#### Intention, Inclusivity and Topicality

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#### Outline

Historical background

The question

Translation: from non-intention to inclusion

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The answer

Translation: reference to topicality

Hierarchization

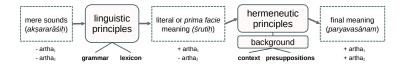
Kumārila's argument

Prabhākara to the rescue

#### Mīmāmsā

Mīmāmsā is an Indian tradition of hermeneutics.

Its principal object is to understand how to perform rituals on the basis of statements found in the Vedas (a corpus of texts transmitted orally by Brahmin families):



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#### Mīmāmsā authors

#### Mīmāmsāsūtras of Jaimini (1st c. BCE?)

#### Commentary (Bhāṣyaḥ) of Śabara (5th c. CE)

*Tantravārttikam* (*Explanation of the System*) of Kumārila (6th c. CE) *Brhatī Ţīkā* (*Long Notes*) of Prabhākara (7th c. CE)

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#### Mīmāmsā authors

Originally the concerns were narrowly exegetical (how does text *x* inform the performance of ritual *y*), but Mīmāmsā started to engage with more philosophical questions a bit before the time of Sabara (5th c.), and the tradition is best known today for defending a realist ontology and epistemology, as articulated by Kumārila.

Mīmāmsā's philosophy of language has so far been examined only in relation to its epistemology (e.g., the independent validity of testimony). But this is only about 2% (albeit an important 2%) of the system!

#### The question

In the course of a particular sacrifice, ten different goblets, all with specific names, are each dipped into a tub of psychoactive juice ( $s\bar{o}ma$ ). Liquid from each of these goblets will be poured into a fire. Before that, however, the text says:\*

He wipes (the/a) goblet.

graham sammārsti.

The case ending of "goblet" (*graham*) is singular. Note that Sanskrit does not use articles (hence the two options for an English translation.)

\* Oddly this is not found in any extant Vedic text.

Does the sacrificer wipe all of the goblets, or just one goblet?

The sentence mentions "goblet" in the singular, but we know from context that there are more than one goblets that could be referred to.

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#### The terms of the question

Mīmāmsā authors ask whether the singularity expressed by the case suffix is intended (*vivakṣita-*) or unintended (*avivakṣita-*).

This language raises interesting questions about how we can coherently speak of "intention" with respect to a text that is believed to be without an author, raised by Kumārila and discussed by:

Kiyotaka **Yoshimizu**. 2008. "The Intention of Expression (*vivakṣā*), the Expounding (*vyākhyā*) of a Text, and the Authorlessness of the Veda." *Zeitschrift der Deutschen Morgenländische Gesellschaft* 158: 51–71.

#### The terms of the question

But this is essentially a semantic question:

- What counts as the correct performance of the action enjoined by the sentence "he wipes (the/a) goblet"?
  - If the injunction requires all the goblets to be wiped, the singularity is said to be unintended.
  - If the injunction requires only one goblet to be wiped, the singularity is said to be intended.
- Whichever interpretation we arrive at must be reconciled with general principles.

I note incidentally that Mīmāmsā deals with injunctive sentences, which are not evaluated as true or false (unless we understand "true" to mean "satisfied by a particular performance"). Does the use of the singular exclude (*parisañcaṣțē*) "the wiping of a second, third, etc."?

 $\rightarrow$  Is this usage of the singular exclusive (referring exclusively to the domain of atoms, i.e., individual goblets) or inclusive (referring in addition to the domain of sums, i.e., all goblets)?

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#### Inclusivity as a semantic problem

Lina didn't harvest tomatoes.

 $\rightarrow$  the plural "tomatoes" is inclusive (it is as false if Lina harvested one tomato as if she harvested two or more).

Kitap aldım. I bought a book/books.

 $\rightarrow$  the singular "kitap" is inclusive (it is true if I bought two or more books as if I bought one)

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(The examples are from Luisa Martí's work)

#### Inclusivity as a semantic problem

Donka F. **Farkas** and Henriëtte E. **de Swart**. 2010. "The semantics and pragmatics of plurals." *Semantics & Pragmatics* 3: article 6 (10.3765/sp.3.6)

Luisa **Martí**. 2017. "[±Atomic]." Handout from 27 CGG (Universidad de Alcalá).

Luisa **Martí**. 2020. "Inclusive plurals and the theory of number." *Linguistic Inquiry* 51 (1): 37–74.

Benjamin **Spector**. 2007. "Aspects of the pragmatics of plural morphology: on higher-order implicatures." In U. Sauerland and P. Stateva (eds.), *Presuppositions and Implicatures in Compositional Semantics*. Palgrave-Macmillan.

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#### Intention and inclusion

To review:

If the singularity expressed by the ending is intended, the term is an exclusive singular.

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If the singularity expressed by the ending is unintended, the term is an inclusive singular.



# Did Sanskrit authors in the 6th c. CE really understand the inclusive/exclusive distinction?



#### Yes, really.

What is prohibited by the sentence "untouchables are not to enter this house" is the entrance both by a individual untouchable or a group of them.

vrşalair na pravēstavyam grhē 'sminn iti coditē pratyēkam samhatānām ca pravēśah pratisidhyatē

Kumārila, Explanation of the System, p. 714

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Note that *pratyeka*- and *samhata*- correspond almost exactly to the concepts of "atom" and "sum," respectively. (More on this issue later.)



Mīmāmsā authors held that the singularity expressed by the case suffix is not intended (and therefore inclusive) because the singularity is not enjoined (*avidhīyamāna-*).



#### What is enjoined and what is referenced

Any injunction can be characterized as a binary function:

 $\phi(x, y) =$ With reference to *x*, *y* is enjoined.

*x* and *y* are called "what is referenced" (*uddiśyamāna-*) and "what is enjoined" (*vidhīyamāna-*) respectively.

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#### What is focused and what is topicalized

In fact these terms do not apply only to injunctions, but rather to any sentence whatsoever, as was very clearly expressed by Vidyādhara (14th c.):

A sentence is articulated into two interdependent parts, the focus (*vidhi-*) and the topic (*anuvāda-*), the topic being subordinate to the focus.

parasparasavyapēkṣapradhānōpasarjanabhāvāpannavidhyanuvādarūpāvayavadvitayaśāli tāvad vākyam.

The "focus" (*vidhi-*) presents new information in reference to the "topic" (*uddēśa-* or *anuvāda-*).\*

\* These terms are not quite synonymous, as we'll see.

#### What is focused and what is topicalized

Hence the formula  $\phi(x, y)$  applies to sentences in general, and refers to constituents labeled by information structure.

The applicability of these terms was suggested first (to my knowledge) by:

Kiyotaka **Yoshimizu**. 2006. "The Theorem of the Singleness of a Goblet (*graha-ekatva-nyāya*): A Mīmāmsā Analysis of Meaning and Context." *Acta Asiatica* 90: 15–38.

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# Did Sanskrit authors of the 6th c. CE really anticipate the focus/topic distinction with all of its consequences?

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Are you sure that this isn't really a subject/predicate distinction?

#### Yes, really.

The focus/topic (*vidhi-/anuvāda-*) distinction was not only recognized in early Mīmāmsā (at least as far back as Śabara, 5th c. CE), but it was leveraged in all kinds of interpretive contexts.

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(As I hope to argue in a book.)

#### How do we know that "goblet" is topical?

Mīmāmsā authors were in agreement that "goblet" has to be the topic, or what is referred to, in the sentence "he wipes (the/a) goblet."

"because it is not enjoined," or equivalently in this context, "because it is not focused," avidhīyamānatvāt.

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How do we know?

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#### How do we know?

 $\rightarrow$  because of hierarchization (viniyōgaḥ)

## Hierarchization (viniyōgaḥ)

This discussion actually occurs in the first chapter of the third book of the Mīmāmsā system, which introduces the topic of *viniyōgaḥ* or the determination of a teleological relationship between elements in a ritual act.

Elements of meaning are "hierarchized" (*viniyujyatē*) according to a complex set of principles, but in this case the question is answered easily by the following principle:

The preparation of a substance is for the sake of the substance that is prepared thereby.

In this case it is uncontroversial that the "wiping" is a preparation (*samskāra-*), and "goblet" is a substance that is to be prepared (*samskārya-*).

## Hierarchization (viniyōgaḥ)

In general (or perhaps always?) a preparation is enjoined with reference to a substance.

This means that *x* and *y* in the formula  $\phi(x, y)$  cannot be drawn from the same domain (*x* should be a substance and *y* should be an action).

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### Kumārila's argument

We are now in a position to understand Kumārila's argument.

- Given that "wiping" is enjoined/focused in relation to "goblet,"
- "one" (i.e., the singularity expressed by the case suffix) cannot be hierarchized in relation to either "wiping" or "goblet."

Kumārila demonstrates this through a (needlessly complicated) argument from elimination, showing that any possible hierarchization would result in interpretations of the sentence that are precluded by general Mīmāmsā principles.

### Kumārila's conclusion

"One" qualifies the topic ("goblet"), but it cannot be hierarchized, and therefore cannot be intended.

The general principle (which Kumārila seems to arrive at inductively) is this:

A qualifier of the topic (= a *description* or *lakṣaṇam*) is unintended.

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(I have simplified his discussion greatly.)

#### Kumārila's conclusion

No description is an element of the performance [of the enjoined action], since descriptions are merely a way of understanding something, for example the clothing in the following example:

► That guy in white clothes — bring him here.

This being the case, [the performer] must take up only as much as the performance requires, and hence what is taken up here is just "goblet."

sarvalakṣaṇēṣu pratītimātraupayikatvād anuṣṭhānānaṅgatvam. yathā yō 'yaṁ śuklavāsā drśyatē tam ānayētyādiṣu vāsaḥprabhr̥tīnām. tatra yāvatā vinā 'nuṣṭhānaṁ na sidhyati tāvad upādātavyam iti grahādimātraṁ parigr̥hyatē.

Kumārila, Explanation of the System p. 723

#### Problems with Kumārila's account

- Depending on how we apply this principle, there are lots of counterexamples.
  - One is already mentioned by Śabara: if the text had said "wipe (the/Ø) goblets," it is clear that wiping only one would fail to satisfy the injunction. There looks to be an asymmetry between singulars and plurals in identical contexts.
  - Grammarians like Kaunda Bhatta rejected this principle for precisely this reason.
- Relatedly, one wonders exactly what should count as a "description":
  - All or some grammatical categories? (Number, gender, etc.).
  - Anything else? (cf. the "white clothes" example)

#### Problems with Kumārila's account

In this case, the goblet, which is "what is referenced"/"what is topicalized" (*uddiśyamāna-*) happens to be given (*prāpta-*) or known from another source of knowledge (*pramāņāntarasiddha-*).

Linguists prefer to distinguish the aboutness topic from what is given or the discourse topic.

Kumārila seems to assume at least a one-way entailment relationship:

If something is given, then it must be the topic.

#### Problems with Kumārila's account

But what about the other way?

If something is the topic, then it must be given (?).

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If this principle doesn't hold, then Kumārila's overall principle (qualifiers of the topic are unintended) is in trouble.

#### Prabhākara's interventions

It is not certain whether Prabhākara knew of Kumārila's work, but on a good day I consider it likely. He seems to make several improvements to Kumārila's account. Moreover, Prabhākara was a much better philosopher of language than Kumārila. Prabhākara introduced the notion that meanings are systematically (and not just occasionally) determined by their context (a doctrine he calls *anvitābhidhānam*, "the expression of relational [meanings]").

# Intervention 1: Distinguishing discourse topic from aboutness topic

He notes that not all descriptions are unintended, but only those that are already "taken up" (*upātta-*). This is his term (as I understand it) for elements of the performance that the performer has already recognized and done something with. He clearly disambiguates this concept, which is close to discourse topic (i.e., something that is given or hearer-old), from aboutness topic. A description is unintended if and only if it attaches to a given (hearer-old) topic.

# Intervention 1: Distinguishing discourse topic from aboutness topic

A topic is defined by its relation to what is focused. Something's already having been taken up or not is not the reason why it is topical. For this reason, the qualifiers of what is topicalized (*uddiśyamāna*-) are unintended [just in case] those qualifiers are known from another source of knowledge.

vidhēyavişayō hy uddēśa ity ucyatē, nōpāttatvam anupāttatvam ca uddēśyatvē hētuḥ. ataḥ pramāṇāntarasiddhaviśēṣaṇam uddiśyamānam avivakṣitaviśēṣaṇam bhavati.

Prabhākara, Long Notes, p. 676

#### **Intervention 1**

This allows Prabhākara to deal with a host of counterexamples:

He should kill an animal. He should install fires. He cuts a post. paśum ālabhēta. agnīn ādadhīta. yūpaṁ chinatti.

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- The part in red is not "already taken up"/"given."
- Hence the semantics of the number is exclusive.

He wipes the goblet.

graham sammārsti

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- The part in red is "already taken up"/"given."
- Note that this licenses the use of the definite article in English.
- ► Givenness → (definiteness) → inclusive reading ~ distributive reading (he wipes each of the goblets).

Prabhākara seems to lay out the argument about exclusion as follows:

- If the suffix expresses a singular meaning, then it should exclude a reference to sums.
- Conversely, if the suffix includes a reference to sums, then the singular meaning of the suffix ends up being unrelated to the sentence-meaning as a whole.

In other words, inclusive singulars (and by extension plurals) pose a problem for compositionality, the theory that (roughly) meanings of individual parts are included in the meaning of the whole.

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Prabhākara argues that one can only ever exclude something given, and hence if something is not given (e.g., the reference to sums in the example), it cannot be excluded.

- This argument is not convincing and Prabhākara seems to give it up quickly.
- Note that Kumārila rejects the analogy with "exclusion" in its entirety.
- Prabhākara's (re)introduction of the relationship between *exclusion* and *presupposition* bears comparison with modern approaches (e.g., Sauerland, Spector).

Regarding the compositionality problem: one approach might have been to say that meanings that are expressed are subsequently *cancelled* or *revised* for pragmatic reasons, but this approach is not available to Prabhākara, for whom what is expressed is actually what is conveyed:

Lawrence **McCrea**. 2013. "The Transformations of Mīmāmsā in the Larger Context of Indian Philosophical Discourse." In Eli Franco (ed.), *Periodization and Historiography of Indian Philosophy*, 129–143. Vienna: Publications of the De Nobili Research Library.

Prabhākara instead solves the compositionality problem by appealing to the fact that Sanskrit is **inflectional** and hence each individual case suffix can have multiple meanings.

In this case the case suffix (-m), usually understood as accusative singular masculine/neuter, only conveys the meaning of the accusative case.

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A Brahmin is not to be killed. Untoucables are not to enter. brāhmaņō na hantavyaḥ vŗṣalair na pravēṣṭavyam

These are given (by Prabhākara and Kumārila respectively) as examples of cases where the case-ending "stops" at expressing a semantic role (patient and agent respectively) without expressing the associated number (or rather: the semantics of the number is inclusive in each case).

But as Prabhākara notes, there are reasons to believe that these cases are special. (His commentator, Śālikanātha, is left with the task of relating them to the example at hand.)

When the negation is connected to the killing, singularity cannot relate [to the killing], since the positive action [i.e., killing] is understood from some other source.

Śālikanātha: And for that reason the number [of Brahmins whose killing is prohibited] cannot be taken up, and hence cannot be an "uptake-subordinate" with respect to [those Brahmins], and that is why it is unintended to begin with.

## na nañarthēna vadhēna sambadhyamānē ēkatvam anvētum ksamam, anyatah pravrttyavagamāt.

Śālikanātha: tataś cānupādēyatvān na tatrōpādānaśēṣatā saṅkhyāyā ity avivakṣaiva.

Thus, according to Śālikanātha (9th c.), there are two related circumstances that license an inclusive reading of a grammatical number:

- In negative sentences, where the embedded positive proposition (or at least its topic) is treated as given; and
- ▶ in sentences where the topic is actually given.

In the first case, the number is "unintended to begin with," and in the second, it is intended when the topic is first introduced, but not subsequently.

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#### Takeaways

- Indian philosophy of language is extremely rich and sophisticated.
- Indian philosophers independently raised many problems that concern philosophers and linguists today, such as:
  - the consequences of the topic/focus articulation;
  - the consequences of givenness;
  - inclusive readings of grammatical numbers.
- Prabhākara's solution to the last problem removes an "exclusive" semantics in those cases where a NP is either given or within the scope of a negation.
- There were questions, only ever partly addressed, about the generalizability of these principles.

Thank you!

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