# Tibetan Logic

Katherine Manchester Rogers

Snow Lion Publications
Ithaca, New York

# Introduction

## Purpose and Method

This book is an attempt to explain introductory Tibetan logic as it is studied and practiced in the monastic universities of the Ge-luk-pa order of Tibetan Buddhism. Since its founding by Tsong-kha-pa in the late fourteenth and early fifteenth centuries, the Ge-luk-pa order has created a system of education and a curriculum designed to enable the student to develop a "path of reasoning." A path of reasoning is a consciousness that has been trained in reasoned analysis until it can use analysis to realize, first, the meaning of religious texts and, eventually, the true nature of reality.

This work is primarily exegetical, explaining the vocabulary, concepts, and principles of Ge-luk-pa logic as it is taught today. However, there is no monolithic Ge-luk-pa presentation of logic; there is no definitive and unchallenged point of view on all topics. Any given monastic college will have its own emphasis and favorite texts; and even within one monastic college, different scholars will have different opinions on the issues that arise in the study of introductory logic. There is thus no single, unquestioned point of view. Rather, Ge-luk-pa logic today presents a fascinating nexus of opinions and counteropinions, of complications and contradictions. My purpose is to draw out of this nexus a general appreciation of the Ge-luk-pa approach to logic and its place in the religious life.

As the basis for this study, I have translated an introductory logic manual on *Signs and Reasonings* by Pur-bu-jok,[a] the Thirteenth Dalai Lama's philosophy tutor. I use this text as the framework of an attempt to articulate a "Ge-luk-pa presentation" of the subject. It is one way of ordering the sometimes bewildering complexity and richness of the Ge-luk-pa tradition. Where there is consensus, I explain it as fully as

[a] Pur-bu-jok's full name is Pur-bu-jok Jam-pa-gya-tso (*phur bu lcog byams ba rgya mtsho*, 1825-1901). *Signs and Reasonings* is a title given to a genre of works dealing with introductory logic. The full name of Pur-bu-jok's work on *Signs and Reasonings* is *The Topic of Signs and Reasonings from the "Great Path of Reasoning" in the Magic Key to the Path of Reasoning, Explanation of the Collected Topics Revealing the Meaning of the Texts on Prime Cognition* (Buxador: 1965). This textbook is used as part of the curriculum at the Jay (*byes*) College of Se-ra (*se rva*) Monastic University and the Jang-tsay (*byang rtse*) College of Gan-den (*dga' ldan*) Monastic University.

possible, drawing on a number of sources. Where there is difference of opinion, I similarly explain that. In this way I hope to sketch the essentials and the lively diversity of the Ge-luk-pa system of logic as it is being transmitted today in the monastic universities.

I have incorporated into my explanation material from: (1) other Ge-luk-pa texts, some on logic and some on related topics, and (2) commentary I have received from eminent Ge-luk-pa scholars.

I. *Ge-luk-pa texts*

(a) Commentaries on Dharmakīrti's *Commentary on (Dignāga's) "Compilation of Prime Cognition"* [a]
  (1) Gyel-tsap's *Revealer of the Path of Liberation* [2]
  (2) The First Dalai Lama's *Ornament of Reasoning on Prime Cognition* [3]
  (3) Paṇ-chen Sö-nam-drak-pa's *Illumination of the Thought* [4]

(b) Introductory logic manuals
  (1) Ge-shay Tsül-trim-nam-gyel's *Signs and Reasonings* [5]
  (2) Jam-yang-shay-pa's *Signs and Reasonings* [6]

(c) Other introductory manuals
  (1) Pur-bu-jok's *Collected Topics* [b]
  (2) Ge-shay Jam-pel-sam-pel's *Awareness and Knowledge* [7]

II. *4*

I received commentary on the texts listed above from numerous teachers; those from whom I received extensive commentary are:

(1) Lati Rin-po-che, former abbot of Shar-tsay College of Gan-den Monastic University.
(2) Ken-sur Ye-shay-tup-ten, former abbot of Lo-sel-ling College of

---

[a] Dharmakīrti (*chos kyi grags pa*, 600-660), *Commentary on (Dignāga's) "Compilation of Prime Cognition,"* P5709, vol. 130. This text is the main root text used by Ge-luk-pa monasteries in their study of the topics of "Prime Cognition," for which the manuals on *Signs and Reasonings* serve as an introduction.

[b] Pur-bu-jok, *The Presentation of the Collected Topics Revealing the Meaning of the Texts on Prime Cognition, Magic Key to the Path of Reasoning* (Buxa: n.p., 1965). This work is made up of three parts: "The Greater Path of Reasoning," "The Introductory Path of Reasoning," and "The Middling Path of Reasoning." The "Greater Path of Reasoning" contains his works on "Awareness and Knowledge" and "*Signs and Reasonings,*" as well as other introductory topics. For a complete list of the contents of each of the three parts of Pur-bu-jok's *Collected Topics*, see Daniel Perdue's *Debate in Tibetan Buddhism* (Ithaca, New York: Snow Lion Publications, 1992), pp. xvi-xvii.

Dre-pung Monastic University.
(3) Ge-shay Ge-dün-lo-drö, of Go-mang College of Dre-pung Monastic University.
(4) Ge-shay Pel-den-drak-pa, of Lo-sel-ling.
(5) Ge-shay Lob-sang-gya-tso, of Lo-sel-ling.
(6) Ge-shay Sang-gyay-sam-drup (Georges Dreyfus), who was the first Westerner to receive the ge-shay degree in 1985 after having studied at the Buddhist School of Dialectics in Dharamsala and all three Ge-luk-pa monastic universities in South India.

The texts listed above span six centuries, from the fifteenth through the twentieth, but this study is not a historical analysis. I am not comparing Ge-luk-pa logic texts over time nor tracing the development of Ge-luk-pa ideas. I also am not tracing the development of Ge-luk-pa logic from its roots in the works of Dignāga and Dharmakīrti nor comparing the Ge-luk-pa logic manuals with pre-Ge-luk-pa forerunners (e.g., logic works of the Sa-kya order, such as Sa-kya Paṇḍita's *Treasury of Reasoning*).[8] And I am not comparing the introductory logic manuals used today in Ge-luk-pa monasteries with earlier versions, such as the well-known Ra-tö (*rwa stod*) manual of *Signs and Reasonings* by Jam-yang-chok-hla-ö-ser.[9]

The Ge-luk-pa order has several competing monastic colleges, following various oral traditions. My exposition illustrates the diversity of these traditions by citing and comparing the points of view of scholars from Gan-den Shar-tsay, Lo-sel-ling, and Go-mang Colleges. The organization is around issues, and thus the reader should not expect a systematic comparison of Ge-luk-pa logic of the various monastic universities, nor a historical account of the development of their various oral traditions. This is a general presentation of Ge-luk-pa logic as explained in Ge-luk-pa monasteries today. By putting this diversity into an order based on Pur-bu-jok's text, I highlight conflicting points of view and avoid oversimplification. I hope to show the general nature of Ge-luk-pa thought without imposing on it an artificial "unity."

To add depth to this presentation, I compare the current Ge-luk-pa treatment of key issues with the corresponding treatment in a source outside of the sect, an eleventh-century logic text by the Indian Buddhist logician Mokṣākaragupta.[10] I do this for two reasons: to show that many aspects of the Ge-luk-pa system of logic are not innovations but part of an even older tradition and to highlight features of various issues that may be unique to the Ge-luk-pa point of view.

Tibetan logic manuals are extremely terse and concise. Rather like a teacher's notes, they are not meant to be the complete exposition;

discussion and debate fill out the topic. In explaining the topics of introductory logic, I present Pur-bu-jok's manual in its entirety and incorporate passages from other Ge-luk-pa logic texts, as well as the commentary of Ge-luk-pa scholars.

Pur-bu-jok's text is in the usual shorthand style, not readily understandable outside the tradition. The ideas are fleshed out by teachers in the classroom and more advanced students in the debate courtyard, along generally accepted lines. An occasional statement is so brief as to be ambiguous, however. To illustrate this, as well as the variety of responses of Ge-luk-pa scholars, I will cite a passage from Pur-bu-jok's explanation of correct nature signs. The highly technical aspects of this topic are explained in my chapter on "The Pervasions"; here I present it only briefly.

Correct reasons, or signs (the terms are equivalent in this context), are reasons that are capable of generating new understanding of a thesis in the mind of an appropriate person. In the syllogism, "The subject, sound, is impermanent because of being a product," the sign is "product," and that which is being proved (the probandum) is that sound is impermanent. A person who has understood that sound is a product and is wondering whether sound is impermanent or not is said to be *ready* to understand that sound is impermanent; and that understanding can be precipitated by this reasoning.

In this syllogism, "product" is a nature sign. Correct signs can be categorized in several ways, but the primary division is into three: effect signs, nature signs, and nonobservation signs. Pur-bu-jok's definition of something's being a correct nature sign is:

> (1) It (x) is a correct sign in the proof of something and (2) it is posited from the point of view that whatever is held as the explicit predicate of the probandum in the proof of that by the sign x must be of one nature with x.[11]

This is all; he goes on to discuss the division of nature signs into two types and to give illustrations.

From the above definition alone, one learns that the sign must be correct and the predicate (impermanent) must be of one nature with the sign (product). If that were an adequate characterization of nature signs, then any correct sign involving a predicate of the same nature as the sign would be a correct nature sign—which is not the case.

Ge-luk-pa scholars agree in amplifying Pur-bu-jok's points to mean that a nature sign must be (1) a correct sign *of (that is, proving) a positive phenomenon* and (2) *related to* the predicate in a strictly defined

"*relationship of sameness of nature.*" Neither of these requirements is clear in Pur-bu-jok's definition, although both can be understood through study of (a) other parts of Pur-bu-jok's text, (b) the commentary of Ge-luk-pa scholars, and (c) the treatment of this topic in other Ge-luk-pa logic texts.

I. The first issue: a nature sign must be a "correct sign of *a positive phenomenon*." For most colleges this means that the predicate of the probandum *itself* must be a positive phenomenon. Lati Rin-po-che reflects this point of view when he says,

> The first two types, correct effect and nature signs, are called correct signs of a positive phenomenon because the predicate of the probandum is a positive phenomenon; that is, that which is held as the explicit predicate of the probandum is a positive phenomenon.[12]

In the syllogism, "The subject, sound, is impermanent because of being a product," "product" is a correct nature sign, and (according to most colleges) "impermanent" is a positive phenomenon.[a] Scholars of the Go-mang College of Dre-pung Monastic University have a different view. Ge-shay Pel-den-drak-pa explains,

> According to Go-mang College, [in the case of nature signs] the predicate of the probandum does not [itself] have to be a positive phenomenon; it is sufficient that the sign be proving a positive phenomenon.[13]

Go-mang scholars agree that a nature sign proves a positive phenomenon, but teach that the predicate *itself* may be a negative phenomenon.[b]

Despite their differences about the predicate, all the colleges agree that a nature sign must be a sign of a positive phenomenon. Pur-bu-jok's definition omits this point, however, specifying only that it must

---

[a] "Impermanent" is defined as meaning "momentary" and is a positive phenomenon, according to most colleges.

[b] According to Go-mang scholars, "impermanent" is a negative phenomenon. They agree that product is a nature sign in the proof of sound as impermanent, but disagree about whether impermanent is a positive or negative phenomenon. Regarding another syllogism—"the subject, sound, is opposite from nonimpermanent because of being a product"—there is complete agreement that the predicate is a negative phenomenon. Most colleges, however, call product in this case a nonobservation sign, because (for them) any proof involving the proof of a negative phenomenon is necessarily a nonobservation sign. For Go-mang, however, product is a nature sign in this proof because in that school a nature sign may have as predicate a negative phenomenon.

be a correct sign. It is interesting to note how different scholars respond to this omission. Ge-shay Lob-sang-gya-tso says that there is no flaw in the text; the meaning is intended, though not fully expressed in the definition, and one has only to bring material from elsewhere to fill in the meaning. He cites Pur-bu-jok's own statement, elsewhere in his text, that "whatever is either a correct effect sign or a correct nature sign is necessarily a correct sign of a *positive phenomenon*."[14]

An interesting fact that emerges from this study is that Ge-luk-pa scholars do not consider ambiguity to be a flaw in a text, and even sometimes explain it as a way to provoke debate. This may of course be an apologetic on the part of the scholars, a way of glossing over mistakes in the texts; however, some express the view that there may be a pedagogical purpose in apparent mistakes, especially in introductory manuals. Ge-shay Ge-dün-lo-drö supports this approach, saying, in a different, but similar, context, "There is no flaw in the text; it is written this way to provoke debate." And Lati Rin-po-che comments, "It's as if Pur-bu-jok were making trouble—to provoke debate." Seeming inconsistencies can inspire analysis and careful scrutiny. These are held to be very important, because the purpose of the study of logic goes beyond gaining familiarity with the logic texts; it is meant to be a tool to develop a path of reason—to become able to confront, creatively and with enthusiasm, the contradictions that arise in study and in meditation on a broad range of topics.

Other scholars cope with Pur-bu-jok's definition by suggesting changes. After pointing out, as a problem with the definition, that one could posit examples that satisfy it but are not actually correct nature signs, Ge-shay Pel-den-drak-pa says,

> One should add to the definition the requirement that whatever is held as the explicit predicate of the probandum in that proof is necessarily a positive phenomenon or the requirement that the sign must be a sign of a positive phenomenon.[15]

II. The second issue: a correct nature sign "must be *related* to the predicate in *a relationship of sameness of nature*." This is more precise and more subtle than Pur-bu-jok's "must be of one nature." There must be a special relationship between the sign and the predicate, which involves more than being merely of one nature. To characterize the special relationship between the sign and the predicate, teachers explain that (1) the predicate must be the same nature as the sign and (2) the predicate must pervade the sign. The first alone is not enough, because the predicate must pervade the sign, whereas the sign need not pervade the

predicate. In this respect, Pur-bu-jok's definition is incomplete and could be misleading. Students will learn the technical requirements and subtleties of a relationship of sameness of nature later in their monastic studies, but Pur-bu-jok could easily have made his definition more precise.

Here is the First Dalai Lama's definition of correct nature sign:

> 1) It is a correct sign of a positive phenomenon in the proof of that and (2) whatever is the explicit predicate of the probandum in the proof of that is necessarily a pervader that is the same nature as it.[16]

The first part states the "positive phenomenon" requirement, which is not expressed explicitly by Pur-bu-jok; and the second part expresses the second criterion of nature signs more accurately and completely than does Pur-bu-jok. The First Dalai Lama's definition was well known, but Pur-bu-jok chose to provide a different definition that could be misleading. Is it a casual mistake, to be corrected, or a teaching device, to be used for debate? Pur-bu-jok's text contains other passages of ambiguous brevity, which I will explore in detail as they appear.

In this book, my purpose is to explain all the topics covered in Pur-bu-jok's manual, *Signs and Reasonings*. Explanation is necessary: like other texts used in the Ge-luk-pa curriculum, it is written in a terse and turgid style. It is not intended that the manual be used by a solitary student; it is always studied under the guidance of a teacher, and the study is enhanced by many hours of intense and lively debate.

My further purpose is to set Pur-bu-jok's topics in context, showing how his manual is used in the Ge-luk-pa curriculum. That text is not intended to cover the whole of Tibetan logic. It serves as an introduction to the more complex topics of valid cognition by giving a beginner the vocabulary and conceptual framework needed for such studies.

## Context of the Cultivation of a "Path of Reasoning"

A fundamental teaching of Buddhism is that, under analysis, ordinary life is found to be a state of suffering. Roughly speaking, beings who suffer (sentient beings) are caught in a cycle of birth, death, and rebirth; and this cycle is set in motion and powered by a cause that abides in their own minds—ignorance. This root of suffering is a specific and fundamental ignorance: ignorance of the true nature of reality. Sentient beings misunderstand the way things (that is, themselves and the phenomena around them) exist.

The various tenet systems of Buddhism are said to explain this fundamental misconception with varying degrees of subtlety. The Prāsaṅgika-Madhyamaka tenet system—which seemingly all schools of Tibetan Buddhism agree to be the highest (most subtle)—identifies this root ignorance as the conception that phenomena are inherently existent. More fully phrased, sentient beings innately conceive of themselves and phenomena as existing inherently, concretely, "from their own side"; this misconception draws them into mistaken and afflicted states of mind (such as desire and hatred); afflicted states draw them into nonvirtuous activities; these activities bring harm and suffering to themselves and others; and the process continues until the sentient beings replace root ignorance by wisdom.

Anyone who wishes to break this cycle of suffering must develop "wisdom understanding the true nature of reality." The stated goal of religious practice in Tibetan Buddhism is not only to liberate oneself from the suffering of cyclic existence but also, and more importantly, to liberate others.

Tsong-kha-pa summarizes the aspects of the path to enlightenment as three: renunciation, *bodhicitta*, and the correct view of emptiness. Renunciation means having seen that the true character of cyclic existence is suffering and renounced all attachment to it; the more clearly one regards cyclic existence the less enticement it holds except as an opportunity for engaging in religious practice. *Bodhicitta* is induced by great compassion; it is a mind that cherishes all sentient beings and one-pointedly seeks highest enlightenment, not for one's own sake but to free sentient beings from suffering and from the causes of suffering. The correct view of emptiness is the wisdom realizing the emptiness of inherent existence of persons and phenomena.

To attain wisdom, one must cultivate valid knowledge; wisdom is valid knowledge regarding the nature of oneself and of phenomena. One cultivates valid knowledge in order to transform oneself: to become a person who can help others effectively—to develop the compassion and wisdom of a Buddha.

In the context of meditative practice, experience of the Madhyamaka view is acquired by meditation on emptiness, as set forth in the Madhyamaka system of tenets. This emptiness is not nonexistence, obliteration, or negation of existence; it is the negation of a certain quality or characteristic of existence—a quality (inherent existence) that untrained persons attribute automatically to themselves and, by extension, to all phenomena.

The root cause of cyclic existence is in oneself (in one's own mental

continuum). It is described in various phrases: "the conception of inherent existence," "the mind conceiving inherent existence," or "the innate consciousness conceiving 'I.'"

According to the Ge-luk-pa system, as a beginner in meditation on emptiness one undertakes an extensive, analytically demanding, deeply probing examination into one's own self, into how one perceives oneself and the world—how one experiences life. The effort requires a capable mind and the persistence to make it a strong mind—a strong "path of reasoning" (a mind trained in valid knowledge), focused and fortified by years of training. The training involves a ruthless pursuit of falsity, of mistakes in one's thought, in one's mind, in one's attitudes and views. Extreme discipline is needed, first, because the meditations are intellectually demanding and, second, because the technique involves generating strong emotion and then analyzing the root of that emotion, to get at the underlying misconception that is its source.

Thus, the student needs a strong "path of reasoning" to pursue not only the academic path (the requirements of the Ge-shay degree are rigorous) but also the path of meditation and self-transformation. This "path of reasoning" refers to a mind that is trained, powerful, flexible, and able to approach an idea from numerous points of view, to discern the logical consequences of any view, and to express the consequences succinctly and clearly, so as to guide others to see mistakes in their views. This skill begins in the classroom with the first introductory topics and is perfected in the debate courtyard. When it is applied in meditation on emptiness, it is a powerful tool for self-transformation.

The curriculum of the monastic universities covers five core topics:

(1) The Perfection of Wisdom,
(2) Madhyamaka Philosophy,
(3) Phenomenology,
(4) Discipline, and
(5) Valid Cognition.

Before students begin the study of the core topics, however, they give considerable attention to introductory topics, which focus on three main subjects: (1) *Collected Topics* (*bsdus grva*), (2) *Awareness and Knowledge* (*blo rig*), and (3) *Signs and Reasonings* (*rtags rigs*). In working to develop a path of reasoning, Ge-luk-pa students devote their first few years to the study of introductory topics. These present the basic vocabulary and concepts that they will need in the more complex core studies to follow.

In the *Collected Topics,*[17] the beginner will learn about such concepts

as established bases, existents, impermanent phenomena, and permanent phenomena; and will study generality and particularity and the relationship between a generality and the particularities subsumed in it. As in any discipline, there is a vocabulary to be learned. "Isolate" is an example: the isolate of a pencil is the pencil itself, in isolation from all other phenomena; only the pencil itself is "one with the pencil," the isolate of the pencil. These concepts will be essential in future study of the topics of valid cognition and Madhyamaka philosophy.

After a year, the student begins "Awareness and Knowledge," the study of types of consciousnesses, such as direct perception and inference. In the following year the student takes up *Signs and Reasonings,* the introduction to logic. This includes the mechanics of reasoning, syllogisms and their parts, and the correct reasons and signs and how they come to be correct—that is, able to induce in the debater or meditator new knowledge about something not formerly understood.

The Ge-luk-pa student is seeking to develop a mind capable of subtle and clear understanding—capable of penetrating the truth, of discerning phenomena as they are. The truth is not held to be something that one can be told; the crucial element is that the student must find it alone and afresh. Thus, the Buddha emphasized the need for the student to analyze well his words:

> Monks, my words are to be accepted by scholars
> Not [merely] out of respect
> But upon having analyzed them, just as
> Gold is accepted after scorching, cutting, rubbing.[18]

Phenomena appear in one way but exist in another. That is, according to Buddhism, we do not see things as they ultimately exist; there is a discrepancy between the true nature of a phenomenon and our perception of it. The mind that can perceive the true nature of phenomena is a "wisdom-consciousness." Such a mind is described as valid[a]—as incontrovertible in its perception of that true nature.

Such a valid mind can be conceptual or nonconceptual. In fact, it is important to note in the Ge-luk-pa system the importance placed on conceptual, analytical thought. There are two valid modes of knowledge: direct valid cognition and inferential valid cognition. Direct ways of perceiving are nonconceptual, unaccompanied by conceptual

[a] From the Latin *validus* (strong), "valid" carries the sense of being sound, able to stand examination. Validity is soundness—the strength that comes from being supported by fact.

thought in any form. Inference is an indirect way of perceiving, because it is conceptual—its functioning is based on mental images (conceptual constructs). Inference is not, however, to be rejected or undervalued. An essential point in the Ge-luk-pa system is that inference—even though it is indirect—is incontrovertible, in the sense that it does bring valid knowledge concerning the object on which it is focused. This point (that inference can enable one truly to grasp the object under consideration) is extremely important and justifies the tremendous emphasis put on mental training and discipline in this system.

The mind sought is a completely nonmistaken mind perceiving truth—a direct valid perceiver. The development of such a mind depends on and must be preceded by development of an indirect, conceptual understanding of emptiness. In this system, inference is viewed as a necessary interim stage between wrong understanding and direct valid cognition. Inference is indeed mistaken, but in only one sense: that what appears to it is not an object's true nature. What appears to the well-trained mind (the good "path of reasoning") is still a mental construct, but it is utterly correct and a true reflection of the phenomenon, and thus it enables one to experience that phenomenon's true nature. A person who has developed a good path of reasoning can attain clear knowledge of all phenomena.

In the language of the basic logic texts, it is said that "in dependence on the presentation of *Signs and Reasonings* the mode of abiding of all phenomena can be seen clearly, as if in a mirror"; the claim is that when one knows well the presentation of *Signs and Reasonings*, one can attain clear knowledge of all phenomena. By means of this strong path of reasoning, valid knowledge is attained—wisdom penetrating the true nature of phenomena, their mode of abiding, just as they are. For this reason, the study of *Signs and Reasonings* is said to be a key unlocking the door to the profound treatises on valid cognition.

Validity does not arise of itself; a mind incontrovertible in its perception of the true nature of phenomena must be generated. The Buddha is said to have become valid; that is, he generated validity in himself in order to help others. This is reflected in the opening stanzas of one of the main texts on valid cognition, Dignāga's *Compilation of Prime Cognition:*

Homage to the one
Who has become valid,
Who has assumed the task of helping transmigrators,

> The Teacher, Sugata and Protector.[a]

Commenting on this verse, Pur-bu-jok writes:

> The words "has assumed the task of helping transmigrators" indicate that [a Buddha] comes into being in dependence on his causes, the fulfillment of contemplation and application.
>
> What qualities does our teacher possess? The expression "Sugata and Protector" indicates that he is an unsurpassed protector because of possessing both the fulfillment of abandonment for one's own sake and the fulfillment of realization for the sake of others' welfare.[19]

Minds are not automatically capable of penetrating the truth; this skill must be developed. A mind that has this skill—trained in the topics of valid knowledge and *Signs and Reasonings*—is called a "path of reasoning." Ultimately the student seeks to understand the true nature of all phenomena. Dharmakīrti says of the Buddha, "He has cleared away the net of conceptuality." Conceptuality is always in relation to something, to some object. Its two parts—conception of self of phenomena and self of persons—are like nets or traps, which have to be cleared away.

It is not contradictory for a mental training manual, devoted to aiding a student in the rigorous channeling of *conceptual* thought and the development of *conceptual* power, to praise the one who has "cleared away the net of conceptuality."[b] On the contrary, this clearing away is the ultimate goal of the mental discipline.

And what is the object toward which this correct thought (valid consciousness) is directed? It is the true nature of reality, emptiness, as it is taught in the Prāsaṅgika-Madhyamaka system of tenets. Thus, the Ge-luk-pa student is attempting to develop true (strong, valid) knowledge of phenomena, which requires the elimination of wrong ideas. As

---

[a] The Sanskrit for this passage is:

> *pramāṇa-bhūtāya jagad-dhitaiṣiṇe*
> *praṇamya śāstre sugatāya tāyine*
> *pramāṇa-siddhyai sva-matāt samuccayaḥ*
> *kariṣyate viprasṛtād ihaikataḥ*

Masaaki Hattori, translator and annotator, *Dignāga on Perception, being the Pratyakṣapariccheda of Dignāga's Pramāṇasamuccaya from the Sanskrit fragments and the Tibetan version* (Cambridge, Massachusetts: Harvard University Press, 1968), p. 73.

[b] A passage from the salutation at the beginning of Dharmakīrti's *Commentary on (Dignāga's) Compilation of Prime Cognition,* cited by Pur-bu-jok in *Signs and Reasonings,* p. 1a.4.

Mahāyāna beginners, seeking understanding of ultimate truth, Ge-luk-pa students recognize that their perception of the nature of reality is mistaken, that phenomena are overlaid with mental superimpositions that prevent one's grasping their true nature. The mental training is only partly aimed at eliminating misconceptions in regard to the topics studied. Its more important purpose is to eliminate one's misconceptions concerning people and phenomena.

The study of Madhyamaka is preceded by years of experience in debate and logic. Study of valid cognition pervades the whole curriculum in that, beginning with *Signs and Reasonings,* the topics of valid cognition are generally studied for two months of every year. It is thus a unifying thread of the curriculum.

The study of valid cognition encompasses eight topics, as set forth in the commentaries on the *Pramāṇavarttika*,[a] but the introductory logic manuals deal with only two of these: correct inference and [incorrect] quasi-inference. The student's concern at this stage is to understand inference: its generation, its process (how it is developed), and its basis (correct signs).

## Some Vocabulary Used in *Signs and Reasonings*

A sign (*rtags*) is a reason (*gtan tshigs*)—the terms are synonymous—used in a syllogism to prove a particular thesis. Reasoning is a broad, general term for the application of the rules of logic. Reasoning encompasses not only signs, but also syllogisms (*sbyor ba*), proof statements (*sgrub ngag*), and consequences (*thal 'gyur*)—in fact, everything involved in establishing the validity of a thesis.

Pur-bu-jok posits as the definition of "sign": "that which is set as a sign."[20] Lati Rin-po-che explains this definition to mean "that which is taken to mind as a sign."[21] Pur-bu-jok goes on to say, however,

> Whatever is either an existent or a nonexistent is necessarily a sign in the proof of something because whatever is either an existent or a nonexistent is necessarily set as a sign in the proof of that. This is because "horn of a rabbit" is set as the sign in "Such-and-such a subject is impermanent because of being the horn of a rabbit."[22]

Clearly, anything may be taken to mind as a sign, however absurd it

[a] These eight "categories of logic" are correct direct perception and quasi-direct perception, correct inference and quasi-inference, correct proof statements and quasi-proof statements, correct refutations and quasi-refutations.

may be. What is set as a sign is not necessarily a "correct sign" (*rtags yang dag*).

Correct signs can lead to valid knowledge concerning phenomena that would otherwise remain hidden and inaccessible. Reasoning is the means of developing incontrovertible knowledge of, and experience of, phenomena that are currently hidden, and it is the means of eliminating ignorance—that is, such misconceptions as attributing inherent existence to phenomena and persons.

Sentient beings are considered to have mistaken views about many things. If we attribute the quality x to an object that does not in fact have that quality, then, in Ge-luk-pa phraseology, x is nonexistent in relation to that object. For example, a person with emphysema may have every right to a parking spot reserved for the handicapped and yet, appearing to be able bodied, may be unfairly criticized. The critic attributes physical strength to the person on the basis of appearance, but strength is in fact nonexistent in relation to that person. The attribution is false, and all judgments of the person based on it are false.

The beginners' manuals of logic provide a way to develop valid knowledge regarding hidden phenomena—those that are not accessible to direct perception. Hidden phenomena include subtle impermanence and emptiness, and knowledge of these is developed—initially—only through reasoning. Furthermore, according to the basic principles set forth in the logic manuals, a reason can be the basis of correct inferential knowledge only if it is a correct reason. Not every reason, or sign, is correct. A correct sign is defined as "that which is the three modes"[23] (see p. 399).

The three modes (*tshul gsum*) are the three characteristics that a sign must have in order to be correct; they are criteria for establishing the validity of the sign. The modes refer to the relationships that must exist in a syllogism between the subject (*chos can*), the predicate of the probandum (*bsgrub bya'i chos*), and the sign if the sign is to cause inferential understanding of the thesis. These three modes are: (1) the property of the subject (*phyogs chos*), (2) the forward pervasion (*rjes khyab*), and (3) the counterpervasion (*ldog khyab*).

To help students grasp these ideas, Ge-luk-pa teachers discuss them in terms of specific syllogisms. They have several "model" syllogisms that are used over and over again.

*The model syllogism.* Let us examine a traditional syllogism and its two proof statements. In the syllogism, "The subject, sound, is impermanent because of being a product":

- The subject is "sound."
- The thesis (that which is to be proved, the "probandum") is "sound is impermanent."
- The predicate of the probandum is "impermanent."
- The sign is "product."

This syllogism has two proof statements:

- Positive: "Whatever is a product is necessarily impermanent, as is the case with pot; sound also is a product."
- Negative: "Whatever is permanent is necessarily a nonproduct, as is the case with uncompounded space; sound, however, is a product."

Each of the two proof statements explicitly expresses the three modes. "Sound also [or 'however'] is a product" states the first mode (the property of the subject) in stating that the sign "product" is a property of the subject "sound." The positive and negative statements of pervasion ("whatever is a product is necessarily impermanent" and "whatever is permanent is necessarily a nonproduct") state the two aspects of the relationship between the sign and the predicate that constitute the second mode (forward pervasion) and the third mode (counterpervasion). The syllogism summarizes the three modes and states the conclusion (the thesis being proved).

*The consequence.* Another basis of inference is the consequence, a statement of the logical extension of an idea. If someone holds that sound is permanent, for example, the "consequence" statement is: "It follows that sound is not a product, because of being permanent." In other words, if sound is permanent, it follows that it is not a product.

Western students are unlikely to argue that sound is permanent, but, according to Buddhists, many Hindu students—raised on the doctrinal statement that the sound of the Vedas lasts forever—have had an unexamined idea of sound as permanent. To state the consequence that sound must therefore be a nonproduct leads to a logical examination of such an idea.

Syllogisms and consequences have the function of precipitating new understanding in a "correct opponent"—a person who is *ready*. The readiness of a person is an essential point in Tibetan logic. If a person has taken something for granted, and if that idea is not valid, then a clear statement of the logical consequences of the idea can cause intellectual effort and lead to understanding. If there has been an unconscious emotional and psychological attachment to the invalid idea, the effort may be startling or even frightening.

If a "consequence" is to help someone generate a new understanding—of impermanence, for example—it must be relevant to that person. Mountains might be an example: many people find psychological security in the concept of permanence, and mountains are symbols of permanence in many traditions. Logic can weaken attachment to this particular concept of permanence. The consequence is stated: "It follows that a mountain is a nonproduct because of being permanent." But a mountain is a product—geologists have studied mountain-building and made the process a part of conventional knowledge. Stating the consequence explicitly can weaken adherence to the view of mountains as permanent.

The concept of impermanence is considered important in general, and it is thoroughly studied in the Ge-luk-pa system. The impermanence that is easily recognized is said to be coarse impermanence—the fact that objects disintegrate over time, break, lose their form, die. But the impermanence being sought through reasoning is the subtle impermanence. This is the object's momentary nature, its nature of forming, disintegrating, and reforming moment by moment.

Given twenty-first-century physics and chemistry, well-read people are not shocked by the statement that a porcelain bowl is changing every moment; the concept of atoms and subatomic particles swirling in patterns is a familiar and comfortable mental perspective. But it is an ivory-tower perspective, usually kept separate from the mental perspective one uses for daily living. The real understanding of impermanence involves deep analysis of phenomena, eventually to the point of being able to see directly the fleeting disintegration of the bowl.

In the tenet system of the Prāsaṅgika-Madhyamaka, the mere statement of the consequence of an unexamined belief (that a mountain is a nonproduct) is enough to induce, in the student who is ready, the inferential cognition realizing the impermanence of mountains. This is not the case in every tenet system, however. The system of Sautrāntika Following Reason, for example, holds that the statement of a consequence will not in itself generate inferential understanding of a thesis. For example, the mere statement of a consequence ("It follows that a mountain is a nonproduct because of being permanent") will not in itself generate inferential understanding of the thesis (that a mountain is impermanent). It will, however, weaken adherence to the idea of the mountain's permanence. Then the positive and negative proof statements are used to summarize the three modes of the sign. The positive proof statement is: "Whatever is a product is necessarily impermanent, as is the case with pot; mountain also is a product." The

negative is, "Whatever is permanent is necessarily a nonproduct, as is the case with uncompounded space; mountain, however, is a product." Finally the syllogism is stated ("The subject, mountain, is impermanent because of being a product")—and it is this statement, at this point, that precipitates inferential understanding of the thesis (mountain is impermanent) in the mind of the "correct opponent."

The teachings encompassed in the topic of valid cognition reflect the viewpoint of the tenet system of the Sautrāntika Following Reason. This means that while the Ge-luk-pa order, like all Tibetan Buddhist orders, adheres to the Madhyamaka system, some aspects of its studies are expressed from the viewpoint of, and in the vocabulary of, lesser tenet systems. The basic principles of logic taught in the Ge-luk-pa monasteries accord with the Sautrāntika system. The purpose of the teaching, however, transcends the limits of the Sautrāntika system, in that the student will eventually use this very system of logic to develop understanding of the subtle Madhyamaka view.

## Validity

An important feature of Tibetan logic is that it is used to acquire new and valid understanding about oneself and the world. Valid knowledge is considered to be irrefutable, unshakable; it is authentic, true, and certain. Western logic is fundamentally different from Tibetan logic. In the Western system, a sharp distinction is made between empirical knowledge and knowledge acquired through application of the rules of formal logic. Empirical knowledge depends on experience and observation and is considered to be necessarily contingent, indefinite, conjectural; it is not discernable as definitely and irrefutably true. Only in mathematics and formal logic can there be certainty; all other knowledge must remain conjectural. This point of view is reflected clearly in the words of the Western logician Karl Popper,

> In the empirical sciences, which alone can furnish us with information about the world we live in, proofs do not occur, if we mean by "proof" an argument that establishes once and forever the truth of a theory. On the other hand, pure mathematics and logic, which permit of proofs, give us no information about the world, but only develop the means of describing it.[24]

This points to a fundamental difference between Western and Tibetan logic. In the point of view of some Western logicians, no new knowledge about the world is possible through logic; it is not the purpose of

logic to produce new knowledge. The aim of logic is strictly propositional, in that it depends strictly on the form of propositions for its validity. In Western logic, validity attaches to the proper logical form of an argument. A Western logician, Stephen Barker, explains,

> In logic, we are mainly interested in considering arguments whose validity depends on their logical forms. ... When the premises of an argument are linked to the conclusion in the right sort of way, the argument is called valid.[25]

In the Ge-luk-pa system of education, the purpose of logic is to generate new knowledge, not about propositions, but about phenomena; that is, about oneself and the world. Logic is used to develop a path of reasoning, in order to acquire valid knowledge. Tibetan logic is transformational, in that it is intended to bring new and valid knowledge that changes one's relationship with the world and brings one closer to the truth and to enlightenment—closer to the truth, in that one's understanding of the world is more accurate and one's relationships with people are based on true understanding of the nature of reality rather than on illusion and ignorance.

## Genesis of This Study

The beginnings of this project go back to 1976, when Lati Rin-po-che came to the University of Virginia as a visiting lecturer and taught the three introductory topics of the Ge-luk-pa curriculum, *Collected Topics*, *Awareness and Knowledge,* and *Signs and Reasonings*. Under his guidance, our class studied the whole of the introductory logic manual on *Signs and Reasonings* by Ge-shay Tsül-trim-nam-gyel, and part of the manual written by Pur-bu-jok. Lati Rin-po-che's commentary was translated by Jeffrey Hopkins and transcribed by class members. Subsequently, I translated the whole of Pur-bu-jok's *Signs and Reasonings* (that translation is included in this book). I also received commentary on Pur-bu-jok's *Signs and Reasonings* from Ge-shay Ge-dün-lo-drö in 1979, when he was a visiting scholar at the University of Virginia.

Later, in India on an American Institute of Indian Studies fellowship, I received commentary on it from Ge-shay Pel-den-drak-pa, at that time the resident scholar at Tibet House in New Delhi, and from Ge-shay Lob-sang-gya-tso, a scholar of Lo-sel-ling College of Dre-pung Monastic University in South India. I recorded and transcribed all commentary received from these teachers.

While in Northern India, I attended the Buddhist School of Dialectics in Dharamsala, joining a class on the *Collected Topics* for one full school year in 1983 and again for two months in 1984. I attended classes and debated with my classmates, in two sessions daily—morning and evening. During that time, I also attended classes on "Awareness and Knowledge" and on "Valid Cognition"; the latter dealt specifically with the relationship between the sign and the predicate in a valid proof. The text used in that class was Paṇ-chen Sö-nam-drak-pa's *Illumination of the Thought,* of which I translated the portion studied in that class.

I also met with advanced students to discuss both the introductory topics of *Signs and Reasonings* and topics of "Valid Cognition." In the study of valid cognition, the most important root texts are Dignāga's *Compendium on Prime Cognition* and Dharmakīrti's commentary on it. There are numerous Ge-luk-pa commentaries on these; one that is widely used is by Gyel-tsap (his *Revealer of the Path of Liberation*), of which I translated one section, on the topic of the relationship between sign and predicate. While in Dharamsala, I received extensive commentary on this section of Gyel-tsap's text from Ge-shay Sang-gyay-samdrup (Professor Georges Dreyfus). I also attended classes on this topic at the Buddhist School of Dialectics and met with students to discuss and debate related issues.

In 1983 and 1984, I spent a total of five months at Lo-sel-ling College. There I joined a class on *Signs and Reasonings* and received individual instruction on the topic from Ge-shay Lob-sang-gya-tso. I also met with other students to debate topics of logic.

I would like to express my thanks to all of these scholars, and to the teachers and students at the Buddhist School of Dialectics, who were extremely kind and encouraging during my period of study there. Special thanks go also to Georges Dreyfus, who has helped me many times and been generous with his expertise in the topic of valid cognition.

I am deeply grateful to my family for their patience and encouragement, and their many, many hours at the word processor, helping to bring this project to completion.

Finally, my thanks go to Jeffrey Hopkins for his immeasurable help.

## Preview

My first three chapters deal with the criteria of a correct sign—the necessary relationship between the subject, predicate, and reason in a valid syllogism. To be valid, the proof must be able to generate, in the mind of an appropriate person, a new valid understanding of the thesis.

There are criteria of validity: the reason must be the three modes, explained in these chapters.

Chapters four through seven cover the different types of correct signs. The main division of correct signs is into three: correct effect, nature, and nonobservation signs. This division is made depending on two criteria: the type of relationship between the sign and the predicate, and whether the predicate is a positive or a negative phenomenon.

Chapter eight is on other ways of dividing correct signs. These do not contradict the main division; they are ways to highlight certain important issues. One division, for example, depends on whether the predicate is a definition or the thing defined (definiendum); study of this topic requires careful consideration of such related issues as the order in which definitions and definiendums are ascertained. Another division highlights the difference between very hidden phenomena and slightly hidden phenomena. Study of correct signs from the point of view of the nature of the predicate of the probandum brings up such issues as the different types of inferential valid cognition and the kind of reasoning each type depends on.

Chapter nine is on quasi-signs—those that do not fulfill the requirements of correct signs.

Chapter ten is an attempt at a concise summation of all the important topics contained in Pur-bu-jok's text.