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Mukulabhaṭṭa’s Defense of *Lakṣaṇā*: How We Use Words to Mean Something Else, But Not Everything Else

Malcolm Keating

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Abstract We frequently use single words or expressions to mean multiple things, depending upon context. I argue that a plausible model of this phenomenon, known as *lakṣaṇā* by Indian philosophers, emerges in the work of ninth-century Kashmiri Mukulabhaṭṭa. His model of *lakṣaṇā* is sensitive to the lexical and syntactic requirements for sentence meaning, the interpretive unity guiding a communicative act, and the nuances of creative language use found in poetry. After outlining his model of *lakṣaṇā*, I show how *arthāpatti*, or presumption, forms the basis of both semantic and pragmatic processes in this approach. I employ a model from contemporary linguist James Pustejovsky as one way of reconstructing Mukulabhaṭṭa’s analysis. Finally, I argue that presumption is responsible for the wide range of interpretations in creative uses of language, and that our interpretations are constrained, through defeasible in a way that our decodings of literal meanings typically are not.

Keywords Mukulabhaṭṭa · *Lakṣaṇā* · Metaphor · Metonymy · Language · Semantics · Pragmatics

The list says...when you are finished in the living room, put out the lights. Oh—I’ll just unscrew all of these bulbs and put them on the clothesline outside.

Amelia Bedelia

“When I use a word,” Humpty said in a rather scornful tone, “it means just what I choose it to mean—neither more nor less.”

“The question is,” said Alice, “whether you can make words mean so many different things.”

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“The question is,” said Humpty Dumpty, “which is to be master—that’s all.”
Through the Looking Glass

We frequently use single words or expressions to mean multiple things, depending upon context. A person who doesn’t recognize this capacity of language would quickly find herself in the position of Amelia Bedelia, the literal-minded protagonist of children’s books. Asked to draw the drapes, she sketches a picture; told to dress the turkey, she puts it in fancy clothes (Parish 1992). But despite language’s flexibility, it isn’t a magic wand that we can use to convey any and all meanings that we’d like, in whichever context we please. Though Humpty Dumpty says he “pays a word extra” when he makes it do a lot of work, his uttering “glory” to mean a “nice knock-down argument” isn’t evidence of his mastery of language but a profound confusion (Carroll 2010). The power of non-literal speech is constrained by a number of factors, not all of which are within the speaker’s control. Indian philosophers called this power ‘*lakṣaṇā*.’

While *lakṣaṇā* is commonly accepted as a *śakti*, or verbal power, by the major orthodox traditions, they do not agree on how to explain it. One problem is to avoid the “Humpty-Dumptyfication” of words and to define principled boundaries for non-literal meaning, but to do so in a way that does justice to the rich nuances with which humans employ language. In this paper, I argue that a plausible model of *lakṣaṇā* emerges from the interaction between the Grammarian, Mīmāṃsā, and Alāṅkāra traditions found in the work of ninth-century Kashmiri Mukulabhaṭṭa. In the confluence of these traditions we find attention to the lexical and syntactic requirements for sentence meaning, the interpretive unity guiding a communicative act, and the nuances of creative language use found in poetry.

Mukulabhaṭṭa describes *lakṣaṇā* as involving abductive inference, either in cases where we have a perfectly acceptable literal meaning available or where a sentence is somehow semantically deviant. In essence, he provides us with a two-fold model of *lakṣaṇā*, or indication, with which we can explain metonymy as well as metaphor. This distinction is important because while some cases of indication are triggered by syntactic or semantic incompatibility among the constituent parts of a sentence, others require a complete sentence from which we derive another, new sentence meaning. Both of these varieties of *lakṣaṇā*, however, are triggered by some kind of incompatibility, which is the crux of *arthāpatti*, or abductive inference.¹ Mukulabhaṭṭa’s innovation is to expand the concept of compatibility, or *yogyatā*, to include consistency between contextual information and speaker intention, from the notion of compatibility as strictly involving semantic features internal to the sentence.

My aim in this paper is two-fold. First, I explicate Mukulabhaṭṭa’s two-tiered model of *lakṣaṇā*, demonstrating how he expands the concept of semantic compatibility to explain the varieties of indication possible through *arthāpatti*. This shows why most human interpreters are not Amelia Bedelia, but can, through contextual cues, have access to more than just a single interpretation for a given

¹ There is substantial debate within Indian philosophy about whether *arthāpatti* is reducible to other kinds of inference. In this paper, I defend the view which I take Mukulabhaṭṭa to hold, which is that *arthāpatti* is something like abduction, and not reducible to negative-only-concomitance or other varieties of deductive inference.

word.² Second, I show how Mukulabhaṭṭa's model constrains the interpretive possibilities available to interpreters, and analogously, the communicative possibilities available to speakers. This explains why we are not Humpty Dumpty, able to endow any word with whatever meaning, in any possible context. Although particular constraints are language-specific, I claim that Mukulabhaṭṭa has given us an example of how we might think of such constraints in general, by his analysis of the Sanskrit poetic tradition.

At the conclusion of this paper, I briefly engage with a recently published article which takes up Gaṅgeśa's theory of *lakṣaṇā* (Guha 2012). I disagree with Guha that our only options are to either reduce *lakṣaṇā* to an "epistemic instrument" or else conclude that language is an autonomous system which "has powers" and is a mysterious "invisible...network" (2012, pp. 508–509). Such a dilemma is false, and Mukulabhaṭṭa's model gives us a way between the horns. In particular, I address Guha's worry that, if we accept *lakṣaṇā* as inferential, we are faced with an infinite number of *lakṣaṇā*-s without general rules capable of predicting the indicated meaning of any given expression.

Mukulabhaṭṭa's Model of *Lakṣaṇā*

Mukulabhaṭṭa's *Abhidhā-vṛtta-mātrkā* (henceforth "AVM") is a text which puts forward a positive analysis of *lakṣaṇā* while arguing against the *dhvani-vādin* view that there is another linguistic power, *dhvani*.³ Mukulabhaṭṭa's major thesis is that wherever the linguistic *śakti* of *dhvani* is posited by the followers of Ānandavardhana, we ought to reduce it to *lakṣaṇā*. He is not arguing against the rich poetic effects that Ānandavardhana and the *dhvani* theorists find in language, but against the particular mechanism that they think accounts for it.

Mukulabhaṭṭa's theory of language, then, distinguishes between two major *śakti*: *lakṣaṇā* (indication) and *mukhya* (denotation). He subsumes both of these under '*abhidhā*', or the communicative function in general.⁴ The distinction between *lakṣaṇā* and *mukhya* is captured in these verses:

² Of course, not all people have the same facility with the non-literal. For instance, recent work in autism is illuminating why non-literal interpretations are less accessible for some people. The fact that autistic people process language differently than neurotypical people can give us insight into the process of retrieving non-literal meanings, multiple interpretations in cases of scope ambiguity, and other such phenomena.

³ The power of *dhvani*, or "suggestion", was first posited by Ānandavardhana in his *Dhvanyāloka*, and developed by Abhinavagupta, among others. While this postulated power was met with some resistance, eventually it gained predominance in the *alaṃkāra* tradition. Mukulabhaṭṭa is an early critic of *dhvani*, although as Larry McCrea points out, he does not entirely reject all the observations of the *dhvani* theorists, merely their explanation of the mechanisms for poetic and non-literal speech. For an excellent and thorough summary of Mukulabhaṭṭa's work and historical context, see McCrea (2009).

⁴ Other theorists employ '*abhidhā*' to describe literal speech in opposition to non-literal or figurative use. As well, the term '*lakṣaṇā*' is sometimes employed in a specialized sense to mean a particular kind of non-literal speech. However, Mukulabhaṭṭa clearly intends '*abhidhā*' as an umbrella term for communication and '*lakṣaṇā*' as a general term for indication.

*śabda-vyāpārato yasya pratītiḥ tasya mukhyatā |
artha-avaseyasya punar lakṣyamānatvam iṣyate ||*

Our view is that: Denoted meaning is what is comprehended from the word's function.

Indicated meaning is understood additionally from that meaning.

Mukulabhaṭṭa, AVM⁵

The central difference between *mukhya* and *lakṣaṇā* is that with the former, the denoted meaning is a function of the word (*śabda-vyāpārataḥ*) whereas indication takes the result of this function and transforms it into a further meaning. While often this results in an interpreter consciously moving from denotation to a non-literal meaning, the rapidity with which we understand speech acts means that phenomenology is a crude guide, at best, to underlying syntactic and semantic mechanisms. Mukulabhaṭṭa says as much, making the point that, depending on how close the denoted meaning and the indicated meaning are, and how conventionally they are used in a language community, phenomenological awareness of the relationship between the two may vary.⁶

Mukulabhaṭṭa begins by setting out an analysis of the four basic kinds of word referents, in a discussion that takes up a competing Bhāṭṭa Mīmāṃsā analysis of word reference. He argues that there are four divisions (see Table 1), corresponding to *jāti* (universals), *kriyā* (actions), *yad-ṛcchā* (named things), and *guṇa* (qualities). His example of a *jāti*-denoting word is 'gaur', in the sentence (1) *gaur anubandhyaḥ* ("The cow is to be tied up.") It refers to COWHOOD. A *kriyā*-denoting word is (2) *pacati*, meaning "S/he cooks." A word denoting *yad-ṛcchā* is (3) *Diṭṭha*, a common Sanskrit name. Finally, a *guṇa*-denoting word is (4) *śukla*, meaning "white."

Mukulabhaṭṭa's central goal is the analysis of *lakṣaṇā*, as evidenced by the fact that most of the text is devoted to it. Still, denotation is important for his explication of *lakṣaṇā*, as the line between what is denoted and indicated will vary depending upon one's lexical semantics. For example, one of the first cases of indication that he takes up is

(1) *gaur anubandhyaḥ |*

This sentence is used as an example of the word function that denotes universals. It is also an example of what Mukulabhaṭṭa calls '*upādāna lakṣaṇā*' of the *śuddhā* (pure) variety (see Table 2). The idea is that although 'gaur' denotes a universal,

⁵ Dvivedi (1973, p. 2). My English translation is based upon the 1973 Dvivedi edition of the text. I sometimes employ Venugopalan's 1977 transliterated edition as a comparative check. Any substantial changes to the edition's reading of the Sanskrit are footnoted.

⁶ Mukulabhaṭṭa describes the phenomenology of highly conventional use: '*yatra tu upacaryamāna-viśayasya upacaryamāṇe 'ntar-līnatayā vivakṣitatvāt sva-rūpa-apahnavah kriyate tatra ādhyavasānam*' and '*tena atra gaṇatvam jhagīty eva apratīyamānatvād bhraṣṭam sad vicāraṇayā samadhi-gamyate*' Translations: "But where there is concealment of the word's natural meaning because the speaker intends to incorporate one thing (call it *x*) as superimposed by another thing (call it *y*) which is the object of superimposition, there is 'inclusion' (of *x* within *y*)", and "Therefore the qualitative relation is not instantly understood, since it has disappeared, and it is understood by careful reflection" (Dvivedi 1973, p. 18).

Table 1 Divisions of *Mukhya*

<i>Jāti-śabda</i> Universal	<i>Kṛīya-śabda</i> Action	<i>Yad-ṛcchā-śabda</i> Named thing	<i>Guṇa-śabda</i> Quality
(1) <i>gaur anubandhyaḥ</i>	(2) <i>pacati</i>	(3) <i>Diṭṭha</i>	(4) <i>śukla</i>

Table 2 Pure and mixed transfer *Lakṣaṇā*

<i>Śuddhā</i> Pure		<i>Upacāra</i> Mixed transfer			
<i>upādāna</i> Inclusive	<i>lakṣaṇa</i> Indirect expression	<i>śuddhā</i> Pure transfer		<i>gaṇā</i> Qualitative transfer	
		<i>āropa</i> Superimposed	<i>adhyavasāna</i> Established	<i>āropa</i> Superimposed	<i>adhyavasāna</i> Established
(1) <i>gaur anubandhyaḥ</i>	(6) <i>dvirepha</i>	(7) <i>āyur ghṛtam</i>	(8) <i>pañcālā</i>	(9) <i>gaur vāhikāḥ</i>	(10) <i>rājan</i>

COWHOOD, the universal cannot be the object of the gerundive ‘*anubandhyaḥ*.’ One cannot tie up the universal of COWHOOD for sacrifice. Thus, Mukulabhaṭṭa argues, in order to make sense of the speaker’s utterance, we must understand it as saying that a particular cow is implicated (*vyakter ākṣepaḥ*).⁷ This sort of indication does not rely on any similarity between COWHOOD and a particular cow, and so it is “pure”, in contrast to the “mixed transfer” (*upacāra*) variety. Further, because the particular cow has within it the universal of COWHOOD, it is the “inclusive” or *upādāna* variety.

First Division of *Lakṣaṇā*: Pure and Mixed Transfer

The relationship between denotation and indicated meaning is the basis for the first of the major distinctions Mukulabhaṭṭa makes between kinds of *lakṣaṇā*. *Śuddhā* (pure) is opposed to *upacāra miśra* (mixed transfer), but each of these two major categories can be subdivided (see Table 2).

Pure indication can be inclusive or simply pick out another meaning, without the denoted meaning being part of the indicated meaning. For example, (6) *dvirepha* literally means “two-r’s” and thereby refers to the word ‘*bhramara*’, the Sanskrit word for bee. Therefore, ‘*dvirepha*’ indirectly indicates “bee”, but a bee is not a thing with two-r’s, and so the relationship is unlike that between COWHOOD and a cow in (1).

⁷ The sentence ‘*gaur anubandhyaḥ*’ could be translated as “The cow is to be tied up” or “A cow is to be tied up.” On the first interpretation, there is a particular cow, say, Bessie, who is the target of the gerundive. On the second interpretation, any (single) cow will do as the target of the tying. Mukulabhaṭṭa’s account needs only that a single cow is the purpose of using ‘*gaur*’ in contrast talking about the class of cows. So the definite or indefinite article will do equally well for his argument, although we would want further explanation of the distinction between these two interpretations, as their truth-conditions may be different.

In contrast to pure indication, mixed transfer indication is as in (9) *gaur vāhīkaḥ*, or “The Punjabi peasant is a bull”, a metaphorical slur. In this kind of *lakṣaṇā*, properties of one object are taken to be properties of another object. The metaphorical target, the *vāhīka*, is understood to have the properties of the vehicle, in this case the bull. Here the properties are things such as being dull and lazy. In contrast, in the sentence (1) *gaur anubandhyaḥ*, the particular cow is not understood as having the qualities of the universal of COWHOOD, but there is simply a shift from universal to particular. There is inclusion because the universal COWHOOD inheres in the particular cow which is indicated. But cognition of the universal as related to the particular is not necessary to understand the point, as in the case of metaphor. Mixed transfer divides between pure and qualitative, each of which subdivides further into superimposed and established. Briefly, the difference between pure mixed transfer and qualitative mixed transfer is in the way in which the properties are shared between the two objects. In qualitative mixed transfer, the relationship is of similarity, but pure mixed transfer can be any other sort of relationship, such as cause and effect. Thus, in (7) *āyur ghr̥tam*, or “Ghee is long life”, the vehicle, ghee, is the cause of long life, the metaphorical target. There is no similarity in the properties of ghee and the properties of a long life.

Finally, in either qualitative or pure mixed transfer, Mukulabhaṭṭa distinguishes between superimposed and established cases. The relevant difference here is how salient the vehicle of the metaphor is for conceptualizing its target. In superimposition, the original meaning of the vehicle is still accessible to the interpreter. For instance, in (7) properties of ghee are helpful in understanding what it means to say that “Ghee is long life.” Established cases are in contrast to this, since we do not conceive of the target as being related to the vehicle. Examples include (10) *rājan*, which is used to refer to a ruler who is not of the *ḥṣatriya* or royal class. Although there are similarities between the literal denotation of ‘*rājan*’ (which picks out a *ḥṣatriya*) and its indication (which picks out a *śūdra*), hearers do not conceive of the *ḥṣatriya* as a *śūdra*. Instead, the word ‘*rājan*’ has almost acquired a second meaning, so that hearers do not need to know the etymological history, or the related properties, in order to understand its referent. Similarly, in pure mixed transfer, such as (8) *pañcālā*, the word indicates a geographical place, by way of the location where the descendants of the Pañcālā tribe lived. The word is said to literally and originally denote the Pañcālā people, but through *lakṣaṇā*, indicates their territory.⁸

⁸ The history of the English word “bank” (in the sense of financial institution) is a helpful example here. Originally, the Middle English “*banke*” meant a raised shelf or ridge. In Italian, it was applied metonymically to the high money-changer’s table (as “*banco*” or “*banca*”). It then came to be derivatively used for the financial institution. The word “bank” for a financial institution, while related to the use of “bank” for the edge of a river, now picks out its referent in a way Mukulabhaṭṭa would describe as “established.” Speakers do not need to recognize any relationship between raised shelves and tables and financial institutions. In contrast, at one point, “bank” applied to a money-changer’s table could have been what Mukulabhaṭṭa calls “superimposed” because the similarities between the original meaning and the extended meaning are part of how speakers and hearers converge on the referent. “bank, n.3”. For more, see the OED Online. March 2013. Oxford University Press. <http://www.oed.com.ezproxy.lib.utexas.edu/view/Entry/15237> (accessed May 23, 2013).

Second Division of *Lakṣaṇā*: Proximity of Meanings

After going through examples for each of these subdivisions, Mukulabhaṭṭa begins his taxonomy again, this time with an eye towards how close the indicated meaning is to the meaning expressed by denotation. He uses terms like '*śuddhā*' which he's already used in different contexts, but "pure" here is not the same thing as "pure" earlier. Mukulabhaṭṭa explains,

*taṭasthe lakṣaṇā śuddhā syād āropas tv adūrage |
nigīrṇe 'dhyavasānaṃ tu rūḍhy-āsannataratvataḥ ||*

In cases of extreme distinction, indication is "pure." It is "superimposed" in the cases where it is not far.

In the cases where it is swallowed, it is "established" because of being nearly conventional in meaning.⁹

Mukulabhaṭṭa's central insight here is that non-literal speech admits of are degrees of conventionality. He identifies three degrees, each of which subdivides according to the kind of relationship between vehicle and target. For the sake of space, I will not summarize all of these categories. One example should suffice. The application of '*rājan*' to a non-*kṣatriya* may have begun as a metaphorical extension of its literal denotation. Initially, it might have been "pure" or '*śuddhā*' because language-users would recognize that the word was being applied in an extended sense. Over time, the metaphor died and became "established", or '*adhyavasāna*.' Now, interpreters and speakers may have no awareness that the application of '*rājan*' to a person of the *śūdra* caste is non-literal. However, this does not exclude philosophers, grammarians, and poets from analyzing the relationship between the denotation and indication to determine whether it is *gauṇa* (based on similar properties) or *śuddhā* (some other relationship, like cause and effect). In the case of '*rājan*', the relationship is *gauṇa*.

Third Division of *Lakṣaṇā*: Speaker Intention

Whether an expression is conventional or not, we can ask a further question: how is the speaker intending to use it? Mukulabhaṭṭa characterizes speaker intention with regard to *lakṣaṇā* as being of two sorts: *rūḍhi* (conventional) and *krīyante sāmpratam* (novel). Most of the examples he takes up in his text are of the latter sort, in large part because this is the arena in which his interlocutors, the *dhvani-vādins*, are working. He explicitly identifies two expressions as being conventional: the earlier described '*dvirepha*' and '*rājan*.'

This analysis is indebted to the Mīmāṃsā philosopher Kumārilabhaṭṭa, whom Mukulabhaṭṭa cites:

*tad uktaṃ bhaṭṭa-kumārilena nirūḍā lakṣaṇāḥ kāścīt sāmartyād abhidhānavat |
kriyante sāmpratam kāścīt kāścīn na iva tv aśāktitaḥ | iti ||*

⁹ Dvivedi (1973, p. 20).

This is said by Kumārilabhaṭṭa: “Some figures are conventional because they have the same capacity as the primary denotation. Some are made in the present time (novel), some are even without (indicative) power.”¹⁰

The novel cases of indication depend upon factors such as the conventional use of the elders or the speaker (*vṛddha-vyavahāra-vaktr-ādy-apekṣayā*). To illustrate, Mukulabhaṭṭa cites part of a poem (the phrases he analyzes are underlined below):

*snigdha-śyāmala-kānti-lipta-viyato vellad-balākā ghanā
vātāḥ śīkariṇaḥ payoda-suhrdām ānanda-kekāḥ kalāḥ |
kāmaṃ santu dr̥ḍhaṃ kaṭhōra-hṛdayo rāmo ‘smi sarvaṃ sahe
vaidehī tu kathaṃ bhaviṣyati ha hā hā devi dhūrā bhava ||¹¹*

Clouds and sailing cranes

Against which the sky is smeared with splendid color.

Winds sprinkle water.

The friends of the clouds joyfully make melodious cries.

Let it be! My heart is hard. I am Rāma. I bear it all.

But Vaidehī, how will she live? Oh, alas, queen, be resolute!

Mukulabhaṭṭa picks out the words ‘*lipta*’, ‘*payoda-suhrda*’, and ‘*rāmo*’ for analysis, arguing that with these, the author intends a novel indication. Later in the text, he explains what kind of indication each of these words employ in terms of the taxonomies outlined above.

A strength of Mukulabhaṭṭa’s distinction between novel/conventional speaker indication and the conventionality/distance of meanings is that it theoretically allows for novel use of conventional figures. We can “re-enliven” dead metaphors through using them in a novel way. For instance, it might be a dead metaphor, as Donald Davidson claims, to say (12), “He was burned up”, to convey that someone is angry (Davidson 1978). Still, if a speaker says, “He was burned up, his emotions a rocket on re-entry”, the expression “burned up” is no longer simply conveying that someone is angry, but drawing attention to similarities between anger and burning. On Mukulabhaṭṭa’s view, novelty is not just a matter of use over time (a point which Davidson does recognize) but depends upon factors such as speaker intention and context (a point which Davidson seems to miss).

Mukulabhaṭṭa has identified two broad ways of characterizing the relationship between the vehicle and target in a metaphor, or more generally, between the denotation and indication of a non-literal expression. We can ask what kind of conceptual relationship they have (are their referents represented as sharing properties, for example?) and what the semantic distance is between them (are they so close as to be lexicalized, or very distant?). Further, we can ask what the speaker intends by her use of the expression, whether something novel or conventional.

¹⁰ See Dvivedi (1973, p. 25). The citation is originally found in Kumārilabhaṭṭa’s *Tantra-vārttika* 3.1.12. See Śāstri (1929–1933, p. 46).

¹¹ See Dvivedi (1973, p. 27). These verses are also found in the famous *Dhvanyāloka* of Ānandavardhana, who only discusses the term “Rāma”, attributing its meaning to the power of suggestion.

However, there are two more questions to resolve. First, how do we know when a speaker is intending to be non-literal? What features clue us into the fact that interpretation should not be based only on the denotation of the component words in context? Second, supposing that we know that we ought to understand an expression in a non-literal sense, what constrains our interpretive search? What features guide us to the correct interpretation? Mukulabhaṭṭa answers these questions next.

Fourth Division of *Lakṣaṇā*: Incompatibility

Mukulabhaṭṭa argues that there are three major factors that trigger an interpretive search for non-literal meaning. These are incompatibility due to *vākya* (sentence), *vācya* (utterance meaning), or *vaktṛ* (speaker).

He defines these terms:

yaḥ parapatipattaye vākyam uccārayati sa vaktā | sa-ākaikṣāṇām padānām eka-arthaḥ samūho vākyam | śabdena mukhyaṃ lākṣaṇikaṃ vā abhidhā-vyāpārama-aśritya yad gocarī-kriyate tad-vācyaṃ |

The one who utters a sentence to cause another to understand something is a speaker. That combination whose single meaning is made up of words with syntactic expectancy is a sentence. That which is within the scope of having been dependent on the communicative function—either the denoting or indicatory function of words—is an utterance meaning.¹²

In addition to *vākya*, *vācya*, and *vaktṛ*, there can be incompatibility with contextual factors including *deśa* (place), *kāla* (time), and *avasthā* (circumstance). Mukulabhaṭṭa does not give examples for every possible combination of factors, only for a few. For example, there could be a conflict between the syntactical unity which is the *vākya* and facts about the place of utterance, or conflict between facts about the *vaktṛ* (speaker) and facts about the *vācya* (utterance meaning), and so on. These apparent conflicts expand the kind of incompatibility, or *anupapatti*, that triggers *lakṣaṇā*.

Take, for instance, the sentence (13) *pīno devadatto divā na bhūṅkta*, or “Fat Devadatta does not eat during the day.” Mukulabhaṭṭa describes this as a case of pure inclusive indication (see Table 2), as well as possibly a case of *śrūta-arthāpatti*. About this example, Mukulabhaṭṭa says,

atra hi [pīnatvaṃ] divā-adhikaraṇa-bhojana-abhāva-viśiṣṭatayā avagamyam-ānam eva kāryatvāt sva-siddhy-arthatvena kāraṇa-bhūtaṃ rātri-bhojanam ākṣepād abhyantarī-karoti...atra hi dina-ādihikaraṇa-bhojana-abhāva-viśiṣṭatayā pīnatva-lakṣaṇam kāryam vivakṣitam eva sat sva-siddhi-arthatvena sambandha-nibandhanayā lakṣaṇayā rātri-bhojana-ātmakaṃ kāraṇam ākṣipati. |

¹² See Dvivedi (1973, p. 24). The utterance meaning, or *vācya*, can sometimes be identical with what the sentence means, as in cases of literal speech, but other times, it may be something else, like what is indicated.

Now in this case, the possession of fatness, because of its being an effect, is simply being understood as characterized by an absence of eating, an absence which has its existence during the day. In order to establish itself, the existence of a cause (of the fatness) is caused to be included by the implication that there is eating at night....

Now here, the effect which is intended is the characteristic of fatness, by Devadatta's being qualified by the absence of eating, whose temporal locus is the day. This effect indicates (*ākṣipati*) the cause whose nature is eating at night (*rātri-bhojana-ātmakaṃ kāraṇam*) by indication whose basis is in the relationship [with the denoted meaning], by its having a naturally established meaning.¹³

Guha (2012) presents this same example in his discussion of Gaṅgeśa, arguing that the sentence is not a case of *lakṣaṇā*, because in *lakṣaṇā*, “due to the semantic incompatibility of the primary meanings, no composition can be formed” (Guha 2012, p. 500). He goes on to distinguish between the “antecedent” *anupapatti* (incompatibility) in *lakṣaṇā* and the “consequent” *anupapatti* in postulation, or *anyathā-anupapatti*, inexplicability otherwise. However, for Mukulabhaṭṭa, *lakṣaṇā* subsumes both kinds of incompatibilities. He explicitly argues for a view on which there is *lakṣaṇā* required for semantic and syntactic unity (such as in the case of ‘*gaur anubandhyaḥ*’) and *lakṣaṇā* required for the pragmatic unity between speaker, sentence, utterance, and contextual factors.¹⁴

abhihita-anvaya-anvita-abhidhāna-samuccaye tu pūrva-udita-nyāya-dvitaya-saṃkalanayā pada-apekṣyā vācyatva-uttara-kāla-bhāvinī lakṣaṇā bhavati [vākya-apekṣyā ca] vākya-artha-uttara-kālaṃ tasyāḥ [vācyatvāt] pūrvam-avasthānam | tad-idam-uktaṃ dvaye dvayam iti ||

Now in the combined view of *connection-of-the-denoted* and *denotation-through-the-connected*, by the act of combining the twofold rule earlier described, we have, from the perspective of words, indication occurring at a time subsequent to the words expressing meaning. And from the perspective of sentences, it occurs after the sentence meaning and before there is an utterance meaning. Therefore it has been said: “In the two-fold view, indication is of two kinds.”¹⁵

While Mukulabhaṭṭa does not give a detailed explanation of the mechanisms at play in the Devadatta case, his idea is close to the generative lexicon of Pustejovsky (1995). Pustejovsky's goal is to explain the creativity and systematicity of phenomena such as polysemy through rich lexical representations, but without resorting to a lexicon with multiple entries to explain the ambiguities in natural language. So, for example, we might propose that the lexical item **fat** represents

¹³ See Dvivedi (1973, p. 11).

¹⁴ Elsewhere, I argue that Mukula is not consistent in his distinguishing between these categories, possibly to the detriment of his argument against the *dhvani-vadin*, but this does not impact his overall proposal at issue here. See Keating (forthcoming).

¹⁵ See Dvivedi (1973, p. 33).

such things as the fact that fatness is caused by eating. The lexical item **eats** would then represent such things as that food is typically what is eaten, that eating is an event (not a state), that agents are the subjects of the verb, and etc. Notice that Mukulabhaṭṭa has earlier addressed the question of lexical semantics, positing four types of denoted objects (universals, qualities, actions, and named things). *Lakṣaṇā* is required when the speaker is intending to refer to another type of thing, such as a particular cow in contrast to a universal.

In context, although sentence (13), “Fat Devadatta does not eat during the day”, is perfectly grammatical, it is unsemantical. Pustejovsky describes his notion of *semanticality* this way:

I will introduce a notion of *semanticality*, analogous to the view of grammaticality (cf. Chomsky 1964), but ranging over semantic expressions rather than syntactic structures. Semanticality refers to the semantic well-formedness of expressions in a grammar... (Pustejovsky 1995, p. 40).

Semanticality as Pustejovsky understands it is analogous to the concept of *yogyatā*, or semantic compatibility, violations of which trigger *lakṣaṇā*. Importantly, Pustejovsky's semanticality and the Indian concept of *yogyatā* are not reducible to grammaticality or syntacticality.¹⁶ The test is not whether an expression can yield a truth-conditional proposition, but whether there are easily available interpretations which make the sentence acceptable (Pustejovsky 1995, p. 41). This approach is consistent with the Bhāṭṭa school's view, that it is incompatibility with speaker's intention in a context (*tātparya-anupapatti*) that triggers *lakṣaṇā*. So while Guha is technically right to say that *lakṣaṇā* requires violations of *yogyatā*, this does not necessarily require that a sentence is syntactically ill-formed or that nothing truth-conditional is available to us.

While Mukulabhaṭṭa does not explicitly identify the kind of incompatibility operating for the Fat Devadatta case, the most obvious candidate is a conflict between facts we know about the *avasthā* (the world and the causes of fatness) and the *vākya* (expressed meaning). Here's how an interpreter, call her “A” might use *lakṣaṇā* to understand “Fat Devadatta does not eat during the day” as including the meaning that Devadatta eats at night, with lexical entries in bold:

1. A recovers the denotation of the lexical items in context, yielding the *vākya*. For example, on Mukulabhaṭṭa's lexical semantics, **fat** denotes a quality. Understanding what **fat** denotes might include knowing such things as that it is a state which applies to biological entities, and is caused by eating. **Devadatta** refers to a named thing, perhaps one which speakers know is human and thus part of the larger class of biological entities, allowing it to be modified by the lexical item **fat**. The action **eats** might be understood to take a biological entity as its subject and a kind of foodstuff as its object. As eating is a process, it can be qualified by the temporal span of **during the day** as well as the negation **does not** (I leave technical issues of quantification and negation aside for the purposes of this example). For example:

¹⁶ For Pustejovsky, semanticality admits of degrees, but in contrast, it seems that an expression either possesses *yogyatā* or does not.

Fat = *event*(state), *argument*(biological entity); *qualia*[*formal*(mass); *constitutive*(biological property); *agentive*(act of eating)]

Devadatta = *argument*(x:human); *qualia*[*formal*(x)]

does not eat = *argument*(physical object); *event*(process); *argument*(x:biological entity, y:foodstuff); *qualia*[*agentive*(event of x's eating y)]

during the day = *argument*(x:action, y:day); *event*(process); *qualia*[*formal*(during(x,y)), *agentive*(temporal span)].

2. *A* observes that there is an incompatibility between the *vākya* and what she knows about the causes of fatness.¹⁷ More specifically, this incompatibility makes the sentence unsemantical since **fat** is caused by the act of eating and the negation of **eat** means that there is no event such that *x* eats *y*.
3. To rectify this unsemanticality, *A* includes “eats at night” as part of the meaning of the sentence.¹⁸ More specifically, *A* might understand the lexical entry **fat** to include the eating at night. Or, she could insert the expression “eats at night.” Mukulabhaṭṭa is explicitly agnostic on which is the correct account, saying, “Let there be verbal presumption or implication of simply the cause—of the eating at night.”¹⁹

Fifth Division of *Lakṣaṇā*: Interpretive Constraints

There is still another unresolved question for this account of *lakṣaṇā*: What constrains the solution to the incompatibility found in such sentences? Mukulabhaṭṭa answers by citing and expanding upon Bhartṛmitra's analysis of the logical relationships between denotation and indication:²⁰

¹⁷ It is not necessary that this process is a conscious one. Guha suggests that whether the first reading is problematic or not is a test for whether the inexplicability is antecedent or consequent (Guha 2012, p. 500). However, Mukulabhaṭṭa's account does not require that interpreters are conscious of all cases of “antecedent” inexplicability. For example, it is antecedent inexplicability that forces a shift from the lexical item **cow** as a universal to a particular, but unless speakers and interpreters are well-versed in metaphysics, these processes are likely occurring below the level of phenomenal consciousness. Better tests for what kind of inexplicability is involved will include analysis of lexical semantics, syntax, and etc.

¹⁸ A Gricean story, on which *A* derives an implicature, “Fat Devadatta eats at night”, is plausible here, as well, but Mukulabhaṭṭa seems to prefer a more semantic account, as he describes this as *upādāna*, like the case of “*A*/the cow is to be tied up.” Elsewhere, I argue that this can be understood as a kind of sort-shifting. See Keating (forthcoming). How to understand the relationship between Pustejovsky's view and proposals for type- and sort-shifting operations is a technical question. Both are motivated by an effort to minimize the number of lexical entries in a language and explain the multiplicity of readings available to words. See Pustejovsky (1995, p. 111ff) for discussion.

¹⁹ Dvivedi (1973, p. 25).

²⁰ Bhartṛmitra is a Mīmāṃsā philosopher writing after Śābarasvamin (Ca. 350 to 400 CE) and before Kumārilabhaṭṭa (Ca. 600 to 700 CE). He argues against the former's views. We do not have his works except through citations in other texts. Abhinavagupta, commenting on the *Dhvanyāloka* of Ānandavardhana, quotes the same passage from Bhartṛmitra, using two different versions of the quote, neither of which is identical with Mukulabhaṭṭa's quotation (Ingalls 1990, p. 67 fn. 4).

Table 3 Logical relationship to primary meaning

Category	Example
<i>sādrśya</i> (similarity)	(14) Bee, in all your buzzing ...
<i>vaiparītya</i> (irony)	(15) O fair-faced one!
<i>kriyā-yoga</i> (etymology)	(17) You are the Enemy-Killer in the great battle.
<i>samavāya</i> (inherence)	(16) The umbrella-holders are going.
<i>sambandha</i> (close connection)	(18) The village is on the Ganges.

*yac ca tat mukhya-artha-asannatvam tat pañca-prakārataya-acāra-bhartṛmi-treṇa pradarśitam |
abhidheyena sambandhāt sadrśyāt samavāyataḥ
vaiparītyāt kriyā-yogāl lakṣaṇā pañcadhā mata iti ||*²¹

Because of the close connection with that which is to be denoted, because of being similar, because of being associated, because of being opposed, because of relationship to an action, indication is thought to be five-fold.

These five ways in which indication can be related to primary meaning, or denotation, are constraints upon interpretative processes (see Table 3). I will have more to say about these constraints later, but at this point, I will briefly introduce them with a few examples.

The relationship of similarity, or *sādrśya*, is explained with a poem that anthropomorphizes a bee and a flower:

(14) *bhramara bhramatā digantarāṇi
kvacid āsāditam īkṣitam śrutam vā |
vada satyam apa-asya pakṣa-pātaṃ
yadi jāti-kusuma-anukāri puṣpam ||*

Bee, in all your buzzing about the spacious sky,
Have you anywhere touched, seen, or heard
—now speak the truth without bias—
If there is a flower which is equal to the jasmine blossom?²²

The idea here is that ‘*bhramara*’ and ‘*puṣpam*’ are not explicable otherwise (‘*anyatha-anupapattiyā*’) in the vocative case, since inarticulate flora and fauna are not appropriate objects of address. Crucially, Mukulabhaṭṭa here identifies *lakṣaṇā* with a case of *anyathā-anupapatti*, where there is nothing grammatically or syntactically infelicitous about the vocative case. The problem lies in what we know about the world and the meanings of the words in the verse. Because the *mukhya* (denoted meaning) of these words are not applicable, we look for “another meaning which is connected to qualities similar to the qualities understood by the denoted

²¹ Dvivedi (1973, p. 23).

²² Dvivedi (1973, p. 27).

meaning” (*tad-gata-guṇa-sadrśa-guṇa-prajuktam artha-antaram*).²³ There is a violation of *yogyatā* in the broad sense.

Similarity is not the only possible relationship between denoted and indicated meaning. For example, in hearing (15) *bhadra mukha*, “O fair-faced one!” uttered ironically, an interpreter understands the utterance (*vācya*, not the sentence/expression meaning which is *vākya*) as communicating the opposite of *bhadra*, or fairness. Metonymic relationships are also described by Mukulabhaṭṭa, as in the sentence (16) *chatrīṇo yānti*, “The umbrella-holders are going”, used in a context where there is a single umbrella holder who accompanies the king and his retinue. The third person plural, ‘*yānti*’, is inappropriate for a single umbrella holder, and while the sentence literally means “The umbrella holders go”, there is in actuality only one umbrella holder. By association, *samavāyaḥ*, the entire retinue is described as “umbrella holders.” There is the relationship of etymological play on words, or *kriyā-yoga*, as in the case of (17) *mahati samare śatrughnas tvam asi*, “You are Enemy-Killer in the great battle”, in which the proper name “Śatrughna” means both “enemy-killer” and metaphorically picks out the poem’s protagonist through his similarity to the original Śatrughna. Finally, there is the famous traditional example of *lakṣaṇā*, (18) *gaṅgāyāṃ ghoṣaḥ*, “The village is on the Ganges”, where the stream denoted by ‘*gaṅgāyām*’ is inapplicable (Mukulabhaṭṭa again uses ‘*anupapattya*’) as the substratum of a village.²⁴ Again, the difficulty is semantic, not syntactic. If villages were the kinds of things that ordinarily did float upon rivers (like in some fishing villages), the sentence would not violate *yogyatā*. In any case, it is through *sambandha*, or “close connection (with the primary meaning)” that the interpreter understands the bank as being near to the stream and included within the denotation of ‘*gaṅgāyām*.’ This is, arguably, a kind of metonymy.

With Mukulabhaṭṭa’s framework generally in place, I now show that his model of *lakṣaṇā*, which employs two kinds of *lakṣaṇā* grounded in the general abductive principles of *arthāpatti*, gives a plausible explanation for the fact that language’s capacities are simultaneously constrained and creative.

Arthāpatti, Abduction, and Pramāṇa-s

Hearers recover what is indicated through *arthāpatti*, a kind of abductive inference often translated as “presumption.” A traditional definition of presumption, due to Śabarāsvamin, asserts that through *arthāpatti* one can draw a conclusion about “something not seen, on the ground that a fact already seen or heard of cannot be explained without that presumption.”²⁵ The earlier example of fat Devadatta is among the most commonly given in the tradition. The idea is that if we already know that (1) Devadatta is fat and (2) Devadatta does not eat during the day, we can presume that Devadatta eats at night.

²³ Dvivedi (1973, p. 25).

²⁴ Guha (2012) translates ‘*ghoṣaḥ*’ as the proper name of a diaryman, but I take it that Mukulabhaṭṭa means it to refer to a village. This is also a traditional interpretation of the sentence.

²⁵ Jha (1942, p. 157).

One way to formalize presumption follows:

An interpreter is warranted in presuming q from p and m iff:

1. p and m are two already-established facts and;
2. The presumption of q is required to make p consistent with m .

Lakṣaṇā relies upon presumption to remove apparent inconsistency between the linguistic elements mentioned above: sentence meaning and facts about the speaker, the sentence meaning and facts about the circumstance of utterance, and so on. Twentieth-century analytic philosopher H.P. Grice, in “Logic and Conversation”, proposes a similar set of interpretive principles, known as the **Cooperative Principle**: “Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.”²⁶

This general principle can be divided into four categories of maxims (some further divisible into submaxims): the Maxim of Quantity, the Maxim of Quality, the Maxim of Relation, and the Maxim of Manner. Grice then explains when it is that a speaker can be said to generate a “conversational implicature.” This notion of implicature is intended to explain how we can mean by “He is in the grip of a vice” that someone is caught in a bad character trait, and not that someone is physically trapped by an instrument, which would be its literal sentence meaning.

Conversational Implicature S conversationally implicates that q in saying that p iff S implicates q when:

1. S is presumed to be observing the conversational maxims (or the Cooperative Principle),
2. the supposition that S thinks that q is required to make saying that p consistent with this presumption,
3. S thinks, and expects H to think that S thinks, the hearer can work out, or grasp intuitively, that the supposition that q is required.

Point (2) above is analogous to the general structure of *arthāpatti*, although for Grice, what must be “consistent” is the presumption of a cooperative and rational conversational contribution and the sentence meaning, p .²⁷ In *lakṣaṇā*, we have sentence meaning p and an interpreter presumes that S is indicating q by saying that p . According to Mukulabhaṭṭa, apparent incompatibility can occur between the sentence meaning p and some fact about the speaker, place, time, or circumstance. Or, he claims, the literal denotation of a word may be incompatible with the denotation of another word or words in the sentence. I will address the second case first, as this is the traditional understanding of *lakṣaṇā* that Guha assumes, and Mukulabhaṭṭa expands upon.

²⁶ Grice (1989, p. 26). The following principles and maxims are taken directly from Grice’s “Logic and Conversation.”

²⁷ While Grice says “consistency” he cannot be talking about logical consistency, as adding another proposition to two inconsistent propositions will not remove their inconsistency. I take it he means something like “apparent incompatibility.”

Semantic Indication or *Lakṣaṇā*

In cases of what I will call semantic *lakṣaṇā*, the interpreter and speaker may not be aware of making any inference: language processing occurs rapidly and phenomenology is a poor guide to underlying mental modules. But we can still understand the information given by the sentence as filling in an inference.

James Pustejovsky, whose work I referred to above, gives an example of this for the ambiguity in the verb “began.” He describes the process as *enthymemic abduction*, as an *enthymeme* is an argument containing two propositions, where a third is elliptical or implicit and, when added to the other two, a categorical syllogism results. In enthymemic abduction, the implicit premise is not analytic, in contrast to enthymemic deduction. In other words, there’s nothing in the explicit premises which contains the assumption that the speaker or hearer makes. Take the example, “Stephen King began a new novel.” If we suppose “began” paired with “novel” *literally* means “began to read” then it is most coherent (given other background conversational principles) that the speaker wants to convey, instead, that Stephen King began the *writing* of a novel. However, as this inference is not deductive, but abductive, it’s not a necessary inference. It’s possible that the speaker could be describing Steven King beginning to read a new novel by a friend; nothing in the syntax or semantics prevents this reading. Pustejovsky makes this explicit:

- A. Steven King began a new novel.
- B. [Steven King is a writer.]
- C. AGENTIVE(novel) = $\lambda z\lambda x.y\lambda e^T[\text{write}(e^T, z, x.y)]$
- C'. Steven King began to write a new novel.

Above, A is the sentence uttered, B is the implicit non-analytic assumption, and C is the lexical information projected by the word “novel.” This lexical information is that novels have agents (z) which participate in an event at time T (e^T) of writing them, and that novels are objects that can be understood as both a physical thing (x) and information (y), which he represents as $x.y$, or a “dot object.” Since we assume that Steven King is a writer, the word “novel” coerces the interpretation that “began” means “began to write” rather than “began to read”, as in C'. This process may be one a speaker or hearer is never conscious of, although we can often be brought to awareness of such ambiguities (Pustejovsky, pp. 237–238).

This inference can be classified as *arthāpatti* as there is a presumption of C', that Steven King began to write a new novel (rather than read one), as a way to reconcile A and B. For Mukulabhaṭṭa, apparent inconsistency between A and B arises because of privileging one reading of a word as literal.²⁸

There are many examples throughout Mukulabhaṭṭa’s text where *lakṣaṇā* is said to function in this *semantic* manner, shifting “cow” from a universal to a particular, incorporating “eating at night” into the meaning of “fat”, and so on. Mukulabhaṭṭa

²⁸ In this way, Pustejovsky’s account differs from Mukulabhaṭṭa’s and is more consistent with a Prābhākara account, on which words have no denotation without being embedded within a sentence. For Pustejovsky, there is no “default” reading, but rather a structured lexical entry that allows for what he calls “co-compositionality.”

accounts for the constraints in how word meanings can shift via *lakṣaṇā* by means of his lexical semantics combined with the logical relationships between literal and indicated meaning (Table 3). Take the example of (16) *chatriṇo yānti* above, in which Mukulabhaṭṭa describes a case of *śuddhā lakṣaṇā* (pure transfer, or metonymy) as employing the relationship *samavāyah* (association or inherence). There are two ways to understand the metonymic transfer involved, as shown by the diagrams below (Figs. 1, 2).

In the first case, what is indicated by '*chatriṇaḥ*' (literally: "umbrella-holders") is the single umbrella-holder (represented below by the small gray circle) plus all of those in the king's retinue who are associated with his direction of movement (the large circle and arrow). Thus, what is intended by the speaker is to primarily indicate the umbrella holder, plus whomever accompanies him. This is *upādāna* (inclusion) because the other, non-umbrella-holders are subsumed under the indicated meaning.

In the second case, while the relationship is still association, it is the converse association: the umbrella-holder is understood as part of the crowd. Here, because of the plurality of '*chatriṇaḥ yānti*', what is indicated must be more than just one person, and so the crowd is primarily the target of indication. However, because the umbrella-holder is associated with the crowd's movement, he is part of the indicated meaning. The diagram below shows in a large gray circle the primary target of indication, the crowd, and in white the umbrella-holder who comes along for the ride, so to speak.²⁹

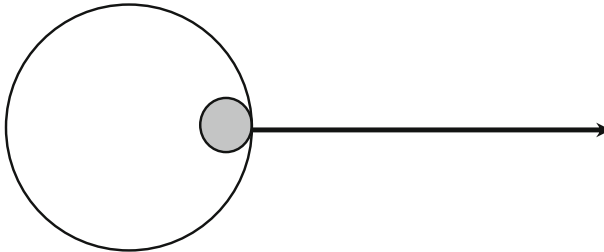


Fig. 1

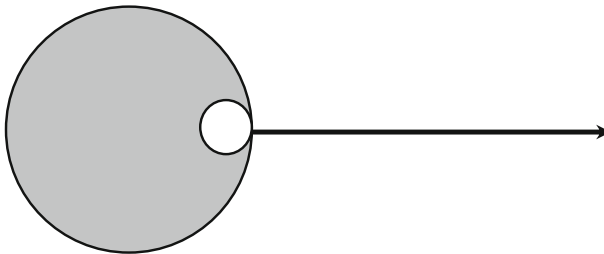


Fig. 2

²⁹ The case of '*gaur anubandhyaḥ*' is a case like the second, where the primary target of indication is a particular cow, but cowhood is, though not intended to be expressed, still part of the meaning, as cowhood inheres in cows. Similarly, "The village on the Ganges" relies upon the relationship of nearness between the bank and the river, and '*gaṅgāyām*' includes both the current and the close-by riverbank.

Mukulabhaṭṭa's insight here is that speakers have nuanced ways of representing the same object, and while he does not spell this out explicitly, it seems clear that depending upon context, one or the other of these two interpretations might be made salient. For instance, one might say,

(19) The umbrella-holders go and then disperse.

This shows more clearly that it is the crowd which is the primary target of indication. This point is more easily made for modern English-speakers with cases like Geoffrey Nunberg describes:

(20) I am parked out back and have been waiting for 15 minutes.

(21) *I am parked out back and may not start.³⁰

The asterisk marks (21) as infelicitous because while "I" can be metonymous for myself and my car (which is associated with me), the pronoun can only refer to my car derivatively, not directly. This reference functions in virtue of a property that I have. While this property seems to belong to my car, the fact that this property is transferred to my car (rather primarily attached to the car) is shown by the inability to conjoin a property of the car, not being able to start, in (21). If Mukulabhaṭṭa's analysis is correct, we would expect a Sanskrit language equivalent of (20) to be possible with "umbrella holders", where the singular umbrella-holder can be referred to, as in

(22) *The umbrella-holders go and is carrying a blue umbrella.

This sentence not only seems to be infelicitous, but it is certainly ungrammatical. Perhaps an example can be constructed, but the clash between the grammatical numbers makes it appear unlikely. However, Mukulabhaṭṭa's larger point stands: that metonymic transfers admits of conceptual analysis based upon the relationships they exploit. Again, as with the example of Steven King's novel writing above, hearers and speakers may not be consciously aware of this process.

Pragmatic Indication or *Lakṣaṇā*

Finally, before addressing Guha's worry that *lakṣaṇā* as inference threatens us with a problematically infinite, unpredictable, and unconstrained number of interpretations, I take up another kind of indication in Mukulabhaṭṭa: pragmatic *lakṣaṇā*. This is a function, also based upon *arthāpatti*, which reconciles facts about sentence meaning with conversational maxims or context. For example, the phrase (15) *bhadra-mukha* (lit., "fair-faced one") is employed in the presence of, or referring discursively to, an ugly-faced man. The relationship Mukulabhaṭṭa identifies here is of *vaiparītya* (opposition, or irony). In contrast to semantic *lakṣaṇā*, there are no

³⁰ Nunberg (1995, p. 111).

lexical or compositional reasons to interpret 'bhadra' as its opposite. Rather, the conflict is between the expressed meaning and contextual facts. Something like Grice's Maxim of Quality and the Cooperative Principle operate in the background, and we presume that a speaker who says *p* to describe or pick out someone who is *not-p* must be implicating *not-p*. Of course, this assumption is defeasible—it is possible that the speaker does not share the hearer's judgment that the man is ugly and is not trying to ironically convey the opposite.

Likewise, the case of metaphor: (9) *gaur vāhīkaḥ*. In this example, a punning slur which translates to something like "The Punjabi peasant is an ox", the statement is straightforwardly false, but not ungrammatical, nor does it violate *yogyatā* in the compositional sense. What it violates is our expectation that speakers speak informatively and truthfully. As Guha rightly points out, in his description of a "similarity-based metaphor", the relationship between the primary and secondary meaning is one of similarity (Guha 2012, p. 512). An interpreter, *A*, would then look for (perceived) similarities between Punjabi peasants and oxen, similarities which interpreter *A* expects speaker *B* to believe herself or be aware of, and which interpreter *A* thinks speaker *B* would believe herself (*B*) capable of expressing successfully to *A*. While there may be no general (in the sense of universal) rule determining interpretation, a shared speech community and culture will facilitate the interpretive process.³¹ In this metaphor, the *vāhīka* is thought of as a *gaur*, and so the metaphor is superimposed qualitative transfer.

Mukulabhaṭṭa also identifies superimposed pure metaphorical transfer, where the relationship is not similarity. Again, this is prompted not by strictly internal semantic incompatibility, but by incompatibility between the literally false sentence meaning and conversational principles. This case, (7) 'āyur ghr̥tam' ("Ghee is life"), relies upon the relationship of causation. Given that it is not true that the substance of ghee can be identical with an abstract entity (or whatever is represented by the noun "life"), we are prompted to presume another, indicated meaning. This rectifies the apparent inconsistency between the literal meaning and the principle that speakers utter informative, truthful sentences. Given the background assumption that ingesting ghee is a cause of long life, there is a metaphorical identification of ghee with life.³²

Interpretive Constraints and Creativity

Given this extensive analysis of the causes of, and procedures for, *lakṣaṇā*, what are we to make of Guha's argument that *lakṣaṇā* cannot be reduced to inference? As I understand it, his argument is as follows (Guha, pp. 501–502, 505):

³¹ The Sanskrit poetic tradition in fact gives explicit interpretive guidelines drawn from social and ethical norms. For an analysis of the relationship between these linguistic and socio-cultural norms, see Pollock (2001).

³² Not only do obviously false sentences prompt such pragmatic *lakṣaṇā*, but trivially true ones, like 'puruṣaḥ puruṣa' ("The man is a man").

1. If *lakṣaṇā* is a form of abductive inference (*arthāpatti*), it requires prior observation, viz, observation of the co-occurrence of the terms of inference (*sahacāra-darśana*).
2. The *sahacāra-darśana* for *lakṣaṇā* is the linguistic behavior of a competent speaker (*vṛddha-vyavahāra-darśana*).
3. *Lakṣaṇā* is creative and for any given expression ϕ there is an infinite number of possible *lakṣaṇā*-s.
4. Given 1, 2, and 3, for any given expression ϕ there must be an infinite number of *vṛddha-vyavahāra-darśana*-s.

Therefore, the conclusion follows:

- C. On 4, it would be impossible to observe all the co-occurrences, and thus by *reductio*, 1 is false.

First, I think a case can be made against premise 3, and in fact, Mukulabhaṭṭa briefly takes up this problem in his discussion of the phrase ‘*turaṅga-kānta-ānana-havya-vāha*’, or “fire with the face of a lovely mare.” His opponent says this is a case of *lakṣaṇā*, whereas Mukulabhaṭṭa denies it is, arguing that it is simply a set of synonyms directly picking out the referent. As support, the interlocutor suggests that the phrase is like ‘*dvirepha*’ (literally: having two-r’s) which indicates “bee” because another Sanskrit term for “bee”, ‘*bhramara*’ has two r’s. Likewise, they argue, this phrase picks out its synonyms, which then pick out the object. Mukulabhaṭṭa replies:

na etat | yato vṛdda-vyavahāra-abhyamujñāteṣv eva śabdeṣu taj-jātīya-śabda-darśanāl lakṣaṇātvam abhyupagamyate na tu sarvatra | anyathā sarveṣāṃ eva yena kenacij jātilēśena sarvān arthān prati lakṣaṇā-śabdatvasya vaktum śakyatvāt |

This is not so. That (word) which is understood as possessing indicative properties is such because it is observed to be a word belonging to a class of words which are accepted as part of the conventional use of the elders—but not even in all instances. Otherwise, every (word) would have the capacity to convey all meanings, as words which indicate by means of some tiny property.

The problem is that on this view, any expression ϕ would allow for an infinite number of interpretations, since there always exists some similarity between two objects. But this would unmoor *lakṣaṇā* from linguistic constraints that allows for interpretability. So Mukula concludes words do not have the capacity to convey all things.

Second, even if we grant the possibility that there is an infinite number of possible interpretations for any expression ϕ , given just the right contextual priming, premise 2 is still a problem for Guha. This premise claims that, for any case of *lakṣaṇā*, there is an infinite number of linguistic behaviors that an interpreter must observe in order to successfully understand. This is too high an epistemic standard, as he rightfully points out. Further, on the speaker’s side, she must also have observed a prior linguistic behavior before employing a word or sentence non-literally. This forces an infinite regress, in which no one can employ language creatively. After all, there must be a first instance of a creative use of a word. But if I

must first observe such a use, I am not the first instance. Nor can there be such an instance. We can only use language as it has already been employed.

However, if we give up the requirement that speakers and hearers must have observed someone else using, for instance, '*āyur ghr̥tam*' to mean "Ghee is life", or '*chatriṇo yānti*' to mean "The umbrella-carriers go", then how are we to explain the apparent convergence in interpretations? Again, in some ways, I wish to agree with Guha. It is unlikely that there is some general principle which would allow us to predict beforehand every possible interpretation of an expression ϕ . The application of Gricean maxims have notorious problems and exceptions, and semanticists have been working diligently for years to come to consensus on the mechanisms for metonymy, polysemy, and ambiguity. However, if the only solution is to give up the view that *lakṣaṇā* is (broadly) inferential, and to instead propose that it is an irreducibly linguistic phenomenon, I humbly submit this is no solution at all. This view, which is indebted to the Naiyāyika concern to keep testimony and inference as separate *pramāṇas*, or valid knowledge sources, is ultimately unsatisfactory, if what we wind up appealing to is language as a mysterious, invisible network.³³ Guha's concluding paragraphs suggest

...language as a communication system is autonomous. It has powers...The speaker has a power to encode their message in a semantically deviant sentence. Language has a power to preserve it. And the hearer has a power to decode the sentence and read the message...Language somehow restricts my metaphorical uses in the sense that I cannot just mean anything by uttering a specific word. This too perhaps is a power of language (Guha, pp. 507–508).

While I wholeheartedly agree with Guha that we cannot, like Humpty Dumpty thinks, squeeze simply any meaning into any particular word, on any occasion of use, I disagree that what hearers do when they process metaphors is to simply "decode" a sentence. Semantic deviance forms evidence that we need a non-literal interpretation, but speakers must use abduction and appeal to psychological principles to determine their meaning. In the case of metonymy, where the deviance is within the parameters of lexical possibilities, speakers need not consciously engage in interpretation at all. However, for both metonymy and metaphor, interpretations are defeasible and not deductively necessary.

This tension between interpretative freedom and linguistic constraints is part of the motivation for Mukulabhaṭṭa's reply to the *dhvani-vādin*'s claim that the richness of metaphor cannot be accounted for with *lakṣaṇā*. As Ānandavardhana points out, there is no easy agreement in the interpretation of figurative language. The open-endedness of metaphor and its resistance to sentential paraphrases are

³³ Guha adds that the connection between mathematics and the natural sciences is "no less a mystery" than the "preservative power of language and the communicative power of the speaker-hearer" (Guha (2012, p. 509)). As I do not see the relationship between mathematics and the natural sciences to be particularly mysterious, although it is certainly complex and worthy of philosophical investigation, I'm unclear as to why this should motivate us to think language and communication to be mysterious. Further, cognitive science and linguistics are part of the purview of the natural sciences, successfully employing mathematical models to investigate processing speed of metaphors, the role of discourse priming in resolving ambiguity, and so on.

reasons many contemporary philosophers (such as Donald Davidson) have given up on even claiming that there are such things as metaphorical *meanings*. For instance, if someone utters, ‘*āyur ghr̥tam*’, just what must I, the interpreter, cognize in order to have successfully, as Guha says, “decoded” the metaphor? Must I understand that ghee causes longevity? Or that ghee causes an enjoyable life? Perhaps I might understand the speaker to be saying that the point of life is to consume ghee. While conversational principles, cultural background, and general rationality can constrain the interpretive search, it is not at all obvious that a speaker is able to simply “retrieve” a meaning encoded in a deviant sentence, at least in the pragmatic case of metaphor, which Guha is addressing.

In the semantic case of metonymy, one might be tempted to think Mukulabhaṭṭa is siding with the Naiyāyika. However, there is still the question that Mukulabhaṭṭa must address, and which I think points to some difficulties with his semantic account, of why we should think the solution to the Fat Devadatta case is to incorporate “eats at night” as part of the *meaning* of “fat.” Instead, it seems to be a matter of world knowledge (or observation of co-occurrence) that fatness is typically caused by eating. Thus perhaps more of the putatively semantic cases are pragmatic than Mukulabhaṭṭa thinks. Still, even if they are semantic, neither enthymemic abduction nor *arthāpatti* are “decoding” meaning in the manner of literal speech.

In any case, the real reply to premise 2 above is this: human beings do not need to observe others using words in precisely the same ways that they do themselves, but can rely upon lexical knowledge plus world knowledge, combined with abductive inferential principles, to yield a “best guess” in a context. It is because interpretation is abductive that we do have a wide range of interpretations in the most creative cases, and that our interpretations are defeasible in a way that our decodings of literal meanings are typically not. What Mukulabhaṭṭa’s analysis points to, in conclusion, is that the mechanism of *lakṣaṇā* can be fruitfully characterized as abductive inference, whether we are aware of such an inference (as often in pragmatic cases) or the inference is constructed subconsciously as we process a sentence’s syntax. Further, this inferential nature of non-literal speech does not threaten our ability to make creative use of words and expressions in new contexts, nor does it leave us wildly unconstrained. Instead, it is this very nature which allows us to use everyday metonymical expressions and engage in wild flights of the poetic imagination.

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