Specification of the underspecified:
A pragmatic analysis of the injunctive in the *R̥gveda*

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ABSTRACT

> This paper uses formal pragmatics to show that discourse context alone is inadequate to explain the function of "injunctive" verb forms (i.e., finite verbs unspecified for tense or mood) in R̥gvedic Sanskrit. Prior treatments, which explain the temporal and modal specification of the injunctive as being picked up from other verb forms in the immediate discourse, do not fully account for the injunctive's observed meanings. By applying a framework known in neo-Gricean pragmatics as a "Horn strategy" to tense and modality, I explain the various functions of the injunctive as arising from partial blocking relationships that hold between it and other verb forms with which it competes.

1   Introduction

The term *injunctive* refers to a verbal category in Sanskrit grammar that is not marked for tense or mood. The name "injunctive" does not accurately describe its function(s) and should be thought of as a formal designation only. Injunctives may be built to either of two distinct aspect stems of concern to us here: the present (neutral aspect) and the aorist (perfect(ive) aspect). The former is called the *present injunctive*, the latter the *aorist injunctive*.[1] These consist of no more than the aspect stem plus agreement morphemes marking person, number (singular, dual, or plural), and voice (active or middle).

From the present stem are also formed the present indicative and the imperfect indicative. The imperfect is identical in form to the present injunctive but with a past-tense marking prefix called the augment (*á-*). The present indicative has a special series of tense endings (*-mi*, *-si*, *-ti*, etc.). To the aorist stem is also built the aorist indicative, which is identical in form to the aorist injunctive but with the augment *á-*. Despite their names, the present and aorist injunctives should not be thought of as having any particular temporal specification (unlike the indicatives, which are specified for tense).[2]

So, to the root $\sqrt{kr̥}$ 'make' the injunctive and indicative forms are constructed as shown in (1), using the active third-person singular as an exemplar.

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[1] I set aside the perfect injunctive for the purposes of this paper, as it is of much more limited occurrence than the other two. Its functions in no way conflict with the findings here presented.

[2] There is no good substitute for this unfortunate naming convention. Replacing *injunctive* with the term *augmentless* ("augmentless imperfect" or "augmentless aorist") would give the false impression that these forms are derived from the augmented ones. It would also not do to substitute the traditional labels with purely aspectual terms, such as *imperfective* and *perfective*, since the kind of aspect expressed by the present and aorist stems is a matter of ongoing debate. I follow Dahl 2010 and Hollenbaugh 2021 in assuming that the present stem is aspect neutral and the aorist is perfect(ive) (similarly Kiparsky 1998).

(1) FORMATION OF THE INJUNCTIVE AND CORRESPONDING INDICATIVES[3]

		INDICATIVE		INJUNCTIVE	
PRS. STEM	{	ipf.	/á-kr̥-n̥o-t/	: prs.	/kr̥-n̥ó-t/
		prs.	/kr̥-n̥ó-ti/		
AOR. STEM	{	aor.	/á-kar-t/	: aor.	/kár-t/

From the two aspect stems may also be built a variety of marked modal forms. These include the subjunctive, which has prospective meaning (effectively a future tense), the optative (potential or deontic), and the imperative. Examples of these formations to $\sqrt{kr̥}$ 'make' are: prs. sbjv. *kr̥-n̥áv-a-t(i)*, prs. opt. *kr̥-n̥u-yā́-t*, prs. imp. *kr̥-n̥u(-hí)*; aor. sbjv. *kár-a-t(i)*, aor. opt. *kur-yā́-t*, aor. imp. *kr̥-dhí*.

The injunctive retains its full range of functions only in the most archaic Sanskrit text, the *R̥gveda* (*RV*). In later Vedic texts it is of drastically more limited occurrence, and in the Classical language it is virtually restricted to the prohibitive construction with *mā́* 'don't' (cf. Hollenbaugh 2020). As it occurs in the *R̥gveda*, the injunctive is said to be "undifferentiated" (Renou 1952: 368–9) or "un(der)specified" (Kiparsky 2005, 1968) for tense and mood (similarly Macdonell 1916: 349–50; Hoffmann 1967: 276, 278).[4] Accordingly, it can have essentially any kind of temporal or modal interpretation, which is commonly held to be determined by context (so Macdonell 1916: 349–50; Renou 1952: 369; Kiparsky 1968, 2005).

While context certainly plays a role, I argue that it is not sufficient in itself to account for the observed temporal and modal readings available to the injunctive, and that these arise primarily from the resolution of a series of competitions between forms of the injunctive and other finite verb forms (viz. marked modals and indicatives). Because more specific verb forms are in principle always available for use, the move to use the injunctive means that interlocutors must rely on essentially Gricean principles to resolve its meaning. If a speaker uses a less specific form than they could have used, the addressee reasons that they must have done so for some special purpose, and so the injunctive is assigned an interpretation that the more specific form would not have. Each possible interpretation relies on a partial blocking relationship that holds between particular pairs of forms—one specified for tense and mood and one unspecified.

I formalize these blocking relationships in terms of "Horn strategies" (after Horn 1984), applying Blutner's (2000) framework of bidirectional OT to tense and modality (follow-

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[3]As is conventional, *r̥* indicates syllabic *r*. An underdot marks retroflex consonants (e.g., *n̥*), except in the case of *ḥ*, which is simply [h] (distinct from *h* [ɦ]). The voiceless palatal fricative is written *ś*; the palatal stops are *c* (voiceless) and *j* (voiced). The velar nasal is *ṅ*; the palatal nasal is *ñ*. In certain sandhi environments nasalization is written *ṁ* or *m̐* (e.g., in (4b) below). Aspirated or breathy-voiced stops are indicated with a following *h* (e.g., *th*, *dh*). Vowel length is indicated by a macron, accent by an acute (or by a following grave when the accented vowel is nonsyllabic, as in *nyàk* in (4b) below).

[4]It has sometimes been erroneously classified as a mood in its own right (Avery 1885; Macdonell 1916: 349–52; Hoffmann 1967: 29).

ing Grønn 2007, 2008). How the meaning of an injunctive is resolved depends on which blocking relationship is relevant in a given situation (e.g., prs. inj. vs. ipf. ind., or aor. inj. vs. aor. ind., or inj. vs. imp.). In this way, the underspecification of the injunctive can lead to it receiving specific interpretations that do not match the temporal or modal function of indicatives or marked modal forms in the immediate discourse.

I also demonstrate how underspecification does not necessarily correlate with imprecision of expression, nor is the use of underspecified forms motivated solely by the economy principle. On the contrary, underspecified forms are typically selected when none of the more marked forms available in the language will make the speaker's intended meaning easily recoverable to the addressee. By using the underspecified form in such contexts, interlocutors achieve maximum specificity. The results of this analysis go to show that in order to understand the function of a single verbal category in a language we must consider its place in the verb system as a whole.

This paper is structured as follows: Section 2 reviews prior research and highlights remaining problems, for which I put forth a new proposal. My analysis is given in Section 3, with conclusions in Section 4.

2   Problematization

Whereas prior accounts have privileged syntactic environment, discourse anaphora, and shared common ground as determining factors for deciding the temporal or modal reference of the injunctive in a context, these have the problem that they predict that the injunctive will always match the interpretation of verbs with which it is conjoined or which occur in the immediate discourse. They are unable to handle the large number of cases in which the injunctive shows a meaning that is distinct from that of other verbs in the discourse, or in which the injunctive occurs entirely on its own. My analysis (§3), on the other hand, is able not only to accommodate but to explain such cases by treating the interpretation of injunctives as dependent on other verb forms with which they compete, not necessarily on the verbs that occur in the local discourse.

In his first formulation, Kiparsky (1968: 35–8) attributed the injunctive's context dependent temporal and modal specification to the syntactic phenomenon known as conjunction reduction, whereby "both tense and mood were in conjoined structures neutralized by the injunctive." This means that when two or more verbs are conjoined only the first has to be marked for tense and mood, and so the the injunctive will always follow the marked indicative or modal forms. Thus, an injunctive following an indicative past tense will have past time reference (e.g., *RV* V.32.1), whereas one following a present indicative will have present time reference (e.g., *RV* I.61.1), and one following a marked modal form will have future time reference and some sort of modal value.[5]

The problem with this formulation is that the linear order "marked indicative/modal + injunctive" has in fact nearly as many exceptions as adherents. For this reason, Kiparsky (2005: 225) later broadened his formulation to say that the "temporal/modal interpretation

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[5] Putative examples include VI.40.4bc (subjunctive), II.33.14ab (optative), and VIII.17.1 (imperative).

of injunctives is analogous to determining the antecedent of a pronoun, a process in which the hearer relies not only on the local syntactic environment, but also on the discourse context, and on the common ground shared between hearer and speaker." This allows for the injunctive to either precede or follow verbs specified for tense and mood, albeit without a clear explanation of how its temporal and modal values are determined in cases where they cannot be explained syntactically.[6]

Yet even under Kiparsky's (2005) expanded formulation several problems remain. One is that the injunctive often co-occurs with forms specified for tense or mood without matching in interpretation. Far from picking up temporal or modal reference anaphorically, in such cases the injunctive's distinctive form seems to signal a difference in function from the surrounding indicatives or marked modal forms. This is true especially when the injunctive is the only non-modal verb in a verse, as in (2), which shows an injunctive both following and preceding an optative.[7]

(2) INJ. NOT MATCHING THE INTERPRETATION OF A COORDINATED MODAL
    bhágo   *vā góbhir*   *aryamém*
    bhaga.NOM.SG.M or cow.INS.PL.F aryaman.NOM.SG.M.it
    anajyāt   *só*   *asmai*   *cắruś*
    anoint.PRF.OPT.ACT.3SG it.NOM.SG.M him.DAT.SG.M dear.NOM.SG.M
    chadayad   *utá* ***syāt***
    seem.PRS.INJ.ACT.3SG and be.PRS.OPT.ACT.3SG

    'Or else Bhaga (and) Aryaman **should anoint**[OPT.] it [=the hymn] with cows. It [=the hymn] **seems**[INJ.] dear to him [=Agni] and so it **should be**[OPT.]' (*RV* X.31.4cd, transl. after Jamison 2015–: ad loc.).

Were we to follow Kiparsky (2005: 222) in interpreting the injunctive as matching the meaning of the surrounding optatives, we would read 'may it seem and be pleasant to him'. Yet this makes little sense, since "being" typically implies "seeming" and vice versa. There is no reason, moreover, to suppose that the hymn's *actually* being dear to Agni (= the ritual fire) is in doubt and in need of being distinguished from its only *seeming* to be dear, or, conversely, that the hymn needs not only to *be* dear to Agni but also to *seem to be* dear to him. Rather, the injunctive *chadayat*, by virtue of its formal contrast with the surrounding forms, is best understood as having a non-modal meaning, most appropriately with present reference time ('seems'), as often. The optative *syāt* serves to validate the statement of the injunctive: this situation *seems* to be true and that is just how things *ought to be*.

In (3) we see the injunctive following a marked indicative (imperfect) without, as it seems, matching it in time reference. Again, the formal contrast between the indicative and the injunctive appears to signal a functional contrast, rather than a functional match. The

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[6]Even so, Kiparsky (2005: 225) stresses that in the majority of cases of verbal and sentential conjunction the more specific form precedes the injunctive (thus maintaining to some degree the notion of conjunction reduction). But if such neutralization applies also at the discourse level, we should expect to find the same tendency of word order even without overt conjunction, contrary to fact (cf., e.g., (9) and (10) in §3 below).

[7]Except where noted, all translations of R̥gvedic text are based on those of Jamison & Brereton (2014) (q.v. ad loc.), though often modified to reflect my own interpretations where necessary.

first pāda refers to Agni's first creation by means of kindling sticks, and the second pāda follows up on this by referring to Agni's *capacity* to be "born" regularly from within the sticks (see Jamison & Brereton 2014: 412). The change in time reference is signaled by the change in form to the injunctive. This, in turn, is picked up by the present indicative in the next hemistich, which likewise refers to the habitual present, as Agni regularly "resides" inside the kindling sticks (cf. Jamison 2015–: ad loc.).

(3) INJ. NOT MATCHING THE TENSE INTERPRETATION OF A PRECEDING IND.

uttānáyām **ajanayan** *súṣūtam*
outstretched.LOC.SG.F birth.CAUS.IPF.IND.ACT.3PL easily.born.ACC.SG.M

bhúvad *agníḥ* *purupéśāsu*
become.AOR.INJ.ACT.3SG agni.NOM.SG.M many.ornamented.LOC.PL.F

gárbhaḥ
embryo.NOM.SG.M

śíriṇāyàṁ *cid* *aktúnā* *máhobhir*
waterway(?).LOC.SG.F even night.INS.SG.M power.INS.PL.N

áparīvṛto **vasati** *prácetāḥ*
unconfined.NOM.SG.M dwell.PRS.IND.ACT.3SG attentive.NOM.SG.M

'In her with (legs) agape [=kindling sticks] they **engendered**[IPF.IND.] him whose birth is easy. Agni **becomes**[AOR.INJ.] the embryo in the (women) of many ornaments [=logs].

In the (birth-)canal [?] also he **dwells**[PRS.IND.] by night, (though) because of his powers he cannot be confined, the discerning one' (*RV* II.10.3).

(3) also illustrates a second problem with Kiparsky's (1968, 2005) proposal, namely that we frequently find verses in which the switch to the injunctive is followed by a return to an indicative or modal verb. If use of the injunctive is just a kind of contextual neutralization, such sequences would not be expected. Rather, we would expect to find the switch to the injunctive lasting for the remainder of the utterance, or at least of the sentence, such that all subsequent verbs are in their "reduced" injunctive form. Yet we frequently see a rapid alternation, within the same sentence or even pāda, from indicative to injunctive and back to indicative, as in (4a), or the reverse: injunctive to indicative to injunctive, as in (4b). Note that in these examples there does not appear to be a difference in time reference between the injunctive and indicative forms.

(4) ALTERNATION OF INDICATIVE AND INJUNCTIVE

a. *āvír* *bhávann* **úd atiṣṭhat**
visible become.PTCP.NOM.SG.M.PRS.ACT up stand.IPF.IND.ACT.3SG

parāvṛ́k
outcast.NOM.SG.M

práti *śroṇá* **sthād** *ví* *anág*
firm lame.NOM.SG.M stand.AOR.INJ.ACT.3SG far.and.wide blind.NOM.SG.M

acaṣṭa
see.IPF.IND.MED.3SG

'Becoming manifest, [Indra] **stood up**[IND.]—he who was shunned:
The lame one **stood firm**[INJ.]; the blind one **saw clearly**[IND.]' (*RV* II.15.7bc).

b. *yá*　　　*udnáḥ*　　　*phaligám*　　　**bhinán**
REL.NOM.SG.M water.GEN.SG.N bolt.ACC.SG.M split.PRS.INJ.ACT.3SG

nyàk　　*síndhūm̐r*　　**avā́sr̥jat**
downward river.ACC.PL.M down.release.IPF.IND.ACT.3SG

yó　　*góṣu*　　*pakvám*　　**dhāráyat**
rel.NOM.SG.M cow.LOC.PL.F cooked.ACC.SG.N fix.PRS.INJ.ACT.3SG

'[Indra] who **split**[INJ.] the bolt of the water (and) **released**[IND.] the rivers downward,
who **fixed**[INJ.] the cooked (milk) fast in the cows' (*RV* VIII.32.25).

The third outstanding problem is that Kiparsky's (2005) account has no clear way of handling data of the type in (5) and (6), where an injunctive occurs in the first verse of the hymn, with no non-injunctive verb in the sentence or immediate discourse from which it can pick up its temporal and modal specification. In such situations, the injunctive tends to have a special function as a performative verb. The verb is typically in the first person with the poet(s) as its subject, as in (5).

(5)　PERFORMATIVE AORIST INJUNCTIVE (HYMN-INITIAL)
ápūrviyā　　*purutámāni*　　*asmai*　　*mahé*
foremost.ACC.PL.N much.SUP.ACC.PL.N 3SG.DAT.M great.DAT.SG.M

vīrā́ya　　*taváse*　　*turā́ya*
hero.DAT.SG.M powerful.DAT.SG.M oncoming.DAT.SG.M

virapśíne　　　　*vajríṇe*　　　*śáṁtamāni*
having.abundance.DAT.SG.M having.mace.DAT.SG.M beneficial.SUP.ACC.PL.N

vácāṁsy　　*āsā́*　　*sthávirāya*　　**takṣam**
speech.ACC.PL.N mouth.INS.SG.N strong.DAT.SG.M fashion.AOR.INJ.ACT.1SG

'For him [=Indra] I **(hereby) fashion**[AOR.INJ.] with my mouth (these) words, unprecedented, best of many, most wealful—
for the great hero, powerful and precipitous, conferring abundance, bearing the mace, stalwart' (*RV* VI.32.1).

Because the performative meaning cannot be derived from any other verb in the immediate discourse context, it must arise by some other means.

Yet performative is not the only function available to the injunctive at the beginning of a discourse. It may also have its past, present, or modal functions that we find in other discourse positions. Crucially, this is even true when the verse contains no other verb from which the injunctive can pick up its temporal or modal specification anaphorically, as shown in (6) and (7).

(6) INJUNCTIVE ISOLATED IN ITS VERSE (HYMN-INITIAL)

   a. ***tákṣan***   *rátham*   *suvŕ̥taṁ*
      fashion.AOR.INJ.ACT.3PL chariot.ACC.SG.M well.rolling.ACC.SG.M

      vidmanā́pasas   ***tákṣan***
      with.wisdom.working.NOM.PL.M fashion.AOR.INJ.ACT.3PL

      hárī   *indravā́hā*   *vŕ̥ṣaṇvasū*
      fallow.ACC.DU.M indra.bearing.ACC.DU.M having.bullish.goods.ACC.DU.M

      tákṣan   *pitŕ̥bhyām*   *r̥bhávo*
      fashion.AOR.INJ.ACT.3PL father.DAT.DU.M the.r̥bhus.NOM.PL.M

      yúvad   *váyas*   ***tákṣan***
      youthful.ACC.SG.N vigor.ACC.SG.N fashion.AOR.INJ.ACT.3PL

      vatsā́ya   *mātáraṁ*   *sacābhúvam*
      calf.DAT.SG.M mother.ACC.SG.F companion.ACC.SG.F

      'They **fashioned**[AOR.INJ.] the smooth-rolling chariot, working with their know-how; they **fashioned**[AOR.INJ.] the two fallow bays that convey Indra and bring bullish goods.
      They **fashioned**[AOR.INJ.]—the R̥bhus—for their parents youthful vigor; they **fashioned**[AOR.INJ.] for the calf a mother to stay by it.' (*RV* I.111.1).

   b. *śrīṇánn*   ***úpa   sthād***
      prepare.PTPL.PRS.ACT.NOM.SG.M towards stand.AOR.INJ.ACT.3SG

      dívam   *bhuraṇyú*   *sthātúś*   *carátham*
      sky.ACC.SG.M flickering.NOM.SG.M stationary.ACC.SG.N mobile.ACC.SG.N

      aktū́n   ***vy ū̀rṇot***
      night.ACC.PL.M apart cover.PRS.INJ.ACT.3SG

      'Bringing (the sacrifice) to readiness, bustling about, he [=Agni] **approaches**[AOR.INJ.] heaven. He **discloses**[PRS.INJ.] the still and the moving through the nights' (*RV* I.68.1).

In (6a) there is only a single, repeated verb in the verse, the aor. inj. *tákṣan* 'they fashioned'. We know it must be past referring because it refers to the well known achievements of the R̥bhus (artisan deities), which lie firmly in the remote past. Here the aorist indicative (*átakṣan*) would lend itself to the perfect-resultative interpretation typical of augmented aorists (thus 'have fashioned', as at *RV* VII.7.6b, X.39.14b, X.48.3a). Using the injunctive form instead therefore implicates non-resultative perfective meaning, thus giving rise to the remote past interpretation that we see in (6a).

   In (6b) we find just the opposite: Two injunctives are used with present time reference, as is clear from the subject matter. The focus of this hymn is on ritual, "especially on the joint activity performed by 'all' in their separate ways and the rewards they share because of it" (Jamison & Brereton 2014: 190). In fact, the first four lines of this hymn contain exclusively injunctives, all of which refer to generalities about Agni and those who serve him. As the corresponding augmented forms would necessarily have past reference, the poet's choice not to use the indicative signals to the addressee that some other interpretation is intended,

in this case generic-habitual.

In (7), the inj. 2sg. *dhāḥ* (/dhā-s/) 'set!' has the force of an imperative, as often, yet there is no marked imperative in this verse from which it could derive this meaning. The finite verbs that follow in the second hemistich are respectively perfect indicative (with habitual present meaning) and aorist injunctive (with resultative meaning).[8]

(7) INJUNCTIVE WITH IMPERATIVE MEANING

imám   *ū*   *ṣú*   *prábhṛtiṁ*   *sātáye*
this.here.ACC.SG.F PTCL well offering.ACC.SG.F attainment.DAT.SG.F

dhāḥ   *śáśvac-chaśvad*   *ūtíbhir*
put.AOR.INJ.ACT.2SG ever-renewing.ACC.SG.N help.INS.PL.F

yádamānaḥ
unite.PTCP.PRS.MID.NOM.SG.M

suté-sute   ***vāvṛdhe***   *várdhanebhir*
pressing-pressing.LOC.SG.M grow.PRF.IND.MID.3SG nourishment.INS.PL.N

yáḥ   *kármabhir*   *mahádbhiḥ*   *súśruto*
REL.NOM.SG.M deed.INS.PL.N great.INS.PL.N well.renowned.NOM.SG.M

bhū́t
become.AOR.INJ.ACT.3SG

'**Set**[AOR.INJ.] this offering here to be won, [o Indra,] being ever newly united with help.

At every pressing he **is strengthened**[PRF.IND.] by strengthenings, he who **has become**[AOR.INJ.] well famed through great deeds' (*RV* III.36.1).

We are left to wonder, then, where the imperatival value of *dhāḥ* comes from, as it cannot be derived from context along the lines suggested by Kiparsky (2005: 225).

The answer, as it happens, has nothing to do with context but rather paradigmatic blocking: A form that would ordinarily be blocked from use in an imperative context by the marked imperative surfaces when no such marked imperative exists. As Hoffmann (1967: 256, 261–2) notes, the verbs $\sqrt{dh\bar{a}}$ 'put' and $\sqrt{d\bar{a}}$ 'give' lack aorist imperative forms in the active singular of the second-person. So, the corresponding injunctives are used instead, respectively *dhāḥ* 'put!' and *dáḥ* 'give!' (e.g., *RV* VI.33.1). The aorist injunctive is *available* for this use because it is underspecified for tense and mood, and therefore compatible with imperative meaning. But it is only *employed* in this function because there is no marked imperative form in this slot of the paradigm that could be used instead. The marked imperative can thus be said to apply wherever possible, while the injunctive in imperatival function occurs just in case of a gap in the imperative paradigm.

In fact, as Hoffmann (1967: 236–64, 268–9) demonstrates, the same is true of all modal uses of the injunctive, whether imperative, optative, or subjunctive (= future). The injunctive in these functions typically occurs only when no corresponding marked modal form is viable for the verbal root or stem in question. Predictably, the present stem almost never attests modal functions, since it tends to have more complete modal paradigms than does the

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[8]Notably, the second injunctive *bhū́t* does not pick up the habitual present function of the perfect.

aorist (cf. Whitney 1889: 284, 290–3).[9] These facts cannot be reconciled with Kiparsky's (2005: 226) statement that "injunctive forms freely alternate with more highly specified tensed and modal forms."

To summarize, marked modal forms are always preferred to injunctive forms when available. Tensed interpretations of the injunctive seem to be substantially less restricted, occurring alongside marked indicatives with considerable frequency and being employed even when a corresponding indicative form is available for use.

While Kiparsky (2005: 229) notes that "underspecified forms in paradigms can *only* surface when ECONOMY outranks EXPRESSIVENESS," his analysis is a morphological one and so provides no clear account of how such a ranking is supposed to come about, except to say that it has something to do with discourse context. But, as I have shown, context alone is not a reliable predictor of the injunctive's use, nor is ECONOMY sufficient to motivate the occurrence of the injunctive in cases like (4), where the injunctive alternates in rapid succession with the indicative, or like (3), (5), and (6a), where the aorist injunctive has distinctive functions unavailable to the corresponding indicative.

I therefore argue that all of the injunctive's available interpretations can be understood as arising from blocking relationships that hold between forms of the injunctive and corresponding forms of the indicative or marked modals. While firmly in the realm of pragmatics, this does not rely on discourse context alone. Rather, it relies on the knowledge shared by interlocutors about the forms available within the Vedic verb system: the set of forms that *could* have been used in a particular utterance and the form that was actually used.

When the injunctive is used, it is always instead of some other form that is specified for tense and mood (except in cases of paradigmatic gaps). From the very knowledge of this fact specific meanings of the injunctive arise, precisely by virtue of its being unspecified for tense and mood: The speaker could have chosen to express tense and mood explicitly with the indicative or a marked modal form but chooses not to, in order to express some alternative meaning to which the more highly specified forms are not well suited. The addressee, being aware of the choices available to the speaker, is in most cases able to reliably recover this alternative meaning that the speaker intends. The goal of my analysis is to show precisely how the interlocutors arrive at the meanings of the injunctive that they do, and hence why the injunctive has the meanings that it does.

3 Analysis

Assuming Horn's (1984) Q(uantity) and R(elation) principles, many terms can be understood to have their meanings via competition with other terms.

- Q Principle (addressee based): Make your contribution sufficient. Say as much as you can (given R).

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[9] One regular exception is the class of reduplicating presents, which generally lacks true subjunctive forms and so uses injunctives instead (Whitney 1889: 244–5). Other exceptions to this generalization are few and debatable (cf. Hoffmann 1967: 256–61; Hollenbaugh 2021: 259–62).

- R Principle (speaker based): Make your contribution necessary. Say no more than you must (given Q).

One consequence of these principles is that, when a speaker uses some form B, the addressee reasons that the speaker has opted for that form in order to express something which is not typical of form A. This partial blocking process may be represented as a 2×2 game between the speaker's preference for "short, unmarked forms" and the addressee's preference for "stereotypical, unmarked meanings" (Grønn 2007). It can be visualized as in the following tables, where the vertical arrows represent the speaker's preferences, and the horizontal arrows represent the addressee's preferences. To help conceptualize this framework, I begin with an English example of lexical blocking in Table 1.

	m_1: direct killing		m_2: indirect killing
f_1: *kill*	✓	←	✗
	↑		↑
f_2: *cause to die*	✗	←	✓

Table 1: Interpretations of *kill* and *cause to die*

In Table 1, the speaker prefers the minimally marked form (viz. *kill* (f_1)) and the addressee assumes its most stereotypical meaning (viz. direct killing (m_1)). When a speaker makes the discourse move to say *cause to die* instead (f_2), some less stereotypical meaning (viz. indirect killing (m_2)) is assumed, because if the speaker had meant m_1 there was a better form available (viz. *kill*). Applying the algorithm of weakly bidirectional OT (Jäger 2002; Blutner 2000), the preferences of speaker and addressee conspire to prefer the pair $\langle f_1, m_1 \rangle$ over the pairs $\langle f_1, m_2 \rangle$ and $\langle f_2, m_1 \rangle$. The two losing pairs are removed from the table (✗) and the optimal pair remains (✓). Thus, *kill* is the preferred form with the preferred meaning of direct killing. The remaining pair $\langle f_2, m_2 \rangle$ survives despite the existence of the optimal pair $\langle f_1, m_1 \rangle$. This is said to be the weakly optimal candidate: "True, there is a better form (f_1), but *not* given meaning m_2. Similarly, there is a better meaning (m_1), but *not* given form f_2" (Grønn 2007).

Importantly, markedness need not strictly involve more morphological material, as can be seen from lexical pairs like *cow* and *beef* discussed by Grønn (2008) following Blutner 1998 (q.v. for further references). Even though both are monosyllables with equivalent morphological complexity, *cow* is the form associated with the "stereotypical, unmarked meaning," which in this case is "countable animal." For its part, *beef* is blocked in the primary meaning and is the weakly optimal candidate in the sense "non-countable cow-meat."

By the same line of reasoning, forms that are grammaticalized in certain functions, even where they involve greater morphological complexity than alternatives, will be considered as the default forms (f_1) in those functions. For instance, Levantine Arabic dialects have grammaticalized an indicative marker *b-*, which contrasts with simplex forms that lack the *b-* and have modal functions (Cohen 1984: 294). So, a marked indicative such as *b-yišrab* 'he drinks' contrasts with the unmarked *yišrab* 'may he drink (vel sim.)' ($š$ = [ʃ]).

Historically the *b-* prefix was a progressive marker. At that stage (Stage A), prefixed forms competed with their unmarked counterparts for use in indicative contexts, with both forms being in principle unspecified for modality. The prefixed forms were used when the event was depicted as being in progress; the unprefixed forms were used elsewhere, including for non-progressive present events. Because events depicted as ongoing tend to be ongoing *in the real world* of the speaker, the *b-* prefix was eventually reinterpreted as a marker of indicative mood (Stage B). As a consequence, the unprefixed forms became pragmatically restricted to their modal meanings, despite not being morphologically marked for modality. The grammaticalization of the *b-* prefix leads to a change wherein the more marked form (f_2) at Stage A, represented by Table 2, becomes the stereotypical form (f_1) in the meaning [indicative] at Stage B, as shown in Table 3.[10]

	m_1: [elsewhere]		m_2: [indicative]
f_1: *yišrab*	✓	←	✗
	↑		↑
f_2: *b-yišrab*	✗	←	✓

Table 2: Stage A (15th-century Levantine)

	m_1: [indicative]		m_2: [non-indicative]
f_1: *b-yišrab*	✓	←	✗
	↑		↑
f_2: *yišrab*	✗	←	✓

Table 3: Stage B (Modern Levantine dialects)

In a similar way, the forms in Sanskrit that are grammaticalized for indicative or modal meanings contain a greater number of morphemes than their injunctive counterparts and clearly do not derive their indicative/modal meanings pragmatically. The tense/modality of these forms is semantically specified (i.e., as an entailment), not an invited inference. For this reason, the tables below position the marked indicative and modal forms as f_1, associated with the "stereotypical, unmarked meaning" m_1, while the injunctive is positioned as the competitor f_2, making it the weakly optimal candidate for a variety of senses (m_2) depending on the f_1 that it is being contrasted with.[11]

As discussed in the previous section, R̥gvedic Sanskrit shows blocking of the injunctive on two fronts, which are not equally distributed.

1. <u>In the modal domain</u> (prospective, potential, deontic): Non-injunctive modal categories block the injunctive in that they tend to apply wherever they can. The injunctive is available for use only when no marked modal form is available.

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[10]Compare the development of the simple preterite in English: Originally used as a perfect as well as a remote past tense, by the advent of the *have*-perfect it was largely restricted to non-perfect past usage.

[11]In principle the same results could be obtained if all the tables were reversed (i.e., with the injunctive as f_1), but this would have the undesirable effect of implying that indicative mood is not entailed by the marked indicatives and the other modalities are not entailed by the marked modals.

2. <u>In the indicative domain</u>: The indicative blocks the injunctive wherever undesired ambiguity would arise, particularly with respect to the injunctive's performative and remote past interpretations. The injunctive is available when such interpretations are, in fact, desirable, or when the chance for ambiguity is contextually minimized.

An adequate analysis of the injunctive must explain why we find such frequent alternation between specified and underspecified forms in the indicative domain but relatively little in the modal domain (except for the generic-habitual use, discussed below).

Crucially, ambiguity of the injunctive only arises when the reference time is non-past. Tense and mood are mutually exclusive categories in Vedic generally (Kiparsky 2005: 230), and there are no past modal functions of the injunctive of the type 'should have done' (vel sim.), nor do we typically find modal uses of the injunctive in subordinate clauses (Kiparsky 2005: 223–4 with further references). The generic-habitual interpretation is likewise unavailable in past time: It cannot mean 'such and such used to happen/be true', only 'such and such always happens/is true'. This means that the injunctive in a robustly narrative or mythic context can only have one time reference: past, and only one modality: indicative. All other possible interpretations of the injunctive—performative, generic-habitual, prospective, potential, deontic—only apply outside of past contexts. This remains true even in the absence of marked indicative forms in the local discourse, as we have seen in example (6a) above. Because the chance for ambiguity is minimal in such contexts, the injunctive is allowed to occur, apparently favoring "ECONOMY" over "EXPRESSIVENESS" in Kiparsky's (2005: 227) terms.

Yet an interesting distributional fact about the indicatival uses of the injunctive is that the aorist injunctive occurs with considerably more frequency in past narration than does the present injunctive (cf. (4) above). Taking the second book (Maṇḍala) of the *R̥gveda* as a sample, the present injunctive with remote past reference is less than a fifth as common as the imperfect in the same meaning. This makes good sense for the present system, since the present injunctive has a more marked counterpart that regularly refers to remote past events, namely the imperfect indicative. Accordingly, this is the optimal form for use in past narration, with EXPRESSIVENESS outranking ECONOMY.

In the aorist system, however, the marked indicative does not regularly refer to remote past events. Instead, it typically has resultative perfect meaning (Kiparsky 1998), while the aorist injunctive is frequent in past narration (Avery 1885). In *RV* II, for instance, the ratio of injunctive to augmented aorists with remote past reference is nearly two to one, while the ratio of augmented to injunctive aorists with resultative perfect meaning is nearly seven to one.[12] The strong preference for the injunctive to refer to the remote past can be explained by reference to the available alternatives. If the speaker wishes to use an aorist in sequential past narration, the indicative is a fairly poor choice, since it is typically associated with resultative perfect meaning. The injunctive, having no such association, is the better choice in that it provides the best chance for the intended meaning (remote past) to be recovered

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[12] For the readings on which these figures are based, and the methods used to obtain them, see Hollenbaugh 2021.

by the addressee.

So, unlike the present system, in the aorist system using the underspecified form actually makes the intended meaning more easily recoverable than would the more marked form. This gives the appearance of ECONOMY outranking EXPRESSIVENESS when the aorist is used to refer to remote past events, though in fact clarity of expression is still being favored in this case *by means of* underspecification. Thus we commonly find examples like (4a) above, where the aorist injunctive is used alongside imperfect indicatives in sequential past narration, and (6a), where the aorist injunctive is used on its own in the same meaning. In the present system, on the other hand, using the injunctive offers no particular bene-fit in terms of clarity of expression, and examples like (4b), where the present injunctive alternates with the imperfect indicative, are comparatively infrequent. In general, EXPRES-SIVENESS is favored over ECONOMY: When no clarity of meaning stands to be gained by using the morphologically briefer form, the more specific one is preferred, even where context makes the time reference clear.

The blocking processes that give rise to these readings may be analyzed in terms of Horn strategies. The remote past interpretation of the aorist injunctive can be represented as in Table 4. Here I use /á-takṣ-an/ 'they have fashioned' to represent the aorist indicative in its resultative perfect meaning (as at *RV* VII.7.6b) and /tákṣ-an/ 'they fashioned' to represent the aorist injunctive in its preterital function (as in (6a) above). The aorist indicative is the stereotypical form associated with resultative meaning (Kiparsky 1998), making it our f_1 in this case. It will accordingly be preferred in the resultative meaning (m_1), while the aorist injunctive (f_2) is weakly optimal for non-resultative perfective meaning (m_2). Table 4 thus captures the intuition that the aorist injunctive is used to express a meaning for which the aorist indicative is generally unavailable.

	m_1: [resultative pfv.]		m_2: [non-resultative pfv.]
f_1: /á-takṣ-an/	✓	⟵	✗
	↑		↑
f_2: /tákṣ-an/	✗	⟵	✓

Table 4: Interpretations of aor. ind. and aor. inj. for the feature [resultative pfv.]

The apparent change in aspect between the augmented and injunctive aorist that emerges due to Table 4 provides an explanation for Avery's (1885: 330) observation (137 years after he observed it) that, when the injunctive is used "in a historical sense" (= past narrative), the distinction "between imperfect and aorist" tends to be "obliterate[d]." That is, the aorist seems to lose its a resultative aspect when it occurs in past narration, where the imperfect is wont to occur. But given Table 4, this turns out to be only illusory: The aorist indicative is generally disfavored in past narrative contexts, due to its association with resultative mean-ing, and so the better alternative for expressing remote past meaning, if the aorist stem is to be used at all, is the aorist injunctive. This gives rise to the appearance that stripping the aorist of its augment neutralizes the aspectual distinction between the aorist and the imperfect (or present injunctive).

Outside of sequential narrative contexts, all readings available to the injunctive are, in principle, equally possible. These include remote past, generic-habitual, performative, and modal. I begin with the remote past interpretation. We find the present injunctive having remote past reference in passages like (8), the opening to a hymn about Agni which focuses on his relationship with the gods, who begot him (*janayanta*) in the distant past (see discussion in Jamison & Brereton 2014: 780).

(8) REMOTE PAST PRS. INJ. NOT IN SEQUENTIAL NARRATION
    āsánn   *ā́ pā́traṁ*   **janayanta**
    mouth.LOC.SG.N to drinking.cup.ACC.SG.N birth.CAUS.PRS.INJ.ACT.3PL
    devā́ḥ
    god.NOM.PL.M
    'As a drinking cup to their mouth the gods **begot**[PRS.INJ.] (him) [=Agni]' (*RV* VI.7.1d).

Of course, context plays a role in determining the reference time of *janayanta* here, but in the absence of sequential narration (this is the first finite verb of the hymn) the use of the injunctive cannot be explained simply as a contextual neutralization.

The past tense interpretations of the present injunctive in such cases may be understood as arising in contrast to the present indicative. The relevant feature here is [present], our m_1. As the form stereotypically associated with this meaning, the present indicative is our f_1, which I represent with /hán-ti/ 'slays' in Table 5. Because the present indicative is the form best suited to present meaning, it blocks the corresponding injunctive, /hán-t/ 'slew', from having a [present] interpretation. For its part, the present injunctive (f_2) is weakly optimal in the meaning [non-present] (m_2), and so is interpreted as having past time reference.[13]

	m_1: [present]		m_2: [non-present]
f_1: /hán-ti/	✓	⟵	✗
	↑		↑
f_2: /hán-t/	✗	⟵	✓

Table 5: Interpretations of prs. ind. and prs. inj. for the feature [present]

This is meant to capture the intuition that if a speaker chooses to use a present injunctive where the present indicative could have been used refer to present time, the intended meaning must be something opposite to [present] for which the present indicative is ill-suited, namely [non-present]. Such a case is found in *RV* VIII.29, discussed below, where the prs. inj. *manvata* '(the poets) thought up' occurs only once (10a) in a hymn otherwise dominated by the present indicative. Standing in contrast to the present indicative, the underspecified injunctive form receives its distinctly preterital function. A further prediction of this analysis is that the present injunctive will be preferred to the present indicative in

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[13]This could equivalently be represented as a [non-past] vs. [past] distinction. A future interpretation is ruled out by the existence of a marked future tense in Sanskrit.

contexts where English would have the so-called historical present, as is in fact the case (see Kiparsky 1968: 37–41). For its part, the aorist injunctive with remote past reference in non-narrative contexts (e.g., *RV* I.148.1a) may be derived as in Table 4 above.

Yet there is also the performative use of the aorist injunctive. This must likewise arise by contrast to the aorist indicative, which, as discussed above, regularly has resultative perfect meaning. That this is so is evident from pairs like *prá vocam* 'I (hereby) proclaim' (e.g., *RV* I.32.1a) vs. *prá avocam* 'I have proclaimed' (*RV* IV.45.7a) or *takṣam* 'I (hereby) fashion (this hymn)' (VI.32.1d) vs. *átakṣāma* 'we have fashioned (this hymn)' (*RV* X.39.14b). The performative aorist injunctives regularly come at the beginning of the hymn, referring to the speech act of the poet as it is accomplished, whereas the aorist indicatives occur in hymn-final summary verses, in reference to what the poet has just accomplished.

Unlike the aorist system, the present system again has a temporally specified form compatible with performative meaning, namely the present indicative. Just as the imperfect is more common than the present injunctive for remote past reference, the present indicative is far more common in the performative function than the present injunctive, of which no clear cases are known to me. The present indicative and aorist injunctive even alternate in this function within the same passage, as in (9).[14] We see again that where a more highly specified form exists to express a particular meaning, it is used (sc. present indicative), while the underspecified form is used when its specified counterparts are ill-suited to the intended meaning (sc. aorist injunctive).

(9) PERFORMATIVE AORIST INJUNCTIVE AND PRESENT INDICATIVE
    prá *te*   ***yakṣi***   ***prá*** *te*   ***iyarmi***
    forth 2SG.DAT sacrifice.AOR.INJ.MID.1SG forth 2SG.DAT send.PRS.IND.ACT.1SG
    mánma
    thought.ACC.SG.N
    'I **begin the sacrifice**[AOR.INJ.] to you (and) I **propel**[PRS.IND.] my thought to you'
    (*RV* X.4.1a).

The performative function of the aorist injunctive may be derived as in Table 6. The resultative perfect use of the aorist indicative can be understood as a specific kind of past tense interpretation.[15] Competition between the aorist indicative and aorist injunctive with respect to the feature [past] will lead to the injunctive having a [non-past] interpretation. Non-past perfectives are a cross-linguistically common means of expressing performativity (Fortuin 2019: 20–29), as we find in Ancient Greek (Bary 2012). I therefore take the performative use of the aorist injunctive in the *Ṛgveda* to arise in precisely this way. Here I use as an exemplar the aor. ind. /prá á-voc-am/ 'I have proclaimed' (as at *RV* IV.45.7a) and the aor. inj. /prá vóc-am/ 'I (hereby) proclaim' (as at *RV* I.31.1a).

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[14]The opposite order (present indicative followed by aorist injunctive) occurs at *RV* X.85.25ab.

[15]On the perfect readings being a subset of those available to a more general past perfective see Condoravdi & Deo 2014: 266.

	m$_1$: [past]		m$_2$: [non-past]
f$_1$: /prá á-voc-am/	✓	←	✗
	↑		↑
f$_2$: /prá vóc-am/	✗	←	✓

Table 6: Interpretations of aor. ind. and aor. inj. for the feature [past]

Similarly, we find the injunctive in its generic-habitual meaning standing in deliberate contrast to the indicative referring to the recent past in (10). The opening of *RV* V.45 is given in (10a), and the ending of the same hymn is given in (10b). As Jamison & Brereton (2014: 718–19) explain in their introduction to this hymn, the opening (10a) employs several injunctives in reference to "the *ideal* sunrise to which the poet aspires," whereas the conclusion (10b) has augmented indicatives in reference to today's sunrise, "making it clear that the sunrise there has indeed (just) occurred."

(10)   CONTRASTIVE GENERIC-HABITUAL AOR. INJ. AND RECENT-PAST AOR. IND.

　　a. *vidá́*　　　　*divó*　　　　*viṣiyánn*
　　　knowledge.INS.SG.N sky.GEN.SG.M unbind.PTPL.PRS.ACT.NOM.SG.M
　　　ádrim　　　*ukthaír*　　　*āyatiyá́*
　　　stone.ACC.SG.M hymn.INS.PL.N go.PTPL.PRS.ACT.GEN.SG.F
　　　uṣáso　　　*arcíno*　　　**guḥ**
　　　dawn.GEN.SG.F radiant.NOM.PL.M come.AOR.INJ.ACT.3SG

　　　ápā-vr̥ta　　　*vrajínīr*　　　　　***út súvar***
　　　un-cover.AOR.INJ.MID.3SG having.enclosures.ACC.PL.F up sun.NOM.SG.N
　　　gā́d . . .
　　　come.AOR.INJ.ACT.3SG

　　　'Through knowledge unloosing the stone of heaven with hymns—the shining
　　　(beacons) of the approaching dawn **come**[AOR.INJ.] (out of it)—
　　　he **uncloses**[AOR.INJ.] (the doors) to the enclosures: the Sun **comes
　　　up**[AOR.INJ.] . . .' (*RV* V.45.1a–c).

　　b. ***ā́***　*sū́riyo*　　**aruhac**　　　　*chukrám*
　　　hither sun.NOM.SG.M ascend.AOR.IND.ACT.3SG bright.ACC.SG.N
　　　árṇo　　　***áyukta***　　　*yád dharíto*
　　　flood.ACC.SG.N yoke.AOR.IND.MID.3SG since golden.ACC.PL.F
　　　vītápr̥ṣṭhāḥ
　　　having.flat.back.ACC.PL.F

　　　'The Sun [i.e., of today] **has mounted**[AOR.IND.] the gleaming flood, now that
　　　he **has yoked**[AOR.IND.] his golden, straight-backed (horses)' (*RV* 10ab).

It is no coincidence that the generic-habitual injunctives in (10a) are all aorists, seeing as the present injunctive tends to be dispreferred to the present indicative to express the generic-habitual meaning (despite examples like (6b) above). For example, in *RV* VIII.29, a riddling hymn that describes characteristic actions of various gods in each verse, the

present indicative is uniformly used throughout (along with a few perfect indicatives). The present injunctive occurs in this hymn only once, in the final verse (10a), where it is past referring (*manvata* '(the poets) thought up') preceding the imperfect indicative *arocayan* 'they caused (the sun) to shine'. Accordingly, we often find the present indicative occurring side by side with the aorist injunctive in the generic-habitual function, with apparently identical meaning, as in (3) above (for further examples see Hoffmann 1967: 113–6). As in the case of the performative and remote past functions, the present injunctive is generally dispreferred to its more marked counterpart. Yet this situation does not hold for the aorist, as the aorist indicative has no generic-habitual function, so the injunctive is the only viable option if the aorist stem is to be used. I defer further discussion here, since, in order to adequately account for the generic-habitual reading we must first examine the injunctive with respect to the modal domain.

The regular indicative interpretation of the injunctive may be accounted for by assuming that the marked modal forms block the application of the injunctive wherever possible with respect to the feature [modal], as shown in Table 7. Here I use the prs. sbjv. /hán-a-t(i)/ '(s)he will slay', prs. opt. /han-yá̄-t/ 'may (s)he slay', and prs. imp. /hán-tu/ 'let him/her slay' as representative of the marked modal forms (f_1).

		m_1: [modal]		m_2: [non-modal]
f_1:	/hán-a-t(i)/ /han-yá̄-t/ /hán-tu/	✓	⟵	✗
		↑		↑
f_2:	/hán-t/	✗	⟵	✓

Table 7: Interpretations of modal and inj. forms for the feature [modal]

As noted above, certain kinds of stem formations, particularly among the aorist paradigms, lack marked modal forms of one kind or another. In such cases no blocking can apply and the injunctive is predicted to be used modally, as we in fact find. Its modal interpretation can be understood as arising from contrast to the indicative, which is explicitly marked by the augment. In competition with the augmented form, the injunctive form is the weakly optimal candidate for a non-indicative interpretation. Whether this is realized as having imperative, optative, or subjunctive (future) force will depend on what the rest of the verb's paradigm looks like. For instance, aor. ind. 2sg. /ádās/ 'you have given' has corresponding subjunctive and optative forms attested (i.e., built to the same aorist stem) but lacks a corresponding imperative. Accordingly, the injunctive takes on the imperative function rather than one of the other two logically possible modal functions. I represent this blocking relationship in Table 8, using as an examplar the aor. inj. /á-dā-s/ 'you have given' and its injunctive counterpart /dá̄-s/ 'give!'. I name the relevant feature here [indicative] for consistency with the foregoing tables, though this could equivalently be represented as a [non-modal] vs. [modal] distinction.

	[indicative]		[non-indicative]
á-dā-s	✓	⟵	✗
	↑		↑
dä́-s	✗	⟵	✓

Table 8: Interpretations of aor. ind. and aor. inj. for the feature [indicative]

The generic-habitual use of the injunctive requires special consideration. One option would be to assume that this is a [non-past] interpretation of the injunctive derived along the same lines as in Table 6 above. While possible, such an analysis would leave certain facts unexplained. First, Hoffmann (1967: 130–4) has observed that the injunctive is not typically used to refer to eventualities in progress at the time of speech ("aktuelle Gegenwart"). With few exceptions (cf. Hollenbaugh 2021: 230–7), the injunctive's presential interpretations are limited to the generic-habitual use (unlike the present indicative). Second, given the analysis so far, it will not do to simply say that the generic-habitual injunctive is non-past referring, since in that case the aorist would be predicted to have its performative function (present perfective). Third, the generic-habitual interpretation of the injunctive is often called "timeless," being delinked from any particular time reference rather than strictly present.

For these reasons, I follow Boneh & Doron (2008, 2010) in classifying the generic-habitual reading as a kind of modal interpretation. This means that the generic-habitual reading of the injunctive may be derived along the lines of Table 8 above, by means of contrast with the augmented forms. Yet, unlike all other modal interpretations of the injunctive, there is no marked modal form that serves a generic-habitual function. As a result, the generic-habitual reading of the aorist injunctive is uniquely unconstrained among its modal uses, and any aorist injunctive may in principle have this meaning, irrespective of paradigmatic gaps. The present injunctive, however, will be blocked in the generic-habitual function by the present indicative. The latter is accordingly predicted to be preferred in this function, as is in fact the case (discussed above).

4 Conclusion

In conclusion, the injunctive, being underspecified for tense and mood, acquires all of its temporal and modal specifications contrastively. Its remote past interpretations arise by contrast to the marked present or aorist indicative (Tables 4 and 5). The performative interpretation of the aorist injunctive arises by contrast to the aorist indicative (Table 6). The indicative interpretations of the injunctive arise by contrast to the marked modals (Table 7). The modal interpretations of the injunctive, when not blocked by the existence of a corresponding marked modal form in the paradigm, arise by contrast to marked indicatives (Table 8). The generic-habitual function, being a modal interpretation, is always available to the aorist injunctive, since no marked modal form is specified for this function. Yet the present injunctive is of limited occurrence in this function, due to the existence of the present indicative, which is used instead.

The fact that the injunctive frequently co-occurs with indicative forms but has modal functions only in the event of a paradigmatic gap has been explained by observing that using the injunctive often makes the intended meaning clearer than would using the corresponding indicative. There is thus an incentive to use the injunctive for greater clarity in the indicative domain, and no such incentive in the modal domain (excepting the generic-habitual function). The aorist injunctive is used to refer to the remote past because its corresponding indicative generally does not, whereas in the present system the imperfect is prefered over the present injunctive, since there is no communicative benefit to under-specification beyond ECONOMY. Likewise, the injunctive aorist is used to express the performative meaning, for which its corresponding indicative is ill-suited. Meanwhile, in the present system, we regularly find the present indicative in this function, which is perfectly well suited to being performative, rather than the injunctive. Again, where a more highly specified form exists, it tends to be used. Finally, the aorist injunctive is used in generic-habitual contexts, because no modal form expresses this meaning. As expected, the present injunctive is comparatively uncommon in this function, since (unlike the aorist) it competes with a marked indicative form that is also compatible with the generic-habitual meaning, namely the present indicative.

The interpretation of the injunctive thus depends on one's awareness that it is *not* the indicative or a marked modal form. In this sense, the injunctive's distinctive readings can be understood to arise by virtue of what they are not. Paradoxically, then, precision of expression is sometimes achieved not by overt specification but by the judicious use of an underspecified form.

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