Classical Indian epistemologists agree on one thing: whenever we know something, there is an epistemic instrument—a *pramāṇa*—which explains how we acquire this knowledge (*pramāṇa*).\(^1\) Suppose I look out of my window and see a white picket fence. If I thereby know that there is a white picket fence outside, perception (*pratyakṣa*) is the epistemic instrument which explains how I acquire this knowledge. If you tell me, “Bob is in his office,” and I thereby learn that Bob is in his office, testimony (*śabda*) is the epistemic instrument which explains how I learn this.

For these classical Indian philosophers, an epistemic instrument \(M\) is independent (*svatantra*) just in case there is no other epistemic instrument \(M^*\) which explains how we gain knowledge by \(M\). Now, reductionism about any epistemic instrument \(M\) is the view that \(M\) isn’t an independent means of knowing. For example, a reductionist about testimony might claim that we can explain how we acquire testimonial knowledge by appealing solely to inference of some sort.

In this chapter, we will focus on a certain kind of reductionism: reductionism about arthāpatti. Consider:

**Absent Devadatta.** You know Devadatta is alive, but you don’t see him at home. Therefore, you judge, and therefore come to know, that he’s outside.

How do you gain this knowledge? According to one story, you antecedently know a generalization on the basis of empirical investigation, e.g., the generalization that anyone who isn’t outside their home must either be dead or present at their home. When you learn that living Devadatta isn’t at home, you infer that Devadatta must be outside. On this story, therefore, your knowledge is derived from a form of observation-based inference,\(^2\) which classical Indian epistemologists label *anumāṇa*. Many Nyāya philosophers—the *Naiyāyikas*—favor this story.

According to another story, your inference isn’t based on the prior empirical knowledge of any generalization. On one version of the story, in **Absent Devadatta**, you know that Devadatta is quite old. So, when you don’t find him at his home, you suspect that he might not be alive. But you also know that he’s alive on the basis of

---

\(^1\) Many thanks to Elisa Freschi, Alessandro Grahetli, Malcolm Keating, Andrew Ollett, Stephen Phillips, Mark Siderits, Anand Vaidya, and an anonymous reviewer for comments on earlier drafts of this paper.

\(^2\) The term “inference” is used here to refer to any episode of reasoning. So, the term “inference” will not only cover *anumāṇa* but also other kinds of reasoning, e.g., inductive or abductive reasoning, which cannot straightforwardly be treated as kinds of *anumāṇa*. 
an independent source of information. That is why you resolve your doubt by judging that Devadatta must be outside. This is the story that Prabhakara Mimamsakas typically support. On another version of the story, in Absent Devadatta, when you learn that Devadatta isn’t at home, you realize that Devadatta’s being alive is incongruous or inexplicable unless he is present outside. Then you resolve this incongruity or inexplicability by judging that Devadatta must be outside. This is the account that Bhatta Mimamsakas typically support. On both accounts, you posit Devadatta’s existence outside his home in order to resolve either a doubt (samshaya) or an incongruity (anupapatti) pertaining to his being alive, without having recourse to any purely empirically discoverable generalization. For these Mimamsakas, therefore, the relevant epistemic instrument isn’t anumana; it’s a separate epistemic instrument called arthapatti.

The Naiyayikas and the Mimamsakas disagree about whether arthapatti is an independent epistemic instrument. The Mimamsakas are anti-reductionists about arthapatti: they say that no other epistemic instrument can explain how we acquire knowledge by arthapatti. In contrast, many Naiyayikas are reductionists about arthapatti: they say that we can explain how we gain arthapatti-based knowledge by appealing to anumana.

Interestingly, however, the unorthodox fifteenth-century Naiyayika, Raghunatha Siromani, argued against reductionism about arthapatti in his commentary Splendor (Didhiti, D) on Gangeśa Upadhya’s (fourteenth century CE) The Jewel of Reflection on the Truth (Tattva-cintanamani, TCM). In this chapter, I reconstruct and explain the significance of this argument. I show that Raghunathas anti-reductionist argument crucially depends on his opposition to a principle about the ontology of absence (abhava) accepted by earlier Nyaya philosophers like Udayana (tenth/eleventh century CE) and Gangeša. I also argue that Raghunathas argument poses a serious challenge for the Nyaya reductionists about arthapatti: they cannot resolve the challenge without making implausible psychological claims. This, I think, reveals an instability within the standard Nyaya view about arthapatti.

This chapter is divided into five parts. In §1, I outline the Nyaya reductionist view about arthapatti, and different ways of precisifying it. On a popular precisification of the view, putative instances of arthapatti-based knowledge are based on negative-only anumanas (kevala-vyatirekyanumana). In §2, I discuss how Gangeśa rejects the view that episodes of such reasoning cannot be treated as anumanas because they proceed from an awareness (jñana, sometimes translated as “cognition”) of negative pervasion (vyatireka-vyapti). The second of these arguments depends on a principle about the ontology of absence. In §3, I show that Raghunatha rejects this principle,
so he has the resources to block Gaṅgeśa’s argument. In §4, I explain how Raghunātha defends the claim that an episode of reasoning that proceeds solely from an agent’s awareness of negative pervasion cannot be treated as an anumāna. In §5, I say why he takes this to support anti-reductionism about arthāpatti.

1. NYĀYA REDUCTIONISM

In this section, I outline the basic commitments of Nyāya reductionism about arthāpatti. A simple case:

Smoke and Fire. You see smoke coming out of a hill. You had learnt earlier by empirical investigation that wherever there is smoke, there is fire. You recall this. So, you conclude that there is fire on the hill.

Here, your inference establishes the presence of an unobserved property, i.e., the fire. This is the property to be proven (sādhyā). The place where the fire is established, i.e., the hill, is the subject (pakṣa). Finally, the observed property from which the fire is inferred, namely the smoke, is the reason (hetu).

Suppose you know, in Smoke and Fire, that the subject possesses the property to be proven. According to almost all Naiyāyikas after Uddyotakara (sixth century CE), you arrive at your knowledge in three steps, each of which involves an awareness-event about the reason.

**Step 1.** First, you undergo a perceptual awareness-event, whereby you learn that the reason, i.e., the smoke, is present in the relevant subject, i.e., the hill (what the Naiyāyikas call the awareness of the reason’s being a property (dharmā) of the subject (pakṣa-dharmatā-jñāna)).

**Step 2.** Next, you recall that there is a relation of pervasion (vyāpti) between the reason and the property to be proven. The reason is pervaded by the property to be proven just in case wherever the reason is present, the property to be proven is also present. In Smoke and Fire, you recall what you previously learnt: namely, that wherever there is smoke, there is fire. This is what the Naiyāyikas call the recollection of pervasion (vyāpti-smṛti).

**Step 3.** Finally, you undergo an awareness-event where you unify the contents of the previous two awareness-events: you judge that the reason is both pervaded by the property to be proven and a feature of the subject. In Smoke and Fire, you judge that the hill possesses smoke which, in turn, is pervaded by fire. This awareness-event is what Naiyāyikas call a subsumptive judgment or consideration (parāmarśa).

Immediately after the third step, you judge that the subject possesses the property to be proven. If the judgment constitutes knowledge, the resulting knowledge is called anumāti. The epistemic instrument by which this knowledge arises is anumāna.

An anumāna can be of different kinds, depending on what relation of pervasion underlies the relevant inference, and how the agent apprehends the relevant relation of pervasion. As I said earlier, a property H is pervaded (vyāpta) by another object or property S if and only if wherever H is present, so also is S. (This will be made
more precise later.) An *anumāṇa* that proceeds from smoke to fire, for instance, could be based on two generalizations:

1. Wherever there is smoke, there is fire.
2. Wherever there isn’t any fire, there isn’t any smoke.

The first generalization says that smoke is pervaded (in the specified sense) by fire. The second generalization says that the absence of fire is pervaded by the absence of smoke. The first kind of pervasion is therefore a relation between two positive entities (i.e., entities that aren’t themselves absences), while the second is a relation between two negative entities (i.e., entities that are absences). So, the first kind of pervasion is called positive pervasion (*anvaya-vyāpti*), while the second kind is called negative pervasion (*vyatireka-vyāpti*).

We can define these two relations as follows. Let’s say that the counterpositive (*pratiyogin*) of an absence is the thing that is absent; for instance, the counterpositive of the absence of a pot is the pot itself. Suppose H is the reason involved in an *anumāṇa*, and S is the property to be proven. If H bears a relation of positive pervasion to S, then that relation consists in H’s being co-instantiated with S such that H is pervaded by S (*hetu-vyāpaka-sādhyā-sāmānādhi-karanyā*). If H bears a relation of negative pervasion to S, then that relation consists in H’s being the counterpositive of an absence that pervades the absence of S (*sādhyābha-hāvyāpyāpikā-bhūtābhāva-pratiyogitvā*). In *Smoke and Fire*, smoke bears relations of both positive and negative pervasion to fire. On the one hand, smoke is co-instantiated with fire which, in turn, pervades it. For fire and smoke occur together such that wherever there is fire, there is smoke. On the other hand, smoke is the counterpositive of an absence that pervades the absence of fire. For, wherever fire is absent, smoke is also absent. Using this distinction amongst the two kinds of pervasion, we can distinguish two types of *anumāṇa*: the first kind involves a recollective awareness of a relation of positive pervasion between the reason and the property to be proven, while the second kind involves a recollective awareness of a relation of negative pervasion between them.

We can classify *anumāṇas* in another way. In *Smoke and Fire*, you had learnt that wherever there is smoke, there is fire. How could you have learnt this? There are two possibilities. You might have observed lots of places where smoke is present, e.g., a kitchen, and noticed that fire is always present in such places. Or you might have observed lots of places where fire is absent, e.g., a cold lake, and noticed that smoke is always absent from such places. Call places where both fire and smoke are present together instances of positive correlation (*anvaya-sahacāra*) between fire and smoke. And call places where both fire and smoke are absent instances of negative correlation (*vyatireka-sahacāra*) between fire and smoke. In general, a relation of pervasion between a reason and a property to be proven can be known in three distinct ways: either (a) by observing only positive correlation, or (b) by observing only negative correlation, or (c) by observing positive as well as negative correlations. An *anumāṇa* where the relevant relation of pervasion is known (or can only be known) in the first way is called positive-only (*kevalānvayin*). An *anumāṇa* in which the relevant relation of pervasion is known (or can only be known) in the second way is called negative-only (*kevala-vyatirekin*). Finally, an *anumāṇa* in which the
relevant relation of pervasion is known in the third way is called positive-and-negative (anvaya-vyatirekin).²

Here are some stock examples that illustrate the distinction.

i. Consider the inference, “This is nameable (abhidheya), since it is knowable (prameya).” Here, the reason is knowability, and the property to be proven is nameability. For many Naiyāyikas, everything is nameable. So, the only way you could learn that nameability pervades knowability is by observing cases where both nameability and knowability are present. Since the relevant pervasion here is known solely on the basis of positive correlation, this is a positive-only anumāna.

ii. Take another inference: “The earth is different from other substances (itarabhinna); for it has smell.” Here, the reason is smell, and the property to be proven is difference from substances other than earth. But since the earth is the subject, there is no observed place (other than the subject itself) where the property to be proven is present. So, the only way the agent could learn that there is a relation of pervasion between the reason and the property to be proven is by observing negative correlation between the two. Hence, this is a negative-only anumāna.

iii. Finally, in Smoke and Fire, you can apprehend the relevant relation of pervasion by observing instances of both positive and negative correlations, i.e., cases where smoke and fire are present together and cases where they are absent together. When that happens, the resulting anumāna is positive-and-negative.

Let us now turn to reductionism about arthāpatti.

For many Naiyāyikas, all putative instances of arthāpatti-based knowledge are produced by anumānas.⁵ Even before Gaṅgesea, several Naiyāyikas, e.g., Udayana and Śaśadhara, explicitly considered the view that at least some—if not all—instances of arthāpatti-based knowledge have to be produced by negative-only anumānas.⁶ Here is an example from Kumārila that motivates this view.

Present Devadatta. I learn by perception that Devadatta is standing at this location. So, I conclude that he is absent everywhere else.
For Kumārila, this is a case of arthāpatti-based knowledge: since Devadatta’s being located here is incongruous (anupapanna) without his being absent everywhere else, I posit Devadatta’s absence everywhere else to resolve that incongruity. Now a reductionist about arthāpatti should say that this knowledge is in fact produced by an anumāna. The reason for that anumāna would have to be the property of being located here (etad-desa-sambandhitva) and the property to be proven would have to be the property of being absent from every other place (anyatrabha). In his Śloka-
vārttika (ŚV), Kumārila says that in this case, a relation of positive pervasion between the reason and the property to be proven cannot be established by observing instances of positive correlation. For in order to know that something is absent everywhere else, one would have to go to those places and check whether the relevant object is present. So, the Naiyāyikas must say that in this scenario, I gain my knowledge by an anumāna of the negative-only variety.

This still leaves open some further possibilities. In Absent Devadatta, you gain your knowledge by an anumāna where the subject is Devadatta, the reason is the property of being alive but absent from home, and the property to be proven is the property of being outside one’s home. Now, two different relations of pervasion could hold between the property of being alive but absent from home and the property of being outside one’s home. We can express them as follows:

3. Whoever is alive but absent from home is outside their home.
4. Whoever isn’t outside their home is either not alive or not absent from their home.

Relation (3) expresses a relation of positive pervasion between the reason and the property to be proven, while (4) expresses a relation of negative pervasion. This means that the Nyāya reductionist view about arthāpatti could be sharpened in (at least) two ways.

The Positive Story. In any case of arthāpatti-based knowledge, the anumāna on the basis of which the agent gains her knowledge involves an awareness of positive pervasion.

The Negative Story. In all cases of arthāpatti-based knowledge, the anumāna on the basis of which the agent gains her knowledge involves an awareness of negative pervasion.

In the positive story, in Absent Devadatta, your reasoning goes like this.

Step 1. First, you perceive that Devadatta who is alive and isn’t at home.

Step 2. Then you remember that whoever is alive but absent from home must be outside their home.

Step 3. Next, you make a subsumptive judgment that Devadatta who is alive possesses the property of being absent from home, which is pervaded by the property of being outside one’s home.

---

Finally, you conclude that Devadatta isn’t at home. In the negative story, you reason as follows.

**Step 1.** First, you perceive that Devadatta who is alive isn’t at home.

**Step 2**. Then, you remember the content of (4): namely, that whoever isn’t outside their home is either dead or present at their home.

**Step 3**. Next, you make a subsumptive judgment that Devadatta who is alive possesses the property of being absent from home, which is the counterpositive of an absence that is pervaded by the absence of being outside one’s home.

The difference between the two episodes of reasoning lies in the second and third steps. At Step 2 in the positive story, you recall a relation of positive pervasion between the reason and the property to be proven; at Step 2* in the negative story, you recall a relation of negative pervasion between the two. At Step 3 in the positive story, you undergo what we may call a positive subsumptive judgment (anvaya-parâmarsa), i.e., a judgment that the subject possesses the reason which is pervaded by the property to be proven; at Step 3* in the negative story, you undergo what we may call a negative subsumptive judgment (vyatireka-parâmarsa), i.e., a judgment that the subject possesses the reason which is the counterpositive of an absence that is pervaded by the absence of the property to be proven.

In both early and later Nyāya, the negative story about arthâpatti seems to have been popular. In his *Flowers of Reasoning* (Nyāya-mañjarī, NM), Jayanta supports a version of the negative story.⁸ Udayana (at least according to his commentators) partially supports the negative story, while Gaṅgeśa mentions it.⁹ In his *Collection of Verses* (Kārikāvalī, kA), Viśvanātha says, “Arthâpatti is not in fact taken to be a distinct means of knowing. For it is successful [in generating knowledge] in virtue of an awareness of negative pervasion.”¹⁰ What explains this? First of all, it is sometimes assumed that anumānas of the negative-only variety involve an awareness of negative pervasion, presumably because an agent can only apprehend a relation of negative pervasion between the reason and the property to be proven by observing the correlation between their absences. (We will discuss this point in the next section, but for a representative passage, see the Viśvanātha passage in footnote 30.) Second, some Nyāya writers, including Jayanta and possibly Udayana, thought that the awareness of incongruity-otherwise (anyathânapapatti) involved in an arthâpatti could be construed as an awareness of negative pervasion. In *Absent Devadatta*, you

---

⁸ See Graheli in this volume, p. xxx. NM, 107: api ca tena vinā nōpapadyata iti kalpanam arthâpattih. tena vinā nōpapadyata iti ca vyatireka-bhanītīr iyam. vyatirekaś ca aprāptaḥ tasmin saty upapadyate ity anvayaṃ ākṣipati. anvaya-vyatirekā ca gamakasya litigasya dharmā iti katham arthâpattih nānumānam kevala-vyatirekī hetu anvaya-mūla evam gamaka iti vaksyāmaḥ.


¹⁰ kA, 144: arthâpattis tu naiveha pramāṇāntaram iṣyate | vyatireka-vaśyātipi-buddhāḥ caritārthā hi sā yataḥ ||.
conclude that Devadatta is outside his home, because you judge that if Devadatta weren’t outside, his property of being alive but absent from home would be incongruous. For he would either be dead or at home. This judgment, at least on one interpretation, is simply an awareness of a relation of negative pervasion between the property of being alive but absent from home and the property of being outside one’s home.

So far, we’ve seen two things. The first is that Nyāya reductionists about arthāpatti treat at least some putative cases of arthāpatti as anumānas of the negative-only variety. The second is that, historically, some Nyāya reductionists about arthāpatti have thought that putative cases of arthāpatti are anumānas that proceed from an awareness of negative pervasion. In the next section, we’ll look at Gaṅgeśa’s discussion of the view that no putative negative-only anumāna can give rise to an anumiti, because any such inference proceeds from an awareness of negative pervasion. If this view were true, the agent’s reasoning in cases like Present Devadatta couldn’t be treated as an anumāna. That would be bad news for Nyāya reductionists about arthāpatti. Gaṅgeśa’s refutation of this view will be useful for understanding Raghunātha’s strategy for resisting reductionism about arthāpatti.

2. GAṄGEŚA ON NEGATIVE-ONLY ANUMĀNAS

In the section on negative-only anumānas (i.e., the Kevala-vyatireki-prakaraṇa) in The Jewel of Reflection on Truth, Gaṅgeśa first defines the notion of a negative-only anumāna.

[The proponent:] That which is negative-only does not have a similar subject (sapaksā), so that the relation of pervasion involved in it is apprehended on the basis of negative correlation.11

A similar subject is an observed place other than the subject, where the property to be proven is present. In a negative-only anumāna of the form “Earth differs from other substances, because it has smells,” there is no observed place (other than the subject, i.e., earth) where the property to be proven is present. So, there is no similar subject. As a result, the agent must apprehend the relevant relation of pervasion solely by observing negative correlation between the reason and the property to be proven.

However, Gaṅgeśa’s opponent takes this to be problem: she thinks that an inference where the relevant relation of pervasion is apprehended solely by observing negative correlation cannot yield an anumiti. In the rest of this section, I will explain this objection, and then discuss two responses that Gaṅgeśa offers to it.

2.1. An argument against negative-only anumānas

The objection is stated as follows.

[The opponent:] Well, that which is negative-only is not an anumāna. For an anumāna is caused by an awareness of a pervaded entity as the property of the

11 TCM, 582: kevala-vyatirekī tv asat-sapakṣo yatra vyatireka-sahacāreṇa vyāpti-grahaḥ.
subject (vyāpta-pakṣa-dharmatā-jānā). In this case, a relation of pervasion is apprehended there on the basis of negative correlation, whereas a positive entity is the property of the subject.12

If we follow the commentator Mathurānātha’s explanation of the argument, the claim is that an awareness of pervasion that arises from an agent’s observation of negative correlation cannot cause an anumiti. This is because an anumiti has to be caused by a positive subsumptive judgment, i.e., a judgment that the reason, which is pervaded by the property to be proven, resides in the subject. However, in a subsumptive judgment that is based solely on an agent’s observation of negative correlation, the relevant relation of pervasion is a negative one, i.e., it holds between two absences, but a positive entity, i.e., the reason, appears as the property of the subject.13 The argument can be reconstructed as follows.

P1. In any putative negative-only anumāṇa, whatever relation of pervasion the agent may apprehend, she does so by only observing instances of negative correlation between the reason and the property to be proven.

---

12 TCM, 582–4: nanu vyatirekā nānumāṇam vyāpta-pakṣa-dharmatā-jānāsya tat-kāraṇatvāt atra vyatireka-sahacārāt vyāptīḥ tatra anvayasya pakṣa-dharmatā. The printed text has “vyāpta-pakṣa-dharmatā-jānāsya” instead of “vyāpta-pakṣa-dharmatā-jānāsya”; following Mathurānātha’s commentary, I have corrected it.


13 TCM, 587–8: “That which is negative-only” stands for an apprehension of pervasion that results from the awareness of negative correlation. ‘It is not an anumāṇa’: it is not an instrument that gives rise to an anumiti. ‘The awareness of the pervaded,’ etc.: an awareness of something as a property of the subject, where that thing is qualified by positive pervasion, i.e., the relation of being co-located with a property to be proven that pervades the reason. ‘In this case’: in a subsumptive judgment produced by an awareness of negative correlation. ‘On the basis of negative correlation’: on the basis of the correlation between the absence of the property to be proven and the absence of the reason. ‘There’: between the absence of the property to be proven and the absence of the reason. ‘Pervasion’: the property of being a pervader. ‘A positive entity’: the reason. Before ‘a property of the subject’ insert ‘is what appears as.’ The thought is that, since a subsumptive judgment involving negative pervasion (vyatireka-vyāpti-parāmarśa), which is caused by an awareness of negative correlation, isn’t a cause of any anumiti, an awareness of the relevant sort of pervasion cannot be a cause of any anumiti” (vyatirekā vyatireka-sahacāra-janya-vyāpti-grahāb, ‘nānumāṇīṃ’ nānumāṇi-karaṇāṃ, ‘vyāptīt eti hetu-vyāpaka-sādhya-sāmānādhikaranya-rūpānvaya-vyāpti-prakāraka-pakṣa-dharmatā-jānāsyey arthaḥ, ‘atra’ vyatireka-sahacāra-jītāna-janayā-parāmarśe ‘vyatireka-sahacāratā sādhyābhāva-hetuv-abhāvayor sahacāra-jīnāt, ‘tatra’ sādhyābhāva-hetuv-abhāvayor iti yāvāt, ‘vyāptīḥ’ vyāpakatvam, ‘anvayasya’ hetuḥ pakṣa-dharmatēti bhāsata iti śeṣāḥ. vyatireka-sahacāra-jītāna-janaya-vyatireka-vyāpti-parāmarśasya anumity-ajanānātāyā tādṛśa-vyāpti-jānāsya nānumāṇi-karaṇātvaṁ iti bhāvāb.) Mahādeva Puṇḍarikakara paraphrases the same objection in the same way. See Nyāya-kaustubha (Nk, 245): “Well, that which is negative-only is not an anumāṇa. The cause of an anumiti is the awareness of that which is characterized by pervasion as a property of the subject. But in the relevant case, a relation of pervasion is apprehended on the basis of negative correlation in the absence of the property to be proven with respect to the absence of the reason. And the reason is apprehended as a property of the subject. Therefore, an anumiti cannot arise, given that its cause is missing” (atha kevala-vyatirekā nānumāṇāṃ vyāpti-visiṣṭe pakṣa-dharmatā-jīnām evānumāṇīḥ-hetuḥ, prakṛte ca vyatireka-sahacāreṇa sādhyābhāve hetu-abhāva-vyāptīry gṛhyate hetau ca pakṣa-dharmatā-grahāti anumiti-karaṇābhāvenānumīti asambhāvāt iti).
P2. By only observing instances of negative correlation between the reason and the property to be proven, an agent can only learn that the absence of the property to be proven is pervaded by the absence of the reason.

P3. An anumiti can only be produced by a positive subsumptive judgment, i.e., an awareness of the reason as pervaded by the property to be proven and as present in the subject.

P4. An agent’s awareness of negative pervasion between a reason and a property to be proven can only produce a negative subsumptive judgment, not a positive subsumptive judgment.

C. From a putative negative-only anumāṇa, an anumiti cannot arise.

If sound, this argument would count against Nyāya reductionism about arthaḥpatti. But why are the premises true? P1 is obvious: it follows from our definition of a negative-only anumāṇa. In his elaboration of the argument, Gaṅgeśa focuses on P3 and P4. However, P2 can be motivated in light of a remark that Mathurānātha makes.

Suppose we reject P2 and say that by solely observing negative correlation between a reason and a property to be proven, the agent can learn that the reason bears a relation of positive pervasion to the property to be proven. But to learn this is to learn that the reason is co-located with the property to be proven, which, in turn, pervades it. Wouldn’t this view lead to a problem of overgeneration? As Mathurānātha explains the worry, “Well, how does the awareness of the correlation between absences give rise to an apprehension of a relation of pervasion between the counterpositives? For there would be a problem of overgeneration if the awareness of the correlation that resides in two things were to cause an apprehension of a relation of pervasion that resides in two other things.” Here’s a way of putting the point (perhaps anachronistically) with reference to the more contemporary paradox of ravens. Suppose perceiving the correlation between the absence of blackness and the absence of raven-ness in things like a white chalk, a red car, a grey house, etc., can help us learn, or can give us evidence for, the hypothesis that all ravens are black. But intuitively, these things seem irrelevant to the hypothesis. So, if the observation of these things could provide evidence for the hypothesis in question, couldn’t we learn or gain evidence for just about any such generalization by perceiving correlations between completely unrelated entities? That is the problem of overgeneration that Mathurānātha is talking about.

What about P3 and P4? Gaṅgeśa notes that someone who wishes to reject P3 may claim that a negative subsumptive judgment (produced by an awareness of negative pervasion) can be a promoter (prayojaka) of anumiti. What is a promoter? A promoter of some effect X is an object that either directly or indirectly causes X.

---

14 TCM, 592: athābhāvavoḥ sahaçāra-jñānāt katham tat-pratiyoginor vyāpti-grahāt eka-niṣṭha-sahaçāra-jñānenāya-niṣṭha-vyāpti-jñānā janane’iti-prasāngād iti. It’s quite clear that, in this passage, the term “vyāpti” refers to positive pervasion, since the objection it answers is directed at Gaṅgeśa’s view that an awareness of negative correlation suffices to produce an apprehension of a relation of positive pervasion.


16 The notion of prayojaka is characterized in different ways across different texts. For detailed discussion, see Guha (1979: 67ff.).
OPTION 0. A negative subsumptive judgment is a causally necessary condition for any anumiti.

If Option 0 is correct, then P3 is false. However, as Gaṅgeśa notes on behalf of an opponent, this proposal is unnecessarily complex and is in tension with another commitment of the Naiyāyikas. In positive-only anumānas like “The tree is a nameable (abhidheya), since it is knowable (prameya),” the property to be proven (i.e., nameability) is present everywhere. So, its absence (insofar as it doesn’t exist) cannot be pervaded by the absence of the reason. In such cases, the reason doesn’t bear a relation of negative pervasion to the property to be proven. Therefore, a true negative subsumptive judgment cannot arise in such cases. So, a negative subsumptive judgment cannot be a causally necessary condition for every anumiti.

In the section on negative-only anumānas, Gaṅgeśa explains (on behalf of the Mīmāṃsaka opponent) why other proposals that seek to reject P3 cannot easily succeed.17 Here are some options.

Option 1. The presence of a uniform or non-disjunctive property that characterizes both positive and negative subsumptive judgments—e.g., the property of being an awareness that the subject of the inference possesses a property that is connected to the property to be proven by some relation of pervasion—is a causally necessary condition for any anumiti.

Option 2. The presence of either a positive or a negative subsumptive judgment is a causally necessary condition for any anumiti.

Option 3. In some cases, the presence of a positive subsumptive judgment is what causes an anumiti; in other cases, the negative subsumptive judgment serves as a cause; in some other cases, it is both.

Gaṅgeśa’s opponent rules out all these options.18 Option 1 is ruled out on the grounds that there is no non-disjunctive or uniform property that is shared by both positive and negative subsumptive judgments. Option 2 is dismissed on the grounds that if a disjunctive property could be a necessary condition for an awareness to be instance of a certain epistemic kind, then we could collapse all the different kinds of knowledge—perceptual, inferential, testimonial—into one kind of knowledge by creating a disjunction of the different causal conditions that give rise to these different kinds of knowledge. Option 3 also doesn’t work. In this dispute, it is not common ground between both parties that an awareness-event which is based on an awareness of negative pervasion counts as an anumiti. This is because a well-established cause of instances of anumiti—namely, a positive subsumptive judgment—that both parties agree on goes missing in this case. So, unless there is some further intuitive pressure for us to treat an inferential awareness based on an awareness of negative pervasion as an anumiti, Option 3 seems fairly ad hoc. This shows that rejecting P3 in the previous argument will be difficult for the Naiyāyikas.

So far, we have only been discussing strategies for rejecting P3. However, a friend of Nyāya reductionism could also try to reject P4; she could argue that an agent’s

---

17 TCM, 585ff.
18 TCM, 585ff.
awareness of negative pervasion can produce a positive subsumptive judgment, e.g., by producing an awareness of positive pervasion. However, Gaṅgeśa’s imagined opponent gives an argument against this view.

Suppose you say: “From the fact that something is a counterpositive of an absence that pervades the absence of the property to be proven, it is known by anumāna that that thing is pervaded by the property to be proven. What we call an anumāna of the negative-only variety just involves a scenario where an anumiti arises on the basis of an anumāna from negative to positive pervasion.”

[We reply:] If a relation of positive pervasion is what yields an awareness of the property to be proven, then mentioning the relation of negative pervasion (while stating the anumāna aloud for others) will suffer from the fault of irrelevance (arthāntarata). Alternatively, if the relation of negative pervasion is mentioned as something that is conducive to [the awareness of] the relation of positive pervasion, then there will be a fault of inappropriate occasion (aprāptakālata) when the relation of positive pervasion goes unmentioned.\(^1\)

On the view under discussion, there is no anumāna of the negative-only variety where an agent makes an inference of the form:

**The Simple Inference**

- P1*. H is absent wherever S is absent.
- P2*. The object p possesses H.
- C*. The object p possesses S.

Rather, the agent’s inference must involve two extra steps:

**The Complex Inference**

- P1*. H is absent wherever S is absent.
- P1**. For any two X and Y, if X is absent wherever Y is absent, then X is only present somewhere if Y is present there.
- P1***. H is only present somewhere if S is present there.
- P2*. The object p possesses H.
- C*. The object p possesses S.

Now, the response that Gaṅgeśa offers on behalf of the opponent is this. Sometimes, we state out loud an anumāna that is based on our awareness of negative pervasion. In many such cases, we only mention the relation of negative pervasion between the reason and the property to be proven, not the positive pervasion between them. In other words, we don’t mention anything like P1** or P1***. But if the positive pervasion is doing all the work in explaining how an anumiti arises in such cases, mentioning just the negative pervasion in an explicit statement of the inference would be pragmatically defective. On the one hand, if the positive pervasion is also mentioned, mentioning the negative pervasion is tantamount to providing extra,

irrelevant information. On the other hand, if the positive pervasion isn’t mentioned, mentioning the negative pervasion is inappropriate (insofar as it is misleading with respect to the true structure of the inference). But intuitively, there is no such pragmatic defect. Hence, the proposal cannot be right.

Ultimately, Gaṅgeśa doesn’t think that the objection we have been discussing succeeds. He outlines two responses to it: the first involving rejecting P2, while the second involves rejecting P3.

2.2. Gaṅgeśa’s first response: rejecting P2

P2 says that by observing instances of negative correlation between the reason and the property to be proven, an agent can only learn that the absence of the property to be proven is pervaded by the absence of the reason. Gaṅgeśa denies this:

On the basis of negative correlation that is free from inferential undercutting conditions (upādhi), one apprehends just a relation of positive pervasion (anvaya-vyāptir eva). For the relation between the counterpositive (pratiyogin) and its absence (anuyogin) regulates the relevant awareness, just as in the case of a positive-and-negative anumāna.  

The first claim of the passage is that by observing instances of negative correlation in cases where there is no inferential undercutting condition (i.e., roughly, any condition that guarantees that the property to be proven may be absent from a place where the reason is present), the agent apprehends just a relation of positive pervasion between the reason and the property of property. So, P2 is false. Thus, all cases of negative-only anumāna can in fact be based on an awareness of positive pervasion. However, this faces the problem of overgeneration that Mathurānātha highlights: if we reject P2, we may have to countenance cases where an agent apprehends a relation of pervasion between two properties by perceiving the correlation between two completely unrelated properties! The second part of passage answers this worry: “For the relation between counterpositives (pratiyogin) and their absences (anuyogin) regulates the relevant awareness, just as in the case of a negative-and-positive anumāna.”

Here’s how I understand this reply. Consider a version of Smoke and Fire, where the agent only observes that the absence of fire is always accompanied by the absence of smoke. In this awareness of correlation, the absence of fire has fire as its counterpositive, and the absence of smoke has smoke as its counterpositive. Since fire functions as the counterpositive of its absence in virtue of having firehood, firehood is the property that restricts the role of the counterpositive to all and only fires. In that sense, firehood is the delimitor (avacchedaka) of the counterpositiveness

---


21 Gaṅgeśa’s definition of an inferential undercutting condition is given in TCM, 336: “An inferential undercutting condition is that, due to a deviation from which, the reason deviates from the property to be proven. It is defined as a property that pervades the determined (paryavasita) property to be proven, but doesn’t pervade the reason” (yad-vyabhicāritvena sādhanasya sādhyā-vyabhicāritvam sa upādhiḥ, lākṣaṇaṁ tu paryavasita-sādhyā-vyāpakatvē sati sādhanāvāpakatvam).
(pratiyogita) determined by the relevant absence. Similarly, since smoke appears in that awareness as the counterpositive of its absence in virtue of being characterized by smokehood, the counterpositiveness that resides in smoke is delimited by smokehood. According to Gaṅgeśa, by observing the correlation between two absences where the delimiters of counterpositiveness are firehood and smokehood respectively, the agent can learn that the locus of smokehood, i.e., smoke, is pervaded by the locus of firehood, i.e., fire. That is how the relation between a counterpositive and its absence regulates the awareness of pervasion. Gaṅgeśa’s commentator, Mathurānātha, explains:

The meaning is this. There is no problem of overgeneration. For the awareness of the correlation between two absences, which are delimited by two specific properties and are grasped as absences delimited by those two specific properties, causes an apprehension of pervasion between the loci of those specific properties, where those properties are grasped as those two properties.22

This avoids the problem of overgeneration, because the rule mentioned by Mathurānātha only applies to cases where the apprehended relation of pervasion holds between the loci of the properties that delimit (the counterpositiveness relevant to) the observed absences. This rule, according to Gaṅgeśa, is already quite plausible, since it explains why in positive and negative anumānas, the agent’s observation of both positive and negative correlations can help us learn that the reason is pervaded by the property to be proven.

2.3. Gaṅgeśa’s second response: rejecting P3

Later, Gaṅgeśa goes on to outline an alternative response that involves rejecting P3, i.e., the premise that a negative subsumptive judgment cannot produce an anumiti. Unlike the previous response, this reply leaves open the possibility that observing solely negative correlation between a reason and a property to be proven cannot cause an awareness of positive pervasion between the two. But the reply involves the further claim that an awareness of negative pervasion, and therefore a negative subsumptive judgment that arises from it, can give rise to an anumiti. Gaṅgeśa says:

Alternatively, a relation of negative pervasion can be an indicator (gamaka) of a positive entity [i.e., the property to be proven]. Since the reason is just the absence of a property which pervades the absence of the property to be proven, it can establish the presence of the property to be proven which is just the absence of the absence of the property to be proven.23

---

22 TCM, 336: tat-tad-dharmāvacinābhāvacatvena tat-tad-dharmāvacinābhāvavoc sahacāra-jñānasya tat-tad-dharmārūpeṇa tat-tad-dharmāśrayayayor vyāpti-grahaṇ prati janakatvān nātiprasatīga ity arthaḥ. Once again, it’s quite clear that, in this passage, the term vyāpti refers to positive pervasion, since the objection it answers is directed at Gaṅgeśa’s view that an awareness of negative correlation suffices to produce an apprehension of a relation of positive pervasion.

23 TCM, 593: yad vā vyatireka-vyāptar eva anavaya gamya-gamaka-hāvaḥ sādhyābhāva-vaṇṇapakā-sādhanābāvābhāvāyena sādanena pākṣe sādhyābhāvābhāvāyena sādhyāsya sādanaḥ. vyāpakābhāvāyena vyāpābhāvāsvyam-bhāvāt. In my interpretation of this passage, I am relying on Mathurānātha who takes the term anuvaya to refer to the property to be proven.
The proposal here crucially depends on a principle about the ontology of absence.

In later Nyāya-Vaiśeṣika ontology, absences are a separate category of entities, distinct from a positive entity (bhāva-padārtha), i.e., substance (dravya), trope or quality (guna), motion (kriyā), natural kind property (jāti), differentiator (vīśēṣa), and the relation of inherence (samavāya) by which the last four kinds of properties reside in substances. Absences are taken to be of two kinds: relational absence (samsargabhāva) and mutual absence (anyonyābhāva). A mutual absence of an entity X is an absence of identity with X, so it consists in being different from X. A relational absence of an entity X (though often defined as a kind of absence that is distinct from mutual absence) is basically the absence of X in another entity Y. So, when I say, “There is no bottle on this table,” I am ascribing to the table a relational absence, but when I say, “This table is not that one,” I am ascribing to this table a mutual absence. Relational absences fall into three categories: prior absence (prāg-abhāva), posterior absence or destruction (dhvamsa), and absolute absence (atyantābhāva). The prior absence of a thing is its absence before it is produced. The destruction of a thing is its absence after it has been destroyed. Finally, the absolute absence of a thing from a place is an absence that is located in that place at all the three times, i.e., past, present, and future. Constructions of the form “The bottle is not on the table” are supposed to illustrate this last kind of relational absence.

Focus now on just absolute absences and mutual absences. Following Udayana, Gaṅgeśa thinks that the absolute absence of the absolute absence of an entity X is identical to X, while the absolute absence of a mutual absence of X is identical to a distinctive property of X.

The absolute absence of an absolute absence is just the counterpositive, while the absence of a mutual absence is a distinctive property (asādharana-dharma) that resides in the counterpositive.
While commenting on this passage, Raghunātha points out that the distinctive property that Gaṅgeśa refers to is the delimitor of counterpositiveness. Therefore, a pot, which is the counterpositive of an absolute absence of that pot, is identical to the absolute absence of that absence. Similarly, pothood, which is the delimitor of the counterpositiveness that is determined by the mutual absence of a pot, is identical to the absolute absence of that mutual absence. Why does this make sense? Raghunātha and Mathurānātha suggest that the view is motivated by a principle of property individuation: for any two properties P and P*, if P and P* are apprehended in (or ordinarily ascribed to) exactly the same places, then P must be regarded as identical to P*. Since we observe that the absolute absence of the absolute absence of a pot resides in all and only those places where that pot resides, the pot and the absolute absence of its absolute absence are treated as identical. Analogously, since we observe that the absolute absence of a mutual absence of a pot (i.e., the absolute absence of a difference from a pot) resides in all and only instances of pothood (since only that pot isn’t different from itself), the absolute absence of a mutual absence of the pot is regarded as identical to pothood.

From this discussion, we get:

Gaṅgeśa’s Principle of Iterated Absence. For any entity X, the absolute absence of the absolute absence of X is X itself.

If this is true, when someone learns about the presence of smoke on the hill by perception, she thereby learns that there is an absolute absence of the absolute absence of smoke on the hill. Similarly, if she learns that there is an absolute absence of the absolute absence of fire on the hill, she thereby learns that there is fire on the hill. Henceforth, whenever I say “absence,” I will mean absolute absence unless I specify otherwise.
Now, consider a variant of *Smoke and Fire*, where you know (on the basis of the negative correlation between smoke and fire) that the absence of smoke pervades the absence of fire. According to a simplified version of Gaṅgeśa’s definition of pervasion, *Pervasion*. For any two entities H and S, S pervades H if and only if two conditions hold:

**Co-instantiation Condition.** There are some places where both H and S are present together.

**Non-deviation Condition.** S is not the counterpositive of an absolute absence which resides at a place where H is present.\(^{30}\)

So, if you know that the absence of smoke pervades the absence of fire, you know that

(7) The absence of smoke is not the counterpositive of an absence which resides at a place where the absence of fire is present.

This is equivalent to:

(8) If the absence of the absence of smoke is present at a place, then the absence of fire is absent from that place.

If you also know that the absence of the absence of smoke is present on the hill, then, by (8), you can infer the absence of the absence of fire on the hill. By Gaṅgeśa’s Principle of Iterated Absence, that is simply identical to fire. So, you know that there is fire on the hill. Hence, an awareness of a relation of negative pervasion can indeed produce an *anumiti* in this case.

As Gaṅgeśa goes on to explain, the opponent’s earlier worries about whether a negative subsumptive judgment can produce an *anumiti* are unjustified.

Suppose one says, “Well, that [i.e., an awareness that is based on a negative subsumptive judgment] isn’t an *anumiti*. For a well-established cause of an *anumiti* goes missing. If things were otherwise [i.e., if a property common to both kinds of subsumptive judgment were to cause an *anumiti*], there would be a problem of non-uniformity.”

[We reply:] No. With respect to any *anumiti*, the awareness of pervasion serves as the promoter. This view doesn’t result in any problem of overgeneration. Even when the general causal conditions necessary for an *anumiti* are present, a specific kind of *anumiti* doesn’t arise unless the specific causal conditions necessary for that kind of *anumiti* obtain. For the general conditions can only produce the relevant effects with the help of the specific conditions. There is simply no

---

\(^{30}\) TCM, 100: “Pervasion [of x by y] is the co-location of x with y such that y is not the counterpositive of an absolute absence which is co-located with x but not co-located with its own absence” (pratiyogya-asamāṇādhikaraṇa-yat-samāṇādhikaraṇantabhāva-pratiyogī yan na bhavati tena saha tasya sāmāṇādhikaranyaṃ vyāpītaḥ).
collection of causal conditions that includes the specific causal conditions required for both positive-only and negative-only anumiti.\textsuperscript{31}

Gaṅgēśa here endorses what we earlier called Option 3: namely, that some anumiti\textit{s} are caused by positive subsumptive judgments, while others are caused by negative subsumptive judgments. On this view, any anumiti is produced by a general necessary condition: an awareness of pervasion. Since this is what unifies all instances of an anumiti, there is no problem of non-uniformity. But, at the same time, this general necessary condition can only produce specific kinds of anumiti through the mediation of specific causal conditions. In the case of a positive-only anumāṇa, the specific causal condition is a positive subsumptive judgment. In the case of a negative-only anumāṇa, it is a negative subsumptive judgment. Finally, there is also no problem of overgeneration due to the simultaneous presence of the causal conditions necessary for both positive-only and negative-only anumāṇas. For those conditions cannot be present together. So, P3 is false.

The lesson is this. Gaṅgēśa thinks that even if (some or all) so-called negative-only anumāṇas involve an awareness of negative pervasion, that doesn’t prevent them from giving rise to anumiti\textit{s}. Thus, this entire discussion gives us two distinct views about the nature of negative-only anumāṇas. On one view, a negative-only anumāṇa may involve (or perhaps always involves) an awareness of positive pervasion which is based solely on the observation of negative correlation. On the other view, a negative-only anumāṇa involves an awareness of negative pervasion. These two views are reported quite frequently in primers of later Nyāya.\textsuperscript{32} The first view is regularly attributed to Udayana, while some later Naiyāyikas, e.g., Mahādeva Puṇḍatāmakara (seventeenth century CE), suggest that the latter is the view that Gaṅgēśa favors.\textsuperscript{33}

3. RAGHUNĀTHA ON GAṆGEŚA’S PRINCIPLE OF ITERATED ABSENCE

In the last section we reconstructed Gaṅgēśa’s account of how an awareness of negative pervasion between a reason and a property to be proven can be the basis of

\textsuperscript{31} TCM, 593: \textit{atha evam na sānumitiḥ klpta-tad-dhetu-liṅga-parāmarsābhāvāti, anyathānanugama iti cen, na. anumiti-mātre vyāpti-jñāṇa-prayaojatakātvāt. na ca evam ati-prasāṅgāḥ, anumiti-sāmāṇya-sāmagrīḥ satyām apy anumiti-viśeṣa-sāmagrī-virahād anumity-anupatteḥ viśeṣa-sāmagrī-sāpekṣyāḥ eva sāmāṇya-sāmagrī jānakatvāt. anvayi-vyatireki-viśeṣa-dvaya-sāmagrī ca nāsty eva.}

\textsuperscript{32} A representative statement comes from Viśvanātha: \textit{“Amongst those [three kinds of anumāṇa], the awareness of a relation of negative pervasion serves as a cause in a negative-only anumāṇa . . . The apprehension of a relation of negative pervasion is caused by the awareness of negative correlation. However, some say, ‘On the basis of negative correlation, only a relation of positive pervasion is apprehended. Therefore, the awareness of a relation of negative pervasion doesn’t additionally have to be a cause in a negative-only anumāṇa; an anumāṇa in which the relation of pervasion is apprehended on the basis of negative correlation is called negative-only . . .’”} Viśvanātha\textsuperscript{3} remarks: \textit{tatra hi vyatirekini vyatireka-vyāpti-jñāṇanām kāraṇām . . . vyatireka-vyāpti-grahaḥ vyatirekaḥ sahaçāra-jñānaḥ kāraṇām. kecit tu vyatireka-sahaçāra-jñānenaṁvaya-vyāptiḥ eva gṛhyate na tu vyatireka-vyāpti-jñānaṁ api kāraṇān yatra vyatireka-sahaçārad vyāpti-graḥas tatra vyatirekīty ucyate . . . iti vadanti. Siddhānta-muktāvalī (SMA), 499–501. According to Viśvanātha’s commentator, Dinakara Bhaṭṭa, Udayana subscribes to the second view (KA, 501). Also, see Jñānakīnātha’s Nyāya-siddhānta-mañjarī (NSM), 112–17, and Puṇḍatāmakara's NK, 244–5.}

\textsuperscript{33} NK: 244–5.
an anumiti about that property to be proven. A crucial assumption of this account is Gaṅgēśa’s Principle of Iterated Absence. In A Determination of the True Nature of the Categories (Pādārtha-tattva-nirūpana), Raghunātha rejects this principle:34

Thus, the absence of the absence of a pot, etc. is also a distinct entity indeed. For there is an unrebutted awareness of absencehood in the form “The absence of a pot, etc., doesn’t exist” with respect to a place that contains a pot. It is also not the case that, if this view is true, there is a regress. For there is no contradiction in claiming that a single absence of a pot is identical to the absence of its own absence.35

While explaining this passage, Raghudeva claims that Raghunātha is speaking not only about the absolute absence of an absolute absence, but also about the absolute absence of a mutual absence.36 On this interpretation, contra Gaṅgēśa, Raghunātha is saying that the absolute absence of an absolute absence is not identical to the counterpositive of the latter, and the absolute absence of a mutual absence is not identical to any distinctive property that resides only in the counterpositive of the latter. Both are in fact distinct entities, i.e., separate absences. A part of Raghunātha’s reason for rejecting Gaṅgēśa’s claims might be that he rejects the principle of property individuation mentioned earlier. For Raghunātha, even though two properties may be seen to reside in all the same things, they could still be distinct. Let me unpack Raghunātha’s reasoning.

Suppose you are looking at something before you, and you judge:

(9) This is a pot (ayam ghaṭaḥ).

Awareness-events of this kind present an object (or some objects) as characterized by some feature. In this example, for instance, the awareness-event ascribes the property of pothood to the thing before you. Later Naiyāyikas take such awareness-events to have three kinds of object: the qualificand (viśeṣya), the qualifier (viśeṣaṇa or prakāra), and the qualifying relation (samsarga).

34 Raghunātha discusses and/or rejects similar principles in at least two other places in his commentary Splendour on The Jewel: in theVyāpti-pārṣva-paśka-prakarana and the Kevalānvayi-prakarana in GA, 281–2; 1351–4). It’s unclear whether there are any post-Gaṅgēśa writers before Raghunātha who reject the Principle of Iterated Absence: Raghunātha himself mentions and refutes a view (which Jagadīśa ascribes to some Mīśra, possibly Pāksadharāj), according to which the Principle of Iterated Absence is false, since the absolute absence of a mutual or absolute absence is identical to the relation that delimits the counterpositiveness (pratīyogitāvacchedaka-sambandha) determined by the relevant mutual or absolute absence. Even after Raghunātha, his views were not popular: Mathuranātha and Jagadīśa defend the Principle of Iterated Absence in their commentaries on The Jewel, while Raghunātha’s own commentators report extant views that preserve it. For Mathuranātha’s passage, see footnote 29; for Jagadīśa’s comments, see TCMM, 42–3; for the commentaries on Raghunātha’s passage, see PATN2, 108–12. Matilal claims that the Principle of Iterated Absence is almost universally accepted among later Naiyāyikas; see his, “Double Negation in Navya-Nyāya” in M. Nagatomi, B. K.Matilal, J. M. Masson, and E. C. Dimock (1979: 4).

35 PATN1, 5.5.1–4; evam abhāvasyāpy abhāvau’tripirktva eva ghaṭādiṁati tad-abhāvo nāstity ahādhitabhāvatva-pratayāt. na caiva anavasthā ekasyaiva svabhāvabhāva-raṣṭratvā virodhābhāvat.

36 Raghudeva’s PATN2, 109: ghaṭādy-abhāvēti. ghaṭātyantabhāvānyonyabhāvātyantabhāva ity arthaḥ.
i) The object to which the relevant property is ascribed is the qualificand \( (v\text{\i{s}e\text{\i{y}}}) \). In this example, the thing before you is the qualificand. The property which is ascribed to the qualificand is the qualifier \( (v\text{\i{s}}\text{\e{s}}\text{\a{n}} \text{\a{\text{r}}a}) \). In this case, it is pothood.

iii) The relation in virtue of which the qualifier characterizes the qualificand is the qualifying relation. In this example, the qualifying relation is inherence \( (s\text{\a{mav\text{\i{y}}}}) \), i.e., a relation in virtue of which pothood resides in pots.

Moreover, in any such awareness-event, the qualificand, the qualifier, and the relation between the two are presented under certain modes of thought. These modes of thought are not exactly Fregean senses, but rather properties in virtue of which the agent is able to think about the qualificand, the qualifier, and the qualifying relation. These modes of thought are what the Naiy\text{\i{y}}ikas call delimitors \( (a\text{\text{v}a\text{\c{c}c\text{h\text{e}dak\text{a}}}}) \), i.e., they delimit exactly which things play which object-role with respect to which awareness-event. In the previous example, the pot is the qualificand, but the mode of thought under which the agent thinks about it is this-ness \( (i\text{\d{a}n\text{\i{t\text{\a{v}}}}}) \) or the property of being in front of the agent \( (p\text{ru\text{o-vartt\text{t\text{\i{t}}}}}) \). This is what the Naiy\text{\i{y}}ikas would call a delimitor of qualificandhood \( (v\text{\i{s}e\text{\i{y}}s\text{\a{n}}\text{\a{\text{t}}\text{\a{v\text{c\c{c}c\text{h\text{e}dak\text{a}}}}}}) \). The mode under which the agent thinks about the qualifier, i.e., the property of pothood, is pothood-hood \( (g\text{\ha{t\text{a}t\text{v\text{a}}}}) \). This is the delimitor of qualifierhood \( (v\text{\i{s}}\text{\e{s}}\text{\a{n}}\text{\a{\text{t}}\text{\a{v\text{c\c{c}c\text{h\text{e}dak\text{a}}}}}} \text{or } p\text{r\text{\a{\text{ka\text{\r{a}r\text{a}}}}}}\text{\a{\text{v\text{c\c{c}c\text{h\text{e}dak\text{a}}}}}}) \). Finally, the mode under which the agent thinks about the qualifying relation, i.e., inherence, is inherencehood \( (s\text{\a{m\a{\text{s\a{s\a{r\a{t\a{g\text{a}}}}}}}}\text{\a{\text{v\text{c\c{c}c\text{h\text{e}dak\text{a}}}}}}) \). This is the delimitor of relationhood \( (s\text{\a{m\a{s\a{\text{s\a{r\a{t\a{g\text{a}}}}}}}}\text{\a{\text{v\text{c\c{c}c\text{h\text{e}dak\text{a}}}}}}) \).

Consider now an awareness-event that can be expressed as:

\[
(10) \text{The absence of a pot doesn’t exist on the floor (bhū-tale ghatābhavo nāsti).}
\]

This awareness-event may be true in a case where there indeed is a pot on the relevant floor. Here, the qualificand is the (absolute) absence of the pot \( (g\text{\ha{t\text{a}t\text{b\text{h\text{a}}}}}) \). The qualifier is non-existence or absence on the floor \( (b\text{hū-tala-vṛttī-abbhāva}) \). This, too, is an absolute absence. Finally, the qualifying relation is counterpositiveness \( (a\text{bbhāvīya-pratiyogitva}) \). For, since the absence of a pot is the counterpositive of an absence (i.e., the absence of the absence of a pot) that resides on the floor (because it is a place where a pot exists), the absence of a pot is connected to the latter absence by a relation of counterpositiveness. The important thing to note here is that there are two properties which together constitute the mode of thought under which the agent thinks about the qualifier in this example: the property of residing on the floor \( (b\text{hū-tala-vṛttītva}) \), and absencehood \( (a\text{bbhāvātva}) \). Both these properties serve as delimitors of qualifierhood.

Raghunātha’s argument against Gaṅgeśa’s Principle of Iterated Absence is this: In an awareness-event that is verbalizable as \( (10) \), the absence of a pot is taken to be the counterpositive of something that possesses absencehood \( (a\text{bbhāvātva}) \). Absencehood is not a property that we ordinarily take a positive entity like a pot to possess; in fact,
Absencehood is often defined as the property of being distinct from a positive entity (bhāvabhinnatva). So, we should think that, in this awareness-event, the absence of the pot appears as the counterpositive of something that possesses absencehood, and therefore is distinct from a positive entity like the pot. And, since the awareness-event in question may not be rebutted by any other means of knowing, we will have to assume that its content is true. Therefore, if the absence of a pot is a counterpositive of an entity X, then X must be distinct from the pot itself. But note that the absolute absence of a pot is the counterpositive of the absolute absence of the absolute absence of the pot. Hence, the absolute absence of the absolute absence of a pot is distinct from the pot. This means that Gaṅgāśa’s Principle of Iterated Absence is false. A similar argument can be run against the principle that the absolute absence of the mutual absence of a pot is identical to a distinctive property that resides only in the pot; we only have to consider an awareness-event of the form “The mutual absence of a pot doesn’t reside in that pot” (ghate ghata-bheda na asti).

An immediate objection against Raghunātha’s argument might be that for any positive entity X, it forces us to posit an infinite hierarchy of distinct entities, i.e., X’s absolute absence, the absolute absence of X’s absolute absence, and so on. So, there will be an infinite regress. In the last sentence of the quoted passage, Raghunātha explains why he doesn’t think this is a problem. He says that if we want to avoid the regress, we can just assume that any absence is identical to the absence of its absence. This would mean that there are only three levels in the relevant hierarchy: positive entities, their absolute absences, and the absolute absences of their absolute absences.

Raghunātha’s commentators, Rāmabhadrā and Raghudeva, consider another salient objection. Raghunātha’s claim basically is that if the absolute absence of an absolute absence of a pot were identical to the pot, then it would not appear, in an awareness-event of this sort, as characterized by absencehood. However, this argument works only if absencehood is construed as a property that doesn’t reside in positive entities. Raghunātha’s opponent could avoid this problem by positing a property of absencehood (or a property of being an absolute absence), which can reside not only in absences proper (which are distinct from positive entities) but also in positive entities. The response that Rāmabhadrā offers on behalf of Raghunātha is that it is simpler just to reject Gaṅgāśa’s Principle of Iterated Absence. After all, if we take absencehood to reside in both positive entities and absences proper, how would we distinguish positive entities from absences proper? This view would blur the distinction between positive entities and absences proper.

38 Raghunātha explicitly rejects two similar principles of iteration about prior absences and posterior absences: the first says that the posterior absence of a prior absence is identical to the counterpositive of the prior absence, and the second says that the prior absence of a posterior absence doesn’t have to be a distinct absence; see PATN1, 56.2–57.1. Interestingly, however, Raghunātha claims that the mutual absence of a mutual absence doesn’t have to be a distinct absence; see PATN1, 55.5–56.2.

If Raghunātha’s argument succeeds, then Gaṅgeśa’s account of how an awareness of negative pervasion gives rise to an *anumiti* must fail. For Gaṅgeśa cannot explain why learning that there is smoke on the hill amounts to learning that there is an absence of the absence of smoke on the hill, or why learning that there is an absence of the absence of fire on the hill amounts to learning that there is fire on the hill. So, Gaṅgeśa hasn’t shown us that a relation of negative pervasion between a reason and a property to be proven can, by itself, give rise to an *anumiti* about the property to be proven.40

4. RAGHUNĀTHA’S ARGUMENT

Perhaps this shows that Gaṅgeśa’s argument in §2.3 doesn’t succeed. But this doesn’t rule out the possibility that a relation of negative pervasion between a reason and a property to be proven can, by itself, give rise to an *anumiti* about the property to be proven. In his commentary on the section of *The Jewel* on positive-only *anumānas* (the *Kevalānvai-prakarana*), Raghunātha denies precisely this. He argues for:

*Raghunātha’s Thesis.* An agent’s awareness of the relation of negative pervasion between a reason and a property to be proven cannot be *by itself* (i.e., without the mediation of any awareness of a relation of positive pervasion) give rise to an *anumiti* about the property to be proven.

Here, I explain his argument for this thesis.

4.1. Three assumptions

In his argument, Raghunātha presupposes three principles.

*Raghunātha’s Principle of Iterated Absence.* For any positive entity X, the property of being the absolute absence of the absolute absence of X is distinct from the property of being X.

The Principle of Deviation. An agent can acquire knowledge by *anumāna* only if she does not antecedently judge or suspect that the reason deviates from the property to be proven (i.e., is present at some place where the property to be proven is absent).

40 In response, someone like Gaṅgeśa might concede that the absolute absence of an absolute absence is distinct from the counterpositive of the latter absence, but could claim that an agent who understands how the relation between absences and their counterpositives work should know the following principle: Weak Principle of Iterated Absence. For any entity X, the absolute absence of the absolute absence of X is present at a place if and only if X is also present at that place.

So, on observing smoke on hill, such an agent can infer that there is an absence of the absence of smoke on the hill. Similarly, after inferring that there is an absence of the absence of fire on the hill, the agent can infer that there is fire on the hill. However, note that within the Nyāya framework, an agent can only come to know a generalization like the Weak Principle of Iterated Absence by some kind of empirical investigation (which will involve observing correlations between things and the absence of their absences). An agent who doesn’t engage in such empirical investigation won’t be able to learn this principle. Such an agent won’t be able to make the inferences that she is required to make on this revised view.
The Principle of Conflict. Suppose an awareness-event A1 ascribes a property P to an object o1, and an awareness-event A2 ascribes the absence of P to o2. Then, A2 conflicts with A1 only if, in both awareness-events, o1 and o2 are presented under the same mode of thought.

Let me motivate these principles one by one.

Take Raghunātha’s Principle of Iterated Absence. If Raghunātha’s previous argument against Gaṅgeśa’s Principle of Iterated Absence succeeds, then we can show that, for any positive entity X, X isn’t identical to the absolute absence of the absolute absence of X. If that is right, then for any positive entity X, the property of being X can’t be the same as the property of being the absolute absence of the absolute absence of X. For the first property is instantiated by things that are distinct from the things that instantiate the second. So, this principle follows straightforwardly from what he says against Gaṅgeśa’s Principle of Iterated Absence. Moreover, as Jagadīśa notes, we can defend this principle even if Gaṅgeśa’s Principle of Iterated Absence is true. If that principle is non-trivially true, we can informatively assert sentences like “The pot is the absolute absence of its absolute absence” (ghato ghatātyantābhāvātyantābhāvah). But an assertion of such a sentence wouldn’t be informative (or wouldn’t produce a testimonial awareness) unless the delimitor of qualificandhood, i.e., pothood (ghatātva), were distinct from the delimitor of qualifierhood, i.e., the property of being an absolute absence of the absolute absence of that pot (ghatātyantābhāvātyantābhāvattva). According to a popular principle in later Nyāya, an assertion of the sentence, “The pot is the pot,” cannot generate any awareness. For if it did, the delimitor of qualificandhood would be the same as the delimitor of qualifierhood.41 So, Raghunātha’s Principle of Iterated Absence comes out true.

The Principle of Deviation is widely accepted among later Nyāya philosophers.42 In Smoke and Fire, when you infer the presence of fire on the hill after observing smoke on the hill, you are antecedently certain that smoke doesn’t deviate from fire, i.e., is never present at a place where fire is absent. In other words, you are antecedently certain that you couldn’t have the kind of evidence that forms the basis of your inference unless the conclusion of an anumiti from other forms of indirect (i.e., non-perceptual) knowledge. For example, in the case of testimonial knowledge, an agent could come

---

41 The principle is explicitly defended by Gadaḍādaḥa in his Vyutpatti-vāda (VV): “The convention is that an awareness where two objects are semantically combined by a relation of identity can arise only if they are presented differently. For, in the case of sentences like ‘The pot is the pot,’ ‘The stick-bearer is the stick-bearer,’ ‘He cooks the cooking,’ etc., there aren’t any awareness-events in which objects that are delimited by po-hood, stick-bearer-hood, cooking-hood, etc. are semantically combined by a relation of identity with things that are delimited by those very same properties” (abhedānvaya-bodhāca virūpāsthātayo eva iti vyutpattib. “ghato ghatāḥ,” “daṇḍa-vān daṇḍa-vān,” “pākam pacati” ity ādau ghatātva-daṇḍavattva-pākavādy-avacchīme tat-tad-ṛṣṇāvavacchīme n Battlefield-vidhānvaya-bodhānvadāvāyā) (VV, 136). The principle is implicit at many places in The Jewel, e.g., Gaṅgeśa’s discussion of memory demonstratives in the section on qualitative perception (savikalpaka-vāda).

42 For these later Nyāya philosophers, deviation is a defect of a reason (hetvābhaṣa), called common-ness (sādhaṛta). A defect of a reason is some property of the reason the awareness of which prevents an anumiti from arising. For definitions of a defect of a reason and common-ness, see TCM, 763–4 and 823.
to judge the content of an utterance to be true, even though she may not have antecedently ruled out the possibility that the sentence in question is never uttered by a certain speaker in a scenario where its content is false.43

The Principle of Conflict needs some further motivation.44 Let’s say that an awareness-event conflicts with another just in case that, as a matter of rule, the agent never undergoes the two awareness-events at the same time, either because (i) it is psychologically impossible for the agent to undergo both awareness-events at the same time, or (ii) the presence of one awareness-event prevents the other awareness-event from arising or persisting.45 Suppose an awareness-event A1 ascribes a property P to an object o1, and an awareness-event A2 ascribes the absence of P to o2. According to the principle of conflict, in a normal agent, A2 conflicts with A1 only if, in both awareness-events, o1 and o2 are presented under the same mode of thought. Here’s a quick way of seeing why this is plausible. Suppose you know that Caitra is a person. But, then, you see Caitra at a distance, but can’t tell that it is Caitra. In fact, the object you see seems a bit like a tree stump to you, so you wonder, “Is that a person, or not?” (sah puruso na vā) or, perhaps, you judge, “That’s not a person” (so na purusah). Here, your judgment or suspicion that the object isn’t a person doesn’t conflict with your judgment that Caitra is a person even though the qualificand is the same in both cases. The only explanation is that the delimitor of qualificandhood, i.e., the mode under which you think about the qualificand, is different in the two cases: in one case, it is Caitrahood (perhaps, all the properties that distinguish Devadatta from other things), and in the other case, it’s the indexical property of thatness (tattā). This supports the Principle of Conflict.

4.2. The argument

Now, we are in a position to state Raghunātha’s argument for his thesis. In his commentary on the section of The Jewel on inferences of the positive-only variety, Raghunātha says:

In this way, the reason’s being the counterpositive of an absence that pervades the absence of the property to be proven is not conducive to an anumiti. For this property is complex and doesn’t conflict with any awareness of deviation. An awareness-event of the form “The absence of smoke is the counterpositive of an absence that is co-located with the absence of fire” can only sometimes conflict with the awareness of the absence of smoke as co-located with the absence of fire,

43 The later Naiyāyika, Gādādharā, says: “The thought is this. If the set of causal conditions which includes an awareness of deviation can promote an anumiti, then testimony, etc., cannot be treated as independent means of knowledge; for the set of causal conditions such as the awareness of expectation (ākāṅkṣā), etc., [which bring about testimonial knowledge] can also involve such awareness of deviation” (vyabhicāra-jañāna-gaṭita-sāmagrīyā anumiti-prayajakārāvācākāṅkṣā-jañāna-gaṭitā-sāmagrīyā api tathātvābhāvena sābādānām api svatantra-praṇāṇātā-bhaṅga-prasātāga iti bhāvāḥ). Gādādharā on Dīdhīti on Kevalānvyā- prakaraṇa of Tattva-cintā-māni in GA, 1381.
44 My explanation here just follows Guha (1979: 208–9).
45 This relevant notion of conflict or virodha—as regularly not obtaining together (niyata-sahānaastiha)—is discussed by Gaṅgesa in his discussion of counterpositiveness. See the passage quoted in footnote 23.
in virtue of attributing the property of being the absence of the absence of smoke but not in virtue of attributing smokehood. For it involves a different qualifier (prakāra). 46

The argument in this passage is this. An agent’s awareness of negative pervasion cannot give rise to an anumitti for two reasons. First, the relation of negative pervasion is quite complex. Second, this awareness doesn’t conflict with any awareness of deviation, i.e., any suspicion or judgment that the reason deviates from the property to be proven. Let’s ignore the first worry: as Raghunātha’s commentator Jagadīśa notes, there might be a simpler way of stating the relation of negative pervasion (on which a reason is connected to a property to be proven by a relation of negative pervasion if and only if it doesn’t reside in anything that lacks the property to be proven (sādhyābhāva-avatātavāttu)).

The second worry is the interesting one. When an agent comes to know that smoke is connected to fire by a relation of negative pervasion, she knows that the absence of smoke pervades the absence of fire. So, by the definition of pervasion, she knows that:

(11) The absence of smoke is not the counterpositive of an absence which resides at a place where the absence of fire is present (dhiṃabhāva vahny-abhāvādvikaraṇa-vrtty-abhāvāpratiyogyo).

This is what Raghunātha refers to by the term “the awareness of the absence of smoke as co-located with the absence of fire.” This implies:

(12) The absence of the absence of smoke is absent from any place where the absence of fire resides (dhiṃabhāva-abhāva vahny-abhāvādvikaraṇe na asti).

In (12), the absence of the absence of smoke is the qualificand, while the absence from any place where the absence of fire resides is the qualifier. The content of this awareness conflicts with:

(13) The absence of the absence of smoke resides at some place where the absence of fire resides (dhiṃabhāva-abhāva vahny-abhāvādvikaraṇa-vṛttiḥ).

In (13), the absence of the absence of smoke is the qualificand, while the property of residing at a place where the absence of fire resides is the qualifier. Now, notice two things. Here, the qualifiers of the two awareness-events cannot be instantiated together. Moreover, in both cases the qualificand—the absence of the absence of smoke—is presented under the same mode of thought, i.e., the property of being the absence of smoke (dhiṃabhāva-abhāva). So, according to the Principle of Conflict, an awareness-event with the content expressed by (13) can indeed conflict with an awareness-event with the content expressed by (12).

However, according to Raghunātha, an awareness-event with a content expressed by (12) cannot conflict with an awareness-event with the content expressed by (14):

(14) Smoke resides at some place where the absence of fire resides (dbhūmo vabhya-abhava-ūrttih).

In (14), smoke is the qualificand of the relevant awareness, while the property of residing in something that possesses the absence of fire is the qualifier. Here, the delimiter of qualificandhood is smokehood (dbhūmatva). According to Raghunātha’s Principle of Iterated Absence, even if smoke is identical to the absence of the absence of smoke, smokehood and the property of being the absence of the absence of smoke are distinct properties. This, in turn, means that the modes of thought under which the qualificand is presented in (12) and (14) are different. It is this in sense that the two awareness-events involve different qualifiers (since the delimiter of the qualificandhood is a qualifier of the qualificand). Here, the principle of conflict entails that the awareness-event with the content expressed by (12) cannot conflict with any awareness-event with the content expressed by (14).

If this argument works, an agent can indeed judge that smoke bears a relation of negative pervasion to fire and judge or suspect that smoke deviates from fire. If the agent nevertheless infers the presence of the property to be proven in the subject directly on the basis of her awareness of negative pervasion, then, according to the Principle of Deviation, the knowledge of the property to be proven that the agent gains in such a scenario is not an anumiti. This supports Raghunātha’s Thesis, i.e., the view that an agent’s awareness of negative pervasion cannot generate an anumiti by itself.

5. RAGHUNĀTHA’S ANTI-REDUCTIONISM

In response to this argument, someone like Gaṅgeśa might claim that the general causal condition for any anumiti is the agent’s awareness of some relation of pervasion between the reason and the property to be proven. However, an anumiti based on an agent’s awareness of positive pervasion differs from one based on an awareness of negative pervasion insofar as they are brought about by different specific causal conditions (either by a positive subsumptive judgment or by a negative subsumptive judgment). Thus, even though different anumitis together form a unified epistemic kind, they can be brought about by different sets of causal conditions. Raghunātha addresses this view.

An awareness-event that arises out of an agent’s apprehension of negative pervasion is not an anumiti. For it isn’t experienced as such, and it is not preceded by one of the well-established causes of an anumiti. Moreover, it is permissible to posit that different causal conditions produce awareness-events of the same kind only if these awareness-events are experienced in the same way.47

Raghunātha’s response proceeds from a principle.

---

**Criterion for Individuating Epistemic Kinds.** Suppose paradigmatic instances of an epistemic kind \( K \) are produced by a collection of causal conditions \( S \). Then, awareness-events that are not produced by \( S \) can belong to \( K \) only if they are systematically experienced (in introspection) as instances of \( K \).

The underlying idea is that unless there is independent reason derived from introspection (or elsewhere), we shouldn’t classify awareness-events produced by different causal conditions as instances of the same epistemic kind. Now, suppose all \( anumītis \) form a unified epistemic kind. According to the Criterion for Individuating Epistemic Kinds, we should treat an awareness-event produced by a positive subsumptive judgment and an awareness-event produced by a negative subsumptive judgment as \( anumītis \) only if there is independent introspective (or any other kind of) evidence for treating them alike. However, according to Raghunātha, when an agent infers a property to be proven by appealing to a relation of negative pervasion between a reason and that property to be proven, two things happen. On the one hand, one of the well-established causes of \( anumītis \)—namely, the positive subsumptive judgment—goes missing. On the other hand, she isn’t introspectively aware of her final inferential awareness-event as an \( anumīti \). Therefore, by the Criterion for Individuating Epistemic Kinds, such awareness-events shouldn’t classified as \( anumītis \).

Raghunātha suggests that such awareness-events belong to a distinct epistemic kind.

Rather, it [i.e., the awareness-event which arises out of an agent’s apprehension of negative pervasion] is different in kind from an \( anumīti \). Arthāpatti is the instrument by means of which it arises.48

This is Raghunātha’s anti-reductionist view about \( arthāpatti \): the awareness-events that are derived solely from an agent’s awareness of negative pervasion are produced not by \( anumāna \) but by \( arthāpatti \). His commentator, Jagadīśa, notes that there is in fact introspective evidence in favor of treating these two types of awareness-events as instances of two distinct epistemic kinds: “That there is a distinction in kind is established by means of an (introspective) experience of the form ‘I am performing an \( arthāpatti \), not making an \( anumāna \).’”49 The lesson: Raghunātha and his commentators seem to think that his argument leads to anti-reductionism about \( arthāpatti \).

Raghunātha considers a response to his view. A Naiyāyika could argue that, while an awareness of negative pervasion cannot by itself block a suspicion or judgment that the reason deviates from the property to be proven, the awareness of the

---

48 GA, 1380: kintu vijātiyā. tat-karaṇam arthāpattir eva. Raghunātha goes on to point out that in a case where an agent undergoes two subsumptive judgments, positive as well as negative, the resulting awareness will either end up being an \( anumīti \) or an instance of \( arthāpatti \)-based knowledge, but not both. This is because, in a case where all the causal conditions necessary for two different kinds of knowledge are present, the causal conditions necessary for one block the production of the other. Things won’t be different in this case. He says (GA, 1380): “Moreover, the simultaneous integration of positive and negative properties [with respect to the same reason] is compatible with what happens when two well-established epistemic instruments assemble together” (kṛta-pramāṇa-dvaya-samāhāra-samasūlāni ca yugapad-anvavya-vyatireki-dharma-pratisandhānam).

49 JD, 276: vaijātyam arthāpayaṁ nānuminomity anubhāvād eva siddham.
property to be proven that arises from that awareness of negative pervasion may have some other feature that allows us to classify that awareness as an anumiti. Note that this move involves rejecting the Principle of Deviation, so it may be costly from the Naiyāyika’s perspective. But even if it isn’t costly, the Naiyāyika owes us an account of why inferential awareness-events that are based on an awareness of negative pervasion should be treated as anumitis. The answer that Raghunātha explicitly considers is that such inferential awareness-events are caused by subjecthood (pakṣatā). Let me explain.

In Smoke and Fire, the hill is the subject of the inference. What makes it an appropriate subject of that inference? According to earlier Naiyāyikas, it’s because the relevant agent is in doubt about whether the property to be proven, i.e., the fire, is present in the hill. So, subjecthood on this view boils down to having as a property an uncertain property to be proven (sandīgha-sādhyā-dharmatva). This was taken to be a necessary causal condition for any anumiti. However, later Naiyāyikas like Gaṅgēśa pointed out that there are contexts in which an agent may arrive at an anumiti despite having previously learnt (either by an anumāna or by some other epistemic instrument) that the property to be proven is present in the subject. In such cases, an anumiti is possible because the relevant agent has the desire to establish the presence of the property to be proven in the subject. So, Gaṅgēśa revises the definition of subjecthood: for him, it is the absence of an epistemic instrument which establishes the property to be proven in the subject, such that this instrument is accompanied by an absence of a desire to establish the property to be proven in the subject (sisādhiyāsā-viraha-sahakṛta-sādhaka-pramāṇa-abhāva). More simply, an object, e.g., the hill in Smoke and Fire, possesses subjecthood if and only if either (i) the reason to be proven hasn’t been shown by an epistemic instrument to be present in that object, or (ii) the relevant agent still desires to establish that it exists in that object. Gaṅgēśa and many other later Naiyāyikas think that subjecthood is a necessary causal condition for any anumiti.

The rationale behind the objection that Raghunātha considers is that any inferential awareness-event that is derived from an awareness of negative pervasion is produced by the relevant sort of subjecthood, so, such an awareness-event had better be an anumiti.

Suppose you say, “Well, with respect to that which has been ascertained, there arises no arthāpatti-based awareness without a desire to establish it. Given that it too is produced by subjecthood, such knowledge is also an anumiti. This is because, for reasons of simplicity, the property of being produced by subjecthood is the only promoter of anumitihood . . .”

50 See TCM, 431–2.
51 GA, 1383: atha nirūte vina siddhiḥcchāṃ arthāpatter anutpādāt pakṣatā-janyatvāt saśpy anumitir lāghavana pakṣatā-janyatvasyavānumitīte prayojakatvāt. The opponent goes on to explain why the view doesn’t lead to any undesirable consequences at GA, 280–3: “It is not the case that if this view is true, a perceptual awareness of subjecthood would end up being an anumiti. For subjecthood is imperceptible. It has a counterpositive that involves the imperceptible property of being present at a particular time (ekakālīnātva) among other things, since the desire to prove—even when it is present—is absent at other times and other places” (na caivaṃ pakṣatā-pratyakṣasyāpi tathātvāpattīḥ, icchā-sattve’yā kālantarē desāntare vā tad-viraha-sattvenaikā-kālīnātvādy-atindriya-ghaṭiita-pratiyojivetena tasyā atindriyātvād).
Here, given the context, the term “arthâpatti-based awareness” just refers to any inferential awareness-event that is based on an awareness of negative pervasion. So, the claim that since being produced by subjecthood is a promoter of anumitihood, any such awareness-event must also be an anumiti.

Elsewhere in his commentary on The Jewel, Raghunâtha expresses that there is no uniform (anugata) property of subjecthood that can be treated as a cause of anumitis. He repeats that point.

[We reply:] No. For we have indeed repudiated the view that subjecthood is the cause of any anumiti. For subjecthood is non-uniform due to the variation of reasons to be proven, etc., and the property of being produced by subjecthood isn’t a promoter of anumitihood. Promoterhood is neither the property of being a cause, because that is impossible, nor the property of being pervaded by that which it promotes, because there is no evidence for this. This view has been stated more than once. Thus, we also refute the view that the property of being produced by an awareness of pervasion is a promoter of anumitihood.

Here, Raghunâtha wants to deny that subjecthood is a cause of every anumiti. He offers two reasons for this.

First of all, the claim is that subjecthood will vary from one case to another, depending on what the relevant property to be proven is. This makes it non-uniform. In other words, it is a long disjunction of different conditions rather than a condition that is uniformly present in every case of anumiti. Since such disjunctive entities cannot be treated as a cause, subjecthood cannot be treated as a cause of anumiti. Raghunâtha’s commentator, Jagadîśa, sharpens this point in a different way.

Raghunâtha’s opponent intends to give the following argument: “Any awareness that is produced by an awareness of negative pervasion is an anumiti, because it is produced by subjecthood, just like an anumiti that is produced by an awareness of positive pervasion” (vyatireka-vyâpti-jnâna-janya-jnânam anumitiḥ paksatâ-janyatvat, anvaya-vyâpti-jnâna-janyânumitivat). The subject of this anumaṇa is any awareness that is produced by an awareness of negative pervasion. The property to be proven is anumitihood. The reason is the property of being produced by subjecthood. The confirming instance (drṣṭânta), which provides evidence for the relation of pervasion between the reason and the property to be proven, is an anumiti that is produced by an awareness of positive pervasion. Jagadîśa poses a dilemma for Raghunâtha’s opponent.

---

52 See the discussion in GA, 1159.
53 D, 1159: na. anumitáv eva pakṣatāyāḥ hetuttvasya nirastatvat, sādhya-dhi-bhedānanaugatvat taj-janyatvasyaprayojakatvat. prayojakatva ca na janakatvam asambhavat na vyāpatvaṁ mānabhāvād ityāyder asākṛd āveditavāc. etena vyāpti-jñānādā-janyatvam anumitive prayojakam iti api parastam.
54 JD, 284–5: “Therefore, the thought is this. Just as subjecthood varies depending on the property to be proven, etc., so also does it vary depending on whether the relevant desire to establish the property to be proven has, as its qualifier, anumitihood or the property of being arthâpatti-based knowledge. If the promoter of anumitihood is the property of being produced by a kind of subjecthood which involves the absence of a desire that has anumitihood as its qualifier, then there will be a fault of being unestablished by nature due to the absence of the reason from cases of arthâpatti-based knowledge. If the promoter of anumitihood is the property of being produced by a kind of subjecthood which involves the absence of a
opponent’s argument is ambiguous: subjecthood could involve either the absence of a desire to establish the property to be proven by *anumāna* or the absence of a desire to establish it by *arthāpatti*. If it is the former, then the reason of the inference will be absent from the subject, because the subject may be some case of *arthāpatti*-based knowledge which is produced by the agent’s desire to establish something by *arthāpatti*. The reason therefore will suffer from the defect of being unestablished by nature (*svarūpāsiddhi*). If it is the latter, then the reason won’t be present in the example that the opponent cites, namely an *anumiti* which is produced by an awareness of positive pervasion. For such an *anumiti* is caused by the kind of subjecthood that involves the absence of a desire to establish the property to be proven by *anumāna* (and not *arthāpatti*). This gives rise to the fault of being unestablished in the confirming instance (*drṣṭāntāsiddhi*).

Raghunātha’s second argument is that the notion of a promoter or *prayojaka* that his opponent invokes is somewhat murky. The property of being caused by subjecthood cannot be a promoter of *anumiti*hood in the strong sense of being a cause of *anumiti*hood. For that is impossible: *anumiti*hood, for the Nyāya philosopher, is a natural kind of property (*jāti*), and natural kinds of properties (in virtue of being eternal) don’t have causes. Moreover, the property of being caused by subjecthood cannot be a promoter of *anumiti*hood in the weaker sense of being pervaded by *anumiti*hood. For there is no evidence for it. The reason presumably is that Raghunātha’s opponent cannot rule out the possibility that the property of being caused by subjecthood deviates from *anumiti*hood. This is because an anti-reductionist about *arthāpatti* could argue that instances of *arthāpatti* are produced by a distinctive kind of subjecthood which involves the absence of a desire to establish the property to be proven by *arthāpatti*. Since such subjecthood doesn’t cause prototypical *anumitis*, Raghunātha’s opponent cannot appeal to prototypical *anumitis* in order to rule out the possibility that the property of being caused by subjecthood isn’t present in inferential awareness-events other than *anumiti*. So, given that Raghunātha’s opponent cannot rule out the possibility that the property of being caused by subjecthood deviates from *anumiti*hood, she hasn’t shown us that *anumiti*hood pervades the property of being caused by subjecthood.

Raghunātha ends by noting that his strategy generalizes. For example, if an opponent argues that the promoter of *anumiti*hood is just the property of being produced by an awareness of either positive or negative pervasion, the same arguments from non-uniformity, etc., could be marshaled in favor of Raghunātha’s view.

Despite these arguments, Raghunātha’s conclusion might seem too hasty: it’s not clear that his argument succeeds in dismantling all possible reductionist views about *arthāpatti*. Raghunātha himself seems to recognize this.
Some also say that when the relevant property to be proven is already known, an anumiti arises on the basis of another anumāna that proceeds from the fact that the reason is a property which is the counterpositive of an absence that pervades the absence of the property to be proven to the conclusion that the reason is pervaded by the property to be proven.55 (italics mine)

This proposal is in effect a version of the view (rejected earlier by Gaṅgeśa) that an agent’s awareness of negative pervasion can produce an anumiti through the mediation of an awareness of positive pervasion. As Jagadīśa points out, Raghunatha doesn’t like this view, though he doesn’t explain why. However, we may be able to supply a reason. In this view, in order to move from an awareness of negative pervasion to an awareness of positive pervasion, the agent would have to know the further generalization that any two entities X and Y that are connected by a relation of negative pervasion are also connected by a relation of positive pervasion. On the Nyāya view, learning such a generalization will require further empirical investigation. An agent who hasn’t engaged in any such empirical investigation won’t be able to make any inference on the basis of her awareness of negative pervasion. However, it seems intuitively plausible that an agent who doesn’t know such a generalization can still make the inference that we see in Absent Devadatta. This puts some pressure on us to reject this story.

In fact, a general challenge for the Nyāya reductionist about arthāpatti emerges from this discussion. If such reductionism is true, many instances of arthāpatti-based knowledge must be based on negative-only anumānas, i.e., anumānas where the relevant subject apprehends the relation of pervasion by only observing instances of negative correlation. Either such anumānas always involve an awareness of positive pervasion or they don’t. Now, to say that such anumānas always involve an awareness of positive pervasion is to say that there are no anumānas that take the form of the Simple Inference in §2.1. This seems like a psychological generalization that requires much more evidence than the Nyāya reductionist has given us. Without evidence, it is implausible. So, consider the other option: sometimes, in putative negative-only anumānas, people arrive at their conclusions simply on the basis of their awareness of negative pervasion. Raghunātha has argued that such reasoning cannot yield any anumiti; in fact, it is a distinct source of knowledge, namely arthāpatti. This supports anti-reductionism about arthāpatti.

6. CONCLUSION

In this chapter, I have reconstructed Raghunātha’s argument for anti-reductionism about arthāpatti. If Raghunātha is right, once we have accepted Raghunātha’s Principle of Iterated Absence, Nyāya reductionism about arthāpatti is straightforwardly in tension with certain commitments that most later Naiyāyikas share. It remains mysterious, to me at least, how these Naiyāyikas could embrace reductionism about arthāpatti without either rejecting the Raghunātha’s Principle of Iterated Absence or jettisoning some of their commitments.

55 GA, 1383: sādhyābhava-Vyāpakābhāva-pratīyogī-dharmatvena sādhyā-Vyāpyatvānumāṇāt prasiddha-sādhyakaivānumitir iti api kecit.
ABBREVIATIONS AND REFERENCES

D  Didhiti in GA


NBh Nyāya-bhāṣya of Vātsyayana in ND


NKA Nyāya-kusumāñjali of Udayana in The Nyāyakusumāñjali of Śrī Udayanācārya with Four Commentaries: The Bodhini, Prakāśa, Prakāśikā (Jalada) and Makaranda by Varadarāja, Varoddhamānopādhyāya, Mecha Thakkura and Rudrattopādhyāya and with Notes by Śrī Dharmadatta (Bachchā Jhā), eds. P. Upādhyāya and D. Śāstri, Varanasi: Chowkamba Sanskrit Series, 1957.


NV Nyāya-vārttika of Uddyotakara in ND

NVTṬ Nyāya-vārttika-tātparya-ṭīkā of Vācaspati Miśra in ND


R Rabasya of Mathurānātha Tarkavāgīśa in TCM.


