

Affirmative Reasoning: Volume II (in Ten Parts)

## **Validation of Cognition Through Discourse**

**Gautam's Nyay Sutr**

*(Nyaya Sutra or Nyayasutram)*

by Gautam (ca 530 BC)

\*

*Interpretive Translation*

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Affirmative Nyay Reasoning: Volume II (Part One of Ten)

**Validation of Cognition Through Discourse**  
(Gautam's Nyay Sutr)

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## Preface

# Validation Through Discourse

The Gautam's Nyay Sutr is the most ancient of the works of its genera. It was possibly formulated around 550 BCE, and then orally transmitted. According to the Prakrit tradition Gautam (606 to 515 BCE) was a Scholar of Vedant who later became the main disciple of Mahaveer (599 to 527 BCE), and the first Gandhar (527 to 515BC) after Mahaveer. Gautam formalized the ancient Nay practices of reasoning and validation (*Vacch Nay*) through shared consideration (discourse and debates) of the evidence. The eighth Gandhar Bhadrabahu (392 to 329 BCE) used the Syad concepts in his first debate with the Vedantic scholars, and later developed the Saptbhangi syllogism for *Vacch Nay*. Rules of Gautam for reasoning and discourse are widely acknowledged in the philosophical (Buddhist, Vedantic) to political (Chanakya) traditions.

Akchpad (after 200 BCE) organized Gautam's Nyay Sutr. In its current form this text has 608 steps of prose. The subject is presented in ten topics with remarkable continuity of thought and detail. The steps (*Sutr*) are not stand-alone aphorisms. It is not clear how the ancient material came to Akchpad. Apparently original formulation by Gautam was as Gatha, a fluid poetic form for oral transmission (see [Gatha](#) on this site). There are numerous sequences in Nyay Sutr where 3 to 6 successive steps adhere to the typical form of a Gatha with four orthogonal steps in two lines. These steps build the content and context for of subject of the topic. The style of the steps may be aphoristic but the steps are certainly not stand alone aphorisms. It is not clear whether Akchpad wrote the steps in Sanskrit because Sanskrit did not evolve as a medium of discourse sometimes after 200 CE. It is certain that Akchpad's work is the basis for the Vatsyayan's (400 CE) commentary on the Gautam's Nyay Sutr in Sanskrit. Aklank also assembled and included some ancient Gatha in the Karika form that is similar in style to the Gatha.

Gautam's work, reassembled by Akchpad and commented by Vatsyayan, has survived in scores of other commentaries. It has been highly influential in setting the standard of discourse in India. It is extensively cross-referenced in Nyay and other works to formulate arguments for discourse. Uniform and universal standards, criteria and rules of evidence and discourse facilitated virtually all aspects of reasoning, ranging

from the use of suitable word constructs to the consideration of the intention, meaning, significance, and relevance.

Gautam's sets standards and criteria for the ways of evidence based reasoning and interpretation. These rules for reasoned discussion and discourse have influenced virtually all aspects of dispute resolution. Just as an inference is validated by evidence it may also be refuted by evidence. Validity of an evidence based inference is cognitively shared as it is further scrutinized to identify issues of validity, relevance, and doubt inherent in a construct. An interpretation of an established inference may be allowed or discarded. Suitable word constructs are necessary to communicate not only the content and context but also the intention in relation to the meaning of independent evidence. Shared cognition of the strengths and liabilities of evidence in relation to an inference enables a common and continuing basis for its shared consideration. Such a construct is further validated by practice as it forms a basis for shared knowledge to guide future thought, actions and behaviors.

## Lay-out of the primary text is:

**First:** The English rendition at the top (of GIA-34 i.e. Step 34 of Chapter I part A).

**Second:** The Sanskrit text in Nagari largely from Tailangana: *The NyayaSutras* with minor typographical or grammatical corrections.

**Third:** Anglicized transliteration and departures annotated by Vidyabhushana Gangopadhyaya: *Nyaya*.

**Fourth:** The reading used in this work. It is adjusted at certain places to reconcile the differences between the various published texts. The roman script is based on the modern Hindi pronunciation. It takes into consideration not only the nuances of pronunciation but also distinguishes gender and *pratyay* (prefix and suffix) with resolved the word combinations (*sandi* and *samas*).

**GIA-34.** Relevance (*hetu*) of the concern to the means is developed from a similarity of behaviors in an analogy (as an illustration).

**उदाहरणसाधर्म्यात्साध्यसाधनं हेतुः ॥ ३४ ॥**

i. 1.34. *udāharāṇa-sādharṃyāt sādhya-sādhanam hetuḥ*.<sup>14</sup>

14. *hetuḥ iti*. NM 573. In nvr and B the sūtra-s 34 and 35 are read as one sūtra.

*Udaharan sa-dharmyat sadhya-sadhanam hetuh.*

(Abbreviations in the notes)

- ASS : NS, Nbh & NVr, ed. Ānandāśrama Saṃskṛta Series, 1922.  
B : Ballentyne, The Aphorisms of the Nyāya Philosophy of Gautama, Allahabad 1850.  
Bibl. Ind. NS & Nbh, ed. Bibliotheca Indica, 1865.  
Nbh : Nyāya-bhāṣya.  
NM : Nyāyamañjarī by Jayanta Bhaṭṭa, ed. Vizianagram Sanskrit Series, 1895.  
NS : Nyāya-sūtra.  
NSN : Nyāya-sūci-nibandha.  
NV : Nyāya-vārttika, ed. Bibl. Ind., 1887ff.  
NVi : Nyāya-vivarāṇa ed. Paṇḍit, 1903.  
NVr : Nyāya-sūtra-vṛtti by Viśvanātha Bhaṭṭācārya, see ASS.  
nvr : Nyāya-sūtra-vṛtti, ed. 1828.  
R : NS with NVr, ed. Paṇḍit 60 by Rāmabhavana Śarmā. (This does not agree with the edition of Bibl. Ind. or the ed. nvr).  
Up : Upaskāra by Śaṅkaramiśra, see VS.  
V : Vidyābhūṣaṇa's translation of NS, 1913.  
VS : Vaiśeṣika-darśana with Praśastapāda-bhāṣya & Upaskāra, ed. Kāśī Sanskrit Series, 1923.  
VSS : NS with Nbh, ed. Gaṅgādhara Śāstri, Vizianagram Sans. Ser., 1896.

## Validation of Cognition Through Discourse (Gautam's Nyay Sutr)

### Chapter IA

### External World as Evidence

Concerns are resolved by reasoning guided by evidence.

**GIA-1.** A reliable grasp of world happenings experienced by senses is developed from relevant evidence (*praman*). The content and context of an identified concern (*pramey*) is reasoned, corroborated and validated by analogies, logical deduction (algorithms relating the known parts), or interpretation to arrive at an inference. Reasoned inference is further scrutinized for implications and relevance. The decision to act or not to act to address the concern is also influenced by additional internal and external factors.

प्रमाणप्रमेयसंशयप्रयोजनदृष्टान्तसिद्धान्तावयवत-  
र्कनिर्णयवादजल्पवितण्डाहेत्वाभासच्छलजातिनिग्रहस्था-  
नानां तत्त्वज्ञानान्निःश्रेयसाधिगमः ॥ १ ॥

i. 1.1. *pramāṇa-prameya · saṁśaya · prayojana · dṛṣṭānta · siddhānta-  
avyava-tarka-nirṇaya-vāda-jalpa-vitaṇḍā-hetvābhāsa-chalu-  
jāti-nigrahasthānānām tattvajñānāt niḥśreyasa-adhigamaḥ.*

*Praman, pramey, sanshay, prayojan, drashtant, siddhant, avyav, tark, nirnay, vad, jalp, vitand, hetu-abhas, chal, jati-nigrah-sthanam, tattv gyanat nishreyash adhigamah.*

**GIA-2.** Meaningful grasp of a concern is useful to evaluate it before acting on it and to bring it to a closure (*apvarg*).

**Note:** Concerns are generally about unhappy surprises caused by unexpected, unrealistic and unfulfilled expectations. In-born tendencies and limitations prevent us from seeing inconsistencies and contradictions underlying such expectations as unreasonable. Also expectations are clouded if actions are guided by passion and biases.

दुःखजन्मप्रवृत्तिदोषमिथ्याज्ञानानामुत्तरोत्तरापये  
तदनन्तराभावादपवर्गः ॥ २ ॥

i. 1.2. *duḥkha-janma-pravṛtti-doṣa-mithyājñānānām uttara-uttara-  
apāye-tat-anantara-apāyād<sup>1</sup> apavargah.*

1. *abhavat.* NSN, ASS in Nbh, NM 513.

*Dukh, janm, pravritti dosh mithya gyananam uttarah-uttarah apaye tat anantar abhavat apvargah.*

**GIA-3.** Evidence relevant to a concern is obtained from the external (*Pratyakch*) factors that are substantiated in relation to the prior experience.

**प्रत्यक्षानुमानोपमानशब्दाः प्रमाणानि ॥ ३ ॥**

**i. 1.3. *pratyakṣa-anumāna-upamāna-śabdāḥ pramāṇāni.***

*Pratyakch, anumān, upman, shabdah paramanani.*

**No one thing is the root of all of anything.**

In-front-of-eyes (*pratyakch*) is interpreted in relation to what is behind-the-eyes on mind (*parokch*). Observable and testable is the basis of the awareness of the sense experience. The meaning of the sense experience of what is in-front-of-eyes emerges in stages as reasoning is guided by emerging inputs.



**A. Awareness** of a concern emerges as the relevant sense experience takes hold.

**B.** The meaning and significance of such awareness is cognized and validated by what one knows (**information**). **Cognition** emerges as the shared knowledge as we address how one knows, what one knows, and also by *what others know that you know or do not know*, and *you know that others also know or do not know*. Discourse is a means of validation of cognition through word constructs. Evidence helps in identifying inconsistencies and contradictions. Deliberations help in redefining a concern by identifying doubt, uncertainty, ambiguity, counter-arguments, and alternatives.

**C.** By its very nature relevance of the past for the real time decision is tenuous. If the available evidence is not clear cut, perceptions begin to take hold. These bring in unprocessed awareness, cognition, memories, and much more. All such factors contribute to the **perceptions** that dominate our choices and decisions. This is the core concept of [Jeevattan](#) on this site.

**Consider the perceptions: Why people smoke?** Some people become aware of the problem and avoid smoking all together even before they experience or know about its dangers. This is why the tobacco companies advertise. Once hooked people continue to smoke in the face of overwhelming evidence about the dangers of smoking.

GIA-4. Cognition from the sense experience is related to the external reality. Sense experience is not out-of-place, does not contradict the real-world, and it is relevant to the external happenings relevant to the needs of survival.

**इन्द्रियार्थसन्निकर्षात्पन्नं ज्ञानमव्यपदेश्यमव्यभिचारि  
व्यवसायात्मकं प्रत्यक्षम् ॥ ४ ॥**

i. 1.4. *indriya-artha-sannikarṣa-utpannam jñānam avyapadeśyam<sup>2</sup>  
avyabhicāri vyavasāyātmakam pratyakṣam.<sup>3</sup>*

2. *avyapadeśam. NM 65, Hemacandra Pramāna-mimāṃsā i. 1.30.*

3. R counts the following as the next sūtra : *samskāra-udbhavā  
pratyabhijñā (Re-cognition [is the knowledge] growing out  
of past impression).*

*Indriy-arth sannikarshat utpannam gyanam a-vyap-deshyam a-vyabhichari vyavsaya-  
atmakam pratyakcham.*

GIA-5. Concern and inference follows from cognized sense-experience in relation to the past inputs. Its validation requires suitable consideration of the alternatives and other possibilities to identify relevant context.

**अथ तत्पूर्वकं त्रिविधमनुमानं पूर्ववच्छे-  
षवत्सामान्यतो दृष्टं च ॥ ५ ॥**

i. 1.5. *atha tat-pūrvakam trividham anumānam pūrvavat śeṣavat  
sāmānyatodṛṣṭam ca.*

*Ath tat purvkam trividh anumanam purv-vat sesh-vat samanyato drashtam ch.*

GIA-6. The basis of inference is established from the independent measure (*upman*) of similarity of behavior (*sadharmya*) between the concern (*sadhya*) and a means (*sadhan*) to address the concern.

**प्रसिद्धसाधर्म्यात्साध्यसाधनमुपमानम् ॥ ६ ॥**

i. 1.6. *prasiddha-sādharmyāt sādhyā-sādhanaṁ upamānam.*

*Prasiddh sadharmyat sadhya-sadhanam upmanam.*

GIA-7. Value of testimony (opinion) in resolving a concern follows from the sum-total of what is said by a reliable person.

**आप्तोपदेशः शब्दः ॥ ७ ॥**

i. 1.7. *āpta-upadeśah śabdah.*

*Apt updeshah sabdah.*

GIA-8. Meaning of testimony may or may not be directly apparent.

**स द्विविधा दृष्टादृष्टार्थत्वात् ॥ ८ ॥**

- i. 1.8. *sa<sup>4</sup> dvividhah dr̥ṣṭa-adr̥ṣṭa-arthatvāt.*  
4. *sa cāyam. NVi.*

*Sa dvi-vidhah drasht-adrast arthatvat.*

**GIA-9.** Evidence-based reasoning is useful to resolve concerns identified by inner self, body, and senses. Recurring consequences of a concern may be apparent to commonsense or mind, or in tendencies and behaviors.

**आत्मशरीरेन्द्रियार्थबुद्धि-**

**मनःप्रवृत्तिदोषप्रेत्यभावफलदुःखापवर्गास्तु प्रमेयम् ॥ ९ ॥**

- i. 1.9. *ātma - śarīra - indriya - artha-buddhi-manah-pravṛtti - doṣa -  
pretyabhāva phala-duḥkha-apavargāḥ tu prameyam.*

*Atm-sharir-indriy-arth buddhi-manah-pravratti dosh pretya-bhav phal dukh apvargah tu prameyam.*

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### **All organisms maximize happiness by minimizing the unexpected**

Nay reasoning starts with a uniquely positive assumption: **All organisms are basically happy. Unhappiness begins to take hold with rising tide of unmet expectations that disregard the extent reality.**

Life is about managing expectations. By their very nature expectations are about the future. Concerns are often about unmet expectations and unpleasant outcomes. Even as we anticipate we seek to resolve the unpleasant and the unexpected. As such distractions are worked out of ones own desired identity, resolution of such concerns is like being reborn. It is like appreciation of the facts that were unknown or we did not know ever existed.

Closure and resolution calls for bringing expectations in line with the reality. Search for available options and choices are distracted if concern is unformulated, if there are answers where there is no question, or if there is no basis for a concern. Solace of wishfulness, utopian make-belief, or grace distracts attention from the real concerns.

Concerns are not resolved by running away. Resolution calls for evaluation of the perceived relevance of the concerns and its basis. Activist approach calls for direct dealing with inaction and extraneous issues. A course for resolution may be charted through shared knowledge, but the resolution begins by taking responsibility for real-time behaviors to weed out contradictions and inconsistencies.

**Nyay Sutr by Gautam**  
**Validation of Cognitive Inference**  
**Through Discourse**

Chapter IA-GNS

**Senses Respond to Tangible Reality**

Senses are windows that *give us light- the little light- whereby we gaze abroad to know if dawn will break, and whether winds to better sail.* Sense information is of course subject to verification and substantiation.

*[From: Ashvghosh: Biography of Buddh, ca 200 AD]*

**Role of senses:** Sense assure that an entity does not materialize from nothing or disappear into nothing that is ascertain that the sources of inputs either "it exists *or* it does not exit," it cannot "exist *and* not-exist" in the same space at the same time. Also the space becomes a defined place as senses help in positioning the inputs and the response.

**Pratyakch: Information from Sense Inputs**

**GIA-10.** A distinguishing attribute of living beings is to cognize the basis of desire, aversion, effort, happiness and unhappiness.

**इच्छाद्वेषप्रयत्नसुखदुःखज्ञानान्यात्मनो लिङ्गमिति ॥ १० ॥**

i. 1.10. *icchā-dveṣa-prayatna-sukha-duḥkha-jñānāni ātmano liṅgam*<sup>5</sup>.

5. *liṅgam iti. ASS*

*iccha, dvesh, prayatn, sukh, dukkh gyanani atmanah lingam iti.*

**GIA-11.** Their body responds to the cognized meaning of the sense-inputs.

**चेष्टेन्द्रियार्थाश्रयः शरीरम् ॥ ११ ॥**

i. 1.11. *ceṣṭā-indriya-artha-āśrayaḥ śarīram.*

*Cheshta indriy-arthasya ashryah shariram.*

**Role of senses:** Sense assure that an entity does not materialize from nothing or disappear into nothing that is ascertain that the sources of inputs either "it exists *or* it does not exit," it cannot "exist *and* not-exist" in the same space at the same time. Also the space becomes a defined place as senses help in positioning the inputs and the response.

**GIA-12.** The sense organs like nose, tongue, eyes, skin, and ears respond to specific external physical changes [stimuli].

**घ्राणरसनचक्षुस्त्वक्-श्रोत्राणीन्द्रियाणि भूतेभ्यः ॥ १२ ॥**

i. 1.12. *ghrāṇa-rasana-cakṣuḥ-tvak-śrotrāṇi indriyāṇi bhūtebhyah.*

*Ghran rasna chakchuh tvak shrotani indriyani bhutebyah.*

**GIA-13.** These stimuli are the material changes [i.e., the composition and the concentration] in the earth, water, fire and air elements in relation to the space.

**पृथिव्यापस्तेजा वायु-रकाशमिति भूतानि ॥ १३ ॥**

i. 1.13. *pṛthivī āpaḥ tejah vāyuh ākāśam iti bhūtāni.*

*Prathivi, apah, tejah, vayuh, akasham iti bhutani.*

**GIA-14.** Characteristic response to smell, taste, appearance, touch and sound are expressions of the (awareness of) physical stimulus.

**गन्धरसरूपस्पर्शशब्दाः पृथिव्यादिगुणास्तदर्थः ॥ १४ ॥**

i. 1.14. *gandha-rasa-rūpu-sparśa-śabdāḥ pṛthivyādi-guṇāḥ tadarthāḥ.*

*Gandh ras rup sparsh shabdah prathivi-adi gunah tat arthah.*

\*

### *Interpretation of Sense information*

**GIA-15.** The meaning of cognized sense experience is processed by intellect for response.

**बुद्धिरुपलब्धिर्ज्ञानमित्यनर्थान्तरम् ॥ १५ ॥**

i. 1.15. *buddhiḥ upaladdhiḥ jñānam iti anarthāntaram.*

*Buddhih uplabdhih gyanam iti an-arth-antram.*

**GIA-16.** It is an attribute of mind that the cognition and interpretation are neither coincident with the sense experience, nor is the response.

**युगपज् ज्ञानानुत्पत्तिर्मनसो लिङ्गम् ॥ १६ ॥**

i. 1.16. *yugapat jñāna-anutpattiḥ manasaḥ liṅgam.*

*Yugpat gyan anutpattih mansah lingam.*

**GIA-17.** Words, actions and reasoning are the body's response to the interpretation of sense experience.

**Note:** Language communication facilitates integration of the meaning and significance of sense inputs into a suitable response.

**प्रवृत्तिर्वाग्बुद्धिशरीरारम्भः इति ॥ १७ ॥**

i. 1.17. *pravṛttiḥ vāk-buddhi-śarira-ārambhah*<sup>6</sup>.

6. *iti*, as occurring in certain versions, is omitted in NM 499, NSN, NVi, nvr, B.

*Pravrattih vak buddhi sharir arambhah iti.*

\*

### *Defective tendencies in word constructs*

GIA-18. Defective response is not based on the (defective) characteristics of the inputs.

**प्रवर्तनालक्षणा दोषाः ॥ १८ ॥**

i. 1.18. *pravarttanā-alakṣaṇāḥ doṣāḥ*.

*Pravartana a-lakchana doshah.*

GIA-19. Defective response makes it necessary to respond again.

**पुनरुत्पत्तिः प्रेत्यभावः ॥ १९ ॥**

i. 1.19. *punah utpattiḥ pretyabhāvah*.

*Punah utpattih pretya bhavah.*

GIA-20. Tendencies that lead to defective response lie in the perceived meaning of the sense-experience, and of the words (verbal communication) used for the evaluation of the consequences of the experience.

**प्रवृत्तिदोषजनितोऽर्थः फलम् ॥ २० ॥**

i. 1.20. *pravṛtti-doṣa-janitah<sup>7</sup> arthah phalam*.

7. *-janita-arthah*. B. nvr.

*Pravratti dosh janitah arthah phalam.*

GIA-21. Unexpected outcomes follow if response is not based on the proper characteristics of the experience.

**बाधनालक्षणं दुःखमिति ॥ २१ ॥**

i. 1.21. *bādhana-lakṣaṇam duḥkham*<sup>8</sup>.

8. *duḥkham iti*. ASS. cf. VSS. But *iti* does not occur in NM 506, NSN, NVi, nvr, B.

*Badhna lakchanam dhukaham iti.*

GIA-22. For ultimate resolution of a concern it is necessary to resolve such defects.

**तदत्यन्तविमोक्षोऽपवर्गाः ॥ २२ ॥**

i. 1.22. *tad-atyantavimokṣah apavargah*.

*Tat atyant vi-mokchah apvargah.*

\*

### *Doubt in word construct*

**GIA-23.** Doubt is entertained to resolve uncertainties in a concern or a word construct. Such uncertainties are inherent in the conundrum of disorganized diversity of similar and dissimilar behaviors, opinions, beliefs and considerations.

**समानानेकधर्मापपत्तेर्विप्रतिपत्तेरुपलब्ध-  
नुपलब्धव्यवस्थातश्च विशेषपेक्षी विमर्शः संशयः ॥ २३ ॥**  
i. 1.23. *samāna-aneka-dharma-upapatteḥ vipratipatteḥ upalabdhi-  
anupalabdhi-avyavasthātaḥ ca viśeṣa-apekṣaḥ  
vimarśaḥ saṁśayaḥ.*

*Saman-anek dharmanam upatteḥ vi-pratipatteḥ uplabdhi-anupalabdhi avyavasthataḥ cha vishesh apekchah vimarshah sanshyah.*

**GIA-24.** Purposeful consideration is necessary to arrive at what is meaningful and significant (in such a conundrum).

**यमर्थमधिकृत्य प्रवर्तते तत्प्रयोजनम् ॥ २४ ॥**  
i. 1.24. *yam artham adhikṛtya pravartate tat prayojanam.*

*Yam artham adhikratya pravartate tat prayojanam.*

**GIA-25.** An agreed upon analog (or representation) provides a practical framework for shared reasoning to arrive at a consistent and meaningful inference.

**लौकिकपरीक्षणां यस्मिन्नर्थे बुद्धिसाम्यं स  
दृष्टान्तः ॥ २५ ॥**  
i. 1.25. *laukika-parikṣaṇāṃ yasmin arthe buddhisāmyaṃ saḥ  
dr̥ṣṭāntaḥ.*

*Laukik parikch-kanam yasmin arthe buddeh samyam sa drashtantah.*

**GIA-26.** An established conclusion is useful to address other concerns.

**तन्त्राधिकरणाभ्युपगमसंस्थितिः सिद्धान्तः ॥ २६ ॥**  
i. 1.26. *tantra-adhikaraṇa-abhyupagama-samsthitiḥ-siddhāntaḥ.*

*Tantr adhikaran abhyupgam sansthitih siddhantah.*

**GIA-27.** A conclusion evolves further as additional criteria are introduced to address emerging concerns.

**सर्वतन्त्रप्रतितन्त्राधिकरणाभ्युपगमसंस्थित्यर्थान्तरभावात् ॥ २७ ॥**  
i. 1.27. *sa caturvidhāḥ<sup>9</sup> sarvatantra-pratitantra-adhikaraṇa-  
abhyupagamasamsthiti<sup>10</sup> arthāntara-bhāvāt.*

9. Only NM and NSN have *sa caturvidhah*.

10. *-samsthitiṅām*, B. nvr.

*Sarv-tantr prati-tantr adhikaran abhyupgam sanstheti arth-antar bhavat.*

GIA-28. A conclusion remains useful to guide considerations as long as it is not inconsistent with any of the other established conclusions.

**सर्वतन्त्राविरुद्धस्तन्त्रे ऽधिकृता ऽर्थः सर्वतन्त्रसिद्धान्तः ॥ २८ ॥**

i. 1.28. *sarvalantra-aviruddhah tantre<sup>11</sup> adhikṛtaḥ arthah<sup>12</sup>*

*sarvalantra-siddhāntah.*

11. *sva-tantre.* NM 565.

12. B, nvr, Nvi omit *arthah*, which naturally is dropped, as otherwise it would not have been a definition of *siddhānta*. *Siddhānta* means a proved doctrine and not an object. But cf. Nbh i. 1.1. : *asti ayam iti abhyanyujñāyamānoḥ arthah siddhāntah*

*Sarv-tantr a-vi-ruddhah tantre adhikratah arthah sarv-tantr siddhantah.*

**Note:** The emphasis is on identified inconsistency rather than on consistency.

GIA-29. A conclusion is evaluated not only for consistency with other similar results, but also for inconsistency with the converse of the conclusion.

**समानतन्त्र सिद्धः परतन्त्रा सिद्धः प्रतितन्त्रसिद्धान्तः ॥ २९ ॥**

i. 1.29. *samāntantra-siddhah paratantra-asiddhah pratitantra-*

*siddhāntah.*

*Saman-tantr siddhah par-tantr a-siddhah prati-tantr siddhantah.*

GIA-30. Consistency of a conclusion with an independent conclusion established in another context is useful to extend the range of its validity.

**यत्सिद्धावन्यप्रकरणसिद्धिः सा ऽधिकरणसिद्धान्तः ॥ ३० ॥**

i. 1.30. *yat-siddhau anya-prakarana-siddhiḥ saḥ adhikarāṇa-*

*siddhāntah.*

*Yat-siddhau anny-prakaran siddhih sah adhikaran siddhantah.*

GIA-31. Special methods of scrutiny or modification of an established conclusion may be required to address unexamined or unresolved concerns.

**अपरीक्षिताभ्युपगमात् तद्विशेष-**

**अपरीक्षणमभ्युपगमसिद्धान्तः ॥ ३१ ॥**

i. 1.31. *aparikṣita-abhyupagamāt tat-viśeṣa-parikṣaṇam*

*abhyupagama<sup>13</sup>-siddhāntah.*

*A-parikchit abhupamat tat vishesh parikchnam abhyupgam siddhantah.*

\*

*Parts of Inference Syllogism*

**GIA-32.** Inference (*of fire from smoke*) requires (syllogistic) consideration of a definite concern (*sadhya*) in relation to a suitable means (*sadhan*) and an analog to identify the underlying relationship of concomitant invariance to arrive at an evidence-based conclusion (See the box in the Series preface).

**प्रतिज्ञाहेतूदाहरणोपनयनिगमनान्यवयवाः ॥ ३२ ॥**

i. 1.32. *pratijñā-hetu-udāharāṇa-upanaya-nigamanāni avayavāḥ.*

*Pratigya hetu udaharan upnay nigmanani avyavah.*

**GIA-33.** An addressable concern is formulated as a binding assertion (that can be affirmed or negated on the basis of evidence).

**साध्यनिर्देशः प्रतिज्ञा ॥ ३३ ॥**

i. 1.33. *sādhyā-nirdeśaḥ pratijñā.*

*Sadhya nirdeshah pratigya.*

**GIA-34.** A similarity of behaviors in the analog (example) is relevant (*hetu*) to illustrate the relationship of the means to the concern.

Udaharan sa-dharmyat sadhya-sadhanam hetuh.

**उदाहरणसाधर्म्यात्साध्यसाधनं हेतुः ॥ ३४ ॥**

i. 1.34. *udāharāṇa-sādharmyāt sādhyā-sādhanaṃ hetuḥ.*<sup>14</sup>

14. *hetuḥ iti.* NM 573. In nvr and B the sūtra-s 34 and 35 are read as one sūtra.

**GIA-35.** Means are also relevant to rule out the alternatives (including the converse and the opposites) that may invalidate the inference.

**तथा वैधर्म्यात् ॥ ३५ ॥**

i. 1.35. *tathā vaidharmyāt.*

*Tatha vai-dharmyat.*

**GIA-36.** The analog for inference illustrates a unique relationship of the behavior of the concern and the means (as in smoke and fire).

**साध्यसाधर्म्यात्तद्धर्मभावी दृष्टान्त उदाहरणम् ॥ ३६ ॥**

i. 1.36. *sādhyā-sādhyarmyāt tat-dharma-bhāvi<sup>15</sup> dr̥ṣṭānta udāharāṇam.*

15. *-bhāvitvaṃ dr̥ṣṭāntasya.* NV 136

*Sadhya sadharmyat tat dharm bhavi drashtant udaharnam.*

**GIA-37.** An independent analog is required to illustrate each of the alternatives and opposites.

**तद्विपर्ययाद्वा विपरीतम् ॥ ३७ ॥**

- i. 1.37. *tat viparyayāt vā<sup>16</sup> viparītam<sup>17</sup>*  
 16. ASS omits *tā*.  
 17. nvr, B, NVi add *vyatireki udāharaṇam*. The expressions *anvayi* and *vyatireki* do not, however, occur in NS.

*Tat viparyayat va vipreetam.*

**GIA-38.** Validation of a concern as a proposition (*upnay*) is based on such established and unique relationship illustrated in the analog.

*Note:* Validation follows from the concomitant invariance (and not just from inherence).

**उदाहरणापेक्षस्तथेत्युपसंहारो न तथेति वा साध्यस्थोप-  
नयः ॥ ३८ ॥**

i. 1.38. *udāharaṇa-apekṣaḥ tathā iti upasamhārah na tathā iti vā  
sādhyasya upanayah.*

*Udahran apekchah tatha iti upsamharah na tatha iti va sadhyasya upnayah.*

**GIA-39.** The affirmed proposition (*nigman*) is emphasized by the relevance (*hetu*) of the concern and the means.

**हेत्वपदेशात्प्रतिज्ञायाः पुनर्वचनं निगमनम् ॥ ३९ ॥**

i. 1.39. *hetu-apadeśāt<sup>18</sup> pratijñāyāḥ punaḥ vacanam nigamanam.*  
 18. *hetu-āpta-upodeśāt. VSS.*

*Hetu apdeshat pratigyayah punah vachanam nigmanam.*

**GIA-40.** Deliberation about an unknown entity requires deduction from the meaning of the available information.

**अविज्ञाततत्त्वे ऽर्थे कारणोपपत्तितस्तत्त्वज्ञा-  
नार्थमूहस्तर्कः ॥ ४० ॥**

i. 1.40. *aviññāta-tattve arthe kāraṇa-upapattitah<sup>19</sup> tattvajñānārtham  
ūhaḥ tarkah.*

19. *kāraṇa-upapattiḥ tasya. VSS.*

*A-vigyat tatve arthe karanah uppattitah tatv gyan artham uhah tark.*

**GIA-41.** Such deliberations are consolidated into a conclusion by weighing the pro and the con (supporting and opposing) of the evidence.

**विमृश्य पक्षप्रतिपक्षाभ्यामर्थावधारणं निर्णयः ॥ ४१ ॥**

i. 1.41. *vimṛśya pakṣa-pratipakṣābhyām artha-avadhāraṇam nirṇayaḥ  
Vimarshya pakch prati-pakch-abhyam arth avdharnam nirnayah.*

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