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初期新ニヤ一ヤ学派における 言語哲学の基礎的研究

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序 言

本研究は、新ニヤーヤ学派の体系を確立したとされるガンゲーシャ（14世紀）の『タットヴァ・チンターマニ』（Tattva-cintāmaṇi）の第4章「言語論」（Śabda-khaṇḍa）における「定動詞接辞節」（Ākhyāta-vāda）の英訳を作成し、訳注を施し、併せて、初期のこの学派の言語哲学が先行するどのような思想の影響を受けて形成されたかを解明しようとするものである。

新ニヤーヤ学派はガンゲーシャによって体系が確立されて以来、その術語及び記述の方法はインド哲学のすべての学派に浸透していった。哲学以外の分野、例えば修辞学やダルマ文献においても注釈書を読む場合には、新ニヤーヤ学派の術語の知識なくしては理解ができない。中世インドの思想を研究するためには新ニヤーヤ学派の研究は避けて通れない。このような重要性にもかかわらず、国内のみならず海外においても研究者は少ない。本研究は、この学派の初期の言語哲学の一端を明らかにしようとするものである。

『タットヴァ・チンターマニ』の「定動詞接辞節」の英訳と解説を行うことと併せて次の重要な作業も予定している。一般論としてガンゲーシャは11世紀のウダヤナの影響を強く受けていると言われるが、ウダヤナの主要著作の一つである『ニヤーヤ・クスマージャリ』（Nyāyakusumāñjali）における定動詞接辞に関する議論との対応関係も解明する。この作業を通して、ガンゲーシャが先行するどのような思想の影響を強く受けたかを明らかにでき、未だ必ずしも明確になっていない新ニヤーヤ学派の起源について、言語哲学の観点からの解明の糸口を提示できる。

本研究は、インドの言語哲学においては必ずしも最重要のトピックとは言えない定動詞接辞に関する議論を取り上げたが、新ニヤーヤ学派が登場して以降インドではこのトピックは言語論に関する基礎的知識を読者に与えるために重要な役割を担うようになった。このトピックの下に言語哲学をリードしたパーニニ文法学派やミーマーンサー学派が自説を展開し、新ニヤーヤ学派と論争した。初期の新ニヤーヤ学派の言語論を、定動詞接辞という具体的なトピックの下に解明しようとする試みは、同じ時期に文献が現存しない他の二派の言語論をも解明する助けとなるだけでなく、なぜこのトピックが後世に新ニヤーヤ学派の言語論の基礎的なものとして重要視されたのかを解明することにもなる。

ウダヤナ以前の言語哲学に関する研究は、海外でも国内でも文法学派やミーマーンサー学派を中心に行われてきた。このことはニヤーヤ学派において言語の問題は主要ではなかったという事実を反映しているのであるが、少なくともウダヤナの時代には状況が大きく変化していたと仮定できる。あるいは、9世紀のジャ

ヤンタやバーサルヴァジュニャや10世紀のヴァーチャスパティから言語の問題が大きく扱われるようになってのかもしれない。これは本研究の範囲を超えた問題であり、今後の課題でもある。

我が国における新ニヤーヤ学派の言語哲学の主要な研究は、研究代表者がかつて行った「インド哲学における言語分析」(1990, 1993, 1995, 1996)と題する一連の論文のみである。この研究は、17世紀に著された『ニヤーヤ・シッダーンタ・ムクターヴァリー』の「言語論の章」を和訳し、詳細な注を付けたものである。この書は14世紀のガンゲーシャと彼以降の説を初学者向けに要約したものであるから、その研究によって必ずしもガンゲーシャもしくは初期の新ニヤーヤ学派の立場が明確にできたというわけではない。

海外では、1500年頃のラグナータの「定動詞接辞節」(Ākhyāta-vada)、17世紀のジャガッドイーシャの『シャブダ・シャクティ・プラカーシカー』(Śabda-śakti-prakāśika)、17世紀のガダーダラの『シャクティ・ヴァーダ』(Śakti-vada)の翻訳研究がこれまでされてきた。いずれの研究も、新ニヤーヤ学派の体系が確立されて後かなりの時代を経た文献を扱っている。14世紀以降の新ニヤーヤ学派と文法学派とミーマーンサー学派の言語分析を概観した先駆的業績として V.S. Rao, *The Philosophy of a Sentence and Its Parts* (1969)がある。これらの業績は、新ニヤーヤ学派の初期からガンゲーシャまでのいわゆる形成期の言語論を扱った研究ではない。しかも、本研究のようにガンゲーシャとウダヤナと関わりを扱うという視点は見られない。

本研究を科学研究費補助金に申請する時期に21世紀COEプロジェクト「統合テキスト科学の構築」(名古屋大学文学研究科)の採択が決定され、これに研究推進担当者として参加することとなった。このこと自体は研究代表者にとって研究方法も含めて自らの研究対象を広げるには好機であった。現実問題として、力不足から本研究とこのCOEプロジェクトとの両立が困難であり、予定していたガンゲーシャの「定動詞接辞節」全体の英訳は一応終えたものの、出版可能な形にできたのはごく一部である。この点は慚愧に堪えない。また、本研究を開始する時期に執筆依頼を受けていた原稿をまとめることにも時間を割かざるを得なかった。幸いこれらの原稿は本研究と密接な関係があり、「定動詞接辞節」を全体から眺めるという視点をしばしば想起させてくれたことは、ミクロな文献学的作業に埋没しそうな状況の中では幸運であった。

さて、本報告書に収める3編の論文のうち第一編は、新ニヤーヤ学派の特質に関する先行研究を俯瞰し、それが充分でなかったことを論じ、新たな視点を導入してその特質についての仮説を提示する。その結果、この学派の起源をウダヤナ

に求めることができることを論じたものである。第二編は、初期の新ニヤーヤ学派が語の意味を決定する方法を明らかにし、そしてその方法でも決定できない場合にどのような原則が働くのかについて議論した。さらに、この原則が新ニヤーヤ学派の实在論と深く関わっていることを解明した。このことは、实在論の立場をとる学派の（サンスクリット）意味論が存在論的枠組みの中に取り込まれていることを示す一例となる。第三編は、ガンゲーシャの「定動詞接辞節」の冒頭部分の英訳と議論で用いられる術語と議論において前提とされている概念との分析を試みたものである。本編の元となった論文は、ウィーン大学のインド学研究者の編集による記念論集に寄稿したものであるが、未だ刊行されていない。この論文には、新ニヤーヤ学派の「伝統説」とこれに対するミーマーンサー学派からの反論との英訳が含まれる。未刊行の論文の全体を本報告書に収めない方がよいと判断し、ミーマーンサー学派からの反論の英訳とその訳注とを削除し、第三編として含めた。

第三編からだけでは明らかではないが、その元となった論文からは、ガンゲーシャの『タットヴァ・チンターマニ』「定動詞接辞節」とウダヤナの『ニヤーヤ・クスマージャリ』における定動詞接辞に関する議論との間には密接な関係があることが判明した。ウダヤナの議論に沿ってガンゲーシャが記述しているという印象すら我々は受ける。ただしこの論文で見いだせた関係は「定動詞接辞節」の冒頭部分についてのみであり、その全体にわたって調査できたわけではない。今後の研究に委ねたい。

研究協力者の平野克典氏は本研究を進めるに当たっての資料収集を主に担当した。本研究を遂行するに当たって平野氏と様々な機会に議論したことも本報告書に生かされているが、内容についての責任は研究代表者にあることを付言しておきたい。

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研究発表

(1) 学会誌等

- (i) “The Origin of Navya-nyāya and Its Place within the History of Indian Logic”, in S. Hino and T. Wada (eds.), *Three Mountains and Seven Rivers: Professor Musashi Tachikawa's Felicitation Volume*, Delhi: Motilal Banarsidass, 2004, pp. 439-462.
- (ii) “A Navya-nyāya Presupposition in Determining the Meaning of Words”, *Acta Asiatica: Bulletin of the Institute of Eastern Culture* 90, pp. 71-91, 2006.
- (iii) “Gaṅgeśa on the Meaning of Verbal Suffixes (1)”, in K. Preisendanz (ed.), *Wilhelm Halbfass Commemoration Volume*, Vienna. (印刷中)

(2) 口頭発表

- (i) XIIth World Sanskrit Conference (University of Helsinki, Finland、平成15年7月14日～18日) “The Definition of Invariable Concomitance (*vyāpti*) in Early Navya-nyāya: Śāśadhara's Definition”

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THE ORIGIN OF NAVYA-NYĀYA AND ITS PLACE WITHIN THE HISTORY OF INDIAN LOGIC

I. Introduction

'Navya-nyāya' is the name given to the new school of Nyāya, which preserved the traditions of both Nyāya and Vaiśeṣika. Gaṅgeśa, who lived in the 14th century, is regarded as the representative philosopher of this school, though there are various views on who was the founder of this school. This question is inextricably linked to the question of what are the distinctive features of Navya-nyāya. Without taking these features into account, we cannot find the answer to the question of who was the founder. Therefore, I have devoted a considerable amount of space in the introduction to a discussion of the features of Navya-nyāya's analytical method.

The term Nyāya, which means 'logic', also refers to a philosophical system which is concerned not only with the study of formal inference-patterns but also with the theory of how to get true cognition (*pram*). In other words, Nyāya, or Indian logic, deals with both logical and epistemological issues.¹ The means of getting true cognition is called a *pramāṇa*, and the number of *pramāṇas* differs according to the various schools of Indian philosophy; Nyāya recognizes all four *pramāṇas*. The term Nyāya can also refer specifically to the theory of inference, or *anumāna*, which is one of the four *pramāṇas*.

Keeping in mind the meaning of Nyāya as a system concerned with both logical and epistemological issues, we will first look at past research on the historical divisions of Nyāya and see how Navya-nyāya, or the New Logic, fits into with these divisions. Then, we will look at past research on the question of

* The present paper is a revised English version of my paper in Japanese, "Shin Nyāya Gakuha no Kigen to Bunseki-Houhou" (The Origin of Navya-Nyāya and the Position of This School in the History of Indian Logic), which appeared in *Indo-Shiso Kenky* (*Studies in the History of Indian Thought*) 11, 1999, pp. 16-41.

¹ On this point, see Matilal [1998: 14], which discusses the differences between Indian logic and Western logic.

who was the founder of Navya-nyāya. My conclusion is that Navya-nyāya originated with Udayana, who lived in the 11th century, and not with Gaṅgeśa.

II. The Historical Divisions of Indian Logic

It is commonly said that the final stage of Indian logic is Navya-nyāya, or the New Logic. Research on the historical divisions of Indian Logic began with Satish Chandra Vidyabhusana [1977(1909): xvii-xviii]: *History of Mediaeval School of Indian Logic*. He presents three divisions: the Ancient School of Logic (600 B.C.-400 A.D.), the Mediaeval School of Logic (400 A.D.-1200 A.D.), and the Modern School of Logic (1200 A.D.-1850 A.D.). He says that the Mediaeval School originated with Dignāga, and the Modern School originated with Gaṅgeśa;² the foremost text of the first school is the *Nyāyasūtra* (3rd-4th centuries A.D.) by Akṣapāda, the representative work of the second is the *Pramāṇasamuccaya* by Dignāga (ca. 480-540), and the main text of the third is the *Tattvacintāmaṇi* by Gaṅgeśa (14th c.). Vidyabhusana [1977(1909)] does not discuss the first and second schools in detail, which follows from the title of his book. Vidyabhusana [1921: xiii, 157-158, 401-404]: *A History of Indian Logic* sets forth the same divisions as Vidyabhusana [1977(1909)] but modifies the beginning date of the Ancient School of Logic from 600 B.C. to 650 B.C., and the beginning date of the Modern School of Logic from 1200 A.D. to 900 A.D.

Ganganath Jha [1994(1912-1916): 20]: *Sāḍholāl Lectures on Nyāya* presents three similar divisions: the Old Nyāya (logic) School³ (*prācīna*) represented by Gautama and his commentators, the Medieval Nyāya School (*madhyama*) represented by the Jaina and Buddhist authors, who confine their attention to the means of knowing (*pramāṇa*) but do not investigate the verbal accuracy of its definition (*lakṣaṇa*), and the Modern Nyāya School (*navya*), which deals mainly with the means of knowing and its definition. Unlike Vidyabhusana, Jha does not provide a specific time frame for these divisions. He acknowledges that there is some overlapping between the Old and Medieval periods.

² Vidyabhusana [1921: 406] places Gaṅgeśa in the fourth quarter of the 12th century. But it has recently become the predominant view that he lived in the first half of the 14th century. For instance, D. Bhattacharya [1958: 101] places him ca. 1325, and Potter and Bhattacharyya [1993: 85-87] place him ca. 1320.

³ Jha [1994(1912-1916)] uses the term Nyāya in the sense of logic.

Janaki Vallabha Bhattacharyya [1975(1937?/1953): 125-126]: “Navya-Nyāya” refers not only to Vidyabhusana and Jha but also to Arthur B. Keith and Sarvepalli Radhakrishnan. J. Bhattacharyya, like Jha, acknowledges the general problem of overlapping of the periods, but he in the main follows Jha’s divisions.⁴ C. Goekoop [1967: vii]: *The Logic of Invariable Concomitance in the Tattvacintāmaṇi* proposes three divisions: old Nyāya, Buddhist logic, and new Nyāya. Goekoop does not mention when and with whom New Nyāya began but simply says that the principal text of the third period is the *Tattvacintāmaṇi* of Gaṅgeśa (1320).⁵

The differences between Jha’s and Vidyabhusana’s classifications do not seem to be that great. Both Jha and Vidyabhusana designate the three historical divisions by the particular school of logic that existed during that period. This kind of designation obscures the fact that these schools overlap in time. The Old Nyāya, used to designate the first period, in fact existed through the medieval period up to the advent of Navya-nyāya. Also, the Buddhist school of logic existed until about 1200 A.D., and Jaina logic continued much later than that.⁶ But some scholars, such as Jha, move the beginning of the Navya-nyāya back to Udayana in the 10th century. Vidyabhusana by assigning specific dates to these divisions clarifies the divisions to some extent but does not really solve the problem of overlapping.

In the present paper, I have followed in general the classification given by Vidyabhusana and Jha, but without a specific time frame. For the three divisions I have adopted Goekoop’s terminology. Thus, Old Logic covers the period from the *Nyāyasūtra* to Dignāga, Buddhist Logic from Dignāga to Udayana, and New Nyāya, or Navya-nyāya, begins with Udayana.⁷ As noted before, I endorse the view that Udayana, and not Gaṅgeśa, is the originator of this school.

4 On the question of with whom Navya-nyāya began, Jha and J. Bhattacharyya hold different views, which will be referred to later. Jha marks its beginning with Udayana, and J. Bhattacharyya with Gaṅgeśa.

5 On the dates of the Nyāya and Vaiśeṣika authors, see Potter [1977: 9-12] and Potter and Bhattacharyya [1993: 10-13].

6 Vidyabhusana [1921: 157] assigns Jaina logic to the period 400 A.D. - 1700 A.D.

7 It is an on-going problem whether it is proper or not to use historical designations like ‘ancient’, as Vidyabhusana does, for the divisions of the history of Indian logic. If we depend upon such designations, we have to define them. Hence, I have avoided them here.

III. On the Question of Who is the Founder of Navya-nyāya

Past research on this problem has mainly emphasized the following two differences: in Old Nyāya the basic text is the *Nyāyasūtra*, while in Navya-nyāya it is Gaṅgeśa's *Tattvacintāmaṇi*, and Navya-nyāya developed its own characteristic terminology. Based on these differences the prevalent view is that Gaṅgeśa is the founder of Navya-nyāya. Others maintain that Navya-nyāya originated with Udayana. In the following section we have investigated the three views on who is the founder of Navya-nyāya: (1) that it is someone unknown who lived between the time of Udayana and Gaṅgeśa, (2) Gaṅgeśa, or (3) Udayana.

The first view is held by Arthur B. Keith, Saileswar Sen, Dharmendra Nath Shastri, Dinesh Chandra Guha, Daniel H.H. Ingalls, Erich Frauwallner, Atsushi Uno, Keiichi Miyamoto, Michiko Ishitobi, John Vattanky, and so forth. Keith [1921 (1977): 29-41]: *Indian Logic & Atomism* states that the Nyāya and Vaiśeṣika schools were syncretized after Vācaspati Miśra (900-980), and he deliberately avoids using the term 'Navya-nyāya'. Keith says that Nyāya attains its final shape in Gaṅgeśa's *Tattvacintāmaṇi*,⁸ but he does not describe what this shape is.⁹ Sen [1924: 5-6]: *A Study on Mathurānātha's Tattva-cintāmaṇi-rahasya* agrees with Keith's view on the historical relationship between Nyāya and Vaiśeṣika¹⁰ but does not discuss who is the founder of Navya-nyāya. D.N. Shastri [1976(1964): 120] does not deal with this question but says that in Udayana's works we find the method of subtle argumentation without much substance, which is the chief characteristic of Navya-nyāya. According to D.N. Shastri [1976(1964): 121], Gaṅgeśa furnished the basis for a new methodology which made sharp and subtle distinctions in the connotations of logical terms, but Navya-nyāya made a contribution neither to the *prameya* part of the system (metaphysics) nor to the *pramāṇa-vāda* (epistemology). Shastri has on the whole a low estimate of Navya-nyāya.¹¹

⁸ Keith [1921: 33] says, "Probably within two centuries from Udayana and Śivāditya there flourished the famous Gaṅgeśa or Gaṅgeśvara, the author of the *Tattvacintāmaṇi*, in which the logic of Nyāya attains its final shape".

⁹ We cannot criticize him for not discussing its final shape, because he probably had limited access to research materials on Navya-nyāya.

¹⁰ Sen calls the commentators on Gaṅgeśa syncretists as does Keith [1921: 33]. Sen [1924: 5 fn.3] refers to Keith [1921].

¹¹ D.N. Shastri places less importance on Udayana and Navya-nyāya in the history of Indian

Guha [1968: 1, 3]: *Navya Nyāya System of Logic* states that the Navya-nyāya system of logic gradually flourished after Udayana and particularly at the time of Gaṅgeśa, and that it is very difficult to say when the logical treatises came to be known by the name of Navya-nyāya. Guha [1968: 5] points out that the outstanding features of Navya-nyāya are its extreme thoroughness of analysis and highest possible perfection. It is interestingly set forth by Guha [1968(1979): 4] that the Prabhākara school of Mīmāṃsā paved the way for Gaṅgeśa's new method.¹² Ingalls [1951]: *Materials for the Study of Navya-Nyāya Logic* takes the second view on the founder of Navya-nyāya, but Ingalls [1968a: xvii-xviii; 1968b: vii] shifts to the present view without giving any reason. We will see the view presented by Ingalls [1951] later. Frauwallner [1970: 5]: *Die Lehre von der Zusätzlichen Bestimmung (upādhih) in Gaṅgeśa's Tattvacintāmaṇi* states that Udayana's school occupied the leading position in Nyāya for more than 200 years but was gradually superseded by the newly arising trend of Navya-nyāya. This implies that Frauwallner holds the view that Navya-nyāya originated after Udayana and before Gaṅgeśa. On who is the founder of Navya-nyāya, Frauwallner does not say anything more than this.

Uno [1973: 119-120]: "Logical Speculation in India"¹³ presents the popular view that Gaṅgeśa established Navya-nyāya but says that the trend of Navya-nyāya started before him. Uno also reports that among scholars the view prevails that Udayana founded Navya-nyāya while Gaṅgeśa organized it, which view corresponds to the third view on the founder of Navya-nyāya. Uno seems to include Dineshchandra Bhattacharya and Daniel H.H. Ingalls among those holding such a view.¹⁴ Miyamoto and Ishitobi [1983: 211]: "The System of Indian Logic" state that Navya-nyāya began during the time of Udayana and that

philosophy. Chemparathy [1972: 32], on the other hand, says that Shastri's statements regarding them are too harsh, and he holds Udayana in particularly high regard.

¹² Guha [1968: 4, fn.2] provides the source of this view as: Paṇḍita Vāmācāraṇa Nyāyācārya, Introduction of Mahāmahopadhyāya Pañcānana Tarkaratna to *Vyāptipañcaka Māthuri* edited by Paṇḍita Vāmācāraṇa Nyāyācārya, p. 3. Umesh Mishra [1966] also takes this view, which will be referred to in the discussion of the second view on who is the founder of Navya-nyāya.

¹³ This article is included by Uno [1996: 1-39] with revisions and partial deletions.

¹⁴ Uno must have read D. Bhattacharya [1958], Ingalls [1968a: xvii-xviii], and Ingalls [1968b: vii], which were published before Uno [1973]. Later, Uno [1980] refers favorably to Matilal's opinion that Navya-nyāya was founded by Udayana, i.e., a few centuries before Gaṅgeśa. This opinion is presented by Matilal [1977]. Ingalls [1951] supports the second view, but Ingalls [1968a; 1968b] apparently favors the first view.

Gaṅgeśa's *Tattvacintāmaṇi* exerted a great influence on later Nyāya literature. Miyamoto and Ishitobi regard Udayana as the final culmination of classical Nyāya but do not explicitly mention the relationship between Udayana and Navya-nyāya.

Vattanky [1984: ix-x]: *Gaṅgeśa's Philosophy of God* gives Udayana an intermediate position between classical Nyāya and Navya-nyāya, but does not say whether Navya-nyāya began with Udayana or Gaṅgeśa. However, Vattanky regards the *Tattvacintāmaṇi* as the basic text of Navya-nyāya and holds that this text reveals the features of the Navya-nyāya method of analysis. Vattanky does not specify what these features are but merely sums them up by saying that Navya-nyāya investigated "the nature, dimensions, and conditions of human knowledge with unparalleled rigor and exactitude".

The second view — that Gaṅgeśa is the founder of Navya-nyāya — is held by Maheśa Chandra Nyāyaratna, Satis Chandra Vidyabhusana, Surendranath Dasgupta, Sarvepalli Radhakrishnan, Gopinath Kaviraj, Maysore Hiriyanna, Janaki Vallabha Bhattacharyya, Daniel H.H. Ingalls, Jadunath Sinha, Karl H. Potter, S. Kuppaswami Sastri, Umesh Mishra, Sibajiban Bhattacharyya, Stephen H. Phillips, and so forth. Maheśa Chandra Nyāyaratna [1973(1891?): 1-3]: *Navyanyāya-Bhāṣāpradīpaḥ: Brief Notes on the Modern Nyāya System of Philosophy and Its Technical Terms*¹⁵ says that Navya-nyāya lays particular stress on the strict definition of technical terms and aims at ascertaining precisely the meanings of expressions in common use, and that Gaṅgeśa founded Navya-nyāya.

Vidyabhusana [1921: 402-403]: *A History of Indian Logic* makes use of the term 'Tarka-śāstra' in the sense of Navya-nyāya and says that Gaṅgeśa originated Tarka-śāstra. Tarka-śāstra, according to Vidyabhusana, is characterized by the following five features: (1) discussion under the theme of the four means of valid knowledge (*pramāṇa*), i.e., perception (*pratyakṣa*), inference (*anumāna*), analogy

¹⁵ This book is an introductory work on Navya-nyāya and includes, according to Uno [1977: 89-90; 1996: 75], a paper read by Nyāyaratna on the occasion of the Ninth Orientalists Conference in 1891. (It is not known whether his paper was read in English, as it is reproduced in the book, or in Sanskrit.) The last colophon of the original of Uno [1977] tells us that Nyāyaratna's book was published on 1 August 1891, by the publisher Jadu Nath Seal, and by the press Hare Press. Nyāyaratna [1973] includes Nyāyaratna's paper in the section following his Sanskrit exposition on Navya-nyāya. This paper is assigned Arabic page numbers independent of the Sanskrit numbers in the previous section. This paper and the Sanskrit exposition are translated into Japanese by Uno [1977; 1978; 1979], and his translation is reprinted in Uno [1996: 71-119].

(*upamāna*), and verbal testimony (*śabda*), (2) the adoption of the Vaiśeṣika categories, (3) hair-splitting discussion of the meaning of terms, (4) precise definition of terms, and (5) the use of technical terms¹⁶ which makes (3) and (4) possible. He enumerates several technical terms but does not explain why or how they represent the Tarka-śāstra method. It is interesting that he sets the beginning of the Modern School, including Tarka-śāstra, at ca. 900, four centuries before Gaṅgeśa. Vidyabhusana [1921: 356-357] says that between ca. 900 and the time of Gaṅgeśa, the manuals of logic called *prakaraṇa* were written, and their authors attempted to assimilate the six or seven Vaiśeṣika categories to the Nyāya categories of the means of valid knowledge; these authors inherited the Buddhist and Jaina tendency to relate issues with the means of valid knowledge. Vidyabhusana [1921: 402] further states that such a tendency permeates Tarka-śāstra. In his opinion, Navya-nyāya, i.e., Tarka-śāstra, which represents the final stage of Indian logic, emerged during the period of Gaṅgeśa, but the Navya-nyāya tendency to give importance to the means of valid knowledge can be traced back to ca. 900.

Dasgupta [1975(1922): 308]: *A History of Indian Philosophy*, Vol. 1 states that Navya-nyāya began with Gaṅgeśa, and that its main contribution lies in the development of a system of linguistic notations to specify accurately and precisely any concept or its relation with other concepts. Radhakrishnan [1983(1923): 41-42]: *Indian Philosophy*, Vol. 2 does not say with whom Navya-nyāya began, but says that its standard text is Gaṅgeśa's *Tattvacintāmaṇi*. According to him, "Navya-nyāya devotes much attention to the means of knowledge (*pramāṇa*) and the theory of definition, and indulges in scholastic subtleties, logical legerdemain, fine hair-splitting". Radhakrishnan thus describes the features of Navya-nyāya with negative connotation. Kaviraj [1962 (1924): 33]: *Gleanings from the History and Bibliography of the Nyāya-Vaiśeṣika* regards Gaṅgeśa as the starting point of Navya-nyāya. Hiriyanna [1932(1983): 227]: *Outline of Indian Philosophy* also states that Navya-nyāya commenced with Gaṅgeśa, and that one of its chief characteristics is the cultivation of precision in thought as well as expression. Hiriyanna [1932(1983): 227-228] categorizes Navya-nyāya after Gaṅgeśa as "confined more and more to matters of detail" and

16 Vidyabhusana gives the following terms: *ativyāpti*, *anugataadharmā*, *anugama*, *anuyogit*, *anyathāsiddhi*, *avacchinna*, *avacchedaka*, *avyāpti*, *kurvad rūpatva*, *pratīyogit*, and *vyāpti*.

“for most part philosophically barren”. In this respect he is as negative as Radhakrishnam. J. Bhattacharyya [1975(1937?/1953): 126-127]: “Navya-Nyāya” takes the view that Gaṅgeśa laid the foundation of the revised metaphysics¹⁷ of the Vaiśeṣika school by means of a new theory of knowledge, and that Navya-nyāya originated from Gaṅgeśa.

Ingalls [1951: 5]: *Materials for the Study of Navya-Nyāya Logic* states that Gaṅgeśa refers to his teachings as the New Nyāya as distinguished from the Old Nyāya. It is one thing how Gaṅgeśa describes his own view, and it is another how we describe his view within the context of the history of Indian philosophy. On this matter Ingalls keeps silence, which means that he seems to implicitly accept Gaṅgeśa’s description of his own view. Ingalls interestingly points out that many Indian scholars apply the term Navya-nyāya only to Raghunātha and his followers because of the originality of his work. Ingalls [1951: 1] states that Navya-nyāya, by means of abstract properties and the combination of negatives, expresses the same facts which we normally express by quantification. Later, Ingalls, as I mentioned before, changed his view on the founder of Navya-nyāya to the first view.

Sinha [1956: 699]: *A History of Indian Philosophy, Vol. 1* maintains that Gaṅgeśa founded Navya-nyāya, and that its features are the arrangement of argument under the four means of knowledge and the introduction of a new terminology for logical analysis. He adds that Gaṅgeśa developed Udayana’s line of thought. Potter [1957: 3] notes that the works of Navya-nyāya were produced between the 13th and 17th centuries, and that its greatest exponent was Gaṅgeśa. This means that Potter regards him as the first author of Navya-nyāya, i.e., its founder, because following Ingalls Potter places Gaṅgeśa in the 13th century. This view of Potter remains unchanged in Potter [1977] and Potter and S. Bhattacharyya [1993]. S.K. Sastri [1961: xxxvi-xxxvii] states that Gaṅgeśa shifted the emphasis from the categorical treatment of the topics of Nyāya to the epistemological treatment of the four means of valid cognition (*pramāṇa*) and established the terminology of Navya-nyāya, which enables elaborate analysis and

¹⁷ Although Gaṅgeśa’s *Tattvacintāmaṇi* is generally said to be a work on epistemology and logic, Bhattacharyya seems to defend the position that Gaṅgeśa deals with metaphysical issues also. As a result he comes to emphasize Gaṅgeśa’s metaphysical contribution. Bhattacharyya [1975(1937?/1953): 127] deems that sound epistemology and logic should precede metaphysics and integrates the above common view into his view.

discussion. Sastri does not refer to the relationship between Udayana and Gaṅgeśa or between Udayana and Navya-nyāya.

Umesh Mishra [1966: 238]: *History of Indian Philosophy*, Vol. 2 takes the view that although the Navya-nyāya trend of thought can be found in Udayana, it is proper to regard Gaṅgeśa as its founder. However, Mishra [1966: 269-270] evaluates Udayana more highly than Gaṅgeśa in terms of substance and method of argumentation and adds in the final paragraph comparing both authors that we find much originality in Udayana and only subtle distinctions in Gaṅgeśa. According to Mishra [1966: 237-238], Navya-nyāya is mainly concerned with the theory of knowledge, and its system is based on the four means of knowledge. We can infer the strong influence of the Prabhākara school of Mīmāṃsā on Gaṅgeśa from the statement in Mishra [1966: 239, 249, 256-257].

Potter [1977: xi]: *Encyclopedia of Indian Philosophies Vol. II: Indian Metaphysics and Epistemology: The Tradition of Nyāya-Vaiśeṣika up to Gaṅgeśa* states that with Gaṅgeśa a new start is made within the systems of Nyāya and Vaiśeṣika, the result coming to be known as Navya-nyāya. Moreover, Potter [1977: 8] says that Udayana looms so monumentally in the history of Nyāya and Vaiśeṣika that other writers in these traditions are overshadowed. Potter simply refers to the fact that there are some historians who hold the view that Udayana pioneered a new technique which Gaṅgeśa expertly wielded. Keeping the basic position in Potter [1977], Potter and S. Bhattacharyya [1993: 3]: *Encyclopedia of Indian Philosophies Vol. VI: Indian Philosophical Analysis Nyāya-Vaiśeṣika from Gaṅgeśa to Raghunātha Śiromaṇi*¹⁸ deal with only the philosophy and authors of Navya-nyāya and clearly state that Gaṅgeśa is rightly viewed as its founder. Both authors point out that the term Navya-nyāya is employed to identify not only the Nyāya-Vaiśeṣika literature of Gaṅgeśa and later authors but also in particular those literary works, such as Gaṅgeśa's *Tattvacintāmaṇi*, which utilize a technical vocabulary to explicate the Nyāya-Vaiśeṣika concepts. Potter and Bhattacharyya [1993: 15-18] say that Navya-nyāya is concerned mainly with the concepts of relation and awareness (*jñāna*) and analyze both concepts in Navya-nyāya before elucidating its metaphysics, epistemology, and logic in their book.

Phillips [1997(1996): 119]: *Classical Indian Metaphysics* regards Gaṅgeśa as the first Navya-nyāya philosopher and gives three main reasons. The first

18 Wada [1996] is my review of this book.

reason is that Udayana's work is not regarded by post-Gaṅgeśa Nyāya philosophers as part of Navya-nyāya. For the second reason Phillips claims that it was Śrīharśa, the 12th century Advaita-vedānta philosopher's criticism of Nyāya in particular Udayana that impelled Gaṅgeśa and others to make innovations in their analytical method.¹⁹ The third reason is that Udayana's definitions suffer from an overall sterility. Explaining this point, Phillips further states that "Gaṅgeśa re-invigorates Nyāya by formulating new definitions that crystallize Nyāya insight and lead to a more profound appreciation of the system — in contrast with Udayana's excessive formalism, which seems blind to students' needs". However, on the same page Phillips says that "probably we should say then that Gaṅgeśa's monumental *Tattvacintāmaṇi* solidifies but does not, strictly speaking, originate Navya-nyāya".

Those who uphold the third view that Udayana is the founder of Navya-nyāya are: Ganganath Jha, Dineshchandra Bhattacharya, Musashi Tachikawa, Bimal Krishna Matilal, Akihiko Akamatsu, Toshihiro Wada, and so forth. We may include in this group Umesh Mishra, whose view was introduced before. Jha [1994(1912-1916): 18]: *Sāḍholāl Lectures on Nyāya* appears to be the first to claim that Udayana was the pioneer of Navya-nyāya. Jha says that Udayana led the way for a rigid course of strict reasoning, which, beginning with his *Nyāyakusumāñjali* and *Ātmatattvaviveka*, reached its final stage in Gaṅgeśa's *Tattvacintāmaṇi*. According to Jha [1994(1912-1916): 20], classical Nyāya is concerned with the object of cognition (*prameya*), while Navya-nyāya is concerned with the definitions of the means of cognition (*pramāṇa*) and the definitions of things (or terms). D. Bhattacharya [1958: 1-2, 39-40]: *History of Navya-Nyāya in Mithil* takes the view that the real founder of Navya-nyāya is Udayana, but regrettably Bhattacharya does not clearly state the reasons for his view. We can infer them from his following statements: that Udayana's *Nyāyakusumāñjali* is a textbook of Navya-nyāya; that there is hardly any topic

¹⁹ Phillips [1997(1996): 4] claims that the criticism by non-Vedāntic philosophers as well as Śrīharśa led the emergence of Navya-nyāya. Phillips [1997(1996): 118] also says that "since it is Udayana who receives the brunt of Śrīharśa's criticism, the legend that Śrīharśa provoked the writing of the *Tattvacintāmaṇi*, although strictly unwarranted, makes good folklore". Granoff [1978], on the other hand, keeps silence on the relation between Śrīharśa and Gaṅgeśa. Śrīharśa's opponents referred to in the first chapter of his *Khaṇḍanakhaṇḍakhāḍya* are listed by Granoff [1978: 3]: the Naiyāyikas Udayana, Vācaspati Mīśra, and Bhāsarvajña; the Mīmāṃsakas Kumārila and Prabhākara; the Buddhists Dharmakīrti, Dharmottara, and Prajñākaragupta, and the Jains Pūjyapāda, Vidyānanda, Samantabhadra and Akalaṅka.

dealt with in the four major divisions of Gaṅgeśa's *Tattvacintāmaṇi* that has not already been discussed by Udayana in his main works and especially in the *Nyāyakusumāñjali*; and that Gaṅgeśa displayed his utmost veneration for Udayana by quoting his works in almost every section of his large work.

Tachikawa [1973: 426]: "On Udayana's *Lakṣaṇāvalī* (1)" claims that Udayana is the real starting point of Navya-nyāya while Gaṅgeśa is its consolidator. He says that Udayana was the first to employ the Navya-nyāya method of description: using long compounds with fewer of the so-called operating words such as *samaveta* ('inhering'; an inhering entity) and *samavetavat* ('the possessor of an inhering entity'). Matilal [1977: 101]: "Nyāya-Vaiśeṣika", following D. Bhattacharya, maintains that Navya-nyāya began with Udayana but does not show his reason for this. Akamatsu [1988: 229-230] regards Udayana as the founder of Navya-nyāya, based upon G. Chemparathy's characterization of Udayana as an inspiring herald of Navya-nyāya. Chemparathy emphasizes in particular the influence of the *Nyāyakusumāñjali* on Navya-nyāya. Akamatsu employs the term Navya-nyāya in two senses: the syncretic school of Nyāya and Vaiśeṣika, and the authors who wrote the commentaries or subcommentaries on Gaṅgeśa's *Tattvacintāmaṇi*. Since he adds that Navya-nyāya generally carries the latter meaning, he takes a middle position between the second and third views on the founder of Navya-nyāya.²⁰ As far as the features of the Navya-nyāya analytical method are concerned, Akamatsu accepts the statement by Ingalls [1951: 1], which we have already seen. Wada [1990: 14]: *Invariable Concomitance in Navya-Nyāya* supports D. Bhattacharya's statement that Udayana is the founder of Navya-nyāya and finds the origin of the Navya-nyāya method of analysis in Udayana's *Lakṣaṇāvalī*, as does Tachikawa. However, unlike Tachikawa, Wada notes that the concept of relation plays an important role in Navya-nyāya analysis.²¹ This fact furnishes the basis for the

20 On the origin of Navya-nyāya logic, Akamatsu [1988: 214] says "Uddyotakara takes the view that inference is possible only between two properties (*dharmas*) when they simultaneously coexist in one and the same place, i.e., locus. The New Nyāya logic develops from the trends of formulating the structure of this inference, clarifying the relation between two properties as pervasion (*vyāpti*), and connecting pervasion with the reconsideration of the logical sign (*liṅgaparāmarśa*)". This statement explains to some extent the fact that Navya-nyāya literature includes a great deal of discussion on pervasion by post-Gaṅgeśa Navya-nyāya authors. We have to evaluate Akamatsu's attempt to answer the question of the origin of Navya-nyāya logic in a concrete context. However, it is an on-going issue whether Navya-nyāya develops from the connection of pervasion with the reconsideration of the logical sign.

21 Wada [1990: 22]

discussion in sections five and six of this paper.

Taking together all the statements of the scholars discussed above, there appear to be three main points: that (1) the Indian tradition does not regard Udayana as a Navya-nyāya author; instead, the tradition considers the authors who wrote commentaries or subcommentaries on the *Tattvacintāmaṇi* as forming the stream of Navya-nyāya; (2) Udayana did not put the means of knowledge (*pramāṇa*) at the center of his philosophical system; (3) the Navya-nyāya terminology cannot be traced back to Udayana. The above three statements in and of themselves do not provide sufficient grounds for regarding Udayana as the founder of Navya-nyāya. If, on the other hand, one regards Gaṅgeśa as the founder, the above statements do not contradict this conclusion nor do they support it.

Among the scholars who hold that Gaṅgeśa is the founder, only Phillips [1997(1996): 119] offers reasons that are substantially different from the above three. The first reason is that Śrīharśa impelled Gaṅgeśa and others to make innovations in their analytical method. Phillips' contribution consists of employing the two concepts of idealism and realism to contrast Śrīharśa's and Gaṅgeśa's standpoints respectively,²² While he is aware that Udayana pioneered some techniques inherited by Navya-nyāya, he fails to investigate fully the similarity between Udayana's and Navya-nyāya's methods of analysis.²³ On the whole Phillips relies too much on past research on Udayana's position and thus tends to overlook the continuity between Udayana and Gaṅgeśa.

The second reason given by Phillips is that "Gaṅgeśa re-invigorates Nyāya by formulating new definitions that crystallize Nyāya insight and lead to a more profound appreciation of the system in contrast with Udayana's excessive formalism". This reason is not persuasive either. We can, if anything, assume that Udayana's excessive formalism provided the model for Gaṅgeśa's or Navya-

²² On Phillips' definitions of idealism and realism, see Phillips [1997: 1]. His work is a valuable contribution to historical research on early Navya-nyāya, an area which on the whole has been neglected. This work also facilitates to a great extent our understanding of Indian philosophy from the viewpoint of the idealist and realist controversy.

²³ Phillips [1997(1996): 118-119] states that "Udayana pioneered some of the techniques identified with New Logic". For instance, we know Udayana's method was inherited to Navya-nyāya in Phillips [1997(1996): 48, 56, 57-60, 63, 64-65, 66-69]. Phillips [1997(1996): 97] is clearly aware of Udayana's method of formulating definition and says that "in early Nyāya, salient differentiating features are focused upon, while Udayana, in contrast, insists on mere differentiation". He does not mention this characteristic of Udayana as providing a link between Udayana and Navya-nyāya.

nyāya's method of analysis to a great extent, as Tachikawa [1973: 426] points out. Thus, we can conclude this section by stating that neither Phillips' reasons, nor those given by the other scholars, support the claim that Gaṅgeśa founded Navya-nyāya.

IV. The features of Navya-nyāya

From the research discussed in the previous section we know the main features of Navya-nyāya to be the following: (1) its principal text is Gaṅgeśa's *Tattvacintāmaṇi*; (2) its arguments are organized under the framework of the means of valid cognition; (3) its elaborate arguments lead to precise definition of terms; (4) Navya-nyāya devised a terminology which makes (3) possible. At first glance, these four features might appear to bolster the claim that Gaṅgeśa is the founder of Navya-nyāya. But, leaving aside feature (1) for the moment, we can say that features (2), (3), and (4), each by itself, do not exclusively support this claim.

With regard to the second feature, it is Bhāsarvajña (860-920) and not Gaṅgeśa who first argued under the framework of the means of valid cognition. His *Nyāyasāra* consists of three chapters entitled perception, inference, and verbal testimony respectively. It is unreasonable to contend that the third and fourth features are found only in Gaṅgeśa and later authors, because the Navya-nyāya term *avacchedaka* (delimiter) is employed in the works of pre-Gaṅgeśa authors, such as the *Nyāyasiddhāntadīpa*²⁴ of Śaśadhara (1275-1325) and the *Nyāyaratna* of Maṇikaṅṭha Miśra (1275-1325).²⁵

Thus, we can conclude that each of the three features do not exclusively support the view that Gaṅgeśa founded Navya-nyāya. The first feature — that the principal text is the *Tattvacintāmaṇi* — does not contradict the view that Navya-nyāya was founded by Udayana. That is because there is no rule that a text written by the founder must be the principal one of his school. If, however, we interpret

²⁴ Matilal [1976: 17] presumes that the *Nyāyasiddhāntadīpa* was written no earlier than 1200 A.D.

²⁵ The concept of *avacchedaka* is frequently used in the Vyāptivāda of the *Nyāyasiddhāntadīpa* and in the Parāmarśavāda of the *Nyāyaratna*. In the former text the term *nirūpaka* appears twice, but at present we cannot determine whether it is used in the Navya-nyāya technical sense.

feature (1) as an 'extrinsic' rather than 'intrinsic' feature, we might naturally conclude that Gaṅgeśa founded Navya-nyāya. This conclusion appears reasonable if we consider that it is Gaṅgeśa who simultaneously possesses the 'internal' features (2), (3), and (4).

Before proceeding further, we should stop to reflect on our method of solving the problem. We started out by investigating what are the features of Navya-nyāya, and enumerated four main ones. But in enumerating them we seem to have unconsciously taken into account only Gaṅgeśa and post-Gaṅgeśa authors. As a result we appear to have fallen into circular reasoning, and to avoid this we need to find a new starting point.

But in order to find quite a new starting point, we must necessarily look again at the four main features of Navya-nyāya. None of the three views on who is the founder of Navya-nyāya casts any light on the connection among the 'internal' features (2), (3), and (4). These features, which at first glance appear unrelated to one another, do not give us a clear and coherent picture of the Navya-nyāya system. If we could arrive at one concept which would explain the connection among (2), (3), and (4) and give us a clear and coherent picture of the Navya-nyāya system, that concept will facilitate our understanding of the historical and philosophical significance of Navya-nyāya. Moreover, it might answer our question of who founded Navya-nyāya.

That single concept is 'relation' (*sambandha*). Navya-nyāya makes clear the structure of the world in terms of relation. Relation does not exist in the world independently of cognition but is produced by cognition. From the realistic viewpoint Navya-nyāya maintains that cognition grasps as its object relation produced by another cognition. Accordingly, cognition carries so much importance that the means of getting cognition is also looked upon as important. Thus, the key term, or concept 'relation', enables us to explain why feature (2) is characteristic of Navya-nyāya.

Furthermore, this key term can also explain why (3) and (4): elaborate argument about terms and their definitions, and a new terminology are the features of Navya-nyāya. Two terms characteristic of Navya-nyāya are *avacchedaka* (delimitor) and *nirūpaka* (describer), to which all modern scholars will agree. To my knowledge, these two terms are employed to specify, or 'identify', relation, and hence we can derive features (3) and (4) from the Navya-

nyāya approach of interpreting the structure of the world in terms of relation. We will see the function of these two terms in the sixth section of the present paper.

If we stress this approach of Navya-nyāya, there is no necessity to regard Gaṅgeśa as the founder. If, on the other hand, we can demonstrate that Udayana takes such an approach and has exerted a strong influence on Gaṅgeśa, we will have sufficient reason to regard Udayana as the founder.²⁶

V. Definition in terms of relation

We will now see how Udayana formulates definitions in terms of relation. For comparison, we will take Praśastapāda (550-600), who flourished long before him, and focus on their definitions of substance (*dravya*). The question arises of whether it is meaningful to compare the definitions formulated by two persons belonging to different schools: Praśastapāda belongs to Vaiśeṣika, and Udayana to Navya-nyāya in my view. The latter school represents a synthesis of the Vaiśeṣika and Nyāya schools, and so it makes sense to compare Praśastapāda's and Udayana's definitions.

In his *Padārthadharmasaṃgraha* (p. 20, 14-16²⁷), Praśastapāda enumerates five common features of a substance: (1) its being connected with substanceness (*dravyatva*), (2) its producing its own effect, (3) its possessing qualities (*guṇa*), (4) its not being destroyed by cause and effect, (5) its possessing a particular (*viśeṣa*). According to Vyomaśiva (900-960) and Śrīdhara (950-1000), feature (2) means that a substance is an inherent cause (*samavāyikāraṇa*) of a quality and an action (*karman*).²⁸ Hence, feature (2) presupposes a quality and an action. As to

26 We face another problem: why Udayana interprets the structure of the world in terms of relation. I propose as a solution to this problem the two working concepts: Indian realism and nominalism. The former presumes the reality of the external world, while the latter does not. Udayana defended the Nyāya-Vaiśeṣika realistic position against the Buddhist nominalistic position. On Indian realism and nominalism, see Tachikawa [1981: 9-10]. Gaṅgeśa wrote the *Tattvacintāmaṇi* in order to defend his realistic position against the nominalistic position of Śrīharṣa, an Advaita philosopher. To understand the opposition between Śrīharṣa and Gaṅgeśa, Phillips [1997(1996)] is useful. Phillips employs the term idealist/idealism, while I use the term nominalist/nominalism with the same meaning.

27 *pr̥thivyādīnām navānām api dravyatvayogaḥ svātmany ārambhakatvaṃ guṇavattvaṃ kāryakāraṇāvirodhitvaṃ antyaviśeṣavattvaṃ.*

28 *Vyomavati*, p. 44,16-17: *evam svaś cāsāv ātmā ceti svātmā, tasminn ārambhakatvaṃ, svātmasamavetakāryajanakatvaṃ samavāyikāraṇatvaṃ iti yāvat. Nyāyakandaḷī*, p. 21,2-3: *svātmany ārambhakatvaṃ iti. svasamavetakāryajanakatvaṃ ity arthaḥ. Kiraṇāvalī*, p. 23. 6-7: *svātmany ārambhakatvaṃ svasamavetakāryakāritvaṃ samavāyikāraṇatvaṃ ity arthaḥ.*

feature (4), Śrīdhara is of the opinion that it is intended for discriminating a substance from sound,²⁹ and so feature (4) cannot be the substantial definition of substance.³⁰ Features (1) - (3) and (5) are substantial and presuppose entities expressed by absolute general terms, i.e., 'substanceness', 'generic property' or 'universal' (*sāmānya, jāti*), 'quality', 'action', and 'particular'. Absolute general terms are those which apply to an individual thing such as a human being, a pot, and so on.³¹

Udayana, on the other hand, gives four definitions of a substance in his *Lakṣaṇāvalī*, and one of them contains only a relative general term. Relative general terms are those which, unlike absolute general terms, apply to things in a paired set, for instance, cause, father, and so on.³² When we say that A is the cause, we presume its effect. The definition containing only a relative general term runs as follows: a substance is an entity which has inhering [in itself] an property which has inhering [in itself] another property: *samavetasamaveta-samaveta*.³³ We need not concern ourselves here with what this definition means for it is clearly analyzed and expounded by Tachikawa [1973: 426; 1981: 57, 91]. The relative general term contained in the definition is *samaveta*, which means 'inhering' or 'an inhering entity', and no other term is used in the definition. Udayana employs this term presuming the term *samavetavat*, which means 'the possessor of an inhering entity'. Since both terms apply to a set of two entities, one of which inheres in the other, they are relative general terms. Therefore, we can say that Udayana presents the definition only in terms of a relative general term. To apply a general term to an entity means that the entity is regarded as being related to another entity.

Let us look at the other three definitions formulated by Udayana. They run as

29 *Nyāyakandalī*, p. 21,4-10: *kāryakāraṇāvirodhitvam. guṇo hi kvacit kāryeṇa vināśyate yathādyah śabdo dvitīyaśabdena kvacit kāraṇena vināśyate yathāntyah śabda upāntyaśabdena karmāpi kāryeṇa vināśyate yathottarasamyogena dravyāṇi tu na vināśyante nāpi kāraṇeneti kāryakāraṇāvirodhīni nityānām kāraṇavināśayor abhāvād eva kāraṇenāvināśaḥ anityadravyāṇām kāraṇavināśayoh sambhave 'pi kāraṇena na vināśaḥ kiṃ tv anyeneti vivekaḥ.*

30 Vyomaśiva clarifies (4) in two cases: when it consists of a single property (*Vyomavatī*, p. 44,22-24) or two properties (*Vyomavatī*, pp. 44,25-45,15). In the former case, he does not make clear what this single property is. In the latter case, he concludes that neither property can be the definition of a substance.

31 On this term, see Matilal [1968: 31]. Matilal uses it by following Quine [1960: 105].

32 On this term, see Matilal [1968: 31]. Matilal uses it by following Quine [1960: 105]. A relative general term can naturally be used as an absolute general term.

33 *Lakṣaṇāvalī*, p. 56, no. 12.

follows: a substance is not the locus of a constant absence of a quality (*tatra guṇātyantābhāvānadhikaraṇaṃ dravyam. Lakṣaṇāvalī*, p. 56, no. 9); a substance is the possessor of a generic property which inheres in that which lacks corporeality and in that which lacks incorporeality and which (property) lacks the state of inhering in that which inheres in that which lacks incorporeality (*mūrtatvarahitasamavetasamavetatvarahitamūrtatvarahitāmūrtatvarahitasamavetajātīmad vā. Lakṣaṇāvalī*, p. 56, no. 10); a substance is the possessor of a generic property which inheres in space and in a lotus but does not inhere in smell (*gandhāsamavetagaganāravindasamavetajātīmad dravyam. Lakṣaṇāvalī*, p. 56, no. 11).³⁴ These three definitions do not necessarily have relative general terms for their constituents, but in the second definition the term ‘*samaveta*’ (‘inhering’) appears three times, and in the third twice. It is obvious that Udayana formulates these definitions by consciously and repeatedly employing this relative term.

All the definitions of a quality, an action, a generic property, a particular, and inherence in the *Lakṣaṇāvalī* also include the relative general term ‘inhering’ or ‘sharing a locus with’ (*samānādhikaraṇa*).³⁵ ‘Sharing a locus with’ denotes a symmetrical relation between x and y when x and y exist in one and the same locus z . We can say: x is that which shares a locus with y , and y is that which shares a locus with x . The term ‘*samānādhikaraṇa*’, which means ‘sharing a locus with’, applies to x and y , and hence it is a relative general term. This term is not necessarily peculiar to Navya-nyāya, but its frequent use is characteristic of the Navya-nyāya method of description.

In the above discussion, we have seen how Udayana formulates his definition of a substance in terms of relation, i.e., by using relative general terms. We have focused here on his definition of a substance, but we note that he also formulates other definitions using relative general terms, i.e., his definitions of a quality, action, and so forth. In the next section we will show the importance of relation in Navya-nyāya by analyzing the function of two terms: *avacchedaka* (delimiter) and *nirūpaka* (describer). It should be pointed out that past research also supports the claim that relation plays an important role in the system. Guha [1968: 56] calls Navya-nyāya relational logic, which shows that Guha recognizes

34 *Lakṣaṇāvalī*, p. 56, no. 12.

35 On the definitions of a quality, an action, a generic property, a particular, and inherence, see Tachikawa [1976; 1981: 73, 83, 85].

the important function of relation in Navya-nyāya.³⁶ As mentioned in the third section of this paper, Potter and Bhattacharyya [1993: 15-18] point out the central importance of both relation and awareness (*jñāna*) in Navya-nyāya and devote a chapter of their book to an analysis of these two concepts. We note that many books on Navya-nyāya deal with the topic of relation, though they may not explicitly state its importance in the system.

VI. Conclusion

Navya-nyāya describes the structure of the world in terms of relation. For this task it developed a specific terminology including the terms delimiter and describer. Udayana did not use either term, while Śāśadhara and Maṇikaṇṭha both used delimiter frequently in the technical sense. Gaṅgeśa in his *Tattvacintāmaṇi* made technical use of both delimiter and describer: the former term more frequently than the latter. The term describer appears more often in later Navya-nyāya texts, such as the *Nyāyabodhinī* of Gavardhana in the seventeenth century. If we hold that Navya-nyāya is a system which describes the world in terms of relation, we can certainly trace this approach back to at least before Gaṅgeśa, and even further before Udayana if we can find a pre-Udayana author who noted the importance of relation in his system. But we cannot assert that Navya-nyāya was originated by any philosopher who first recognized its importance. To solve the problem of who adopted such an approach first, we should take into consideration other aspects of the relationship between such a philosopher and Gaṅgeśa. Past research on the relationship between Udayana and Gaṅgeśa has made it clear that Udayana's *Nyāyakusumāñjari* and *Ātmattvaviveka* exerted great influence on Gaṅgeśa.³⁷ Taking this into account, we can claim at least that it is possible to find in Udayana the origin of analysis in terms of relation.

³⁶ Guha [1968], however, does not make clear the connection between relation and Navya-nyāya terms such as delimiter (*avacchedaka*) and describer (*nirūpaka*).

³⁷ Jha [1994(1912-1916): 18] and D. Bhattacharya [1958: 1-2] discuss this influence. These two works are referred to in the second section of the present paper under the discussion of the third view that Udayana founded Navya-nyāya.

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A NAVYA-NYĀYA PRESUPPOSITION IN DETERMINING THE MEANING OF WORDS

I. Introduction

One of the central questions in the history of Indian philosophy of language is what the meaning of a word is. Kātyāyana (ca. 3rd century B.C.) presents two views on this in his *Vārttika* on Pāṇini's *Aṣṭādhyayī* or *Pāṇinisūtra* (P.1.2.64): the view of Vājapyāyana that a word denotes a universal and the view of Vyāḍi that a word denotes an individual thing. For Mīmāṃsā philosophers the Vedas are an eternal authority, and the relation between a word and its meaning is unchangeable. Accordingly, they hold that a word denotes a universal (*ākṛti*), which is an eternal entity.³⁸ On the other hand, Nyāya philosophers take the view that a word denotes an individual thing, form, and a universal, or that in the cognition of the meaning of a word one of these three becomes prominent, the other two functioning as subordinate.³⁹ Navya-nyāya philosophers advocate the view that an individual entity qualified by a universal is the meaning of a word. For example, the word "go" (cow) denotes an individual cow possessed of the universal cowness (*gotva*).⁴⁰

One of the popular manuals of Navya-nyāya in the Indian tradition, the *Nyāyasiddhāntamuktāvalī* (NSM) written by Viśvanātha in the 17th century, a commentary on the *Bhaṣāpariccheda* (also called the *Kārikāvalī*), presents eight methods of determining the meaning of a word in the following verse:

38 *Ślokaṅvārttika*, Ākṛtivāda k. 1 (p. 385,1-3): *ākṛtivyatirikte 'rthe sambandho nityatāsyā ca / na siddhyetām iti jñātvā tadvācyaṭvam ihocyate // 1 //* (Trans.: If the meaning of a word is that which is different from an *ākṛti* (universal or form), the relation [between a word and its meaning] and the eternity [of the relation] would not be established. Being aware of this, [we will] explain here [in this chapter] how [a word] denotes that [*ākṛti*]).

39 *Nyāyasūtra* 2.2.66: *vyaktyākṛtijātayas tu padārthah*. On the relationship among an individual thing, form and a universal, see the *Nyāyabhāṣya* on this *sūtra*.

40 *Maṇikaṇa*, p. 80,6-7: *vastutaḥ samavāyena gotvaviśiṣṭā vyaktiḥ gośabdaśakyā*.

*śaktigrahaṃ vyākaraṇopamānakośāptavākyaḍ vyavahārataś ca /
vākyaśya śeṣād vivṛter vadanti sām̄nidhyataḥ siddhapadaśya vṛddhāḥ //*
(NSM, p. 46,18-19.)

The elders say that the denotative function is apprehended through grammar, comparison, a dictionary, the statement of a trustworthy person, common usage, the rest of the statement, paraphrase, and proximity of a well-known word.

According to Kunjunni Raja [1977(1963): 26], Gaṅgeśa, who lived in the 14th century, provides seven methods except ‘proximity of a well-known word’ (*sām̄nidhyataḥ siddhapadaśya*) among the above-mentioned eight in his *Tattvacintāmaṇi* (TC);⁴¹ Mathurānātha, who lived in the 17th century, wrote a commentary on the TC entitled *Tattvacintāmaṇirahasya* (p. 481,8-10), which includes the above-mentioned verse. Hence, it is clear that those seven or eight methods prevail throughout the history of Navya-nyāya.⁴²

The present paper aims at clarifying one of the principles used by the Navya-nyāya philosophers in determining the meaning of a word which underlies the methods given in the verse. For this task, I will take up Gaṅgeśa’s discussion of the meaning of the suffix of a finite verb (*ākhyāta*),⁴³ i.e., the “Verbal Suffix Section” (*Ākyātavāda*) of his TC. In this section through his dispute with the Mīmāṃsā philosophers and the grammarians he utilizes the principle that it is more preferable or simpler to assume that all the entities denoted by a word possess a common property which is a universal (*sāmānya, jāti*) than to assume that those entities denoted by the word possess a common property which is not a universal. In examining this principle, I would like to focus on three aspects: (1) from what viewpoint is the former assumption simpler than the latter, (2) whether

41 TC, Vol. 4, Pt. 2, p. 649,6-10: *iśvarasaṅketajñānañ ca vyavahārāt upamānāt prasiddhārthapadasāmānādihikaranyāt āptopadeśāt, yavarāhendrādiśabdeṣu vākyaśeṣāt kośāt tadabhyuktendrapāninyādipraṇītaśabdānuśāsanāc ca teṣāṃ sādhuśādhuvibhāga evādihikarāt*. Kunjunni Raja gives the page numbers of this Sanskrit text but does not say how many methods Gaṅgeśa acknowledges.

42 On details of the eight methods, see Kunjunni Raja [1977(1963): 26-31]. Wada [1990a] [1992] [1993] [1995] [1996] provides a Japanese translation of the NSM (pp. 46,4-48,6) on the verse with annotation.

43 The term *ākhyāta* has two meanings: a finite verb and the personal ending of a finite verb (*tiṅ* suffix). On these two meanings, see Joshi [1993: 22]. He reports that the *Mīmāṃsānyāya-prakāśa*, which was written in the seventeenth century, uses the term in the second sense. But the TC shows earlier use of the term in this sense. On *tiṅ* suffixes, see P.3.4.78 and Abhyankar and Shukla [1977: 197].

we can further universalize this principle, and (3) why is this principle followed by Navya-nyāya. It should be noted that in this paper I have used ‘word’ to signify not only a so-called word but also a meaningful linguistic unit smaller than a word, or a morpheme, such as a suffix and a prefix.

II. The Principle Used in the “Verbal suffix Chapter”⁴⁴ of the TC

Gaṅgeśa states the above principle five times in his “Verbal Suffix Chapter”. We will analyze each case separately. In order to understand the contexts in which the principle is mentioned, I have shown below the contents of the chapter by dividing it into six parts:

- (1) Introduction: the presentation of the fundamental view of Nyāya (pp. 819,1-820,1),
- (2) the Mīmāṃsā view (pp. 820,1-826,13),
- (3) the Nyāya refutation (pp. 826,13-830,8),
- (4) the View of the author of the *Ratnakośa* (pp. 830,9-831,13),
- (5) the refutation of the author of the *Ratnakośa* (pp. 831,13-834,4),
- (6) the Nyāya view in detail (pp. 834,4-846,4).

First Case

The first occurrence of the principle in question is in the beginning of Part (3). In Part (1) Gaṅgeśa demonstrates the general view of Nyāya that the verbal suffix, for example, *-ti* of “*pacati*” in the sentence “*devadattaḥ pacati*” (Devadatta cooks), denotes effort (*prayatna*, *yatna*, *kṛti*), which is one of twenty-four varieties of a quality (*guṇa*) and occurs only in the soul (*ātman*). Effort is a kind of resolution that causes one to move into action.⁴⁵ In Part (2) he has the first

⁴⁴ In this paper ‘a verbal suffix’ means the suffix of a finite verb. The “Verbal Suffix Chapter” (Parts 1 and 2) is translated with annotation by Wada [forthcoming].

⁴⁵ The existence of effort is inferred from the causal link of the human act. Nyāya holds that knowledge or cognition (*jñāna*) causes desire (*icchā*), which produces effort, which brings about action. To understand the relation among cognition, desire, effort, and action, let us consider the case in which we quench our thirst with water. First, we must know that water can remove our thirst and recognize that there is some water within our reach. Second, we have a desire to take and drink some water. If we have no desire, action does not take place. But due to certain reasons we do not always take action immediately after we have such a desire. For instance, there may be dead insects in the water and so on. Hence, we can infer that there must be an intervening factor which is produced by the preceding desire and which brings about the action of drinking. That is effort. (This footnote is based upon Wada [forthcoming], which provides the Sanskrit sources for the Nyāya view of the causal relationship among cognition, desire, effort, and action.) On the

opponent(s), the Mīmāṃsā philosopher(s), argue that the verbal suffix denotes operation (*vyāpāra*), which can occur in both sentient and insentient beings.⁴⁶ For example, when one says that “*devadatto gacchati*” (Devadatta goes), the suffix *-ti* of “*gacchati*” denotes operation conducive to the action of going which (operation) occurs in his soul and which corresponds to effort in the Nyāya system. When one says “*ratho gacchati*” (the chariot goes), the suffix *-ti* denotes operation which is conducive to the action of going and which is nothing but the contact of the wheels with the ground in front and the separation of them from the ground in back.⁴⁷ In response to this view of Mīmāṃsā Gaṅgeśa⁴⁸ answers the following:

meaning of “*devadatto gacchati*” (Devadatta goes), Nyāya or Gaṅgeśa analyzes that the root *gam* denotes the action of going, that the suffix *-ti* of “*gacchati*” denotes effort, and that effort is conducive to that action. Thus, he obtains the following meaning: “Devadatta who is the possessor of effort conducive to the action of going”. On the Indian theories of the meaning of a sentence, see Rao [1969: 4-36]; Wada [forthcoming].

46 We can understand from the following statement of Gaṅgeśa that the Mīmāṃsā philosophers refer to the meaning (= denoted object) of the suffix which takes place in both sentient and insentient beings. *TC*, Vol. 4 Pt. 2, pp. 820,1-6: *atra vadanti ākhyātasya karoteś ca na yatnārthatvaṃ ratho gacchati jānāti yatate nidrātīyādau dhātvarthānukūla-yatnābhāve 'py ākhyātaprayogāt gamanaṃ karotīti karotīnā tatrākhyātavivaraṇāc ca tatra vyāpārasya karotyarthatve cetane 'pi tathā. na ca tatrākhyātakarotyor gaṇatvaṃ mukhye bādhakābhāvāt.* (Trans.: On this point [the Mīmāṃsā philosophers of the Bhāṭṭa school] say the following. Neither the verbal suffix nor the verb “*karoti*” denotes effort, because a verbal suffix is used even when it is impossible [to obtain] effort conducive to the meaning denoted by the root in the case of “*ratho gacchati*” (the chariot goes), “*jānāti*” ([he] knows), “*nidrāti*” ([he] sleeps), and so forth, and because a verbal suffix is paraphrased as ‘*karoti*’ in the case where [“*gacchati*”] is paraphrased as “*gamaṇaṃ karoti*” ([he] does the going). In that case, if operation (*vyāpāra*) is the meaning of ‘*karoti*’ [used in the paraphrase], [this meaning (= denoted object) can] similarly [occur] in sentient [agents]. In that case, the usage of the verbal suffix [*-ti* or *-te* in the above four expressions] and “*karoti*” [in the paraphrase] is not figurative (*gaṇa*), for there is no impediment to [interpreting “*gamaṇaṃ karoti*” as] a primary [usage] (*mukhya*).)

47 Cf. *Mīmāṃsānyāyaprakāśa*, p. 272, Text 389: *tatra ko 'sau vyāpāra ity apekṣāyām pūrvottarāvāntaradeśavibhajanasaṃyojanarūpa iti paścād avagamyate: pūrveṇa pradeṣeṇa vibhajottarareṇa saṃyujya ratho grāmaṃ gacchatiṭi prayogāt, udyamya nīpātya kuṭhāreṇa chinnatīvat.* (Trans. by Edgerton [1929: 187]: So then, in response to the question “What is that operation?”, afterwards it is defined (as to manner) as consisting of separation from and uniting with (advancing to) earlier, later, and intermediate places, by the employment (or understanding) of such a sentence as “By separating (departing) from an earlier place and uniting with (advancing to) a later one, the wagon goes to the village.” Just as in the words “By raising and lowering (it), with the axe he cuts.”)

48 To be precise, not all the Nyāya views provided in the “Verbal Suffix Chapter” would necessarily be accepted by Gaṅgeśa. However, in the present paper I have regarded Gaṅgeśa as representative of all the Nyāya philosophers, with the exception of the author of the *Ratnakośa*, for convenience sake. The chapter is written in the style of catechism, and it is not certain that the only one opponent raises questions, and that the only one proponent answers them in each part of the chapter. Nor is it clear whether the opponent in Parts 2, 4, and some portions of Part 5 dealing with the views of Mīmāṃsā, Taraṇi, and the grammarians can be identified with Gaṅgeśa. Of course, it is not guaranteed either that the proponent in Parts 3, 5, and some portions of Part 5 dealing with the views of Nyāya or the traditional Nyāya can be identified with him. What we can

ucyate. caitraḥ pacatīty atra pākānukūlayatnānubhavād yatna evākhyātārtho lāghavāt na tv anukūlo vyāpārah yatnatvāpekṣayā vyāpāratvasyopādhitvena gauravāt. (TC, Vol. 4, Pt. 2, pp. 826,13-827,1.)

[In response to all the discussion above the Nyāya philosophers] say [the following:] Since [we] comprehend effort conducive to cooking in the case of [hearing] “*pacati*”, effort alone is the meaning of the verbal suffix due to simplicity. And operation conducive to [cooking] is not [its meaning], because operationness, being an imposed property, is burdensome in comparison to effortness.

Here Gaṅgeśa contends that it is simpler (*lāghava*) to make use of a universal than an imposed property (*upādhi*), but he does not mention from what viewpoint this contention is true. He focuses on operationness (*vyāpāratva*) existing in operation, which is regarded as the meaning⁴⁹ of *-ti* according to Mīmāṃsā, and effortness (*yatnatva*) existing in effort, which is regarded as its meaning according to Nyāya. According to Mīmāṃsā, operationness is the ground for applying or using the suffix (*pravṛttinimitta*) with reference to operation, while, according to Nyāya, effortness is the ground for using the suffix with reference to effort. To take an example, Indian tradition considers that one can apply or use the word “*go*” with reference to cows, because they possess cowness (*gotva*). Hence, cowness is regarded as the ground for using the word “*go*” with reference to cows. Thus, we can say that Gaṅgeśa *may* refer to the two properties, i.e., operationness, which is an imposed property, and effortness, which is a universal, to compare them from the viewpoint of the ground for using the word.⁵⁰

There is another possible reason why Gaṅgeśa speaks about both operationness and effortness. Mīmāṃsā holds that operation, conducive (*anukūla*) to action denoted by the root, is denoted (*śakya*) by the verbal suffix,⁵¹ and in all

say with certainty is that the view expressed by new people (*navinās*) in the final portion of Part 6 (pp. 844,9-846,2) is ascribed to Gaṅgeśa.

⁴⁹ The meaning (*artha*) of a word is quite often the object referred to by the word according to the Indian realists such as the Mīmāṃsā and Nyāya philosophers. It depends upon the context whether we should render the word *artha* as ‘meaning’ or ‘object/thing’.

⁵⁰ Gaṅgeśa seems to be aware that when determining the meaning of the suffix, one method is to deal with the ground for using the suffix, for Udayana, who lived in the 11th century, presents in his *Nyāyakusumāñjali* (p. 532,5-6) the objection referring to the ground for using the suffix: *tathāpi phalānugunataivāstu pratyayasya pravṛttinimittam, prayatnas tv ākṣepato lapsyate iti cet* (Trans. In spite of the above discussion the ground for using the suffix should be the state of being favorable to the effect, and effort will be obtained from implication.).

⁵¹ The meaning of the sentence “*devadatto gacchati*” according to the Mīmāṃsā theory would be: “operation which occurs in Devadatta and which is conducive to the action of going”

such operation there is operationness. In all operation denotedness (*śakyatva*) also exists, and this property is regarded as being confined by operationness to all operation. In other words, operationness is the delimiter⁵² of denotedness (*śakyatāvacchedaka*). Similarly, Nyāya holds that effort, conducive to action denoted by the root, is denoted by the suffix, so in all such effort there is effortness. All effort possesses denotedness, which is regarded as being confined by effortness to all effort. Thus, in the Nyāya view effortness is the delimiter of denotedness. We can also say that Gaṅgeśa *may* mention those two properties to compare them from the viewpoint of the delimiter of denotedness.

We cannot determine which concept Gaṅgeśa bears in mind: ‘the ground for using the word’ or ‘the delimiter of denotedness’. It is not possible that he is not aware of the delimiter of denotedness, since he utilizes it in his *TC*.⁵³ Regarding these two concepts, Matilal [1968: 27] remarks that in Navya-nyāya the ground for using the word is considered the delimiter of denotedness. We can understand from the above explanation that Matilal’s remark holds true.⁵⁴

We should next see why a universal is simpler than an imposed property (*upādhi*) in thinking of ‘the ground for using a word’ or ‘the delimiter of denotedness’. The term *upādhi* is employed in three senses in Navya-nyāya: an obstruction, a superimposed condition, or an imposed property.⁵⁵ According to Ingalls [1951: 40-42], imposed properties are further classified as three varieties: (1) a property, such as Devadatta-ness (*devadattatva*), by which a member of what we should call a unit class is recognized, (2) the qualifier (*viśeṣaṇa*) of a universal such as potness-ness (*ghaṭatvatva*), and (3) a compound property such

(*devadattaniṣṭhaḥ pākānukūlavypārah*). On the Mīmāṃsā theory of the meaning of a sentence, see Rao [1969: 24-34]; Wada [forthcoming].

52 On the concept of delimiter (*avacchedaka*), see Wada [1990b: 81-98] [1999: 32-34] [2001: 522-524].

53 Cf. *TC*, Vol., 4, Pt., pp. 491,2; 539,5; 672,1; 758,5 etc.

54 Matilal’s remark coincides with the explanation given in the *Nyāyakośa* (p. 580), which glosses *pravṛttinimitam* as *padaśakyatāvacchedakam*.

55 Phillips and Tatacharya [2002: 14-26] dexterously explain these three varieties and name them the inferential *upādhi*, the *upādhi* in an epistemological sense, and the *upādhi* in an ontological sense respectively. An obstruction is that which proves an inference to be invalid. A superimposed condition is that which is reflected in something that lacks the condition; for example, the red color of a red flower is superimposed on a crystal placed near the flower. An imposed property is unreal in a sense, and Phillips and Tatacharya [2002: 25] call it a surplus property. Halbfass [1992] renders *upādhi* as nominal property (p. 119), imposed property (p. 153), nonobjective property (p. 156), and superimposed condition (p. 252), but he does not classify *upādhi*.

as beastness (*paśutva*). To explain the third one, since a beast is defined as “that which has hair and a tail”, beastness is nothing but a combination of hairyness and tailedness.⁵⁶

The ground for using a word is, in reality, a property which exists only in all entities denoted by the word. To say that the suffix *-ti* denotes effort, as Nyaya does, means that the ground for using the suffix is effectness, which is a universal existing in all effort and is a single entity. Accordingly, the entities denoted by the suffix are regarded as belonging to one class.⁵⁷

On the other hand, to say that the suffix denotes operation (*vyāpāra*), as Mīmāṃsā does, means that the ground for using the suffix is operationness (*vyāpāratva*), which is an imposed property according to Gaṅgeśa. The imposed property here is not a single entity, but a combination of three entities: (1) effortness, (2) the state of being the contact of the wheels with the ground in front (*pūrvadeśasamyogatva*), and (3) the state of being the separation of the wheels from the ground in back (*uttaradeśavibhāgatva*).⁵⁸ Such an imposed property corresponds to the third variety presented by Ingalls. Operation can exist in souls or other substances (*dravya*);⁵⁹ when one says “*devadatto gacchati*” (Devadatta goes), operation denoted by the suffix *-ti* is nothing but effort occurring in Devadatta; when one says “*ratho gacchati*” (the chariot goes), operation denoted by the suffix is nothing but ‘the contact of the wheels with the ground in front’ and ‘the separation of the wheels from the ground in back’ occurring in the chariot. In the former case the ground for using the suffix is effectness residing in any effect that is conducive to the action of going denoted by the root *gam*, while in the latter case the ground is the state of being ‘the contact of the wheels with

⁵⁶ Dravid [1972: 25-33] explains the difference between a universal and an imposed property by referring to Udayana’s list of impediments to universals (*jātibādhaka*) given in his *Kiraṇāvalī*.

⁵⁷ We can consider the class referred to in this paper to be a natural kind. The classification of substances, qualities, and actions provides us with a kind of natural taxonomy. Since universals exist in these entities, we can say that they give us this taxonomy.

⁵⁸ On these two states, see the *Mīmāṃsānyāyaprakāśa* quoted in footnote 10. Since the two states consecutively (not simultaneously according to Nyaya-Vaiśeṣika) occur in the moving chariot, it would be possible to combine them into one state, for example, the state of being ‘the separation of the wheels from the ground in back’ qualified by ‘the contact of the wheels with the ground in front’ (*pūrvadeśasamyogatve sati uttaradeśavibhāgatvam*’ or *pūrvadeśasamyogatva-viśiṣṭottaradeśavibhāgatvam*’).

⁵⁹ Substance is of nine kinds in Nyāya-Vaiśeṣika: earth, water, fire, wind, space, time, direction, soul, an internal organ (*Vaiśeṣikasūtra*, 1.1.4: *prthivyaptejo vāyur ākāśaṃ kālo dig ātmā mana iti dravyāṇi*).

the forward ground' and the state of being 'the separation of the wheels from the backward ground' occurring in such contact and separation as are conducive to the action of going denoted by the root meaning *gam*. Effectness is a universal, while these two states are not universals. When one says that the ground for using the suffix is operationness, one in reality refers to one universal and those two imposed properties. Accordingly, the entities denoted by the suffix are regarded as belonging to either class: that of the loci of effectness or that of the loci of those states. This result indicates that Nyāya deals with one class when thinking about the meaning of the suffix, while Mīmāṃsā deals with three classes. Thus, as far as the number of classes dealt with is concerned, the Nyāya view is simpler than the Mīmāṃsā view.

Even if we assume that Gaṅgeśa bears in mind the delimiter of denotedness instead of that ground, the above explanation will also hold good. Hence, here we do not have to show how the Nyāya view is simpler than the Mīmāṃsā view from the viewpoint of the delimiter.⁶⁰

Second Case

After the First Case Gaṅgeśa attempts to show how the meaning of the suffix differs in sentences whose subjects are sentient or insentient, while the Mīmāṃsā philosophers postulate the same meaning of the suffix whether the subject is sentient or insentient. Gaṅgeśa holds that the suffix in a sentence such as “*caitraḥ pacati*” (Caitra cooks), whose subject is sentient, possesses denotative function (*śakti*), and that the suffix in a sentence such as “*ratho gacchati*” (the chariot goes), whose subject is insentient, possesses indicative function (*lakṣaṇā*). Since this method of explanation appears to bring about two meanings of the suffix, it looks burdensome. But these two meanings are not on the same level. When we obtain the meaning through the denotative function and are sure that this meaning is satisfactory, we do not need another meaning. When we do not obtain a proper meaning through the denotative function, we take recourse to the other function, i.e., the indicative function.⁶¹ Accordingly, we need not postulate one and the

⁶⁰ Wada [1990a: 83-84] discusses why the view in which the delimiter is a universal is simpler than the view in which the delimiter is an imposed property.

⁶¹ Nyāya accepts two varieties of the signifying function of word (*vṛtti*): denotative or primary (*śakti*) and indicative or secondary (*lakṣaṇā*). On this, see *NSM*, p. 46,11: *vṛttiś ca śakti-lakṣaṇānyatarasambandhaḥ*. (Trans.: The signifying function is either the relation of

same meaning in the case of sentences whose subjects are sentient or insentient. It is sufficient to determine the meaning of the suffix obtained through the denotative function, i.e., the denoted meaning. To indicate this, Gaṅgeśa states as follows:

na cācetane 'pi ākhyātasya mukhyatvārtham anugato vyāpāra eva śakyah mukhyatvasambhava tyāgāyogād iti vācyam. śaktigrāhakena pramāṇena laghuni śaktiparicchedād acetane prayogasya vṛtтыantareṇāpi sambhavāt. mukhyatvārtham śaktikalpane ca vṛtтыantarocchedaḥ. etena vyāpāra-vācakākhyātasya yatnasādhyārthakapacyādīdhātuvūpasandhānena vyāpāra-viśeṣayatnopasthāpakatvam iti nirastam. lāghavena yatnasyaiva śakyatvāt. (TC, Vol. 4, Pt. 2, p. 827,1-8. * I have read “-dhānena” for “-dānena”.)*

It should not be argued [by the Mīmāṃsā philosophers] that even in the case of insentient [agents], in order to have a verbal suffix used in the primary sense, operation alone which is accepted [as the meaning of the verbal suffix in both cases of sentient and insentient agents] is the denoted meaning [of the suffix], because [we should] not give up [its denotative function] in the case of its primary usage (*mukhya*) being available. The reasons [why the above view is not correct] are that [we] judge denotative function with reference to a simpler [meaning] by a valid means of grasping denotative function, and that in the case of insentient [agents] the [secondary] usage [of a verbal suffix] can be interpreted by means of the other signifying function [i.e., the indicative function]. And if [you, a Mīmāṃsā philosopher,] postulate denotative function in order to have [a verbal suffix] used in the primary sense, [you have to] give up having recourse to the other signifying function [i.e., the indicative function]. By this argument it is refuted that a verbal suffix denoting operation causes [us] to understand effort, a kind of operation, due to its being juxtaposed with the root *pac* and so on, which denote what are accomplished by effort. This is because on the ground of simplicity (*lāghava*) effort alone is the denoted meaning [of a verbal suffix].

Gaṅgeśa argues that it is our comprehension of the meaning of a sentence as a whole that causes us to determine the meaning of the suffix used in the sentence, and that effort is such a meaning. According to him, this conclusion of the

denotative or indicative function.) Mīmāṃsā accepts three varieties: the denotative function (*abhidhā*), indicative function based on similarity (*lakṣaṇā*), and indicative function based on relations other than similarity (*gaunī*). On how many kinds of signifying function Mīmāṃsā acknowledges, see Kunjuni Raja [1977(1963): 240]. He renders *vṛtti* as ‘significative power’ (p. 19), *śakti* or *abhidhā* as ‘primary power’ (p. 201), and *lakṣaṇā* as ‘metaphor’ (p. 39).

meaning of the suffix is simpler than the Mīmāṃsā view, but he does not mention from what viewpoint he has drawn this conclusion. It seems that since the viewpoint is the same as in the First Case, i.e., ‘the ground for using the suffix’ or ‘the delimiter of denotedness’, he does not have to mention it again.

Third Case

In the beginning of Part (5) Gaṅgeśa refutes the view presented by Taraṇi Miśra⁶² in his *Ratnakośa*, which text is not existent, by saying as follows:

tad apy ata eva nirastam. pacatīty atra yatnapratīter yatna evākhyātārtho lāghavān na tūtpādatvam upādhitayā gauravāt pākānukūlavarta-mānayatnasyākṣepādīnāpy alābhāc ca. (TC, Vol. 4, Pt. 2, p. 831,13-16.)

Even this view of the author of the *Ratnakośa* [i.e., Taraṇi Miśra] is refuted on the same ground. On the basis of an understanding of effort in the case of “*pacati*”, effort alone is [ascertained to be] the meaning of the verbal suffix, because [this meaning is] simple. The reasons for this are that [the meaning given by the author of the *Ratnakośa*] is burdensome because [the state of] being a generator [which exists in the function of generating] is an imposed property, and that present effort conducive to cooking is not [similarly] obtained even through implication.

The view of the author of the *Ratnakośa* is: the verbal suffix *-ti* denotes a generating entity such as energy, which can occur in both sentient and insentient beings; effort is obtained from the verbal root through implication (*ākṣepa*).⁶³

⁶² On Taraṇi Miśra, see D. Bhattacharya [1958: 76-79]. Bhattacharya states that Maṇikaṇṭha and Gaṅgeśa cite the *Ratnakośa*, and he regards Taraṇi Miśra as a pre-Gaṅgeśa author. Potter [1977: 684] says: D. Bhattacharya suggests that Taraṇi Miśra came after Maṇikaṇṭha and is more or less contemporary with Gaṅgeśa. However, we cannot find such a suggestion in D. Bhattacharya [1958: 76-79].

⁶³ TC, Vol. 4, Pt. 2, pp. 830,9-831,1; p. 831,12-13: *yat tu ratnakośakāroktam dhātvartho vyāpārah ākhyātārtha utpādanā sā cotpādatatā saiva bhāvanā pacatītyādau ākhyātasya pākam utpādayatīti vivaraṇāt. dhātvarthotpādanā ca cetanācetanayor iti sarvatrākhyātāprayogo mukhya eva. yatate jānātītyādāv api yatanaṃ jñānam utpādayatīty arthāt. ... pacatītyādau yatnalābhah pākādīnā dhātvarthenākṣepān na tūtpādanāmātreṇa vyabhicārād iti. (Trans.: On the other hand, the author of the *Ratnakośa* said [on the above point]: The meaning of a root is action, and the meaning of the verbal suffix is [the function of] generating. Such is the function of generating [something], and it is nothing but productive energy (*bhāvanā*), because in the case of “*pacati*” [we can get] the paraphrase “*pākam utpādayati*” ([he] generates cooking) as far as the verbal suffix is concerned. Moreover since [the function of] generating the meaning (= denoted object, e.g., cooking and going) of a root [can take place] in sentient and insentient [agents], the usage of the verbal suffix [in the sense of generating] is certainly prominent in all cases. In the cases of “*yatate*” and “*jānāti*” and so on also, they [respectively] mean that [he] generates effort and cognition. ... In the case of “*pacati*” and so on, effort is obtained from the meaning of the root,*

Gaṅgeśa considers ‘the state of being a generating entity’ or ‘the function of generating’ (*utpādakatā*) to be an imposed property, but he does not state the reason for this in the “Verbal Suffix Chapter”. I would like to search for the reason here.

In Navya-nyāya “generating entity” or “generator” (*utpādaka*) is often used in the sense of a producing entity (*janaka*) or cause (*kāraṇa*), so the function of generating (*utpādakatā*) is often regarded as the state of being a producing entity (*janakatā*) or causeness (*kāraṇatā*). The *Nyāyakośa* explains that, according to Navya-nyāya philosophers such as Gaṅgeśa, the relational absence of impediments to bringing about effect is also the cause of all effect and that such an absence is the constant absence of impediments.⁶⁴ Accordingly, the function of generating is the state of being the constant absence of impediments. This state is not a universal, because a universal exists only in substances (*dravya*), qualities (*guṇa*), and actions (*karman*) and because the locus of that state is constant absence which does not belong to any of these three categories. Furthermore, Gaṅgeśa does not admit that the ‘state of being an absence’ or absenceness (*abhāvatva*) is a single property like a universal.⁶⁵ In other words, absenceness differs according to its loci, i.e., absences.

When absenceness is the ground for using the suffix *-ti*,⁶⁶ the suffix will denote a particular absence of impediments, and not all absences of impediments. It follows that when the ground is absenceness, the meaning of the suffix cannot

such as cooking, through implication (*ākṣepa*), and not only on the basis of generating, because [the rule that effort is obtained from the meaning of the suffix] deviates [in the case of insentient agents].)

64 *Nyāyakośa*, p. 225,1-2: *yathā vā navinānām maṇikārādīnām mate pratibandhakasamsargābhāvo 'pi kāryamātram prati kāraṇam. sa ca pratibandhakātyantābhāvaḥ*. Here I have not dealt with another well-known definition of cause in Navya-nyāya: that which cannot be established otherwise and which always occurs before its effect (*ananyathāsiddhakārya-niyatapūrvavrtti*).

65 Cf. *TC*, Vol. 1, 714,8-715,1 or Matilal [1968: 185 Text 38]: *anugatābhāvatvaṃ vināpi ghaṭādir na paṭa iti samānādhikaraṇaṣedhād anugatavyavahāraḥ paṭānyonyābhāvenaikena, evaṃ ghaṭādau na gotvam ity anugatavyavahāra ekenātyantābhāvena, ... evaṃ catvāro 'nugatanīśedhavyavahārās catasrḥhir eva vyaktibhiḥ kriyante*. (Trans. by Matilal [1968: 135-136]: For, even without a consecutive absence-ness, [it is possible that] by means of mutual absence, e.g., of cloth, which is a unitary entity, one has an expression that is consecutive [with one type], as seen from nominative denials in the form “a pot is not a cloth,” [“a tree is not a cloth,”] etc. Likewise, by means of constant absence, which is unitary, we have an expression that is consecutive [within another type], as seen in “cow-ness is not in a pot,” etc. ... Thus, four consecutive expressions of denial are constructed on the basis of four particular entities.)

66 To be precise, the ground is the state of being the constant absence of impediments (*pratibandhakātyantābhāvatva*).

include all absences of the impediments. When absenceness is the delimitor of denotedness, the same result will be arrived at. On the other hand, as mentioned in the First Case, in the Nyāya view that the suffix denotes effort, that ground or that delimitor will be effortness, which is a universal. Hence, this view can include in the meaning of the suffix all effort conducive to action denoted by its root. In this sense the Nyāya view is simpler or thus preferable to the view of Taraṇi Miśra.

Fourth Case

In Part (5) after the Third Case Gaṅgeśa points out that Taraṇi's view that the suffix denotes the function of generating would cause doubt about which of the two, the recognizer or the pot, in the case of the sentence “*ghaṭam jānāti*” ([he] recognizes a pot), possesses the cognition of the pot. The reason for this is that the function of generating the cognition (*jñāna*), i.e., the root meaning of “*jānāti*”, can occur in the pot as well as in the recognizer, and that the pot is also one of the causes of the cognition of itself. Moreover, since the pot is said to generate this cognition, the sentence “*ghaṭo jānāti*” (a pot recognizes) would be grammatically correct, though absurd. Then, Gaṅgeśa states that his view is simpler than Taraṇi's view and that if effort is implied by the root meaning (i.e., action), as Taraṇi argues, the tense which is expressed by the suffix would be related to the function of generating, and not to effort which is expressed by the root. To indicate this, Gaṅgeśa says as follows:

vastutas tu caitro jānāticchati yatata ityādau jñānādimattvaṃ caitrasya pratīyate na tūtpādakatvam acetane 'pi jñānotpādake śabdalingendriyādau jānātītyādiprayogaprasaṅgāt. ghaṭam jānātīty ukte ghaṭajñānavān na veti saṁśayāpattē ca. acetanasyāpi jñānotpādakatvāt. śabdādikam jñāpayatīti cānubhavo na tu jānātīti tasmāl lāghavāt pacati pakṣyaty apākṣīd ity atrātītānāgatavartamānayatnapratīteś ca yatna ākhyātavācyas tena yatnasya vartamānatvādikam ākhyātenābhidhīyate prakārantareṇa tad-alābhāt. jānāticchati yatate nidrātīty atra dhātvatha eva yatnādiś caitreṇānveti yatnādimāṁś caitra ity anubhavāt. (TC, Vol. 4, Pt. 2, pp. 831,16-832,11.)

Truly speaking, in the cases of “*caitro jānāti*” (Caitra knows), “[*caitro*] *gacchati*” (Caitra goes), “[*caitro*] *yatate*” (Caitra makes an effort) and so on, the property of possessing cognition (*jñāna*) etc. is understood [as existing] in Caitra, and not in [the function of] generating. For this there are [two] grounds: (1) when, even in the case of insentient [agents], words, inferential

signs, sense organs and so on generate cognition, it would be proper usage to say “*jānāti*” (a word, smoke or a sense organ recognizes), and (2) when [we] say “*ghaṭam jānāti*” ([he] recognizes a pot), [we] would have doubt about whether he possesses a cognition of the pot or not. That is because insentient [agents can] also generate cognition. [We] experience that a word causes people to know, but do not experience that a word knows. Therefore, because [our view of the meaning of the verbal suffix] is simpler [than Taraṇi’s view] and because we have an understanding of past, future, or present effort in the cases of “*pacati*” ([he] cooks), “*pakṣyati*” ([he] will cook), and “*apākṣī*” ([he] cooked), effort alone is the meaning of the suffix. On this ground, the present tense, etc. of [the existence of] effort is denoted by the verbal suffix, because such [tenses] are not obtained through other means. In the cases of “*jānāti*” ([Caitra] knows), “*icchatī*” ([Caitra] desires), “*yatate*” ([Caitra] makes an effort), and “*nidrāti*” ([Caitra] sleeps), the meanings of the roots which are nothing but effort, etc. are related to Caitra, [the agent in those cases,] for [we have] the experience that Caitra possesses effort, etc.

Here too Gaṅgeśa repeats that his view is simpler than Taraṇi’s but does not state from what viewpoint it is simpler. We can conjecture that since the Third Case has already mentioned that the function of generating is an imposed property, the Fourth Case does not need to state this again. This implies that Gaṅgeśa takes into account ‘the ground for using the suffix’ or ‘the delimitor of denotedness’, as in the Third Case.

Fifth Case

In Part (6) of the “Verbal Suffix Chapter” Gaṅgeśa presents the view of the grammarians that the verbal suffix denotes an agent (*karṭr*) and that the suffix and the word in the nominative case possess coreferentiality (*sāmānādhikarāṇya*).⁶⁷ For example, in the sentence “*caitraḥ pacati*” (Caitra cooks) “*caitraḥ*” and the suffix *-ti* of “*pacati*” denotes one and the same agent of the action of cooking,

⁶⁷ TC, Vol. 4, Pt. 2, p. 841,5-8: *atha kartāpy ākhyātavācyah caitraḥ pacatīti sāmānādhikarāṇyāt**. *anyathā nāmākhyātayor bhinnapravṛttinimitakatve 'py ekatra vṛtyabhāve sāmānādhikarāṇyam na syād iyī cet.* (* I have read “*sāmānādhikarāṇyāt*” for “*samānādhikarāṇyāt*”. Trans.: [The grammarians would object:] The agent is also denoted by the verbal suffix, for [the subject expressing the agent and the suffix have] coreferentiality in the case of “*caitraḥ pacati*”. Otherwise, if the nominal base and the verbal suffix do not possess signifying function with reference to one [and the same object] even in the case of their having different grounds for using the words (i.e., the subject and the suffix), there could not be coreferentiality [in any case].)

Caitra. To refute this view, Gaṅgeśa formulates the definition of coreferentiality as follows:

na, nīlaḥ paṭaś caitraḥ pacati pacyate taṇḍula ityādau nāmnor nāmākhyātayor vā ekasamkhyāvācakatvam eva hi śābdasāmānādhikaranyam na tu bhinnapravṛttinimittasyaikatrārthe vṛttir gauravāt odanakāmaḥ pacetetyādau vyabhicārāc ca. (TC, Vol. 4, Pt. 2, pp. 841,8-842,3.)

[The Nyāya philosophers would reply: That is] not correct. That is because the coreferentiality of words is nothing but that two nominal bases or one nominal base and one verbal suffix denote one and the same number in the cases of “*nīlaḥ paṭaḥ*” (blue cloth), “*caitraḥ pacati*” (Caitra cooks), “*pacyate taṇḍulaḥ*” (rice is cooked) and so forth, and not [because such coreferentiality is] the denotative function of [words which have] different grounds for using those words with reference to one thing. The reasons for this are that [your theory is] burdensome, and that [your theory] deviates in the case of “*odanakāmaḥ paceta*” (one who wishes for rice should cook).

It is commonly accepted by the grammarians and Gaṅgeśa that in the sentence “*caitraḥ pacati*” the word “*caitraḥ*” has Caitra-ness for the ground for using “*caitraḥ*”, and that the suffix *-ti* has something other than Caitra-ness — agentness (*karṭṛtva*) in the grammarians’ view or effortness in the Nyāya view — for the ground for using the suffix. In both views two grounds for using the words are accepted, so in this regard we cannot judge which view is simpler.⁶⁸

Next we will look for the ground for using the word “coreferentiality”. Coreferentiality is a property possessed by both “*caitraḥ*” and the suffix, which, according to the grammarians, denote one and the same entity, Caitra, who is the agent of cooking. To put it another way, it is the state, possessed by different words, of denoting one and the same entity. Then, the ground for using “coreferentiality” with reference to this state is the state of being the state of denoting one and the same entity (*ekārthavācakatvatva*).⁶⁹ Here, I have omitted “possessed by different words”, because this phrase is common to the meaning of

⁶⁸ It is possible to assume that in the grammarians’ view the ground for using the suffix is agentness, which is not a universal, while in the Nyaya view the ground is effortness, which is a universal. In this sense, we can conclude that the latter view is simpler than the former. However, Gaṅgeśa does not discuss the matter this way and proceeds to the issue of coreferentiality.

⁶⁹ The Sanskrit text uses “*ekatrārthe vṛttiḥ*” (signifying function to one and the same entity), which means *ekārthavācakatva* (the state of denoting one and the same entity).

“coreferentiality” in the Nyāya view. On the other hand, according to the Nyāya philosophers, coreferentiality is a property possessed by “*caitraḥ*” and the suffix which denote one and the same number (*ekasamkhyā*), i.e., number one (*ekatva*). In other words, it is the state, possessed by different words, of denoting one and the same number. Then, the ground for using “coreferentiality” with reference to this state is the state of being the state of denoting one and the same number (*ekasamkhyāvācakatvatva*). The difference between the former and latter views is that to be denoted by plural words is one entity or one number. ‘One entity’ means any entity among the seven ontological categories of Nyāya-Vaiśeṣika, i.e., a substance, a quality, an action, a universal, a particular (*viśeṣa*), inherence (*samavāya*), or an absence. However, the Nyāya view indicates that the ground for using “coreferentiality” deals only with number, which is one of twenty-four varieties of a quality. In this regard this view is simpler than the grammarians’ view. Even if we replace ‘the ground for using the word’ with ‘the delimiter of denotedness’, the same explanation will hold true.⁷⁰

III. Later Interpretation

Later manual texts of Navya-nyāya such as the *Maṇikāṇa* (p. 86) and the *NSM* (pp. 46,19-47,5) also include a discussion of the meaning of the verbal suffix. The *NSM* illustrates the grammarians’ view on the meaning of the verbal suffix as follows:

yathā viayākaraṇair ākhyātasya kartari śaktir ucyate caitraḥ pacatītyādau kartrā saha caitrasyābhedānvayaḥ. tac ca gauravāt tyajyate. kiṃ tu kṛtau śaktigraho lāghavāt. (NSM, p. 46,20-22.)

For example, the grammarians say that the verbal suffix possesses denotative function with reference to an agent. In the sentence “*caitraḥ pacati*” (Caitra cooks) Caitra has the relation of non-difference with the agent [of the action of cooking]. However, since [this view is] burdensome, it is disregarded. Instead, the denotative function [possessed by the suffix] is apprehended with reference to effort, because [this view is] simple.

⁷⁰ Since the properties regarded as the grounds or the delimiters in both views are not universals, it may not be required to use the grounds or the delimiters in comparing the views. However, we should be careful about whether the Navya-nyāya philosophers judge without using the ground or the delimiter which view is simpler.

Here the *NSM* presents the grammarians' view that the verbal suffix denotes an agent,⁷¹ and states that this view is burdensome in comparison to the Nyāya view. But the *NSM* does not clarify from what viewpoint it is burdensome.⁷² One of the oldest commentaries on the *NSM*, i.e., the *Dinakarī* (p. 267,8),⁷³ comments on the word "simple" (*lāghava*) in the above quotation from the *NSM* and says that it means "because it is simple that the universal, effortness, is the delimiter of denotedness" (*kr̥titvajāteḥ śakyatāvacchedakatve lāghavād ity arthaḥ*). In other words, effortness residing in all effort is regarded as confining denotedness to all effort. This indicates that any effort that is conducive to the action denoted by the root is the meaning of the suffix. In this case the entities denoted by the suffix are grouped into one class by referring to effortness.

On the other hand, the grammarians maintain that the suffix denotes an agent, and it follows that the delimiter of denotedness is agentness (*kar̥tr̥tva*), which is nothing but effort.⁷⁴ This result indicates that since a particular effort confines denotedness to its locus (agent), the meaning of the suffix is a particular agent. In this case the entity denoted by the suffix is shown to be one agent only. According to the grammarians' view, the entities denoted by the suffixes are not grouped into one class, but into as many classes as there are entities. In this sense this view is burdensome.

IV. Conclusion

In Gaṅgeśa's "Verbal Suffix Chapter" one of principles for determining the meaning of a word is to do so from the viewpoint of 'the ground for using the word' (*pravṛttinimitta*) or 'the delimiter of denotedness' (*śakyatāvacchedaka*).

71 *P.3.4.69: laḥ karmaṇi ca bhāve cākarmakebhyaḥ.* (Trans. by Vasu [1977(1891): 584]: The tense-affixes called 'la' are used in denoting the object and the agent; and after intransitive verbs, they denote the action as well as the agent.)

72 Living Indian tradition interprets that this viewpoint is the delimiter of denotedness. On this, see Jha [1992: 5-6].

73 The "Language Book" (*Śabdakhaṇḍa*) of the *Dinakarī* is translated with annotation by Vattanky [1995].

74 In the case of the grammarians' view the delimiter of denotedness is effort according to the *Rāmarudrī* (p. 267,18-20), the commentary on the *Dinakarī*. This implies that the agent is analyzed as the possessor of effort (*kr̥timaḥ*). Cf. *Rāmarudrī*, p. 267,18-20: *kr̥titvajāter iti. kimcidaviśeṣitasyaikasya kr̥titvasya śakyatāvacchedakatve lāghavaṃ, kr̥titvaviśiṣṭānām ananta-kr̥tīnām śakyatāvacchedakatve gauravam. jāter eva svarūpato bhānābhyupagamena kr̥teḥ svarūpataḥ śakyatāvacchedakatvāsambhavād iti bhāvaḥ.*

This principle is shown to function after confirming that the methods given in the verse quoted from the *NSM* do not function, for the principle is not dealt with prior to them. Accordingly, this principle is conditioned by the eight methods of determining the meaning of a word listed in the verse of the *NSM*.

In the First and Third Cases of section 2 Gaṅgeśa says that the view referring to a universal is simpler than that referring to an imposed property. In the Second and Fourth Cases Gaṅgeśa does not state what is a universal or an imposed property. This is probably because it has been mentioned in the case preceding each Case. In the Fifth Case Gaṅgeśa seems to consider that the view referring only to number is simpler than that referring to any entity including number. To generalize from these five Cases, we do not have to insist whether ‘the ground for using the word’ or ‘the delimiter of denotedness’ is a universal or not. We can formulate the criterion of simplicity as follows: the view in which the ground or the delimiter is shown by an entity indicating a smaller number of categories/sub-categories is simpler than the view in which the ground or the delimiter is shown by an entity indicating a larger number of categories/sub-categories.

Unfortunately it is not clear which viewpoint, ‘the ground for using the word’ or ‘the delimiter of denotedness’, Gaṅgeśa takes in the chapter itself. But we can say the following. He is aware of the concept of ‘the delimiter of denotedness’, and the later tradition of Navya-nyāya attempts to establish the relationship between a word and its particular meaning by using this concept. Gaṅgeśa possibly bears this concept in mind and states that a universal is simpler than an imposed property, because this assumption does not contradict the content of the chapter. To back up this assumption, a future analysis of other chapters of the *TC* will be required.

Finally I would like to conclude this paper by pointing out the purpose of Gaṅgeśa and other Navya-nyāya philosophers in comparing properties from viewpoint of ‘the ground for using the word’ or ‘the delimiter of denotedness’. It is a feature of Navya-nyāya to analyze and describe phenomena or facts in terms of relation,⁷⁵ which may lead us to think that the Navya-nyāya philosophers believe that the world does not have the firm basis. They describe the world as a vast network of relations, but relations are not necessarily eternal like universals. Some relations exist only as long as they are recognized. In this sense, even

⁷⁵ This feature is discussed by Wada [1999] [2001] [2004].

though relations are real, they cannot be a firm basis. For Navya-nyāya it is the ontological categories of Vaiśeṣika that provide a firm basis for the world. It attempts to connect the ends of relations to real entities classified into those categories by employing the device of ‘the ground for using the word’ or ‘the delimitor of denotedness’. Even while discussing issues pertaining to the philosophy of language, Navya-nyāya does not discard this fundamental position.

* I wish to thank Dr. Charles Pain for correcting my English.

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GAṄGEŚA ON THE MEANING OF VERBAL SUFFIXES (1)

I. Introduction

Navya-nyāya contributes a great deal not only to Indian epistemology and logic but also to Sanskrit semantics. Gaṅgeśa, who consolidated the system of Navya-nyāya in the fourteenth century, influenced the semantic arguments made by the later scholars in the Mīmāṃsā and Vyākaraṇa schools. We do not yet have an intelligible translation of the whole “Language Book” (Śabdakhaṇḍa) of his *Tattvacintāmaṇi* (TC).⁷⁶ On the other hand, we have translations of later Navya-nyāya texts on language analysis such as the *Ākyātaśaktivāda*⁷⁷ of Raghunātha, the *Śabdaśaktiprakāśikā*⁷⁸ of Jagadīśa, the “Language Chapter” (Śabdakhaṇḍa)⁷⁹ of the *Nyāyasiddhāntamuktāvalī* of Viśvanātha, and the *Vyutpattivāda*⁸⁰ and the *Śaktivāda*⁸¹ of Gadādhara.

In spite of the importance of the “Language Book” of the TC, modern scholars have paid more attention to later texts. In the present paper I would like to provide an annotated translation of the “Verbal Suffix Chapter” (Ākhyātavāda), which represents only a small part of that Book.

* This section includes only A Part of a translation of the Ākhyāta-vāda of the *Tattvacintāmaṇi*, which (Part) is explained in the next page. The original paper of this section contains B Part of the translation too.

76 Potter and S. Bhattacharyya [1993: 239-312] give a summary of the “Language Book.” In this book, the Apūrvavāda is translated by Jha [1986], the Vidhivāda by Jha [1988], and the Śabdaprāmāṇyavāda by Mukhopadhyay [1992].

77 Translated by Chatterjee [1981].

78 Explained by Chatterjee [1980] and partly translated by K. Bhattacharya [1979].

79 English commentaries by Goswami [1991] and Jha [1993], and translated by Vattanky (1995). Since 1990 I have working on the project of rendering that chapter into Japanese with annotation. On my rendering, see Wada [1995: 103].

80 Translated by Bhatta [1990] [2001].

81 Translated by Bhatta [1994-1995] and partly by Gerschheimer [1996]. Ganeri [1999] explicates the position presented in this text.

II. Text, Commentary, and Contents

I have used the Sanskrit text included in:

Tattvacintāmaṇi of Gaṅgeśa Upādhyāya, 4 Volumes. Edited with the *Āloka* of Jayadeva Miśra and the *Rahasya* of Mathurānātha by Kāmākhyānātha Tarkavāgīśa. Delhi: Chaukhamba Sanskrit Pratishtan, 1990.

In this book, the “Verbal Suffix Chapter”, which covers the 4th Volume, 2nd Part, pp. 818-859, is accompanied by the *Āloka* of Jayadeva (ca. 1470), and not by the *Rahasya*. I have consulted the *Āloka*.

The arguments presented in the “Verbal Suffix Chapter” can be divided as follows. Numbers in brackets refer to page and line numbers of *Tattvacintāmaṇi of Gaṅgeśa Upādhyāya*, 4th Volume, 2nd Part.

- A. Introduction: the presentation of the Nyāya view (pp. 819,1-820,1)
- B. The Mīmāṃsā View (pp. 820,1-826,13)
- C. The Nyāya Refutation (pp. 826,13-830,8)
- D. The View of the Author of the *Ratnaśośa* (pp. 830,9-831,13)
- E. The Refutation of the Author of the *Ratnaśośa* (pp. 831,143-834,4)
- F. The Nyāya View in Detail (pp. 834,4-846,4)

Part F includes the views of traditional Nyāya⁸² and new Nyāya as well as Gaṅgeśa’s conclusion. The present paper deals with Parts A.⁸³

In the “Verbal Suffix Chapter” Gaṅgeśa sometimes presents discussions similar to those found in the fifth book of Udayana’s *Nyāyakusumāñjari* (*NKu*). In the corresponding portions, Gaṅgeśa’s discussions are briefer than Udayana’s. It is also true that his argument is more elaborate. I have supplied after my translation page and line numbers of passages of the *NKu* which correspond to Gaṅgeśa’s discussion. However, the portions of the *NKu* indicated by page and line numbers do not necessarily correspond to *whole* divisions of the Sanskrit text.

82 It is a problem whether the ‘traditional Nyāya’ dealt with in Part F is the Prācīna-nyāya or not. It may be the Nyāya view upheld between the periods of Udayana and Gaṅgeśa. On the founder of Navya-nyāya, see Wada [1999]. The English revised version of Wada [1999] is to appear in Wada [2004].

83 The original paper of this one contains a translation with annotation of Part B too; but I have removed it for the reason mentioned in Preface written in Japanese of the present report.

III. Bacis Concepts

In order to understand the present translation and annotation, it is necessary to have a clear understanding of the concept of 'ākhyāta' (verbal suffix), effort (*kṛti*, *yatna*, *prayatna*), the signifying function of word (*vṛtti*), verbal understanding (*śābdabodha*, *śābdajñāna*), and meaning (*artha*). For lack of space, I will give only a brief explanation of them here.

(a) ākhyāta

The word *ākhyāta* has two meanings: the finite verb and the personal ending of the finite verb (*tiṅ* suffix).⁸⁴ Gaṅgeśa's argument with the Mīmāṃsā and Grammar schools is confined to the analysis of the second of these two meanings. Unless otherwise specified, the suffixes he discusses are those used in the active voice and the present tense. He discusses the meaning of verbal suffixes used in the passive voice in Part F.

Navya-naiyāyikas including Gaṅgeśa hold that a verbal suffix denotes effort, while Mīmāṃsakas of the Bhaṭṭa School⁸⁵ hold that it denotes productive operation (*bhāvanā*), whether internal or external.⁸⁶ Internal operation, which Navya-naiyāyikas regards as effort, occurs in the soul (*ātman*). External operation, which occurs in the body and things, is perceived by the sense organs. Naiyāyikas generally call this operation action (*kriyā*). Grammarians (*pāṇinīya*) argue that a verbal suffix denotes an agent.⁸⁷ Navya-naiyāyikas and Mīmāṃsakas accept

84 On these two meanings, see Joshi [1993: 22]. He reports that the *MNP*, which was written in the seventeenth century, uses the word in the second sense listed above. But the *TC* shows earlier use of the word in this sense. On *tiṅ* suffixes, see P.3.4.78 and Abhyankar and Shukla (1977: 197).

85 The view of the Prabhākara School is briefly referred to and refuted at the end of Part C.

86 The operation of Vedic injunctions is not discussed here. However, since the Mīmāṃsakas' method of interpreting sentences in common usage is based on their exegesis of Vedic sentences, we have to consider this exegesis in order to follow their arguments as presented in the "Verbal Suffix Chapter". On their exegesis, see Edgerton [1929]. The verbal suffixes of Vedic injunctions denote the word-efficient-force (*śābdībhāvanā*) which resides in the injunctions themselves. On the word-efficient-force, see *MNP*, no. 4 and Edgerton [1929: 40].

87 To be precise, in Pāṇini's grammar a verbal suffix denotes an agent, an object, or in the case of intransitive roots, the action itself. See P.3.4.69: *laḥ karmaṇi ca bhāve cākarmakebhyaḥ*. Vasu [1977: 584] translates this sūtra as follows: "The tense-affixes called 'la' are used in denoting the object and the agent; and after intransitive verbs, they denote the action as well as the agent". This means: when transitive verbs are used in the active voice, the suffixes denote the agent; when these verbs are used in the passive, the suffixes denote the object. On this issue, see also Cardona [1975: 266].

Panini's grammar in general, but when they disagree with the grammarians, and with each other, they attempt to prove their own views by analyzing common linguistic usage, in this case the usage of the finite verb.

(b) Effort (*kṛti*, *yatna*, *prayatna*)

Effort, which is regarded as the meaning of a finite verbal suffix by Navya-naiyayikas, is one of twenty-four kind qualities (*guṇa*), and we know of its existence through inference. Nyāya holds that knowledge or cognition (*jñāna*) causes desire (*icchā*), which produces effort, which brings about action.⁸⁸ To understand the relation among cognition, desire, and effort, let us consider the case in which we quench our thirst with water. First, we must know that water can remove our thirst and recognize that there is some water within our reach. Second, we have a desire to take and drink some water. If we have no desire, action does not take place. But due to certain reasons we do not always take action immediately after we have such a desire. For instance, there may be dead insects in the water and so on. Hence, we can infer that there must be an intervening factor which is produced by the preceding desire and which brings about the action of drinking. That is effort.

(c) The signifying function (*vṛtti*)

Any meaningful unit, or morpheme, as well as a word possesses the signifying function and so can mean something. Navya-nyāya accepts only two kinds of signifying function: the denotative function (*śakti*) and the indicative function (*lakṣaṇā*).⁸⁹ For instance, when we hear the word 'śaśin' (the moon) at night, this

88 For the causal relationship among these four, Marui [1987: 145-146 and notes 24, 26] gives two Sanskrit references and the explanation of them. The one is from *NKus* k. 7: *pravṛtīḥ kṛtir evātra sā cecchāto yataś ca sāl' taj jñānaṃ ... //*, and the other is from *NSD* (p. 74,1-4): *pravṛtīparavākyaśramaṇāntaraṃ prayojyasya tattadarthasambandhavyāpārānukūlāṃ ceṣṭāṃ paśyan taṣasthaḥ svaceṣṭāyāṃ kṛteḥ kṛtau ca cikīrṣāyās cikīrṣāyāṃ samānādhikaraṇa-samānaviśayakajñānasyaivādvadhṛtakāraṇabhāvaḥ iti prayojyasyāpi tatkāraṇibhūtaṃ jñānam anumāya tasya jñānasya vākya-janyatāpravṛttau janayitavyāyāṃ śabdavyāpāratvam cāvadhārayati*. For a translation of the former Sanskrit reference, see Cowell [1980: 71] and Dravid [1996: 433].

89 Cf. *NSM* p. 292,3: *vṛtīś ca śaktīlakṣaṇānyatarāḥ sambandhaḥ*. See also Matilal [1968: 25]. The indicative function is defined as the relation with the denoted object/meaning (*NSM* k. 82ab: *lakṣaṇā śakyasambandhas ... /*). To explain this definition, when word *A* denotes meaning *B* and further indicates the meaning *C*, the indicative function of *A* reaches *C* through *B*. This function also represents the relation between *A* and *C*. The relation between *A* and *B* is expressed by 'the denoted object' in the definition; the relation between *B* and *C* by 'the relation' in the

word first reminds us of the moon in the sky; secondly it reminds us of a rabbit (*śaśa*). In this case the moon is the direct meaning of the word, and the function pointing to this meaning is called denotative. A rabbit is the indirect meaning of the word, and the function pointing to it is called indicative.

(d) Verbal understanding (*śābdabodha*, *śābdajñāna*)

The concept of verbal understanding is quite often utilized in analyzing the meaning of language units, e.g., a root (*dhātu*), a suffix (*pratyaya*), a nominal base (*prātipadika*), a case-ending (*sUP*), and so on. Since we cannot determine the meaning of an isolated verbal suffix such as *-ti*, we have to deal with a complete word such as '*pacati*' ([he] cooks). From *pacati* we obtain a verbal understanding which has some content or structure. Gaṅgeśa and his opponents presuppose that all of this understanding is generated only by *pacati*; they attempt to find the correspondence between the constituents of the understanding which we derive on hearing '*pacati*' and the linguistic constituents, such as the verbal suffix, which make up the word *pacati*.

There are three competing views of verbal understanding which identify different elements in a sentence as being prominent. These views claim in verbal understanding (1) the meaning of the noun in the nominative case is predominant (*prathamāntārthamukhyaviśeṣyakaśābdabodha*), (2) the meaning of the verbal suffix is predominant (*ākhyātārthamukhyaviśeṣyakaśābdabodha*), and (3) the meaning of the root is predominant (*dhātvarthamukhyaviśeṣyakaśābdabodha*).⁹⁰ The Nyāya school upholds the first view; the Mīmāṃsā school the second; and the Grammar school the third.

Take "*caitraḥ pacati*" as an example. Let us see what Navya-nyāya regards as the verbal understanding caused by hearing this sentence. The word *caitra* denotes a person called Caitra; the case-ending *-ḥ* (*sU*) denotes the number of Caitra; the root *pac* denotes the action of cooking (*pāka*); the suffix *-ti* denotes effort. Effort generates the action of cooking. This relation between effort and cooking is not denoted by any meaningful unit of the sentence, but it is

definition.

⁹⁰ Cf. Rao [1969: 4-34]. The expression of verbal understanding may appear to represent the structure of the understanding, but it does not do so for some schools of Indian philosophy, i.e., those of so-called Indian realism such as Nyāya, Vaiśeṣika, and Mīmāṃsā. This point will be referred to later on in (e) Meaning.

understood from the juxtaposition of the two units, *pac* and *-ti*. Similarly, the relation of effort and Caitra is understood; he (i.e., his *ātman*) possesses effort. Finally, the sentence generates the understanding “Caitra who is the possessor of effort conducive to cooking” (*pākānukūlakṛtimān caitaḥ*).

Mīmāṃsakas, on the other hand, present the following verbal understanding as generated from the same sentence: “the productive operation which conduces to cooking and which resides in Caitra” (*caitraniṣṭhā pākānukūlā bhāvanā*). Grammarians give the following understanding: “the operation which conduces to the softening of the cooked substance and which occurs in Caitra” (*caitrāśrayakaḥ viklittyanukūlo vyāpāraḥ*). I have only briefly illustrated how the three schools analyze verbal understanding.⁹¹

(e) Meaning (*artha*)

Finally I would like to call the readers’ attention to the word ‘meaning’, which appears throughout my translation. This word does not always stand for mental representation in the Indian context. Nyāya, Vaiśeṣika, and Mīmāṃsā hold the view that knowledge or cognition (*jñāna*) has no content in itself (*nirākāravāda*) and that recognizing an object means that a cognitive relation (*grāhyagrāhaka-bhāva*) takes place between the cognition and the object. When for these three schools, for example, the meaning of the root *pac* is said to be the action of cooking, this is not the understanding of cooking or the concept of cooking; it is rather the physical action of cooking which takes place in the outer world. Even the expression of verbal understanding (*śābdabodha*) does not represent the structure of understanding or cognition itself, but the structure of part of the outer world.

By contrast, the Grammar school maintains that knowledge has content.⁹² For this school the expression of verbal understanding represents the structure of the understanding. This expression also represents the structure of a phenomenon

91 For example, I have not illustrated how tense and mood are expressed, what the suffix *a* inserted between *pac* and *-ti* denotes, and so forth. For a further general illustration of verbal understanding, see Rao [1969:4-34] and Joshi [1993: 29-36]. Cardona [1975] discusses whether or not paraphrase and the analysis of verbal understanding decisively serve to assign partial meanings to the items of a sentence or word such as a root and a suffix. Cardona [1975: 272] remarks that the different schools assign meanings in different ways, based on their particular backgrounds, premises, and aims.

92 The Vijñānavāda school of Buddhism also takes this position. Gaṅgeśa does not debate with the followers of this school and other *nirākāravādins* in the “Verbal Suffix Chapter”.

in the outer world as long as the understanding corresponds to this phenomenon. When I refer readers to this explanation of ‘meaning’ in the course of my translation, I have given a footnote.

IV. A Translation with Annotation of the *Ākhyātavāda* of the *Tattvacintāmaṇi*

A. Introduction: the presentation of the Nyāya view (pp. 819,1-820,1)

A verbal suffix (*ākhyāta*) denotes effort (*yatna*), and hence when [the agent of action is] insentient in the case of “*ratho gacchati*” (the chariot goes) and so on, a verbal suffix possesses indicative function (*lakṣaṇā*) with reference to operation (*vyāpāra*). To explain, effort is denoted by the verbal suffix in the case of ‘*pacati*’ ([he] cooks), because all verbal suffixes are paraphrased as ‘*karoti*’ which denotes effort, as in the case where ‘*pacati*’ is [paraphrased as] ‘*pākaṃ karoti*’ ([he] does cooking) and so on. [Paraphrase can be the grounds for the assignment of meanings to meaningful units,] because in the absence of impediment [the relation between a verbal suffix and its meaning] is understood from paraphrase (*vivarāṇa*) also, as in the case of the verbal usage of elder people. [However,] even in the case of the paraphrase of a *dvandva* compound and so on by means of analysis (*vigraha*)⁹³, [the whole compound] does not possess denotative function (*śakti*) towards [all] the meaning [obtained] by analysis, because [some meaning is] obtained from something else.⁹⁴ The teacher says that when [you] ask about effort (or intention) [of someone by saying] “*kiṃ karoti*” (what does [that man]

⁹³ Paraphrase by means of analysis is basically the account of its derivation by Pāṇini’s rules. For instance, since ‘*rājapurusaḥ*’ derives from ‘*rājñāḥ purusaḥ*’ by the application of the rules, the latter expression is the paraphrase of the former. On the classification of *vigraha*, see Abhyankar and Shukla [1977: 353]. Navya-nyāya does not admit that a whole compound or sentence possesses denotative function. It assigns all the component meanings of a compound obtained by means of analysis to the components of the compound. On how Navya-nyāya does this task, see the next note.

⁹⁴ Navya-nyāya takes the view that in the case of a *samāhara dvandva* compound the meaning of collection is not obtained through the denotative function of any component of the compound. Take as an example, ‘*ahinakulam*.’ This compound means a collection of a snake and a mongoose. The word ‘*nakula*’ denotes a mongoose and further means a collection of a snake and a mongoose through indicative function (*lakṣaṇā*). The word ‘*ahi*’ is interpreted as indicating the speaker’s intention (*īātparyagrāhaka*) to make the hearer understand a collection of a snake and a mongoose, not a collection of something else and a mongoose. On this issue, see *NSM* (p. 334,1-2) and Jha [1992: 29-30].

do?), it is impossible to answer that [the man] cooks (“*pacati*”) unless [you assign] the meaning of effort to [the suffix *-ti*].⁹⁵

(to be continued)

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TD *Tarkadīpikā*, in *Tarka-Saṃgraha of Annambhaṭṭa*, ed. Yashwant Vasudev Athalye and Mahadev Rajaram Bodas. 2nd ed. Poona 1974.
NKu *Nyāyakusumāñjali* of Udayana, in *The Nyāyakusumāñjali of Śrī Udayanāchārya with Four Commentaries — the Bodhanī of Varadarāja, the Prakāśa of Vardhamāna, the Prakāśikā of Mecha Thakkura, and the Makaranda of Rucidatta*. Ed. Padmaprasāda Upādhyāya and Dhunḍhirāja Śāstrī. Varanasi 1957.
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P *Pāṇinisūtra or Aṣṭādhyāyī*, ed. in Vasu 1977.
MK *Maṇikaṇa*, ed. in Sarma 1977.
MNP *Mīmāṃsānyāyaprakāśa*, ed. in Edgerton 1929.
MMUM *Mānameyodaya* of Nārāyaṇa, ed. C.K. Raja and S.S. Sastri. 2nd ed. Madras 1975.
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⁹⁵ That teacher appears to be Udayana. A similar expression is found in *Nyāyakusumāñjali* (p. 528,6-7): *asti ca tad iha — kiṃ karoti? pacati, pākam karoty ity arthaḥ ityādidarśanāt*. D. Bhattacharya [1958: 40] remarks that Gaṅgeśa displayed his utmost veneration for Udayana, and that in the Prāmānyavāda of the *TC* there are three references to ‘*ācāryāḥ*’. Ingalls [1951: 104] remarks that in Navya-nyāya Udayana is regularly referred to as *ācāryāḥ* and points out that Mathurānātha refers to him so.

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* This style of bibliography slightly differs from that of the two previous chapters of the present report.