, 1970

<sup>238</sup> CSPAN, 6:23, 2003

<sup>239</sup> Ibid, 6:23-13:27.

<sup>240</sup> Smith, 2, 2004

<sup>241</sup> Lyons, 33-4.

the relationships between the elements in each of the levels.<sup>242</sup> Popularized in the United States by Bloomfield in *Language* (1933), the structuralist tradition of which Harris was a part was the dominant paradigm of “scientific” linguistics in the United States in the 1930s and 1940s.<sup>243</sup>

In the wake of the Scientific Revolution of the 17<sup>th</sup> century and the Industrial Revolutions of the 19<sup>th</sup> and 20<sup>th</sup> centuries, Euro-American linguistics had for some centuries been concerned with developing “scientific” accounts of language. The “historical” or “diachronic” approach to linguistics which was superseded by de Saussure’s structuralism emerged in Europe from the discipline of philology in the late 18<sup>th</sup> century and was concerned with developing a genealogy of languages through the study of etymology, phonology, morphology, syntax, etc.<sup>244</sup> By marking a distinction between “synchronic” and “diachronic” analysis de Saussure created the conditions for the possibility of a behavioral science of language.<sup>245</sup> Whereas diachronic analysis preceded in an intergenerational manner by measuring the rates of change of linguistic elements in populations, the synchronic statistical and structural analyses of corpora of utterances could be used to classify the linguistic behavior of individuals and communities at a particular moment in time.<sup>246</sup> By the early 20<sup>th</sup> century, empirical advances and empiricist intellectual currents in mathematics, logic, physics and chemistry precipitated the emergence of a science of human behavior: behavioral psychology. By the 1950s, convergences in the fields of propositional logic,<sup>247</sup> communication theory,<sup>248</sup> computational theory,<sup>249</sup> and linguistics,<sup>250</sup> prompted an inward turn in the nascent discipline of psychology, away from the study of the products of behavior toward the study of inner mental mechanisms. This shift in perspective has since been referred to as the “Cognitive Revolution” and is credited as the genesis of modern cognitive science.<sup>251</sup>

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<sup>242</sup> Ibid, “The Bloomfieldians” pp. 25-34

<sup>243</sup> Ibid.

<sup>244</sup> De Saussure, 81-83, 1959

<sup>245</sup> Ibid.

<sup>246</sup> Ibid, 83-87.

<sup>247</sup> McCulloch and Pitts, 1943

<sup>248</sup> Shannon, 1948

<sup>249</sup> Turing, 1950

<sup>250</sup> Chomsky, 1957

<sup>251</sup> Miller, 2003



### *Content of Transformational Generative Grammar*

Chomsky's two principle contributions to the "Cognitive Revolution" appeared in 1957 and 1959. In 1959, Chomsky published a scathing review of *Verbal Behavior* by B.F. Skinner, which has since been widely held, rightly or wrongly, to have refuted the theoretical basis of behavioral psychology.<sup>252</sup> Two years prior, Chomsky published a monograph called *Syntactic Structures* which modeled language, not as a system of stimuli and responses, but rather in terms of a *finite set of elements* and *rules* governing the combinations of these elements into "grammatical" sentences. This project was known as *transformational generative grammar*, the goal of which was to construct an empirically verifiable abstract theory of linguistic structure.<sup>253</sup> *Syntactic Structures* was written as lecture notes for a course Chomsky taught at the Massachusetts Institute of Technology in the 1950s and was based on the work he'd developed in *The Logical Structure of Linguistic Theory (LSLT)* which he wrote during his doctoral studies in the Harvard Society of Fellows (1951-1955) and published twenty years later.<sup>254</sup> In Chomsky's words, "*LSLT* is an attempt to develop a theory of transformational generative grammar. The 'realist interpretation' of linguistic theory is assumed throughout,<sup>255</sup> and it is argued that the competence attained by the normal speaker-hearer is represented by a transformational generative grammar, which determines the representation of each sentence on the levels of phrase structure and transformational structure (*inter alia*)."<sup>256</sup>

While similar in content to the structuralist theories which had preceded it, the form of generative grammar—as an explicit, finite set of elements and rules which generated an infinite set of structured symbolic expressions—was precisely opposite to that of the structuralist tradition in one crucial respect. Whereas in the "externalist"<sup>257</sup> approach of structuralism, the theory of linguistic structure (i.e. the grammar

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<sup>252</sup> Palmer, 2006

<sup>253</sup> Chomsky, 61, 1975

<sup>254</sup> Ibid, "Preface".

<sup>255</sup> Chomsky discusses the "realist" or "naturalist" approach to linguistic theory in a myriad of places in *LSLT* and *Syntactic Structures*, but the most concise iteration I've found was at the 20<sup>th</sup> Annual Killian Lecture delivered at MIT: "One approach—let's call it naturalistic—says, it goes kind of like this. It says, the mental organs are viewed as computational representational systems, and we want to show that they're *real*, that their statements in these theories are true, that is, that there *are* certain states and the properties of the brain which these theories exactly capture, in that's what you try to show," (Chomsky, 30:22-30:46, 1992k; emphasis added).

<sup>256</sup> Chomsky, 45, 1975

<sup>257</sup> Cf. *Philosophy of Linguistics* in Stanford Encyclopedia of Philosophy

of a language) was *derived* from the distribution of data in corpora, Chomsky's "internalist" approach shifted the explanatory locus of linguistic theory to the grammar itself:

"Any scientific theory is based on a finite number of observations, and it seeks to relate the observed phenomena and to predict new phenomena by constructing general laws in terms of hypothetical constructs such as (in physics, for example) 'mass' and 'electron.' Similarly, a grammar of English is based on a finite corpus of utterances (observations), and it will contain certain grammatical rules (laws) stated in terms of the particular phonemes, phrases, etc., of English (hypothetical constructs). These rules express structural relations among the sentences of the corpus and the indefinite number of sentences generated by the grammar beyond the corpus (predictions). *Our problem is to develop and clarify the criteria for selecting the correct grammar for each language, that is, the correct theory of this language.*"<sup>258</sup>

Chomsky defined a language 'L' in terms of a set (finite or infinite) of sentences ( $\Sigma$ ), "each finite in length and constructed out of a finite set of elements."<sup>259</sup> A grammar of a language 'L' consisted of ( $\Sigma$ ) and a set of rewrite rules (F) of the form:  $[\Sigma, F]$ <sup>260</sup> and "[could] be considered... to be a complete scientific theory of a particular subject matter, and if given in precise enough form, a formalized theory."<sup>261</sup> In generative grammar, the syntactic structure of a sentence arises from the ordered application of a sequence of these "rewrite rules" of the form  $X \rightarrow Y$  where " $X \rightarrow Y$ " is interpreted "rewrite  $X$  as  $Y$ ".<sup>262</sup> For instance, if we wanted to write a generative grammar of a language that consists of all palindromes over the alphabet  $\{A, B\}$ <sup>263</sup> we can write the following:

$[\Sigma, F]$ :

- 1  $\Sigma: \{A, B, AA, BB, ABA, BAB \dots\}$
- 2  $F: \{i, ii, iii\}$ 
  - i.  $S \rightarrow ASA$
  - ii.  $S \rightarrow BSB$
  - iii.  $S \rightarrow \{nil\}$

<sup>258</sup> Chomsky, 49, 1957; emphasis added.

<sup>259</sup> Ibid, 13.

<sup>260</sup> Chomsky, 45-6, 1957

<sup>261</sup> Ibid, 77.

<sup>262</sup> Chomsky, 26, 1957

<sup>263</sup> Example based on Pullum, 341, 1999

These rules are thus a formal “theory” of the language of all palindromes in the alphabet  $\{A, B\}$ .

Consider now a slightly more complex example<sup>264</sup> from *Syntactic Structures*:

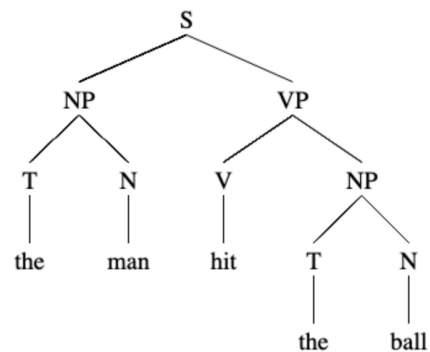
3      *Rules*

- i.     $Sentence \rightarrow NP + VP$
- ii.    $NP \rightarrow T + N$
- iii.    $VP \rightarrow Verb + NP$
- iv.     $T \rightarrow the$
- v.      $N \rightarrow man, ball, \text{ etc.}$
- vi.     $Verb \rightarrow hit, took, \text{ etc.}$

4      *Sentence*

$NP + VP$	(i)
$T + N + VP$	(ii)
$T + N + Verb + NP$	(iii)
$The + N + Verb + NP$	(iv)
$The + man + Verb + NP$	(v)
$The + man + hit + NP$	(vi)
$The + man + hit + T + N$	(ii)
$The + man + hit + the + N$	(iv)
$The + man + hit + the + ball$	(v)

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Here (3) indicates six rules of the form  $X \rightarrow Y$  numbered (i-vi), (4) indicates “a *derivation* of the sentence ‘the man hit the ball’” from these rules and (5) is a dendrogram (tree diagram) illustrating the derivation.<sup>265</sup>

In (4) the rule applied is listed (i-vi) to the right of each line of the derivation. Chomsky aimed to simplify

<sup>264</sup> Example quoted from Chomsky, 26, 1957

<sup>265</sup> Tree diagram generated using <http://mshang.ca/syntree/> with input formula:  
[S [NP [T the][N man]] [VP [V hit] [NP [T the][N ball]]]]

linguistic theory by assigning each sentence in a language several levels of representation (morpho-phonemic, phrase-structure, and transformational).<sup>266</sup> Each linguistic level associates the elements in that level (e.g. phonemes) using the mathematical operation of *concatenation*.<sup>267</sup> Concatenation of the elements (indicated by the “+” signs in (4)) according to the rules in the different levels allows the formation of strings, sequences of strings, and classes of sequences of strings, which serve as the analytical categories for a theory of linguistic structure. “If the grammar is to consist of a finite set of rules operating upon a finite vocabulary and is to be capable of generating an infinite set of sentences, it follows that at least some of the rules must be applicable more than once in the generation of the same sentence.”<sup>268</sup> Rules of this kind, such as (ii)  $\{NP \rightarrow T + N\}$  (applied twice in (3) due to *NP* being an output of (i)  $\{Sentence \rightarrow NP + VP\}$  and (iii)  $\{VP \rightarrow Verb + NP\}$ ), are called *recursive*.<sup>269</sup>

Three more ideas central to transformational generative grammar warrant a brief discussion before we render the picture of human psychology Chomsky’s early view recommends: 1) phrase-structure rules, 2) transformational structure, and 3) the distinction of syntax and semantics. The term “phrase-structure grammar” was coined by Chomsky to denote grammars based on the *constituency relation* wherein a clause is divided into the constituents of *subject* and *predicate*.<sup>270</sup> This model “[incorporated] a large part of what [was then] generally known as ‘immediate constituent analysis’”<sup>271</sup> as described by Bloomfield in 1933.<sup>272</sup>

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<sup>266</sup> Chomsky, 2, 1955

<sup>267</sup> Concatenation is the operation of joining together character strings “end-to-end” just as one might lay bricks end to end. In *Transformational Analysis* (p.2) Chomsky cites *The Elements of Mathematical Logic* (Rosenbloom, 189, 1950) as one of three sources that “heavily influenced” his methodological move of constructing linguistic levels (the other two sources being W.V.O. Quine’s *Mathematical Logic* (1940) and an unpublished essay by Henry Hiz titled “Positional Algebras and Structural Linguistics”). Rosenbloom writes: “Just as the notion of a logic of classes or propositions (and presumably of logic, in general) can be framed as a deductive science, so can the concept of language be profitably studied from that point of view. If we consider strings, including the null string, in a given alphabet, and their behavior with respect to the operation of concatenation (the formation of *ab* from *a* and *b*), then we are led to the study of a special type of algebra.”

<sup>268</sup> Lyons, 51-2, 1970

<sup>269</sup> Ibid.

<sup>270</sup> Ibid, 61-63.

<sup>271</sup> Chomsky, 6, 1957

<sup>272</sup> “The common part of any (two or more) complex forms is a linguistic form; it is a *constituent* (or *component*) of these complex forms. The constituent is said to be *contained in* (or to be *included in* or to *enter into*) the complex forms... it appears that every complex form is entirely made up, so far as its phonetically definable constituents are concerned, of morphemes. The number of these *ultimate constituents* may run very high... However, the structure of complex forms is by no means as simple as this; we could not understand the forms of a language if we merely reduced all the complex forms to their ultimate constituents. Any English-speaking person who concerns himself with this

Phrase-structure rules operate over constituents in the phrase-structure level of representation which is a higher-order level of representation than phonemes or morphemes. Units such as the NP (*noun phrase*) or VP (*verb phrase*)—familiar to structural linguistics—are constituents at this level.

Even though the phrase-structure grammar had more explanatory purchase than communication theoretic or statistical models this form of grammar was shown to be inadequate for dealing with the relation of active-to-passive sentence constructions.<sup>273</sup> In the practice of immediate constituent analysis, Chomsky's mentor Zellig Harris noticed that some "individual co-occurrences" of morphemes could not be explained using units of analysis which Chomsky would later incorporate into phrase-structure rules. Harris borrowed the notion of "transformations" from linear algebra to "[define] a formal relation among sentences, by virtue of which one sentence structure may be called a transform of another sentence structure."<sup>274</sup> For Harris, transformations captured elements of the structure of texts which could not be derived at the level of phrase-structure, namely, the relation of active and passive sentence constructions.<sup>275</sup> Chomsky then transposed the idea of transformations from Harris' structuralist framework into a generative framework by drawing on the work of Rudolf Carnap in predicate calculus<sup>276</sup> defining a transformation as "the structural analysis of the strings to which it applies and the structural change it effects on these strings."<sup>277</sup> He applied this relation to phrase-structure, effectively mapping the ordered application of rules in one phrase-structure into another. An illustration of this mapping process<sup>278</sup> is shown in the following pair of dendrograms where "the passive transformation applies to [a string of the form] *NP – Aux – V – NP* and has the effect of interchanging the two noun phrases, adding *by* before the final noun phrase, and adding *be + en* to *Aux*,"<sup>279</sup> where *Aux* = *auxiliary verb* and *be* = *was*:

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matter, is sure to tell us that the *immediate constituents* of *Poor John ran away* are the forms *poor John* and *ran away*," (Bloomfield, 160-161, 1933).

<sup>273</sup> Chomsky, 6, 1957

<sup>274</sup> Harris, 283, 1957

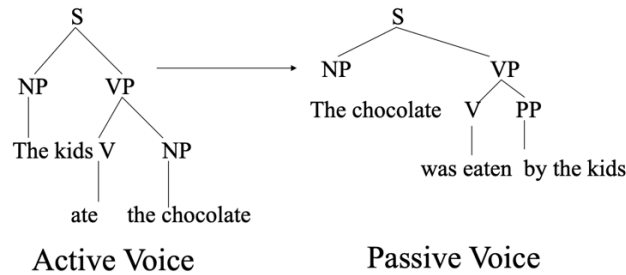
<sup>275</sup> Ibid.

<sup>276</sup> Carnap, 27, 1937

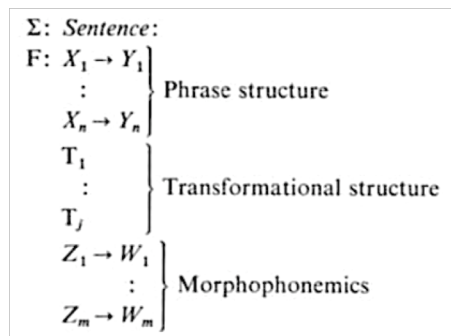
<sup>277</sup> Chomsky, 111, 1957

<sup>278</sup> Figure based on course handout "Katz, 'On the General Character of Semantic Theory'" by John Spackman from PHIL 435: *Concepts: The Stuff of Thought* at Middlebury College, Spring 2017.

<sup>279</sup> Ibid, 61.



In the construction of transformational generative grammar, Chomsky therefore suggested<sup>280</sup> grammars have a tripartite structure of the following form:



Nowhere has Chomsky yet dealt with the thorny problem of *meaning*. A common question fielded by structural linguists who held meaning to be encoded by grammatical structure was: “how [one can] construct a grammar with no appeal to meaning” in the process.<sup>281</sup> On this matter, Chomsky wrote in *LSLT*, “I have argued that the appeal to meaning in the determination of grammatical structure is actually a misnomer for the appeal to intuition, and hence is to be avoided. But it is important to distinguish sharply between the *appeal* to meaning and the *study* of meaning. The latter is an essential task for linguistics. It is certainly important to find some way of describing language in use. But this is not the study of grammatical structure.”<sup>282</sup> Implicit in the question of “how one constructs a grammar with no appeal to meaning” is the presupposition that one *can* construct a grammar with appeal to meaning, which Chomsky maintains is “totally unsupported.”<sup>283</sup>

<sup>280</sup> Figure 35, p. 46, *Syntactic Structures*, Chomsky, 1957.

<sup>281</sup> Chomsky, 93, 1957

<sup>282</sup> Chomsky, 96-7, 1975

<sup>283</sup> Chomsky, 93, 1957

He first marked the distinction of syntax and semantics in *Syntactic Structures*, motivated both by the kinds of considerations just described and by the fact that sentences with an ambiguous meaning have “constructional homonymities”<sup>284</sup> at the level of transformational structure (but not necessarily at other levels), whereas sentences which tend not to be interpreted ambiguously lack these ambiguities of representation at the transformational level.<sup>285</sup> In other words, two “kernel” sentences that have different transformational structure could converge on a common set of phonemes, in which case, the interpretation of the sentence will be ambiguous because transformations conserve the properties of phrase-structure which figure in syntactic representation. This suggests a “criterion of adequacy for grammars” which is independent of *meaning* per se, as a linguist can ask

“whether or not each case of constructional homonymity is a real case of ambiguity and each case of the proper kind of ambiguity is actually a case of constructional homonymity... To understand a sentence, then, it is first necessary to reconstruct its analysis on each linguistic level; and we can test the adequacy of a given set of abstract linguistic levels by asking whether or not grammars formulated in terms of these levels enable us to provide a satisfactory analysis of the notion of ‘understanding.’”<sup>286</sup>

Understanding a sentence therefore amounts to utilizing one’s “intuitions about linguistic form” to reconstruct the sentence subconsciously in the mind at each of these linguistic levels. These “intuitions about linguistic form” are largely constitutive of the linguistic knowledge an adult speaker possesses and define the “grammatical” sentences of a language.<sup>287</sup> In his definitive statement on the matter of meaning (significance) in linguistic theory, Chomsky writes

“... the grammar must generate a set of grammatical sentences on the basis of a limited corpus:

Is it correct to identify ‘grammaticalness’ with ‘significance’? I think that it is not. If we take ‘meaningfulness’ or ‘significance’ seriously, I think we must admit that

(i) *colorless green ideas sleep furiously*

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<sup>284</sup> Where a *constructional homonymity* is an ambiguity in the analysis of a sequence of phonemes at some level, (Chomsky, 86, 1957).

<sup>285</sup> Ibid, 86-91. Cf. example (111) “*the shooting of the hunters*” which is ambiguously represented

<sup>286</sup> Ibid, 86-87.

<sup>287</sup> Chomsky, 62, 1975

is thoroughly meaningless and nonsignificant, but it seems to me that as a speaker of English, I would regard this as a ‘grammatical’ sentence.”<sup>288</sup>

Compare the above example with the following sentence:

(ii) *revolutionary new ideas appear infrequently* <sup>289</sup>

Chomsky argues it is technically impossible to detect how meaning, as a criterion of grammaticality, could manage to include both (i) and (ii) in a grammar of the English language. What, then, is Chomsky’s theory of meaning? Perhaps surprisingly, to answer this question we must delve back into the relationship between language and metaphysics and Chomsky’s concept of human nature.

### *Universal Grammar and the “Poverty of the Stimulus” Argument*

While the earliest formulations of transformational generative grammar arose from rather technical concerns we’ve detailed above concerning immediate constituent analysis, the mapping of phrase-structure trees from active to passive sentence constructions, and concerns about the adequacy of a grammar for representing an infinite range of sentences with a finite set of rules and elements, the central questions of Chomsky’s early work in linguistic theory can be stated at a more general level:

How is it that “on the basis of [a] finite linguistic experience,” the mature speaker of a language “can produce an indefinite number of new utterances which are immediately acceptable to his speech community,” and furthermore how can such a speaker “distinguish a certain set of ‘grammatical’ utterances, among utterances he has never heard and might never produce?”<sup>290</sup>

Chomsky’s stance on this issue is that “there is only one possible explanation” which can account for the “gap” between the “small and degenerate quantity of data” made available by the speech-community and the extremely intricate and articulate grammar of the mature speaker-hearer: the existence of an innate structure in the mind into which a corpus of data – one’s finite linguistic experience – is submitted and transformed into a highly organized, abstract, and systematic representation. Chomsky christened this

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<sup>288</sup> Ibid, 94.

<sup>289</sup> Chomsky, 149, 1965

<sup>290</sup> Chomsky, 61, 1975



innate structure *universal grammar*, which is thus a specification of a *class* of grammars where the linguistic universals are constraints on the form of each component of a grammar.<sup>291</sup>

“The theory of language, then, is a definition of ‘grammar’ and, alternatively, a definition of ‘natural language’, where a grammar is any system of rules consistent with the specified constraints and a natural language is anything represented by a grammar. The constraints are of three types: *formal universals*, *substantive universals*, and *organizational universals*. Formal universals constrain the form of the rules in a grammar; substantive universals provide a theoretical vocabulary from which the constructs used to formulate the rules of particular grammars are drawn; organization universals, of which there are two subtypes, *componential organizational universals* and *systematic organizational universals*, specify the interrelations among the rules and among systems of rules within a grammar.”<sup>292</sup>

Universal grammar emerged as a theoretical superstructure enveloping the “Standard Theory” or “combinatorial era” of transformational generative grammar (ca. 1957-1965)<sup>293</sup> which had a tripartite arrangement roughly analogous to the  $[\Sigma, F]$  grammar of *Syntactic Structures* (phrase-structure rules, transformation rules, and morphophonemic rules). In the Standard Theory, these were remodeled as a *syntactic component* containing base and transformation rules, a *phonological component* containing morphophonemic rules that generated a *surface structure*, and a *semantic component* which included semantic interpretation or *projection rules* which projected the *deep structure* formed by the base rules into a *semantic interpretation*.<sup>294</sup>

The method Chomsky used for establishing universal grammar has been called the “poverty of the stimulus argument” and is a special case of the “problem of the under-determination of theory by data.”<sup>295</sup> If a child only hears a finite set of sentences and yet is capable of comprehending and producing an indefinite number of different sentences then “any finite set of example sentences is compatible with an

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<sup>291</sup> Katz, 126, 1966

<sup>292</sup> Ibid. The general theoretical structure of universal grammar will be revisited below in our discussion on Chomsky’s transcendental philosophy of conceptual structure.

<sup>293</sup> Boeckx and Hornstein, 116-120, 2010

<sup>294</sup> There were deep divisions in the field about whether these *projection rules* amounted to a theory of semantic representation. As Chomsky noted in *LSLT*, “Fodor and Katz undertook the first systematic effort to develop a theory that would relate questions of meaning to transformational generative grammar... Katz has been the clearest advocate of the view that linguistic theory provides a system for representation of meaning... my own view is more skeptical,” (Chomsky, 22-3, 1975).

<sup>295</sup> Marcus, 660, 1999

infinite number of grammars.”<sup>296</sup> Universal grammar is a “theory of the initial state” of what Chomsky calls the *language faculty*, the genetically-determined “capacities that enter into the use and understanding of language” provided by the form, patterns, and organization of the human brain.<sup>297</sup> Both the theory of the structure of natural languages (generative grammar) and the theory of language acquisition (developmental psychology) contain a gap in scientific explanation that can be accounted for with a single theoretical device (universal grammar), and so Chomsky attributes the “initial state” of the brain which provides the conditions for the possibility of acquiring certain grammars to a genetic endowment unique to humans.

It is important to note—especially in light of the next chapter—that Chomsky’s *poverty of the stimulus* argument arises from a set of *empirical* observations and the presupposition of *methodological naturalism* and is postulated to account for a gap in the scientific explanation of language acquisition emerging from the integration of these observations (*data*) with a set of presuppositions (*theory and method*).<sup>298</sup> For reasons that will be elaborated in the next chapter, Chomsky claims the concepts of *physicalism*, *physicalist reductionism*, *eliminative materialism*, and *metaphysical dualism* “have no definitions” and therefore “no meaning” in contemporary scientific and philosophical thought.<sup>299</sup> Therefore, Chomsky’s move to posit universal grammar as a product of the human genome and the structure of the human brain arises from *methodological* as opposed to *ontological* naturalism which (overall) is committed to some form of *physicalism*.<sup>300</sup> Critically, this move is also an *inference* that transcends the theory and data of generative grammar in an attempt to unify two approaches to the natural world (biology and linguistics).

### *Closing Thoughts*

In this chapter we’ve developed a working picture of *transformational generative grammar*, an abstract theory of linguistic syntax developed by Noam Chomsky that revolutionized the theory and practice of Anglo-American linguistics in the mid-twentieth century. Chomsky sharply divided the study of syntax

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<sup>296</sup> Ibid.

<sup>297</sup> Chomsky, 257, 1995

<sup>298</sup> Q.v. *Naturalism* in the Stanford Encyclopedia of Philosophy.

<sup>299</sup> Chomsky, 24:01-25:57, 1992b

<sup>300</sup> *Naturalism* in SEP.

from semantics, arguing on the basis of sentences such as “colorless green ideas sleep furiously” that a theory of linguistic form could be developed that accounted for every grammatical sentence of a language independently of the meanings of those sentences. A language was defined as a finite set of elements and the rules governing the combination of those elements into an infinite set of structured symbolic expressions. The order of these elements could be conceived at a number of linguistic levels, including the phonemic and phrase-structure levels familiar from structural linguistics as well as an innovative *transformational* level which Chomsky used to articulate structures underlying the active-passive relation between sentences.

This mechanistic theory of grammar is one of a set of innate schematisms Chomsky claimed are constitutive of his concept of human nature; a set of schematisms which makes complex and intricate knowledge possible on the basis of partial and degenerate data. Chomsky’s ideas grapple with scientific problems in the domains of linguistics, biology, and psychology, and make concerted attempts to unify these sciences in a common framework: a science of human nature. As we will see in the next chapter, Chomsky’s definition of human nature as a set of innate schematisms that organizes intellectual, individual, and social behavior is incomplete and incoherent with his philosophy of language and mind. In addition to this set of innate mechanical schematisms, Chomsky also believes human beings have innate capacities that transcend any mechanistic conception or characterization. These non-mechanistic aspects of human nature, such as consciousness or the elusive “creative aspect of language use” will form the focus for our study in the next chapter.

Chapter Five:  
Science as Grammar:  
Chomsky's Transcendental Philosophy of Concepts

“Are the parts that are rendered unusable the parts that can't be used? We know there are plenty of parts that can't be used. So, if it turns out that parts of language involve irresolvable computational complexity, irresolvable by a reasonable device, and those are the parts you can't use, fine. That's a positive result, not a negative result.”<sup>301</sup>

*Problems and Mysteries*

Chomsky has written and lectured extensively on the “unification problem” in the sciences, particularly with regard to the cognitive sciences.<sup>302</sup> In these discussions he stresses that the distinctions between different forms of naturalistic inquiry “are pretty artificial” and reflect ignorance and historical contingency, rather than substantive differences between the constructs generated by a particular point of view.<sup>303</sup> While acknowledging that “analogies can always be misleading” Chomsky compared current computational-representational<sup>304</sup> and neurophysiological perspectives on the brain to the status of chemistry and physics before the quantum theoretic revolution of the 1920s.<sup>305</sup> Before chemistry and physics were unified each had hypothetical constructs which could be used to make predictions about the behavior of certain experiments, but it was unclear how (for instance) the notion of *chemical valence* was related to the structure of matter until quantum theory “expanded” physics to chemistry.<sup>306</sup> “How two approaches to the natural world will be unified, if ever, can never be guessed in advance really. It could be *reduction*, as in, say, the biology and chemistry case, more or less. It could be what you might call

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<sup>301</sup> Chomsky, 1:06:33-1:06:53, 1992k

<sup>302</sup> Chomsky, 1992k

<sup>303</sup> Ibid, 15:05.

<sup>304</sup> “That means a way of looking at mental activities and mental faculties, at what the brain is doing, to looking at them as a kind of a software problem, that is, a study of the mechanisms, but viewed from a particular abstract perspective,” (Ibid, 11:50-12:04).

<sup>305</sup> Ibid, 12:05-30:16.

<sup>306</sup> Ibid, 12:43.

*expansion*, as in the physics, chemistry case, or it could be something else,”<sup>307</sup> such as the *synthesis* or *convergence* of genetics and evolutionary theory which took place in the 20<sup>th</sup> century.<sup>308</sup>

Another case of convergence occurred in the 1950s during the so-called “Cognitive Revolution” in Cambridge, Massachusetts, which Chomsky traced to a 1956 “meeting of the Institute of Radio Engineers, which had a series of papers on experimental human psychology, which made use of information theory and signal detection, and other then pretty new ideas.”<sup>309</sup> Although there was little or no communication prior to the meeting a common “shift in perception or perspective toward the disciplines” in several of the attendants at the 1956 meeting, Chomsky argues (following Miller), basically initiated the field of cognitive science.<sup>310</sup>

“Crucially,” claims Chomsky, “there’s nothing mysterious about any of this.”<sup>311</sup> The unification of the natural sciences is a historically contingent phenomenon insofar as certain conceptual and technological advances create the conditions for the possibility of unification.<sup>312</sup> The aim of this chapter is to show how Chomsky makes a *transcendental argument* concerning the form, content, organization and unification of the natural sciences *in principle* predicated on the distinction of *problems* and *mysteries*. A transcendental argument defines the necessary conditions for the possibility of a certain phenomenon.<sup>313</sup> In making the claim in the previous chapter that there are “certain kinds of conceptual structures humans are capable of constructing” Chomsky suggested that certain definite constraints structure the mental lexicon and the “language of thought” which may limit knowledge of the world to particular domains and particular patterned forms for representing those domains. By postulating the “problems-and-mysteries” distinction as a transcendental condition for the possibility of naturalistic inquiry Chomsky must be very careful, for he runs the risk of contradicting himself if he believes (as was indicated in the previous chapter) that

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<sup>307</sup> Chomsky, 13:18-13:39, 1992k

<sup>308</sup> Cf. “Modern Synthesis”

<sup>309</sup> Chomsky 8:26-8:45, 1992k

<sup>310</sup> Ibid, 8:45-9:56.

<sup>311</sup> Ibid, 13:40-13:44.

<sup>312</sup> Chomsky’s MIT colleague Thomas Kuhn popularized the term “paradigm shift” with his 1964 *The Structure of Scientific Revolutions*; Chomsky credits Kuhn’s influence on his thinking deriving from intellectual conversation they held together in the hallways at MIT (Chomsky, 1992a).

<sup>313</sup> IEP *Transcendental Argument*

naturalistic inquiry should proceed without the kinds of arbitrary *a priori* constraints he rails against in the case of Quine's "epistemology naturalized." How then does Chomsky arrive at positing this *a priori* condition concerning the form, content, organization and unification of the sciences, and what does it amount to in the case of linguistic theory?

With respect to the science of linguistic form, *transformational generative grammar*, Chomsky has long maintained that a theory of *language in use* is a mystery, and understanding why will provide an aperture through which we can begin to see the deep structural resonances of Chomsky's thought and Bhartṛhari's philosophy of grammar in the next chapter.<sup>314</sup> Problems are "intellectual challenges that can *in principle* be resolved" in a given organism's "cognitive space." In other words, if we've "got the concepts for it" or more accurately, if the organism's grammar and vocabulary of the mental lexicon permits, it can construct a solution to a given problem. Mysteries on the other hand are those aspects of the world which are "outside" a given organism's cognitive space.<sup>315</sup> Chomsky grants that it "doesn't have to be a sharp distinction. It could be graded and there could be all sorts of other dimensions and so on, but as a first approximation it makes sense to distinguish these two categories and it may even be very sharp."<sup>316</sup>

Chomsky argued René Descartes' sharp distinction of mind and matter—his *metaphysical dualism*—was in fact "a naturalistic position, something that comes out of inquiry in the scientific style," given the conceptual framework of the day: the mechanical philosophy.<sup>317</sup> "The modern Scientific Revolution starting with Galileo essentially was aimed to construct a picture of the world that was mechanical: an idea of the world as a machine... that was called the mechanical philosophy."<sup>318</sup> Chomsky maintained (1966 & 1982) that the claim "that Descartes's notion of innate ideas was developed solely to account for the truths of religion, [is] simply false."<sup>319</sup> On Chomsky's account, Descartes couldn't reconcile the data he observed concerning "acts of human will" and language use with the hypothetical constructs

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<sup>314</sup> Chomsky, 1966, 1982, 1992, 1998

<sup>315</sup> Chomsky, 1:25:26-1:25:39, 1992a

<sup>316</sup> Ibid, 1:26:41-1:26:53.

<sup>317</sup> Ibid, 26:08-26:18.

<sup>318</sup> Chomsky, 8:08-8:51, 1998

<sup>319</sup> Chomsky, 434, 1982

generated by the mechanical philosophy.<sup>320</sup> In the mechanical philosophy, the most general, universal principle which structured the theory from the top-down was the idea that the world was an *artifact* “which could be constructed in principle by a master artisan.”<sup>321</sup> This had far-reaching consequences for conceptual thought and reasoning, as noted by Jacques Rogers in “The Mechanistic Conception of Life”:

“The so-called Scientific Revolution of the sixteenth and seventeenth centuries involved much more than a change in scientific ideas; it also entailed the emergence of a new way of reasoning, modeled on geometry.... As Galileo (1564-1642), one of the founders of the new science, said, ‘The book of nature is written in mathematical language.’”<sup>322</sup>

This “geometric” style of reasoning—a form of *transcendental reasoning* which set the necessary conditions for the possibility of certain phenomena—formed the backbone of the mechanical philosophy and was applied to the “most important philosophical problem at that time,” the relation between God and his creation.<sup>323</sup> Descartes dealt with these topics extensively and was an important figure in the mechanical philosophy. He thought the human body should be “regarded as a machine which, having been made by the hands of God, is incomparably better arranged, and possesses in itself movements which are much more admirable, than any of those which can be invented by man.”<sup>324</sup> Chomsky notes in *Cartesian Linguistics* and in his discussions on the topic elsewhere that Descartes had a strong grasp of “computational-representational systems” (although they weren’t called that in his day, they were “automata”) and thought “we ought not confound *speech* with *natural movements* which betray passions and may be imitated by machines.”<sup>325</sup> Incapable of incorporating the rational, infinitely creative use of language by human beings into the mechanical philosophy, Descartes claimed he had “described after this the rational soul and shown that it could not be in any way derived from the power of matter.”<sup>326</sup>

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<sup>320</sup> Chomsky, 14:58-17:18, 1998)

<sup>321</sup> Ibid, 8:27-8:33.

<sup>322</sup> Rogers, 279, 1986

<sup>323</sup> Ibid.

<sup>324</sup> Descartes, 34-5, 1637

<sup>325</sup> Descartes, 36. Emphasis added.

<sup>326</sup> Descartes, 36.

Chomsky argues Descartes' formulation of *substance dualism* was motivated primarily by the realization that “the diversity of human behavior, its appropriateness to new situations, and man’s capacity to innovate—the creative aspect of language use” transcend the “limitations of any imaginable mechanism.”<sup>327</sup> Whatever it is that sets the conditions for the possibility of the exercise of free will or the existence of consciousness, *that* transcendental ground cannot be a mechanism. Informed by this anti-mechanistic view of human beings, throughout his lectures and writing Chomsky therefore suggests that the “hard problem of consciousness” and the “problem of other minds” are aspects of the world which “we may never understand,” and which *do* indeed leave very sharp lacerations in the cognitive *and* perceptual problem space. The reason, he argues, is that our “problem space is sort of wedded to the mechanical philosophy. And [in the course of scientific discovery] we had to give it up and move to some other parts of our mind which have whatever properties they have—which may be systematically misleading us—and may be leading us away from inquiry into the *mental*.”<sup>328</sup>

“While we need not follow Descartes in postulating a second substance,” Chomsky argues, “some critical elements of the ‘Cartesian’ framework can be adapted and reconstructed in ways that make a good deal of sense.”<sup>329</sup> Among these elements, for Chomsky, are the innateness of language in human beings, the explanatory gap between the concepts of “mind” and “matter”, and the transcendental relationship of “acts of human will” to empirical phenomena which can be accounted for in mechanistic terms.<sup>330</sup> He contends that a “naturalistic approach does not exclude other ways of trying to comprehend the world... the arts may offer appreciation of the heavens to which astrophysics does not aspire,” but in the domain of theoretical understanding, “a *particular mode of comprehension*... any departure from a naturalistic approach carries a burden of justification.”<sup>331</sup>

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<sup>327</sup> Chomsky, 6, 1966

<sup>328</sup> Chomsky, 1:39:15-1:39:36, 1992a; annotated for clarity.

<sup>329</sup> Chomsky, 434, 1982

<sup>330</sup> Chomsky, 15:01, 1998

<sup>331</sup> Chomsky, 183, 1993; emphasis added.



Methodological naturalism, the form of inquiry Chomsky consciously applies in his work, “is not to be confused” with *metaphysical* or *epistemic naturalism*, two doctrines which, in their contemporary forms Chomsky rejects.<sup>332</sup> Metaphysical and epistemic naturalism, Chomsky *strongly* suggests, are two forms of what he calls “methodological dualism” a form of inquiry that recommends we “abandon scientific rationality when we study humans ‘above the neck’ (metaphorically speaking), [become] mystics in this unique domain, [and impose] arbitrary stipulations and a priori demands of a sort that would never be contemplated in the sciences.”<sup>333</sup> Polemics aside, the point of Chomsky’s assertion that the doctrines of metaphysical and epistemic naturalism are forms of methodological dualism is that they contain *arbitrary* constraints on the form of “naturalistic” inquiry.<sup>334</sup> Looking retroactively it appears to us that Descartes imposed an “arbitrary” stipulation on his metaphysics when he declared the separation of mind and matter, but Chomsky contends that it was in fact the other way around as “Descartes could be a [metaphysical] dualist because he had a notion of ‘body’—he didn’t—not a very clear notion but at least a *general notion*. ‘Body’ is defined by the mechanical philosophy, by contact mechanics.”<sup>335</sup> Metaphysical dualism was a result of the conceptual constraints generated by the framework of the mechanical philosophy. Conversely Chomsky argues metaphysical naturalism imposes the “arbitrary” conceptual constraints of *physicalism* or *materialism* because they are predicated on a notion of “body” or “physical” or “material” which has been obsolete for hundreds of years. “It’s common these days to ridicule the Cartesian idea of the ‘ghost in the machine’ – the mind is a ghost inside the machine – but that’s misunderstanding. What was exorcised was the machine, not the ghost. The ghost stayed where it was.”<sup>336</sup>

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<sup>332</sup> Ibid, 183-187.

<sup>333</sup> Ibid, 182.

<sup>334</sup> Interestingly, these constraints are “substantive” in the case of metaphysical naturalism (i.e. they regard the definition of certain elements of the lexicon) and “organizational” in the case of epistemic naturalism (i.e. the framework of epistemology is nested inside the framework of behaviorist psychology, on Chomsky’s account). Cf. J.J. Katz, 1966: *On the General Character of Semantic Theory*.

<sup>335</sup> Chomsky, 1:13:27-1:13:44, 1992a

<sup>336</sup> Chomsky, 22:40-22:55, 1998

In the centuries since the Scientific Revolution, Chomsky maintains the ghostly qualities of the world have only multiplied and that for reasons unbeknownst to him (but strongly suggested to be related to the content of his lectures) this fact has been universally ignored in philosophy and cognitive science:

“Well I suggested this morning, that in a post-Newtonian world we are left with no notion of matter, or body, or physical. Hence, no notion of physicalism. No notion of physicalist reductionism. No notion of eliminative materialism in the sense of many cognitive scientists. And of course, no notion of metaphysical dualism. These notions simply seem to have *no definitions*. No specific – they don’t have any meaning, since the notion of physical has disappeared. And again, the notion of physical disappeared because Newton demonstrated that the physical has ‘ghostly’ qualities – if you like – all the way down to the simplest phenomena.”<sup>337</sup>

“In my opinion – either this is true or it’s not true – if it’s not true, I’d like to see a reason *why*. If it is true – and I think it is – it’s taken much less seriously than it should be. Because, if it is true, it’s extremely hard to *translate* an enormous amount of the discussion in philosophy of mind in a way which makes it into something which makes any sense. It just doesn’t seem to mean anything. Because there doesn’t seem to be any topic. There would be a topic only if the notion ‘*physical*’ were in some manner characterized. And that no-one’s tried to do. And they haven’t tried to do it – mainly – because it can’t be done. The “physical” is just whatever we come to understand, more or less. That’s the physical. There is no other—There isn’t—or else ‘what is actually the case.’ *There*, if you want to take the *realist* position, it’s whatever is ‘there.’ And there’s no question of reducing anything to *that*. Everything’s just a part of that.”<sup>338</sup>

Similarly, William Waldron has noted that the trend toward *naturalizing mind* over the last several decades is premised on the idea “that the only relevant facts” for naturalistic inquiry “are material facts,” but paradoxically, this doctrine encodes an “essentialist” definition of “material” that is itself a “vestige of Cartesian dualism,” or perhaps more accurately, a vestige of the *mechanical philosophy*.<sup>339</sup> Whereas, in the mechanical philosophy, the constraints on inquiry were a necessary consequence of the definitions of matter and mechanism (two “elements” of the philosophical lexicon of the day) and the “foundationalist” idea that

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<sup>337</sup> In 1713 (later republished in 1726) a seventy-year-old Sir Isaac Newton wrote with bewilderment in the 3<sup>rd</sup> Edition of *Philosophiae Naturalis Principia Mathematica* (p. 946): “I have not as yet been able to discover the reason for these properties of gravity from phenomena, and I do not feign hypotheses. For whatever is not deduced from the phenomena must be called a hypothesis; and hypotheses, whether metaphysical or physical, or based on occult qualities, or mechanical, have no place in experimental philosophy.”

<sup>338</sup> Author’s transcription of Chomsky, 23:59-25:57, 1992b.

<sup>339</sup> Waldron, 68, 2011

the action of the mechanistic universe depended wholly on God's sovereign power, in contemporary anti-foundationalist science, to impose such constraints *a priori* is an arbitrary move. Therefore, Chomsky contends it requires a reason for doing so. Chomsky thus suggested an empirical alternative to metaphysical naturalism:

“It could come out of cognitive science that humans are capable of constructing certain kinds of conceptual structures, like determinism and randomness, say, and those are going to deal with certain types of phenomena. And if you can show, empirically, that certain arrays of phenomena don't have those properties, too bad. Then you're in the mystery space... that's a conceivable empirical discovery without paradox. We could discover what's a mystery for us. We couldn't solve it, but we could find out where it is.”<sup>340</sup>

This is the first glance we've had so far of Chomsky's *transcendental generative grammar*. In this lecture and elsewhere, Chomsky uses the term “science-forming faculty” to denote all those aspects of the mind which could “enter into naturalistic inquiry,”<sup>341</sup> however we will hereafter maintain the term *transcendental generative grammar* for three reasons: 1) as a theory of the conditions for the possibility of phenomena (e.g. the theories of empirical sciences) Chomsky's “science-forming faculty” is “transcendental” in the technical sense, 2) as a theory of *conceptual structure* Chomsky's research program would generalize beyond the constructs used in naturalistic inquiry and may have explanatory purchase on *non-naturalistic* forms of inquiry, and 3) Chomsky himself has maintained that a “computational procedure” analogous to generative grammar may specify an “infinite range of beliefs” which are accessed during visual perception to inform our understanding of the world.<sup>342</sup> Therefore, by *transcendental generative grammar* I mean to refer to those aspects of the mind which “enter into” conceptual thought, as Chomsky might put it. As early as 1957, in the preface to *Syntactic Structures* Chomsky gestures at this transcendental philosophy of language based on his thorough-going and *pragmatic* approach to empirical discovery:

“Precisely constructed models for linguistic structure can play an important role, both negative and positive, in the process of discovery itself. By pushing a precise but inadequate

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<sup>340</sup> Chomsky, 1:41:42 – 1:42:18, 1992a

<sup>341</sup> Chomsky, 188, 1993

<sup>342</sup> Chomsky, 17:04-17:27, 1992k: “Adult perception, of course, has some kind of access to systems of belief about the world. Not much is known about this, but it seems reasonable to assume that that involves some kind of computational procedure that specifies an infinite range of beliefs, which are called upon when needed, although here, we move into a domain of almost total ignorance.”

formulation to an unacceptable conclusion, we can often expose the exact source of this inadequacy and, consequently, gain a deeper understanding of the linguistic data.”<sup>343</sup>

This double-edged empiricism strikes at the heart of Chomsky’s critique of *epistemic naturalism*, at least, insofar as that term is used to refer to a “philosophical position” rather than a *method* of inquiry.<sup>344</sup> In the sense of the term as a philosophical position, Chomsky contends that epistemic naturalism arises from Quine’s “epistemology naturalized.” Exemplified by Quine’s radical translation paradigm, this approach stipulates arbitrary constraints on the epistemic position of the researcher because it is an *empirical* question what a child does or doesn’t know about their language (and indeed all languages) when they are confronted with an unfamiliar speech community (i.e. during first language acquisition):

“In the naturalistic study of interaction among organisms (cells, insects, birds, dolphins...), we try to discover what internal states make the interaction possible, yielding the interpretations given to signals. In the study of human language, that path is interdicted. The study of interaction must keep within stipulated bounds: the investigating scientist is permitted to register noises in a specific way, to pick out some features of the situation, to test assent or dissent to the inquiry ‘Is this an X?’, and to carry out elementary induction, but nothing more. Various hints are given as to the features admissible, the choice of X, etc. Quine alleges further that this is also the epistemic situation of the child acquiring language and the person in a communication interchange,”

but as Chomsky points out (and here I am inclined to agree) these *stipulated* constraints arise from one branch of behaviorist psychology and are by no means an empirically justified *a priori* constraint for naturalistic inquiry.<sup>345</sup> In fact on Chomsky’s account Quine’s “radical translation paradigm” rules out, *a priori*, any possible innate knowledge of language and relegates hypotheses formulated in those terms to the “mystery space.”

If it is true that the “problem space” of human perceptual and cognitive abilities is somehow “wedded” to the mechanical philosophy as Chomsky suggests, then “most of humans ‘above the neck’ we’ll just never understand,” because “in a post-Newtonian world” science has empirically established that the

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<sup>343</sup> Chomsky, 5, 1957

<sup>344</sup> Chomsky, 186-7, 1993

<sup>345</sup> Ibid, 204.

mechanical philosophy was false.<sup>346</sup> By fastening *a priori* constraints on “naturalistic” forms of inquiry, such as is the case in Quine’s “radical translation paradigm,” we may be able to construct conceptual structures which *mimic* the form, content, and organization of the mechanical philosophy and which thereby would provide “progress” into the questions we happen to be entertaining, but for Chomsky, that’s not good science. “There might be an argument for treating humans non-naturalistically, but the burden of proof is on anyone who suggests that.”<sup>347</sup>

### *The Creative Aspect of Language Use*

Chomsky himself suggests a reason for treating humans non-naturalistically: there may be certain aspects of the mental which “we will never understand” through the methods of naturalistic inquiry. “What seems to be the case,” for Chomsky, “is that through the general obscurity a few points of light have broken through, and that’s what we call ‘science.’”<sup>348</sup> He makes no metaphysical claim for supposing this assertion that some elements of human nature will ultimately fall out of the purview of the sciences, but rather uses the empirical data available in the history of science and philosophy to derive these conclusions: there are certain ideas which “keep cropping up” such as “input-output systems... deterministic systems... probabilistic systems... [or] systems with a random element. And if something can be put into those frameworks, we can deal with them.”<sup>349</sup> But there are many questions, in fact “most of the questions that the Greeks asked, say, are just as obscure today as they were then.”<sup>350</sup> He therefore hypothesizes that “a large part of the so-called mind-body problem may ultimately fall” in the mystery space.<sup>351</sup>

With respect to the scientific study of language, Chomsky has long maintained that the grounds of *meaning* are outside the scope and domain of a proper science of language. He developed the idea of the “creative aspect of language use” to account for these grounds of meaning in a way that didn’t attempt to

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<sup>346</sup> Chomsky, 1:41:10-1:41:15, 1992a

<sup>347</sup> Ibid, 1:44:32-1:44:39.

<sup>348</sup> Ibid, 1:34:39-1:34:50.

<sup>349</sup> Ibid, 1:27:46-1:28:16.

<sup>350</sup> Ibid, 1:34:50-1:34:56.

<sup>351</sup> Ibid, 1:42:20-1:42:26.

incorporate them into the science of transformational generative grammar, which dealt as we've shown with a very precise, abstract notion of language. The *creative aspect of language use* refers to an array of three *properties* which Chomsky argues are phenomenally present in the "normal, everyday use of language."<sup>352</sup>

1. UNBOUNDEDNESS: Humans make "infinite use of finite means," which is to say, using a finite vocabulary, humans can construct and comprehend an infinite number of sentences.
2. APPROPRIATENESS: The language we use is coherent, appropriate to situations and evokes thought in others. This property Chomsky uses to distinguish language-use from "random" or "probabilistic" systems and is a *descriptive* as opposed to *prescriptive* claim.
3. NON-DETERMINABILITY: Language use, Chomsky maintains, is not determined by external stimuli and he argues "we have no reason for believing it is determined by internal states."

This collection of properties defines the *creative aspect* and transcends the mechanistic conception of mind and matter in both gross and subtle ways. Importantly, this "collection of properties" is a form of *intuition*, for Chomsky, which is grounded in the reality which transcends the categories and conceptual structures available to the natural sciences, but which is observable through the kind of "irreducible phenomenal knowledge" which Descartes and the Cartesians argued was the basis of the distinction between mind and matter.<sup>353</sup> Without a theoretical framework to ground these observations, they have no status scientifically, and Chomsky has made no attempt to incorporate the *creative aspect* with transformational generative grammar. He writes, "we do not understand, and for all we know, we may never come to understand what makes it possible for a normal human intelligence to use language as an instrument for the free expression of thought and feeling."<sup>354</sup>

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<sup>352</sup> Chomsky, 26:39-27:49, 1992k

<sup>353</sup> Chomsky, 16:05-17:05, 1998

<sup>354</sup> Chomsky, 424, 1982

### *An Inward Turn*

Regarding the dogmata of physicalism, physicalist reductionism, and eliminative materialism, throughout the works I've been discussing, Chomsky maintains that "if you look at it closely, at each point, it's a departure from a naturalistic approach to humans."<sup>355</sup> He contends that a "natural" explanation for this fact, would be that "intuitively, we are just dualists. We can't help being dualists any more than we can help seeing the sun set. We see the sun set no matter how much we know and probably our approach to humans is just ineradicably dualist. We see humans as having 'ghostly' minds in a 'physical' body and even if the notion 'physical body' disappears, we can't help seeing people that way."<sup>356</sup> This argument highlights the tension in Chomsky's thought regarding the epistemic status of *intuition*. On the one hand, in the cases just described our perceptual and cognitive intuitions systematically mislead us with respect to inquiry into the nature of mind and matter; on the other hand, we have "irreducible phenomenal knowledge" of the existence of our consciousness and free will, and thus Chomsky claims that even though we may not be able to develop a scientific understanding of ourselves, that "doesn't mean we can't deal with these things in our normal lives. Like... in our normal lives we're always dealing with things, more or less successfully, that we haven't *any conception of*. We do it by what's called 'intuition' which is just a name for what we can *do* but without any understanding of how we're doing it. And virtually everything that goes on is by intuition."<sup>357</sup>

The translation of cognitive and perceptual intuitions into theoretical or scientific explanation is the point of departure from naturalistic inquiry. If Chomsky is right in supposing that these intuitions are grounded in a "mystery space," he is making a transcendental argument insofar as those intuitions and whatever other properties of the mind and world are *in the mystery space* determine the form, content, organization and unification of the sciences. Hence, in the construction of his scientific theory of language, *transformational generative grammar*, Chomsky argued "that the appeal to meaning in the determination

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<sup>355</sup> Chomsky, 1:44:19-1:44:25, 1992a

<sup>356</sup> Ibid, 1:45:03-1:45:35.

<sup>357</sup> Ibid, 1:40:20-1:40:41.

of grammatical structure is actually a misnomer for the appeal to intuition, and hence is to be avoided. But it is important to distinguish sharply between the *appeal* to meaning and the *study* of meaning. The latter is an essential task for linguistics. It is certainly important to find some way of describing language in use. But this is not the study of grammatical structure.”<sup>358</sup>

Turning Chomsky’s considerations inward on his own work and thought there is a striking parallelism between the “dualism” of Chomsky’s distinction of syntax and semantics and the Cartesian distinction of body (*res extensa*) and mind (*res cogitans*): in both instances the study of structure (linguistic or material) proceeds in a mechanistic fashion whereas the study of *personal* qualities (meaning or mind) is relegated to a transcendent “mystery space” outside the realm of mechanistic inquiry. “Insofar as [transformational generative grammar] succeeds in [its] aim,” which is, to characterize the “nature of a person’s knowledge of his language... that enables him to make use of language in the normal creative fashion” Chomsky writes that “we have an account of the mechanisms that enter into the [creative aspect of language use].”<sup>359</sup>

The vital distinction between the dualisms of Chomsky and Descartes is that the “mystery space” of Chomsky’s dualism is merely *epistemological* whereas for Descartes the distinction between mechanism and mind is *metaphysical*. This is not to say that Chomsky is contradicting himself and practicing “epistemological dualism” in his science and philosophy; rather it is to say Chomsky is attempting to develop a mechanistic science of language *insofar as this is possible*. He is proceeding as a naturalist (on his conception) as far as it is possible to take naturalistic inquiry. There may be aspects of the mental or of language which cannot be represented by the classes of conceptual structures which are employed in mechanistic or transcendental reasoning, but attempting to integrate those aspects of the “mystery space” into the science of grammar will only lead to confusion and the kinds of intellectual moves being made which led Chomsky to claim that “the cognitive revolution has taken, from the very beginning, a rather

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<sup>358</sup> Chomsky, 96-7, 1975

<sup>359</sup> Chomsky, 424-5, 1982, emphasis added



dubious path. Maybe a wrong turn; and that the directions in which it is proceeding should be seriously reassessed from their very origins.”<sup>360</sup>

### *Closing Thoughts*

In this chapter we began with a discussion of the possibility of the unification of the sciences and used that discussion to frame our inquiry into the transcendental aspects of Chomsky’s philosophy of mind, language, and science. Chomsky acknowledges the historical contingency of scientific theory and practice and argues that conceptual and technological advances will make certain aspects of the world amenable to “naturalistic” investigation that were previously impossible to study. There’s nothing mysterious about this for him. The mystery arises from considering the structure of science as such. Underlying the historically contingent paradigms that dominate scientific discourse from decade to decade, Chomsky argues, there must be a set of properties and relations in the mind which determine the classes of conceptual structures humans are capable of constructing. This hypothesis is derived from the “empirical data” found in the regularity of ideas circulating in the history of science and philosophy and the observation that human intelligence and perception is patterned and *finite*. If all this is true, then there may be all sorts of properties of the world which simply cannot be represented by the combinations of human concepts into coherent schematisms or sciences.

We developed Chomsky’s philosophy of mind in the context within which he situates himself: as a continuation of the 17<sup>th</sup> century tradition of the continental Cartesians and the British Neo-Platonists. In keeping with this tradition Chomsky uses a form of *transcendental* reasoning to make the argument that there is a real distinction between *problems* and *mysteries* for human intelligence. This real distinction necessitates *pragmatism* regarding the theory and practice of any given science, a pragmatism in full maturity as early as Chomsky’s earliest formulations of *transformational generative grammar*. From 1966 onward, Chomsky has maintained explicitly that meaning is no mere formalism, but a full fact of irreducible, phenomenal knowledge made manifest in the *creative aspect of language use*. These concepts

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<sup>360</sup> Chomsky, 9:38-9:55, 1992a

bespeak an underlying theme in Chomsky's thought that resonates strongly with Bhartṛhari's philosophy of grammar: the unifying relation of transcendental and pragmatic perspectives on the nature of language, mind, and science.

## Chapter Six: Bhartrhari and Chomsky On Linguistic Knowledge and Intuition

### *Cartesian Linguistics*

“The limitless possibilities of thought and imagination are reflected in the creative aspect of language use. The language provides finite means but infinite possibilities of expression constrained only by rules of concept formation and sentence formation, these being in part particular and idiosyncratic but in part universal, a common human endowment. The finitely specifiable form of each language—in modern terms its generative grammar—provides an ‘organic unity’ interrelating its basic elements and underlying each of its individual manifest-ations which are potentially infinite in number.”<sup>361</sup>

### *Vākyapadīya*

“When the meanings [of the words] have been grasped separately, then an intuition [*pratibhā*] arises as different from them. That, they say, is the meaning of the sentence, produced by the meanings of the words. (143)

It cannot in any way be described to others as this or that; it is established as an activity proper to each individual; it cannot even be described by the agent [who experiences it]. (144)

It spontaneously effects the integration, as it were, of the [word] meanings; when it has assumed the form of the whole, it exists as an object, so to speak, [of knowledge]. (145)”<sup>362</sup>

The two epigraphs of this chapter present formulations of the role of intuitive knowledge in Chomsky’s and Bhartrhari’s respective linguistic theories. The epigraph quoted from *Cartesian Linguistics* highlights two forms of intuition: the *creative aspect of language use* which Chomsky introduced in this 1966 monograph and the innate (or intuitive) knowledge of linguistic form which is studied in generative grammar. Both these forms of intuition can be subsumed under the more general category of *mental faculties*, which for Chomsky are intuitive capacities or “cognoscitive powers” which were the traditional objects of study in 17<sup>th</sup> century philosophy of mind.<sup>363</sup> The epigraph quoting the *Vākyapadīya* presents a

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<sup>361</sup> Chomsky, 29, 1966

<sup>362</sup> Carpenter, 64. Translation of VP II.143-145. Ramseier’s transliteration of VP II.143-145 verified by the author as II.143-145 in Bhartrhari, 70-71:

II.143 *vicchedagrahaṇe ’rthānām pratibhānyaiva jāyate /  
vākyārtha itī tām āhuḥ padārthair upapāditām*  
II.144 *idaṁ tad itī sāṅyeṣām anākyeyā kathamā cana /  
pratyātmavṛtti siddhā sā kartrāpi na nirūpyate*  
II.145 *upaśleṣam ivārthānām sā karoty avicāritā /  
sārvarūpyam ivāpannā viṣayatvena vartate*

<sup>363</sup> Chomsky, 0:03:02-0:23:02, 1998

phenomenological account of the experience of *pratibhā*, which “spontaneously effects the integration” of word-meanings into an object of knowledge; this experience, Bhartṛhari paradoxically proclaims, cannot be communicated because it is ineffable.

### *Pratibhā and the Creative Aspect of Language Use*

In the preceding chapters we’ve developed an account of the balance struck between transcendental and pragmatic approaches to the study of language in the thought of Noam Chomsky, perhaps the most influential contemporary linguist, and Bhartṛhari, the fifth-century CE author of a foundational text in Indian philosophy of language and *vyākaraṇa* (grammatical analysis): *Vākyapadīya*. The underlying theme of this essay and its organizing argument is that both thinkers recognize and incorporate the limits of linguistic theory into their total conceptions of the nature of the universe and human behavior.

Naturally, Bhartṛhari and Chomsky have different assumptions and arguments regarding the form and content of metaphysics and linguistic theory, as we’ve seen, and their texts have to be read in response to the particular historical and intellectual contexts from which they arose. But nevertheless, Bhartṛhari and Chomsky both present original and perceptive perspectives grounded in epistemic humility which allow them to make strong and sometimes surprising claims about the relation of language and metaphysics. The goal of this chapter is to bring these two intellectuals together in a comparative theology that catalogues one instance where Chomsky and Bhartṛhari see eye-to-eye and to discern where the convergence decoheres: the relation of intuition to linguistic theory and practice, competence and performance. Following in the footsteps of David Carpenter’s comparative theology of Bhartṛhari and Bonaventure, for Chomsky and Bhartṛhari we “will attempt to discern – and respect – *both* what they and their respective traditions have in common and what divides them. It is often forgotten that *both* similarity and difference are intrinsic to the very idea of comparability.”<sup>364</sup>

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<sup>364</sup> Carpenter, 157.

Chien-hsing identifies three interrelated notions in Bhartṛhari's formulation of *pratibhā* as found in VP II.143-II.152: 1) intuitive-meaning, 2) intuitive-understanding, and 3) knowing-what.<sup>365</sup> Intuitive-meaning is derived from the “*world-constituting* character of language” and the interdependence of language and consciousness in Bhartṛhari's philosophy.<sup>366</sup> Owing to the fact that the “primary meaning unit of language is the sentence” or *vākya-sphoṭa* for Bhartṛhari and because this unit is of an “intentionally immanent character,” Chien-hsing ascribes to Bhartṛhari's concept of *pratibhā* a “divisionless and sequenceless” experience of *what it is like* to understand the meaning of a sentence.<sup>367</sup> In other words, intuitive-meaning is a kind of irreducible, phenomenal knowledge *about* the meaning of a sentence. Importantly, for Bhartṛhari the intuitive-meaning of a sentence is ineffable, even to oneself. This is because intuitive-meaning is the experience of a *relation* underlying the properties of the sentence and “a relation is not determinately cognizable; it lacks an independent form on which words can alight because it depends entirely on the items that are related by it.”<sup>368</sup> Iyer notes that even though *pratibhā* “is indefinable,” Bhartṛhari would contend that “we can see its effect and other circumstances connected with it.”<sup>369</sup> Intertwined with this property of intuitive-meaning is the property of intuitive-understanding, as “the intuitive meaning qua sentence meaning, being the inner intentional object of an understanding act, is immanent in the awareness of sentence understanding, whereas the awareness, comprising within itself both the act and the meaning, is said to be a unitary, indivisible whole.”<sup>370</sup> As noted above, the experience of *pratibhā* has an immanent intentional character, which is to say, it is directed from immediate awareness toward the content of the experience which is the meaning of the sentence. As Chien-hsing notes, “Bhartṛhari does not assert that intuitive understanding is infallible,” but rather, that it is a guide to certain forms of knowledge that fall outside the domains of sense perception, inference, and verbal testimony.<sup>371</sup>

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<sup>365</sup> Chien-hsing, 404, 2014

<sup>366</sup> Ibid, 405.

<sup>367</sup> Ibid, 405-407.

<sup>368</sup> Ibid, 406-407.

<sup>369</sup> Iyer, 87.

<sup>370</sup> Chien-hsing, 410.

<sup>371</sup> Ibid, 414.

This quality of *intentionality* infusing intuitive-meaning and intuitive-understanding is formalized in Chien-hsing Ho's notion of "*knowing-what*" in homage to Gilbert Ryle's "celebrated distinction between knowledge-that and knowledge-how."<sup>372</sup> *Knowing-what*, as distinct from *knowing-how* or *knowing-that*, for Chien-hsing, is the property of *pratibhā* whereby the objects of knowledge (in this case *vākya-sphoṭa*) reveal their inner natures to an immanent and intentional form of awareness that *bridges* theoretical knowledge (*knowing-that*) with practical knowledge (*knowing-how*).<sup>373</sup> This accords with Iyer's conception of *pratibhā* as "something very comprehensive,"<sup>374</sup> as Bhartṛhari himself delineates six forms of *pratibhā*: (1) *svabhāva* (by nature), (2) *carāṇa* (by action), (3) *abhyāsa* (by practice), (4) *yoga* (by meditation), (5) *adrṣṭa* (by invisible causes) and (6) *upapādita* (by traditional wisdom).<sup>375</sup> Iyer exegetes these forms of *pratibhā* in his *Study of the Vākyapadīya in Light of the Ancient Commentaries*.<sup>376</sup> The *pratibhā* involved in the understanding of the meaning of a sentence is taken to be a paradigmatic case for Chien-hsing because Bhartṛhari "as a grammarian-philosopher, recognizes the centrality of language in all our theoretical and practice activities."<sup>377</sup> This idea can be traced to the opening verses of the *Vākyapadīya*, in particular VP I.13 which states:

I.13

"Words are the sole guide to truths about the behavior of objects, and there is no understanding of the truth about words without grammar."<sup>378</sup>

In accord with Chien-hsing's reconstruction, we will claim that Bhartṛhari's discussion of *pratibhā* therefore delineates a thread which binds linguistic theory and practice, competence and performance but which is not precisely one or the other, being a form of *relation* between this quatrefoil of conceptual

<sup>372</sup> Ibid.

<sup>373</sup> Ibid, 415-416.

<sup>374</sup> Iyer, 87.

<sup>375</sup> Iyer, 88.

<sup>376</sup> Ibid, 88-97.

<sup>377</sup> Chien-hsing, 411.

<sup>378</sup> Ramseier's transliteration of VP I.13 verified by the author in Bhartṛhari, 3:  
*arthapravṛttitattvānāṃ śabda eva nibandhanam*  
*tattvāvabodjaḥ śabdānaṃ nāsti vyākaraṇad ṛte*

structures. In a similar way, Chomsky's notion of the *creative aspect of language use* is defined as a relation between a collection of properties that he claims arise in the normal, everyday use of language by human beings: 1) the *unboundedness* or "discrete infinity" of possibilities of expression generated from a finite lexicon and system of computational rules, 2) the *intelligibility* or contextual coherence of linguistic utterances, in other words the fact that utterances are *appropriate to situations*, and 3) *non-determinability*, the "irreducible phenomenal knowledge" that words and sentences are freely chosen and are not determined by internal or external states in a mechanistic fashion.<sup>379</sup> Chomsky acknowledges that there are mechanistic rules of concept and sentence formation which are "in part particular and idiosyncratic," and also "in part universal, a common human endowment," but these rules do not exhaust the properties of the world which Chomsky contends are at play in the normal, everyday use of language.<sup>380</sup> These rules enter into the *creative aspect of language use* in some manner that Chomsky hypothesizes falls behind the veil of the human cognitive mystery space, "free from the control of independently identifiable external stimuli or internal states," and are intuitively put to use in "free thought and self-expression."<sup>381</sup>

Thus, the *creative aspect* is the generative source of *meaning* for Chomsky; as such it has understandably been misunderstood as the recursive property of generative grammars.<sup>382</sup> The irreducibility of *meaning* to syntax (and thereby to the recursive property of generative grammar) has figured prominently in Chomsky's formulations of generative grammar since at least the mid-1950s as these passages quoted from *Transformational Analysis* (1955),<sup>383</sup> *Syntactic Structures* (1957)<sup>384</sup> the MIT Libraries microfilm copy

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<sup>379</sup> Chomsky, 1998

<sup>380</sup> Chomsky, 29, 1966

<sup>381</sup> Ibid.

<sup>382</sup> Drach, 57, 1981

<sup>383</sup> Cf. *Transformational Analysis* p. 2: "This is basically a study of the arrangement of words and morphemes in sentences, hence a study of linguistic form. Thus it is syntactic study in both the narrow sense (as opposed to phonology) and in the broader sense (as opposed to semantics). No reliance is placed on the meaning of linguistic expressions in this study, in part, because it is felt that the theory of meaning fails to meet certain minimum requirements of objectivity and operational verifiability, *but more importantly, because semantic notions, if taken seriously, appear to be quite irrelevant to the problems being investigated here.*" (Emphasis added.)

<sup>384</sup> Cf. *Syntactic Structures* p. 100, §9.2.7: "It is, of course, impossible to prove that semantic notions are of no use in grammar, just as it is impossible to prove the irrelevance of any other given set of notions. Investigation of such proposals, however, invariably seems to lead to the conclusion that only a purely formal basis can provide a firm and productive foundation for the construction of grammatical theory."

of *Logical Structure of Linguistic Theory* (1955)<sup>385</sup> and *Aspects of the Theory of Syntax* (1965)<sup>386</sup> all attest. The mystery of the *creative aspect of language use* for Chomsky rests on its obedience to the machine of syntax on the one hand, and its transcendence of mechanistic explanation on the other. It is no exaggeration to say that the *creative aspect of language use* falls at the very limits of conceptual thought for Chomsky, being perceptually open but cognitively closed to human beings.

### *The Role of Intuition in Linguistic Theory and Practice*

Chomsky's distinction of *meaning* from *syntactical and semantic rules* and his perspective on the empirical "method of discovery" (cf. footnote 385) in grammatical theory have deep structural resonances with Bhartṛhari's discussion of *pratibhā* and the role of intuition in linguistic analysis. Concerning the relation of intuition to the practice of linguistic theory, Carpenter notes that Bhartṛhari divorces the "analyzed structure" of a sentence which is "useful as an *upāya*, a means," from the "full fact" of language as *pratibhā*, which is ineffable and undefinable.<sup>387</sup> For Bhartṛhari, analyzed sentence structures serve grammarians for their science but are "false and based on ignorance (*avidyā*),"<sup>388</sup> as "it is ignorance (*avidyā*) that is described in the science (*śāstra*) of grammar in different ways."<sup>389</sup> As noted in Chapter Three (pp. 34-35), Bhartṛhari maintains in VP I.9 that the "true and pure knowledge" of the *Vedas* is "not contradictory to any school of thought," and therefore contradictions concerning the nature of grammar and reality arise from ignorance (*avidyā*) and their transmutation into conceptual constructions (*vikalpa*). In the experience

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<sup>385</sup> Cf. *Logical Structure of Linguistic Theory* (MIT Microfilm Edition) p. 4: "At the same time, it is important to formulate clear and precise criteria, and to apply these with complete rigor and consistency, even when it appears likely that they are only partially adequate. In this way we may hope to expose the source and exact location of this inadequacy. Pushing a precise, but inadequate formulation to an absurd conclusion may be an important method of discovery. Below, we will see that careful pursuit of this course exposes a gap in linguistic theory, and leads to the construction of a theory of transformations. Obscure and intuition-bound conceptions can of course never be pushed to absurd conclusions, but this can scarcely be regarded as a point in their favor."

<sup>386</sup> Cf. *Aspects of the Theory of Syntax* pp. 159-160: "Exactly the same can be said about the boundary separating semantic systems from systems of knowledge and belief. That these seem to interpenetrate in obscure ways has long been noted. One can hardly achieve significant understanding of this matter in advance of a deep analysis of systems of semantic rules, on the one hand, and systems of belief, on the other."

<sup>387</sup> Carpenter, 64.

<sup>388</sup> Ibid.

<sup>389</sup> Aklujkar, 146 on VP II.229-234.



of *pratibhā*, “understanding (*vidyā*) arises spontaneously,” which transcends the *vikalpa* which are passed down by teachers in different traditions.<sup>390</sup> Just as Chomsky proposes to formulate precise but “ultimately inadequate” models of linguistic structure as a “method of discovery” for the *real* properties of universal grammar<sup>391</sup> so too Bhartṛhari insists that by “remaining on the path of unreality (*avidyā*) one strives after reality (*vidyā*).”<sup>392</sup> In spite of their convergence on *meaning* as a form of intuition that transcends the conceptual framework of analyzed sentence structures (and the implications this has for the structure of linguistic theory), Bhartṛhari and Chomsky differ markedly in their conceptions of *how* intuition should inform linguistic theory and practice.

Regarding linguistic theory, both Chomsky and Bhartṛhari postulate forms of innate knowledge that close gaps in the doctrines they develop concerning the nature of language and knowledge. Bhartṛhari postulates six forms of intuition (*pratibhā*) that close the epistemic gap between the *pramāṇa-śāstra* of *anumāna*, *pratyakṣa*, and *śabda*, and knowledge of the *sphoṭa*. According to Bhartṛhari’s commentary on VP I.173, “the original seers were believed to become manifest in *pratibhā* and while in that condition to see (*paśyanti*) the great Self (*ātmā*), which is itself described as Being (*sattā*).”<sup>393</sup> Inference (*anumāna*), perception (*pratyakṣa*) and testimony (*śabda*) each fail to fully account for the kind of knowledge Bhartṛhari suggests is attained in *pratibhā*. Like Chomsky, who proposed a form of innate linguistic knowledge to account for the “underdetermination of theory by data” according to the *poverty of the stimulus argument*, Bhartṛhari’s *sphoṭavāda* proposes a form of innate knowledge that accounts for the underdetermination of linguistic knowledge by practice. In this light we can see that both Chomsky and Bhartṛhari are using forms of transcendental argument to determine the conditions for the possibility of the phenomena they observe.

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<sup>390</sup> Ibid.

<sup>391</sup> Chomsky describes his “realist” conception of *transformational generative grammar* in the *Logical Structure of Linguistic Theory* (p. 37, *Introduction* to the 1975 Edition). The idea being that “the procedural theories [he] was attempting to refine, extend, and correct did make an empirical claim. A grammar determined by a linguistic theory (given data) constitutes a hypothesis concerning the speaker-hearer’s knowledge of his language and is to be confirmed or disconfirmed in terms of empirical evidence drawn, ultimately, from investigation of the linguistic intuitions of the language-user.”

<sup>392</sup> VP II.238

<sup>393</sup> Ibid, 65.

A crucial epistemological difference here emerges in Chomsky and Bhartṛhari's thought. Unlike Bhartṛhari's notion of *pratibhā* as an ineffable form of knowledge which transcends the *pramāṇasāstra* of *anumāna*, *pratyakṣa*, and *śabda*, Chomsky's *creative aspect of language use* can be reconstructed using the analytical tools of inference, perception, and testimony. The *creative aspect* doesn't deliver knowledge of itself in the way *pratibhā* reveals the *sphoṭa*. On Chomsky's account we *perceive* ourselves as having a certain range of abilities (freedom of thought and will, consciousness, and so on) and other human beings *testify* that they too have these experiences, so Chomsky *infers* that such a suite of properties exists, even though knowledge of the fact is in principle (Chomsky argues) cognitively closed to humans. As the structure of these properties lie behind the veil of the *cognitive* mystery space, it seems we can never *know* that we have these abilities. Chomsky offers no reason for believing we have these abilities other than an "appeal to the given" of perception.<sup>394</sup> Unlike Bhartṛhari's intuition for sentence meaning, Chomsky's *creative aspect* (even while it is a part of a reality which transcends scientific explanation) doesn't amount to an innate capacity for *knowledge* of the inner nature of reality:

"Coming back to the question of the natural sciences, it would seem that the natural sciences are sort of an accidental convergence—purely chance convergence—between some properties of the world and properties of our cognitive [problem] space... there's some area of convergence in there. There's no reason why that had to be like that... There's a long discussion in the sciences or philosophy of science, trying to argue that it *had* to be like that. I think this goes back first to Charles Sanders Peirce, about a century ago in the early post-Darwinian period, Peirce argued that—scientists always been asking the question: *how come science is so successful?* It's kind of a miracle... *how come the human mind is capable of understanding the nature of reality?* Well of course that presupposes that humans *are* capable of understanding the nature of reality. And the evidence for that is very slight."<sup>395</sup>

Chomsky insists that science proceed "irrespective of our intuitions" because intuitions may systematically mislead us. He implies here that knowledge of the nature of reality is defined as scientific knowledge, the cognitive side of the "problem space" of human intelligence. The "general content" of the scientific revolution of the 17<sup>th</sup> century, Chomsky claims, was this subordination of intuition to rational inquiry, and

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<sup>394</sup> Cf. McDowell, *Mind and World*

<sup>395</sup> Chomsky, 1:33:22 – 1:34:39, 1992a

“that’s why it’s really the one *real* scientific revolution in human history.”<sup>396</sup> For reasons unbeknownst to me, Chomsky overlooks (and implicitly rejects) the possibility that the *convergence* of the properties of the world with the human cognitive and perceptual problem space is *itself* a mystery and not some “accidental” or “purely chance convergence” on the one hand or a kind of conceptual necessity on the other, as he claims Charles Sanders Peirce suggested. Had Chomsky acknowledged this possibility there would have been a far deeper resonance between his thought and Bhartṛhari’s, who saw the practice of linguistic science as a means toward knowledge of the nature of reality. This oversight is strange, too, in light of Chomsky’s clear-eyed understanding of the situation of scientific knowledge within conceptually contingent paradigms:

“We have learned, we have come to recognize, that the way we see the world is just another fact to be explained about the world. So, if we see the sun *set* and we see the moon illusion and we believe in the mechanical philosophy no matter how much we try not to, that’s just a fact about the world. In fact, it’s a fact about a very special *part* of the world, namely the human mind/brain and the way in which it acts and conceptualizes and constructs and so on and we’d like to come to understand *that*. And in order to do it we have to make a kind of intellectual wrench, we have to take ourselves out of our skins... the way we look at things in ‘common sense’ no longer provides a *criterion* for intelligible explanation, but rather is just a phenomenon to be explained. Now there’s a *real* problem here which you can see right off... the working notion of ‘intelligible explanation’ is again something that is inside our skins.”<sup>397</sup>

Chomsky recognizes this and throws in the towel with the skeptics: “Yes, the world is unintelligible to our common sense, but that’s just the way it is. And we do the best we can in trying to construct doctrines about it. What we’re left with—and this was reasonably well understood in the 18<sup>th</sup> century—is just that we can consider various *aspects* of the world. So, we can consider its mechanical aspects, its electrical aspects, optical aspects, chemical aspects and mental aspects,” but none of these pursuits for Chomsky amounts to anything more than the most sophisticated doctrines we can construct from within our own skins.<sup>398</sup>

Furthermore, Chomsky is silent on whether the world contains “spiritual aspects,” and it is a reasonable inference to claim this silence speaks volumes. During a 1978 interview, Brian Magee asked

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<sup>396</sup> Ibid, 1:06:30-1:06:46.

<sup>397</sup> Ibid, 1:07:27-1:08:45.

<sup>398</sup> Chomsky, 24:17-24:43, 1998

Chomsky if he “accepted any truth” in the characterization of his work as “redoing in terms of modern linguistics what Kant was doing,” to which Chomsky revealingly replied: “well I not only accept the truth in it but I’ve tried to bring it out in a certain way.”<sup>399</sup> Chomsky qualified his answer by saying he hadn’t “specifically referred to Kant, but rather primarily to the 17<sup>th</sup> century tradition of the continental Cartesians and the British Neo-Platonists.”<sup>400</sup> Chomsky consciously situates his own work as a 20<sup>th</sup> century revival or recapitulation of 17<sup>th</sup> century philosophy and science, and it is no surprise, therefore, that his total conception of the universe includes “mental” or “chemical” aspects but no “teleological” or “spiritual” aspects as the Scientific Revolution of the 17<sup>th</sup> century was designed to create a “unified conception of the world” as an artifact. Beginning from the bodies of doctrine Chomsky accepts in the sciences, it would require an enormous leap to unify these doctrines with theological or spiritual doctrines in a manner that doesn’t merely reduce them to the *epiphenomena* of a psychological science of the mind. Perhaps unification of the mental and spiritual “sciences” or aspects of the world is itself a mystery for human intelligence.

In stark contrast to Chomsky’s tradition of scientific naturalism which views the natural sciences as a “purely chance convergence” between the properties of the world and the conceptual structures human intelligence can employ, Bhartṛhari’s metaphysical and linguistic projects in the *Vākyapadīya* are grounded in a tradition wherein the criterion for reliable reasoning is *dharma* which transcends human intelligence and mediates its relationship to the world.<sup>401</sup> As a Brahmin in fifth-century CE India, Bhartṛhari “accepted the standard view that tradition, or *smṛti*, mediates between Vedic *dharma* and broader realms of experience... the tradition’s rootedness in the Veda (*vedamūlatva*) has a deeper significance than mere dependence on Vedic texts. It signifies rootedness in the True Word [*śabdatattva*] itself, through the mediation of Vedic *dharma*.”<sup>402</sup> Bhartṛhari’s approach isn’t so different from Chomsky’s empirical attitude; after all the dichotomy of *dharma* and *adharma* for Bhartṛhari is based on the cultivation of *vidyā*

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<sup>399</sup> Magee and Chomsky, 37:56 – 38:07, 1978

<sup>400</sup> Ibid, 38:07 – 38:19.

<sup>401</sup> Iyer, 86.

<sup>402</sup> Carpenter, 52.

(knowledge) against *avidyā* (ignorance); however, Chomsky doesn't accept or expect a *salvific*, *teleological*, or *revelatory* aspect of the world which could determine the criteria for scientific explanation whereas this is central to Bhartṛhari's understanding of grammar:

### *Chomsky and Bhartṛhari on the Light of Reality*

Chomsky<sup>403</sup>

(1:33:33-1:33:53, 1992a)

“Coming back to the question of the natural sciences, it would seem that the natural sciences are sort of an accidental convergence, purely chance convergence, between some properties of the world and properties of our cognitive space.”

(1:34:39-1:34:50, 1992a)

“What seems to be the case is that through the general obscurity a few points of light have broken through and that's what we call science.”

(1:39:08-1:39:36, 1992a)

“Already by the 17th century big problems—big paradoxes were arising because our problem space is sort of wedded to the mechanical philosophy. And we had to give it up. And move to some other parts of our minds—which have whatever properties they have—which may be systematically misleading us. And maybe leading us away from inquiry into the ‘mental.’”

Bhartṛhari<sup>404</sup>

I.18

“That pure light, which is the supreme essence of speech, free of (any kind of) form, which appears to take several forms in this darkness (of manifestation),

I.19

“—which is worshipped by those who have transcended the (manifested) speech showing form and action, and who have passed beyond (the duality of) light and darkness /

I.20

“—in which the symbols of speech, pointers as it were to the ‘one-letter scripture’ (*Om*) shine forth like reflections in association with that (i.e. *Om*) which is antecedent to all (manifested) speech

I.22

“which, though one, is divided on the basis of the various explanations, – that Supreme Brahman is attained by having recourse to grammar.”

Chomsky critiques a picture of the world that resonates with Bhartṛhari's wherein the “light” of ultimate reality—those properties of the world that are the proper objects of science—break through the obscurity of the world and are made to fit the forms of the human mind. Chomsky contends that this “fact that humans have this amazing capacity to understand the nature of the world just doesn't seem to be

<sup>403</sup> Chomsky, 1:33:33-1:39:36, 1992a

<sup>404</sup> Author's transliterations of Bhartṛhari, 3-4:

I.18 *pranyastamitabhedāyā yadvāce rupamutamam / Yada sminneva tamasi jyoti śuddha vivartate*

I.19 *vaikūta samatīrāntā mūrtavyāpāradaśarnam / vyatītyālokatamasī prakāśam yamupāsate*

I.20 *yatra vāco nimintāni cihrānīvākṣarasmutēḥ / Śabdāmūrveṇa yogena bhāsante pratibimbavatam*

I.22 *yadeka prarīyābhedaibarhūdā pravibhajyate / tadvaṇyākaraṇamāgamyā para brahmādhiganyate*

true.”<sup>405</sup> He often chides that if human beings “aren’t angels” and are “part of the natural world” then we shouldn’t be surprised that our intuitions mislead us when we apply them to the construction of scientific theories. The observation that certain “points of light have broken through” the “general obscurity” is of no significance for Chomsky because that data “has no status,” for him in precisely the same fashion that empirical data in contemporary neurophysiological studies of language has no status in terms of computational-representational theories of the mind.<sup>406</sup>

In precisely the same way, the sciences *in toto* are curiosities for Chomsky. Nobody has developed a theory of the origins of the sciences that would fit his naturalistic method and transcendental commitments (i.e. the mysteriousness of consciousness and freedom of will) and Chomsky is skeptical of the possibility of such a theory. Such a theory would be a *transcendental generative grammar* in the sense in which I’ve been using the term: a theory which would determine the conditions for the possibility of certain kinds of conceptual structures and the infinite arrays of possible conceptual structures which could be manifested by human intelligence. Evolutionary theories of cognition have attempted to provide an explanation for the forms of concepts made manifest in human intelligence, but Chomsky strongly rejects the idea that evolutionary approaches to the study of language and scientific reasoning, which are universally taken to be “naturalistic” approaches will ever yield knowledge of the origins of these systems. Owing to a fact well-understood by Bhartṛhari that “what is inferred by a clever thinker can always be explained otherwise by one cleverer,” and that evolutionary psychology relies entirely on inference, Chomsky seems to believe an evolutionary psychology of the uniquely human traits of language, art, and science is a *mystery*.<sup>407</sup> <sup>408</sup> “There’s nothing possible that anybody will ever be able to say about the evolution of the language faculty,

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<sup>405</sup> Chomsky, 1:35:02-1:35:12, 1992a

<sup>406</sup> Chomsky, 31:06-31:46, 1992k: “Now, rather surprisingly, there’s some recent work which shows quite dramatic and surprising correlations between certain properties of the computational representational systems of language and of ERPs, evoked potentials. For the moment, these ERP measures have no status apart from their correlation with categories of expressions that come out of computational representational theories. That is, they’re just numbers picked at random, because there’s no relevant theory about them that says, just look at these numbers and not at some other numbers. In themselves, in other words, they’re curiosities.”

<sup>407</sup> Aklujkar, 130.

<sup>408</sup> Chomsky, 1:35:25-1:38:18, 1992a

the evolution of cognition, [and] certainly not the evolution of the *science forming faculty*. It's just hopeless. It's got to be just some physical configuration that took place for whatever reason.”<sup>409</sup>

The randomness and arbitrariness in Chomsky's metaphysics (which is to say his historical frame for understanding the origins of humanity) differs markedly from Bhartṛhari's philosophy which is teleological all the way down. Carpenter argues that Bhartṛhari makes clear in VP I.27-42 that the *śiṣṭas* (“traditional experts”) Pāṇini and Patañjali composed the science of grammar as a science of *dharma*.<sup>410</sup> The practice of *vyākaraṇa* emerged as one of six *Vedāṅgas* or “accessories to the study of the Vedas” as we noted in Chapter Two and the myriad *darśanas* which emerged attempted to codify ritual practices in accord with their particular hermeneutical methods and metaphysical systems.<sup>411</sup> “In Bhartṛhari's view,” claims Carpenter, “there are ultimately no stable substances accessible to direct inspection that could provide a solid foundation for the rational elaboration of a body of objective knowledge. The world is relational to its very core, and what constitutes adequate knowledge varies with time and place.”<sup>412</sup> Therefore the criteria for knowledge must arise from tradition and *dharma* “embodied” in the “intuitive insight” of the *śiṣṭa*.<sup>413</sup> Even if these traditions were to vanish and all record of the Vedas with them, Bhartṛhari contends, “the world would not stray from the *dharma* that is taught in the *śruti* and the *smṛti*,” because *dharma* is constitutive of the fabric of the cosmos.<sup>414</sup> It is an “aspect” of reality in the sense that Chomsky uses the term to refer to “mental” or “chemical” or “electrical” phenomena.

Chomsky's notion of “aspects” of the world is perhaps most closely approximated in Bhartṛhari's philosophy by the notion of *śaktis* (powers) which Carpenter writes are the basis of his metaphysics.<sup>415</sup> Again, fundamental distinctions in the bodies of doctrine to which Chomsky and Bhartṛhari adhere shape which “aspects” of the world each thinker focuses on and how they interpret those aspect; for Chomsky the

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<sup>409</sup> Ibid, 1:38:19-1:38:29.

<sup>410</sup> Ibid, 52-54.

<sup>411</sup> Coward and Raja, 3.

<sup>412</sup> Ibid.

<sup>413</sup> Carpenter, 54.

<sup>414</sup> Ibid, 55 translating VP 1.149.

<sup>415</sup> Carpenter, 54.

world has mysterious aspects such as consciousness or the *creative aspect of language use*, but these mysteries shouldn't be incorporated into a scientific conception of the nature of the world. In fact, it would be a contradiction in terms to attempt to do this because a "mystery" in Chomsky's philosophy refers to a lacuna in the formulation of possible theoretical explanations. Bhartṛhari on the other hand simply accepts that there are different "aspects" of the world than Chomsky; for instance, the aspect of time (*kāla*) is the "most important of the powers of the *śabdatattva-Brahman*. It is its creative power (*Kartṛśakti*)," and is a formulation of the nature of time Chomsky would reject as mere mysticism.<sup>416</sup> It is a strange contradiction that Chomsky expounds the "mysteries" and "ghostly qualities" of consciousness and freedom of will on the one hand but rejects (or ignores) the mysteries and ghostly qualities attested to in the varieties of religious experience on the other, if only because those experiences could figure as data in a scientific theory of conceptual structure, but I will not venture an explanation for this fact. Suffice it to say that it's just got to be some sort of physical configuration that took place for whatever reason.

### *Closing Thoughts*

In summary, Chomsky takes a double-edged view toward intuitions and their role in linguistic theory and practice: on the one hand they may systematically mislead us because they are merely properties of the natural world—blind energy, so to speak—and these properties simply do what they do irrespective of human interests; on the other hand, intuitions are the objects of inquiry for a theory of linguistic structure because they define one's knowledge of a language (linguistic competence) and are constitutive of the uniquely human ability to communicate with others using language in the normal, creative fashion (linguistic performance). Using Chien-hsing's trichotomy we could say that *pratibhā* and the *creative aspect of language use* converge with respect to "intuitive-meaning" and "intuitive-understanding" and diverge with respect to "knowing-what." The *creative aspect* is a form of practical knowledge or "knowing-how" and *not* a form of knowledge about what there is. Like Chomsky, Bhartṛhari is skeptical of the forms

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<sup>416</sup> Iyer, 111.



of knowledge (*pramāṇa-śāstra*) of inference, testimony, and perception to deliver knowledge of the inner nature of reality; he differs from Chomsky in that he posits a form of intuition (*pratibhā*) that can account for the fact that when people *do* intuitively understand the meaning of a sentence, that act of knowing amounts to a soteriological relationship between the *dharmic* order of the cosmos and the knower. Hence, the use of proper linguistic forms is a source of merit. Bhartṛhari's view on intuition similarly cuts both ways and therefore he expounds the importance of studying multiple systems of thought (VP II.484):

II.484

“Thought becomes clear by a study of different systems of thought [*darśana*]. What points can possibly be contradicted by him who learns (only) his system?”<sup>417</sup>

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<sup>417</sup> Author's transliteration of Bhartṛhari, 156:

II.484: *prajñavivekaṃ labhate bhinnairāgamadarśanaiḥ /*  
*kiyadvā śaktamunnetuṃ svatarkamanudhāvatā*

## Chapter Seven

### Conclusion

“Just as light, which is one and (illuminates) all objects, is divided by imitating the differences [*bhedānukāreṇa*] of visible objects, so too is the understanding of the meaning of the sentence.”<sup>418 419</sup>

#### *The Story So Far*

We began 2,500 years ago in India with the advent of the auxiliary sciences of the *Vedas* (known as the *Vedāṅgas*) and described the emergence of the science of linguistic analysis (*vyākaraṇa*) codified in the *Aṣṭādhyāyī* by Pāṇini and elevated to the status of a *darśana* by Bhartṛhari in the *Vākyapadīya*. After developing Bhartṛhari’s conception of language in its historical and philosophical context we discussed the *sphoṭavāda* and its metaphysical and epistemological dimensions, including several concrete technical applications of the theory to linguistic arguments in the second *kāṇḍa* of the *Vākyapadīya*. Having painted a portrait of Bhartṛhari’s philosophy we switched frames to a discussion of Chomsky’s scientific theory of linguistic structure: *transformational generative grammar*. Having described the structure, content, and origins of the theory we found resonances between this project and Chomsky’s philosophy of language, mind, and science. Namely, we paid careful attention to Chomsky’s consciousness of theory construction and the thorough-going pragmatism he employed in the creation of this formal science of language. At the same time, Chomsky maintained a transcendental perspective on the nature of language and mind which could not be fully accounted for in the framework of anti-foundationalist naturalistic science. We watched Chomsky struggle to develop a rigorous philosophical understanding of the limits of language and mind, with his theory of conceptual structures that I have christened *transcendental generative grammar*. Bringing Chomsky and Bhartṛhari into dialogue at the limits of their respective linguistic theories highlighted the

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<sup>418</sup> Carpenter, 40-41.

<sup>419</sup> Author’s transliteration of Bhartṛhari, 37:  
*yathaika eva sarvā tharpratyaya pravibhajyate /*  
*drśyabhedānukāreṇa vākyātharnugamastathā*

dual-aspect roles that intuition plays in both of their systems of thought. As the bind that ties the practicing linguist to the mysteries beyond language and thought, intuition—for Chomsky and Bhartṛhari—both is a form of knowledge on the one hand and a source of ignorance on the other. Bhartṛhari advocates a practice of cultivating knowledge (*vidyā*) through ignorance and claims grammar is a central, paradigmatic example of a praxis that can lead to merit or *dharma*. Chomsky eschewed teleology in his science but clings tightly to it in his politics as we’ll see, just as his philosophical forebears in the Cartesian tradition reviled the “neo-Scholastic mysticism” of occult forces and properties in the mechanistic world on the one hand, and championed freedom of thought and will as humanity’s “most noblest possession” on the other.<sup>420</sup>

### *Sphoṭa/Dhvani Dualism and Chomsky’s Dualisms*

The transcendental and pragmatic aspects of the philosophies of Chomsky and Bhartṛhari are like a binary star system centered on two forms of dualism: *metaphysical dualism* and *epistemological dualism*. *Metaphysical dualism* is a form of inquiry wherein a precise delineation in two categories is necessary for some theory, as when the empirical advance of the mechanical philosophy under Descartes demonstrated that the phenomena of consciousness and freedom of will couldn’t be incorporated into a mechanistic conception of the nature of the universe. If the world and all its components were mechanisms, then either they were *mere mechanisms* or else they were mechanisms under the control of a driver.<sup>421</sup> For Descartes, man was made in the image of God and therefore was of a substance with creative powers analogous to God, and as such could freely create forms of action that respected the constraints of the mechanistic physical world. *Epistemological dualism* is a form of inquiry wherein a precise delineation in two categories is possible; Chomsky contends that because it is possible to stipulate *a priori* criteria for inquiry, as in the case of the Turing Test or Quine’s “radical translation paradigm” human beings are capable of creating conceptual structures that mimic the form and content of theories of the world which could only be true if

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<sup>420</sup> Chomsky, 14:59-15:07, 1998

<sup>421</sup> A dichotomy I learned from Alan Watts, cf. *The Nature of Consciousness* (1960).

*metaphysical dualism* were true. If there are no *real* or *essential* differences between things, then the stipulation that by meeting some arbitrary criterion (say being able to fool an outside observer) one has established “empirically” that such-and-such is the case, for Chomsky, is an absurd practice. Asking whether “machines think” is like asking whether “submarines swim.” This is a matter of decision, “and different languages make decisions differently.”<sup>422</sup> To make explicit the underlying theme in this essay, we’ll conclude by cross-examining *metaphysical* and *epistemological dualism* with two forms of dualism that arise from the technical progress Chomsky and Bhartṛhari seek to make in their respective disciplines. In Bhartṛhari’s case the dualism in question is the division of *sphoṭa* and *dhvani*; for Chomsky the dualism in question is the division of *problems* and *mysteries*. Under what circumstances would the characterization of *sphoṭa* be a problem or a mystery for Bhartṛhari?

Bhartṛhari developed the *sphoṭa* theory, I have been suggesting throughout this essay, to break through certain conceptual barriers that had been setup by the epistemologists and grammarians in his tradition and transform knowledge of the meaning of sentences from a *mystery* into a *problem*. Recall that the *Anvitābhīdhāna* and *Abhihitānvaya* theories which preceded him (cf. pp. 23, 26-27) were premised on a semantic theory which was fundamentally compositional, and that to varying degrees the *āstika* schools accepted one or another of these theories of sentence meaning for the purposes of Vedic exegesis.<sup>423</sup> Iyer explains the problem Bhartṛhari set out to solve as follows: “the problem was how to explain the understanding of meaning from the sounds which are uttered in a temporal sequence.”<sup>424</sup> Somehow a unitary experience of sentence-meaning emerged from what appeared to be disparate and temporally discrete units of sound and meaning. *Pratibhā* was posited as a form of intuition that granted, Chien-hsing claimed, intuitive-understanding of the intuitive-meaning along with self-illuminating know-ledge in the form of a “knowing-what” of the nature of this unitary experience of sentence-meaning: the experience of *sphoṭa*. “It

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<sup>422</sup> Chomsky, 35:32-35:37, 1992k

<sup>423</sup> Cf. *Language in the Brahmanical Schools*, Coward, 29-42, 1980

<sup>424</sup> Iyer, 160.

is this conception of the sentence,” Iyer writes, “which Bhartṛhari describes by saying: *eko ’navayavaḥ śabdaḥ* in Vāk. II.1. It means that the *sphoṭa* in the form of sentence is a partless indivisible unit.”<sup>425</sup> Bhartṛhari’s *sphoṭa* doctrine holds this indivisible unit to exist antecedently in the mind before any cognition of it and to be made manifest through the sound (*dhvani*) but not identical to it. Iyer describes the process of cognizing the *sphoṭa* thus:

“Even though each sound causes the cognition of the whole *sphoṭa* which is thus its object, it has the form of the sound with all its properties such as accent, duration, timbre and so on. Whenever a cognition has one thing as its object and the form of another it is an error... the *sphoṭa* is the object of the cognition of each sound but [the *sphoṭa*] appears as the sound. In other words, when we finally get a clear cognition of the *sphoṭa*, it is through a series of errors that we come to it.”<sup>426</sup>

Is Bhartṛhari’s *sphoṭavāda* a form of metaphysical dualism or epistemological dualism, or is it something else entirely? How does Bhartṛhari recommend we understand the distinction of *sphoṭa* and *dhvani* in his treatise? Perhaps the best way to answer these questions is negatively, as Bhartṛhari so often does, by following the logic he employs in answering some persuasive objections to his theory. VP II.61-II.118 voice five objections to the *sphoṭavāda* from a Mīmāṃsā perspective and articulate Bhartṛhari’s answers to these objections. We’ll examine the first and fourth objections.

The first (VP II.64-71) works as follows: if words had no meanings apart from the sentence in which they are instantiated, and the meaning of a sentence is an action as the Mīmāṃsākas believe,<sup>427</sup> then any sentence in the *Vedas* with a *particular* injunction would rule out the superordinate *general* injunction and no substitutions would be possible in rituals. The example given is that the general meaning of the verb *yajeta* (to sacrifice) would be excluded by the addition of the particular *vrīhi* (rice) in some ritual injunction: the sentences “... *yajeta* ...” and “... *vrīhi yajeta* ...” would evoke different *sphoṭa* and therefore could not mean the same action. If, however, words *do* have meaning in and of themselves then the meaning of

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<sup>425</sup> Ibid, 161.

<sup>426</sup> Ibid, 163. Cf. p. 41 (VP II.233)

<sup>427</sup> VP II.71

*vr̥hi* would not exclude the “implicit power of the verb ‘*yajeta*’”<sup>428</sup> (to refer to a general substance used in sacrifice) and the sentences could be used interchangeably. Bhartṛhari doesn’t reply *directly* to this objection but does state in VP II.88 that the five objections do not contradict his argument because the meaning of a sentence can be conceptualized as divided *during linguistic analysis* in the manner the Mīmāṃsākas propose.<sup>429</sup> Bhartṛhari compartmentalizes the constructs of linguists within a particular, theoretical mode of explanation and acknowledges that a coherent logic interrelates the elements of linguistic theory *as if* words really had meanings. Therefore, although the meanings of the two sentences “... *yajeta* ...” and “... *vr̥hi yajeta* ...” may be distinct, under analysis, they can be found to enjoin a single ritual action with possible substitutions.

The fourth objection deals with the meanings of complex or compound sentences (*mahāvākya*). Bhartṛhari as Mīmāṃsā interlocutor states that the individual clauses in compound sentences could not have mutual expectancy (*ākāṅkṣā*) for one another and convey a “principal idea” of the sentence as a whole if the individual clauses did not have meaning in and of themselves.<sup>430</sup> In VP II.112 Bhartṛhari answers this objection by appealing to one-word sentences (*padasarūpa vākya*); constituents (such as words or clauses) have their own meaning if uttered as a whole sentence, and therefore, clauses of compounded sentences (*mahāvākya*) appear to have meanings just as words do under analysis. Consistent with his other discussions of word and sentence-meaning (cf. Chapter Three, pp. 33-34, 41-40, respectively), Bhartṛhari insists that the *act* of analysis creates the conditions for the possibility of meaningfully speaking about word-meanings *as such*. In the *sphoṭa* theory, the sentence and its meaning are taken to be a unified whole; however, that whole does not “show the order of the words,”<sup>431</sup> because in Bhartṛhari’s metaphysics the sounds of the words are created through the functioning of the power of time (*kālaśakti*) along with the rest of the

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<sup>428</sup> VP II.65

<sup>429</sup> VP II.88

<sup>430</sup> Bhartṛhari, 54.

<sup>431</sup> VP II.415, Bhartṛhari, 132.

manifested universe.<sup>432</sup> It seems then that Bhartṛhari's division of *sphoṭa* from *dhvani* is not precisely a metaphysical distinction, because it arises from cognition within a certain analytical frame. However, it isn't precisely an epistemological distinction in the sense of *epistemological dualism* because the distinction of *sphoṭa* and *dhvani* is *necessary* for Bhartṛhari to make sense of the temporality of *dhvani* and the atemporality of *sphoṭa*. Just as Descartes distinguished mind and matter in the mechanical philosophy, and Chomsky distinguished syntax and semantics in generative grammar, so too Bhartṛhari delineates *sphoṭa* and *dhvani* for the purposes of linguistic analysis. These insights are articulated in VP I.44-45:

I.44<sup>433</sup>

“Grammarians consider that there are two ‘word-entities (i.e. two elements) in functional words, one (i.e. the *sphoṭa*) is the cause of the (production) of words and the other (the speech-sound) is used in connection with meanings.”

I.45<sup>434</sup>

“Some, among the teachers of old considered that there was a difference in essence between these two. Others (on the other hand) speak of the same undivided entity being thought various through a difference in conceiving it.”

Echoing the sentiments of Houben and Kelly's “perspectivism,” I claim that Bhartṛhari is conscious of the limits of his linguistic theory and generalizes this consciousness to his views on the different schools of Vedic exegesis. Here he is converging with Chomsky once again on a kind of dualism—which I'm calling *Chomskyan Dualism*—that pragmatically acknowledges the limits of a formal perspective but is sustained by the possibility that *something* which transcends that perspective and gives it form can also deliver veridical knowledge. Chomsky and Bhartṛhari differ in their conceptions of the origin and content

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<sup>432</sup> VP I.3, Bhartṛhari, 1.

<sup>433</sup> Author's transliteration:

I.44 *dvāvupādānaśabdeṣu śabdau śabdavido /  
eko nimitta śabdānāmaparorbhe prayujate*

<sup>434</sup> Author's transliteration:

I.45 *ātmabhedastayo kecidastīnyāhū purāṇagā /  
buddhibhedādabhinnsya bhedameke pracakṣate*

of that knowledge. For Chomsky it's those properties of the mind which randomly map the properties of the world, and for Bhartṛhari, it's *dharma*. Chomsky's naturalism excludes soteriological or salvific aspects of reality from consideration in the structure of scientific theory and approaches the paradoxical when viewed in the light of his political philosophy: a radical, liberation-oriented form of anarcho-syndicalism. In Chomsky's view, "the problem of 'freeing man from the curse of economic exploitation and political and social enslavement' remains the problem of our time. As long as this is so, the doctrines and the revolutionary practice of libertarian socialism will serve as an inspiration and guide."<sup>435</sup> While it has escaped the bounds of this study, I believe Chomsky signifies through his *praxis* as a political activist and social critic that the transcendent truths after which he strives as a scientist may mean more to him and the world than his scientific theorizing can fully articulate. But that would simply be another mystery if it turns out to be true.

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<sup>435</sup> Chomsky, 1970



## References

- Bhartṛhari. *The Vākyapadīya, Critical texts of Cantos I and II with English Translation*. Trans. K. Pillai. Delhi: Motilal Banarsidass, 1971.
- Boeckx, C., Hornstein, N. (2010) “The Varying Aims of Linguistic Theory” in *Chomsky Notebook*. Columbia University Press, New York. pp. 116-120
- Carpenter, D. *Revelation, History, and the Dialogue of Religions: A Study of Bhartṛhari and Bonaventure*. Maryknoll, N.Y.: Orbis Books, 1995.
- Chomsky, A.N. (1955) *Transformational Analysis: A Dissertation in Linguistics*. Retrieved: *Scholarly Commons*, University of Pennsylvania: <https://repository.upenn.edu/dissertations/AAI0013380/>
- Chomsky, N. (1957) *Syntactic Structures*. Moughton & Co. 2<sup>nd</sup> Edition (Mouton de Gruyter, Berlin & New York 2002).
- Chomsky, N. (1966) *Cartesian Linguistics: A Chapter in the History of Rationalist Thought*. University Press of America, Lanham, MD. Reprinted by arrangement with Harper & Row, Publishers, Inc.
- Chomsky, N. (1970) “Notes on Anarchism” in Daniel Guérin, *Anarchism: From Theory to Practice*. [https://chomsky.info/1970\\_\\_\\_\\_/](https://chomsky.info/1970____/)
- Chomsky, N., Foucault, M. (1971) *Human Nature and the Ideal Society*. Eindhoven University of Technology. <https://www.youtube.com/watch?v=3wfNI2L0Gf8> (Transcript which differs substantially from televised version for reasons unknown available here: <https://chomsky.info/1971xxxx/>)
- Chomsky, N. (1975) *The Logical Structure of Linguistic Theory*. New York, N.Y. Springer.
- Chomsky, N. (1982) “A Note on the Creative Aspect of Language Use”. *The Philosophical Review* Vol. 91, No. 3 (Jul., 1982), pp. 423-434
- Chomsky, N. (1992a) “Noam Chomsky speaks about Cognitive Revolution - Part 1.” Pub.: It Can Be Pictures. YouTube. University of Girona, November 1992. <https://www.youtube.com/watch?v=S3gFaNYluBQ>
- Chomsky, N. (1992b) “Noam Chomsky speaks about the Cognitive Revolution - Part 2”. Pub. 2015. <https://www.youtube.com/watch?v=7jOKod4szWs>
- Chomsky, N. (1992k) “Language: The ‘Cognitive Revolutions’” 20<sup>th</sup> Annual Killian Award Lecture delivered at the Massachusetts Institute of Technology. <https://infinitehistory.mit.edu/video/20th-annual-killian-award-lecture-noam-chomsky-1992>
- Chomsky, N. (1993) “Naturalism and Dualism in the Study of Language and Mind”. Agnes Cumming Lecture, 1993 (University College Dublin). *International Journal of Philosophical Studies* Vol. 2(2), 181-209
- Chomsky, N. (1998) “Noam Chomsky speaks about Universal Linguistics: Origins of Language” Pub. 2015. Delivered at Winona State University, MN, 3/20/1998: <https://www.youtube.com/watch?v=7Sw15-vSY8E>
- Clooney, SJ, F.X. (1995). *Seeing Through Texts: Doing Theology among the Śrīvaiṣṇavas of South India*. SUNY Press. SUNY Series: Toward a comparative philosophy of religions.

- Clooney, SJ, F.X. "What's a God? The Quest for the Right Understanding of devatā in Brāhmaṇical Ritual Theory (Mīmāṃsā)". *International Journal of Hindu Studies*, Vol. 1, No. 2 (Aug. 1997), pp. 337-385
- Clooney, SJ, F.X. (2010). *Comparative Theology: Deep Learning Across Religious Borders*. Wiley-Blackwell.
- Coward, H.G. *The Sphoṭa Theory of Language: A Philosophical Analysis*. Motilal Banarsidass Publishers Pvt. Ltd, 1980.
- Coward, H. G., and K. Kunjunni Raja, eds. *The Philosophy of the Grammarians* (Vol.V of Encyclopedia of Indian Philosophies, ed. Karl Potter). Princeton: Princeton University Press, 1990.
- C-SPAN (2003) *C-SPAN2 Book TV: Noam Chomsky In Depth* <https://www.youtube.com/watch?v=i7Ntm5MYVdU>
- De Saussure, F. (1959) *Course in General Linguistics*. 3<sup>rd</sup> ed. (Eds.): Charles Bally and Albert Sechehaye (1915) (Collab.) Albert Reidlinger (Trans.) Wade Baskin. Philosophical Library, Inc., New York.
- Descartes, R. (1637) Trans. Weissman, D., & Bluhm, W. T. (1996). *Discourse on the Method: And, Meditations on First Philosophy*. New Haven: Yale University Press. pp. 34-36.
- Doniger, W. *The Rig Veda: An Anthology: One Hundred and Eight Hymns, Selected, Translated and Annotated*. Penguin Classics.
- Flood, G. *An Introduction to Hinduism*. Cambridge: Cambridge University Press. 1996.
- Gillon, B.S. "Pāṇini's Aṣṭādhyāyī and Linguistic Theory." *J. Indian Philos.* 35:445-468, 2007.
- Gombrich, R. F. *Theravada Buddhism: a social history from ancient Benares to modern Colombo*. Routledge, 1988.
- Grasswick, H. "Feminist Social Epistemology", *The Stanford Encyclopedia of Philosophy*. E. N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/fall2018/entries/feminist-social-epistemology/>>
- Harris, Z. (1957) "Co-Occurrence and Transformation in Linguistic Structure". *Language*, Vol. 33, No. 3, Part 1 (Jul. - Sep., 1957), pp. 283-340 <https://www.jstor.org/stable/411155>
- Iyer, Subramania, K.A. Bhartṛhari. *A Study of Vākyapadīya in the Light of Ancient Commentaries*. Poona: Deccan College Postgraduate Research Institute, 1997
- Katz J. (1966) "On the general character of semantic theory". In Eric Margolis & Stephen Laurence (eds.), *Concepts: Core Readings*. (1999). MIT Press. pp. 125-126
- Kelly, J.D. (1993). Meaning and the Limits of Analysis: Bhartṛhari and the Buddhists, and Poststructuralism. *Asiatische Studien/Etudes Asiatiques* 47:171-94.
- Lyons, J. (1970) *Noam Chomsky*. The Viking Press, Inc. New York, N.Y.
- Marcus, G. (1999) "Poverty of the Stimulus Arguments" in *Massachusetts Institute of Technology Encyclopedia of the Cognitive Sciences* (MITECS) (Eds.) Robert A. Wilson & Frank C. Keil. The MIT Press. pp. 660-661
- Matilal, B.K. *The Word and the World: India's Contribution to the Study of Language*. Delhi: Oxford University Press, 1992.

- Maurer, W.H. *The Sanskrit Language: An Introductory Grammar and Reader*. Revised edition. Routledge. London and New York, 1995.
- McCulloch, P., Pitts, W. (1943) "A logical calculus of the idea immanent in nervous activity". *The Bulletin of Mathematical Biophysics*, 5 (4), 115-133. <https://doi.org/10.1007/BF02478259>
- Palmer, D.C. (2006) "On Chomsky's Appraisal of Skinner's *Verbal Behavior*: A Half Century of Misunderstanding" in *The Behavior Analyst* (29), 253–267 No. 2 (Fall)
- Patton, L.L. *Bringing the Gods to Mind: Mantra and Ritual in Early Indian Sacrifice*. University of California Press, 2005.
- Patton, L.L. *Myth as Argument: The Brhaddevatā as Canonical Commentary*. Religionsgeschichtliche Versuche und Vorarbeiten, Walter de Gruyter. New York. 1996.
- Patton, L.L. *On the Very Idea of Comparing Religions: "Theoretical" Approaches*. Syllabus. 2015. [https://divinity.uchicago.edu/sites/default/files/imce/Craft\\_Teaching/Patton%20-%20Comparing%20Religions%20Syllabus.pdf](https://divinity.uchicago.edu/sites/default/files/imce/Craft_Teaching/Patton%20-%20Comparing%20Religions%20Syllabus.pdf)
- Pullum, G.K. (1999) "Generative Grammar" in *Massachusetts Institute of Technology Encyclopedia of the Cognitive Sciences* (MITECS) (Eds.) Robert A. Wilson & Frank C. Keil. The MIT Press. pp. 340-342
- Ramseier, Y. *Bhartṛhari's Vākyapadīya: Machine readable text*. <http://hin.osaka-gaidai.ac.jp/~ramseier>
- Rogers, J. (1986) "The Mechanistic Conception of Life" in *God and Nature: Historical Essays on the Encounter between Christianity and Science* (eds.) David C. Lindberg and Ronald L. Numbers. pp. 277-295
- Rosenbloom, P.C. (1950) *The Elements of Mathematical Logic*. 1<sup>st</sup> Edition. Dover Publications, Inc. New York, N.Y.
- Smith, N. (2004) *Chomsky: Ideas and Ideals*. 2<sup>nd</sup> ed. Cambridge University Press.
- Turing, A. M. (1950) "Computing machinery and intelligence". *Mind*, 59 (236), 43 3-460 <https://doi.org/10.1093/mind/LIX.236.433>
- University of Chicago (2015). *Craft of Teaching Seminar with Alumna of the Year, Laurie L. Patton* <https://www.youtube.com/watch?v=Om9EZ5uR11w>
- Vasu, S.C (1891). *Aṣṭādhyāyī of Pāṇini Translated into English*. Allahabad: Indian Press.
- Waldron, W. (2011) A Buddhist Critique of Cartesian Dualism in the Cognitive Sciences: Naturalizing Mind and Qualia. *Brain Science and Kokoro: Asian Perspectives on Science and Religion*, Nagoya: Nanzan Institute for Religion and Culture. pp. 68-78
- Wilkin, P. (1999) "Chomsky and Foucault on Human Nature and Politics: An Essential Difference?" *Social Theory and Practice*, Vol. 25, No. 2 (Summer 1999), pp. 177-210
- Winograd, T. (1983) *Language as a cognitive process. Volume 1: Syntax*. Reading, MA: Addison-Wesley Publishing Co.

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