Syntactic and Lexical *-ase-* are Distinct Suffixes [first draft, November 2020]

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Abstract

In addition to the syntactic (inflectional) causative suffix *-(s)ase-*, Japanese displays a lexical (derivational) causative suffix *-(a)se-* (*aw-ase-* 'join', *no-se-* 'place on') whose *a*-zero alternation is general in the stem-level phonology. Because the UR of syntactic *-(s)ase-* must include the *s* of its post-vocalic alternant, the two suffixes necessarily have distinct phonological forms; there is thus no way to treat them as "high attachment" and "low attachment" versions of a single element. The division of labor between syntactic *-(s)ase-* and lexical *-(a)se-* invites the conclusion that no causative suffix is syntactic in some cases and lexical in others; if so, causatives pose no challenge to the position that while Japanese inflectional morphology is generated syntactically, derivational morphology involves lexical listing of stems. The conclusion that there is no causative suffix that spans the syntactic/lexical boundary is validated by showing that forms that have been taken in the literature as exemplifying lexical *-(s)ase-* are in fact either lexical *-(a)se-* or syntactic *-(s)ase-*. As part of this demonstration, it is shown that, with minor exceptions, verb stems in *-ase-* have arisen as variants of pre-existing stems in *-as-*, and an explanation for this ongoing process of replacement is proposed.

1 Introduction

de Chene (2017) has argued that the formation of Japanese transitive and intransitive verb stems such as *nao-s-* 'make better' and *nao-r-* 'get better', a process that has been widely seen (Harley 2012, Marantz 2013) as supporting the Distributed Morphology (DM) view of the creation of stems from roots as performed by the syntax, cannot in fact be analyzed as syntactic. Perhaps the most decisive evidence is the fact that transitivizing suffixes, causative little v under the DM analysis, cease to display any of their criterial properties when the stem they form undergoes further derivation. This is illustrated in (1), where R represents a root and v_c and v_i are causative and inchoative little v, respectively; the n of (1a) is required under DM assumptions to derive a noun stem from a root.

(1)	a.	mata	[[R]n]	'crotch, fork'
	b.	mata-g-	[[R]v_c]	'step over, straddle (tr.)'
	c.	mata-g-ar-	[[[R]v_c]v_i]	'straddle (intr.)'

In (1b), *-g-* (= v_c) supplies a causative interpretation for the transitive stem. It is also naturally taken to introduce the external argument associated with that stem (Chomsky 1995: 315) and, under Burzio's generalization, to assign the accusative case that the theme argument displays. In the intransitive stem (1c), however, none of those properties are observed: there is no causative interpretation, no external argument, and no accusative case, in spite of the presence of the suffix *-g-*. (2) displays further examples of this type, and (3) is a parallel example in which the suffix that occurs outside of v_c is stative little a, which forms adjective stems.

(2)	a.	tuna-g-ar-	'get connected'	(cf. tuna 'rope', tuna-g- 'connect, string together, tie to')
	b.	tuka-m-ar-	'be captured'	(cf. tuka 'hilt, handle', tuka-m- 'grasp')
	c.	nezi-r-e-	'get twisted'	(cf. nezi 'screw', nezi-r- 'twist')

(3)	a.	uto-	[[R]a]	'distant, ill-informed'
	b.	uto-m-	[[R]v_c]	'shun, ostracize'
	c.	uto-m-asi-	[[[R]v_c]a]	'unpleasant, repugnant'

The cancelling of the properties of putative v_c by further suffixation is compelling evidence against the hypothesis that verb stems displaying transitivizing and intransitivizing suffixes are generated syntactically, since any syntactic constituent should inherit the properties of its subconstituents; in Harley's (2009: 321) formulation, "the analysis and structures proposed for a form must also be contained within the analysis of any structure derived from that form."

If Japanese transitive and intransitive verb stems are not derived syntactically, they will be lexically listed (with regularities captured by redundancy rules of the sort pioneered by Jackendoff 1975), assuming there is no separate generative component of the grammar dedicated to derivational morphology. This conclusion, however, fits badly with the well-known analysis (Miyagawa 1984, 1989, 1998, 2012) of the causative suffix *-(s)ase-* as a default element that, in addition to forming semantically regular and productively derived "syntactic" causative stems, can be called upon to form "lexical" causative stems (i.e. ordinary transitives) when no other suffix is available to do so, an analysis that in DM terms (Harley 2008: 41-42) involves *-(s)ase-* selecting vP ("high attachment") for syntactic causatives and √P ("low attachment") for lexical causatives. The present paper, after background discussion of hiatus resolution at root and stem boundary in section 2.1, shows, in section 2.2, that the causative formative *-ase-* that appears to have both syntactic and lexical uses in fact represents two suffixes, syntactic *-(s)ase-* and lexical *-(a)se-*, that are distinct in both their morphophonological behavior and their phonological form. This suggests the conclusion that no causative suffix is syntactic in some cases and lexical in others; if so, causative *-ase-* poses no obstacle to the view that while productive causatives are syntactically derived, transitive (and intransitive) verb stems are lexically listed.

In support of the conclusion that there is no causative suffix that spans the syntactic/lexical boundary, section 3 reviews representative cases that have been seen as exemplifying lexical *-(s)ase-*, arguing in each instance that the suffix is to be analyzed either as lexical *-(a)se-* or as syntactic *-(s)ase-*. Section 3.1 examines verb stems in *-ase-* whose suffix has been taken to be *-(s)ase-* either in general or in particular idiomatic uses (Miyagawa 1989, Harley 2008) and shows that, apart from a small set of exceptions, such stems arise historically as variants of pre-existing stems in *-as-* (i.e. *-(a)s-*). If so, the *-ase-* of those stems cannot be *-(s)ase-* under any account that, like that of Miyagawa and Harley, holds that lexical *-(s)ase-* is licensed only in the absence of other transitivizers, and is most naturally understood as *-(a)se-*. Section 3.2 takes up VP idioms that have been held to instantiate lexical *-(s)ase-*, showing that while the suffix of some is lexical *-(a)se-*, that of others is syntactic *-(s)ase-*. Section 3.3 reviews the evidence that has been taken as showing that the existence of a stem formed with a competing transitivizer will block the use of *-ase-* in presumed lexical uses, notably in idioms. It is found that the predictions of the blocking hypothesis are falsified by two classes of counterexamples, and that putatively blocked idioms that fail to occur are not plausibly understood as blocked because there is no grammatical reason for them to exist in the first place. Section 4 suggests an explanation for the diachronic tendency to replace stems in *-as-* by stems in *-ase-* that was identified in section 3.1, and section 5 summarizes the paper's conclusions, ending with an observation on the diachronic background of high attachment versus low attachment analyses.

2 Syntactic *-(s)ase-*, lexical *-(a)se-*

2.1 Hiatus at stem boundary and at root boundary

The demonstration that syntactic and lexical *-ase-* are distinct suffixes morphophonologically hinges on the differential treatment of hiatus at root boundary and verb stem boundary. Setting aside instances of hiatus that result from phrase-level deletion of *w* before non-low vowels (*i u e o*) and of *y* before front vowels (*i e*), hiatus is in principle disallowed at both of those boundaries, but is resolved by distinct processes in the two cases.[1]

Japanese verbal inflectional suffixes divide into two groups, those that begin with *t* ~ *d* after all stems, and those that alternate between a consonant-initial form (or zero) after vowel-final stems and a vowel-initial form after consonant-final stems. Under the analysis of the latter group proposed by de Chene (2016) ("Analysis A"), underlying representations (URs) coincide with consonant-stem alternants (below, "C-stem suffixes"), which are all vowel-initial, and regular vowel-stem alternants ("V-stem suffixes") are derived by a rule that inserts *r* intervocalically at verb stem boundary. The evidence for Analysis A is that while both (a) C-stem suffixes and (b) V-stem suffixes that consist of the corresponding C-stem suffix preceded by *r* (imperfect *-ru,* provisional *-reba,* passive *-rare-*) are stable throughout Japan (unrelated changes apart), other V-stem suffixes are subject in a wide range of dialects to replacement by innovative forms that duplicate the pattern of *-ru, -reba, and -rare-* in being made up of the corresponding C-stem

[1] In a small number of cases, hiatus at root boundary has resulted from loss of an intervocalic *y* that is not recoverable from contemporary alternations: *mi-e-* 'be visible' (cf. *mi-* 'see'), *ko-e-* 'cross, exceed' (cf. *ko-s-* 'cross, overtake').

suffix preceded by *r*. For speakers, then, V-stem suffixes not formed on that pattern are irregular and subject to elimination; when that occurs, the generation of the regular innovative *r*-initial replacement follows automatically from the postulated URs and rule. de Chene (2019) shows that regularization under Analysis A is observed not only in Japanese proper, but also in Northern Ryukyuan (Amami, Okinawan) and in Sakishima languages other than Miyako. While the analysis of inflectional suffix alternations is logically independent of the claim that syntactic and lexical *-ase-* are distinct suffixes, I will for concreteness assume Analysis A, with the consequence that at verb stem boundary, the regular mode of hiatus resolution is epenthesis of *r*.

Consider now the question of hiatus at root boundary. All Japanese derivational suffixes that appear after both consonant-final and vowel-final roots alternate between an *a*-initial form after a consonant and a form without the *a* after a vowel, as illustrated in (4)-(9). The suffix *-(a)si-* of (6) forms adjective stems; all other suffixes shown form verb stems.

(4) a. muk-aw- 'proceed toward' (cf. muk- 'face')
b. uruo-w- 'become moist' (cf. uruo-s- 'moisten')

(5) a. uk-ab- 'float, ride on the water' (cf. uk- 'float, rise to the surface')
b. koro-b- 'fall down' (cf. koro-gar- 'roll, tumble')

(6) a. kuy-asi- 'causing chagrin, regret' (cf. ku-i /kuy-i-/ 'regret')
b. suzu-si- 'cool, refreshing' (cf. suzu-m- 'cool off, refresh oneself')

(7) a. kuy-am- 'rue, regret' (cf. ku-i (/kuy-i-/) 'regret')
b. ita-m- 'be painful; get damaged' (cf. ita- 'painful')

(8) a. kim-ar- 'be decided' (cf. kim-e- 'decide')
b. utu-r- 'be transferred, reflected' (cf. utu-s- 'transfer, reflect')

(9) a. sam-as- 'cool (tr.)' (cf. sam-e- 'cool (intr.)')
b. utu-s- 'transfer, reflect' (cf. utu-r-'be transferred, reflected')

If the longer form is underlying in each case, hiatus at root boundary will be resolved by deletion of suffixal *a*. If the stems of (4)-(9) are lexically listed, *a*-Deletion will operate in "lexical redundancy mode" (Bermúdez-Otero 2012: 28).

The difference between the treatment of hiatus at root boundary and verb stem boundary that we have seen in this section is naturally accommodated in any phonological framework that, following the lead of Lexical Morphology and Phonology (Kiparsky 1982), distinguishes stem-level, word-level, and phrase-level phonology. Specifically, while *a*-Deletion, operating at root boundary (i.e. within stems), will be a rule of the stem-level phonology, *r*-Epenthesis, operating at stem boundary (i.e. within combinations of stem and inflectional suffix) will be a rule of the word-level phonology.

2.2 High and low attachment analyses and the passive and causative suffixes

The intransitivizing suffix *-(a)r-* of (8) above has a variant *-(a)re-*, as seen in the examples of (10)-(11).

(10) a. wak-are- 'separate (intr.)' (cf. wak-e- 'separate (tr.)')
b. sut-are- 'go out of use' (cf. sut-e- 'discard')
c. tor-aw-are- 'be caught' (cf. tor-a-e- /tor-aw-e-/ 'catch')

(11) a. kowa-re- 'break (intr.)' (cf. kowa-s- 'break (tr.)')
b. kobo-re- 'spill (intr.)' (cf. kobo-s- 'spill (tr.)')
c. tao-re- 'fall over' (cf. tao-s- 'push over')

The post-consonantal alternant *-are-* of this suffix is identical to the post-consonantal alternant of the passive suffix *-(r)are-*. Furthermore, we have suggested that this post-consonantal form coincides with the UR of the suffix in both cases. Finally, while derivational *-are-* and passive *-are-* are morphophonologically distinct, the first undergoing *a*-Deletion and the second undergoing *r*-Epenthesis, this difference, as suggested in section 1, is naturally seen as following from the distinction between stem-level and word-level phonology. In sum, the phonology of derivational *-are-* and passive *-are-* is entirely consistent with treating those two suffixes as low attachment and high attachment versions of the same element, the first taking √P as a complement, the second taking vP. In particular, of course, this would be a natural analytic move in a framework, like DM, that takes derivational as well as inflectional morphology to be syntactically generated.

Just as intransitivizing *-(a)r-* has a variant *-(a)re-*, the transitivizing suffix *-(a)s-* of (9) has a variant *-(a)se-*, illustrated in (12)-(13).

(12) a. aw-ase- 'join (tr.)' (cf. aw- 'meet')
b. sir-ase- 'inform' (cf. sir- 'know')
c. niow-ase- 'hint at' (cf. niow- 'smell (intr.)')

(13) a. mi-se- 'show' (cf. mi- 'see')
b. ni-se- 'model on' (cf. ni- 'resemble')
c. ki-se- 'dress (tr.), clothe' (cf. ki- 'put on')
d. abi-se- 'pour over (other)' (cf. abi- 'pour over (self)')
e. no-se- 'place on; publish' (cf. no-r- 'get on, ride; be published')
f. yo-se- 'bring near' (cf. yo-r- 'come near')
g. kabu-se- 'cover from above' (cf. kabu-r- 'put on one's head')

And just as the post-consonantal alternant *-are-* of the suffix of examples (10)-(11) is identical to the post-consonantal alternant of the passive suffix, the post-consonantal alternant *-ase-* of the suffix of examples (12)-(13) is identical to the post-consonantal alternant of the syntactic causative suffix. Nevertheless, the low attachment vs. high attachment analysis of *-are-* that we cited as phonologically possible, given the stem-level rule of *a*-Deletion and the word-level rule of *r*-Epenthesis, cannot be extended to *-ase-*. The reason is that not only are lexical and syntactic *-ase-* morphophonologically distinct (pace Harley 2008: 36) in that they undergo different alternations, the different morphophonological behavior they display cannot be attributed to the grammar. Rather, they must have distinct phonological representations, either in the lexicon or, in a DM analysis, in the vocabulary (exponent) list.

Specifically, because syntactic *-ase-* alternates with *-sase-* after a vowel, and because that alternation is morpheme-specific, the form *-sase-* must be recorded in the phonological representation of the suffix. On Analysis A, introduced in section 2.1 above, *-ase-* will be the default form of the syntactic causative, and *-sase-* will appear in the lexical representation of the suffix with a restriction limiting it to the post-vocalic environment. On an alternate analysis (as in e.g. McCawley 1968), *-sase-* will be the unique UR of the suffix, and *-ase-* will be the result of a rule deleting the second of two consonants at verb stem boundary. While the form *-sase-* must thus be part of the phonological representation of the syntactic causative suffix regardless of how the *s* ~ Ø alternation of that suffix is analyzed, it cannot be part of the phonological representation of lexical *-ase-*: the latter never takes the form *-sase-*, but, as illustrated in (13), undergoes *a*-Deletion after a vowel in the same way as do the suffixes of (4)-(11).

In short, the syntactic causative and the lexical causative are two irreducibly distinct suffixes, appropriately represented as *-(s)ase-* and *-(a)se-*, respectively, with the former attaching to verb stems and the latter to roots. If so, we predict that lexical (root-selecting) *-sase-* should not occur, since lexical *-(a)se-* has no allomorph of that form. This prediction is accurate, although we will see in section 3.2.2 that stems in syntactic *-sase-* can be lexicalized. At the same time, distinguishing lexical *-(a)se-* from syntactic *-(s)ase-* allows the *-se-* of (13) to be treated as the result of *a*-Deletion operating on *-ase-*, unifying the treatment of that suffix pair with that of every other consonantal derivational suffix. In contrast, if one wishes to deny the existence of lexical *-(a)se-* in addition to syntactic *-(s)ase-*, the fact that lexical *-sase-* is unattested will have to be attributed to fortuitous failure of *-(s)ase-* to occur post-vocalically in its lexical uses, and *-se-* will be a derivational suffix unrelated to the *-ase-* of (12) and having, unlike any other derivational suffix, only a

consonant-initial form.

The conclusion that the syntactic and lexical causative suffixes are distinct suggests that there is no causative element that spans the syntactic/lexical boundary—none, that is, that is syntactic in some instances and lexical in others. If so, causatives pose no obstacle to the view that while inflectional morphology, including productive causatives, is syntactically derived, derivational morphology involves lexical listing of stems, contrary to the position (Miyagawa 2012: 197, 202) that the apparent interaction between lexical and syntactic *-ase-* militates against treating the two in separate components of the grammar. In section 3, I will argue that putative cases of lexical *-(s)ase-* are in fact either lexical *-(a)se-* or syntactic *-(s)ase-*, confirming the conclusion that no causative suffix has a distribution that includes both syntactic (inflectional) and lexical (derivational) occurrences.

In concluding this section, I introduce a notational device that will provide a simple way to distinguish cases of *-ase-* that represent syntactic *-(s)ase-* from those that represent lexical *-(a)se-*, namely bracketings in which lexical verb stems are marked with a right bracket "$_V$]" and other brackets are left unlabeled. An occurrence of *-ase-* internal to the labeled bracket will then represent lexical *-(a)se-*, and one external to that bracket will represent syntactic *-(s)ase-*. Under this convention, for example, the lexical stem *okur-ase-* 'delay' (cf. *okur-e-* 'be late') will be [[okur] ase $_V$], while the syntactic causative stem *her-ase-* of *her-* 'decrease (intr.)' will be [[[her]$_V$] ase]. (In the latter, the lexical entry [[her]$_V$] shows that the string *her* is both a root and a verb stem; I will not postulate a zero suffix deriving the stem from the root.) This convention, of course, assumes the division of labor between lexical *-(a)se-* and syntactic *-(s)ase-* argued for in this section; in discussion of proposals involving lexical *-(s)ase-*, I will write the suffix in that form internal to the labeled bracket.

3 Reinterpreting "lexical *-(s)ase-*"

Miyagawa (1989, 1998) and Harley (1995, 2008) place great emphasis on the apparent complementarity between *-ase-* and other transitivizers. Thus, taking appearance in idioms as a diagnostic of lexical status, Miyagawa (1998:69-70) says, "if a V_{intr}*-(s)ase* has a corresponding and competing transitive verb stem, the causative verb does not participate in idiomatization, but if no transitive stem exists, the causative verb is available for idiomatization." Similarly, Harley (2008: 33) claims (italics in the original) that "*Only intransitive roots with no other transitive form can behave lexically with* -sase." Formulations of this sort are open to two types of objection. The first is that they assume without comment that lexical *-ase-*, as in the examples of (12) above, instantiates the syntactic or inflectional causative suffix *-(s)ase-*. The fact that there is also a lexical or derivational suffix *-(a)se-* with the same post-consonantal allomorph *-ase-*, however, means that this assumption is unwarranted.

The second problem for the claim that a causative stem formed with *-(s)ase-* "is available for idiomatization" when and only when no competing transitive stem exists is posed by the fact that lexical *-ase-* turns out to occur only in cases where lexical *-as-* ((9a) above) is also a possibility, with the stem in *-as-* the historically prior form in all but a handful of cases.[2] Lexical *-ase-*, then, rather than never facing competition from another transitivizer, always faces competition from (typically pre-existing) *-as-*, although the clear tendency is for *-ase-* to win out over time. In section 3.1, I document the variation between *-as-* and *-ase-* for representative verb stems, looking at the relative strength of the two variants in the Balanced Corpus of Contemporary Written Japanese (below, BCCWJ; see reference list for link) and sketching the history of variation to the extent that that is reconstructable from the entries of the *Nihon Kokugo Daijiten* (Nihon kokugo daijiten dainihan henshū iinkai 2000-2002; below, NKD). Section 3.2 takes up the occurrence of *-ase-* in VP idioms, noting that a transitive idiom in *-ase-* whose meaning is predictable in terms of the meaning of a corresponding intransitive idiom does not argue for the lexical status of the *-ase-* in question and concluding that Miyagawa's (1989) proposed examples of lexical *-(s)ase-* in idioms are in fact either syntactic *-(s)ase-* or lexical *-(a)se-*. Section 3.3 reviews the status of the hypothesis that *-ase-* in an idiom is blocked by the existence of a lexicalized transitive stem, concluding that such a hypothesis is both empirically unsupported and, because the phenomenon it is intended to account for does not in the end exist, superfluous.

[2] Miyagawa (1984 [2012]: 184-185) treats this *-as-* as *-(s)as-*, a "morphological variant" of *-(s)ase-*; on this interpretation, see section 3.1.

3.1 Verb stems: lexical *-ase-* as a variant of *-as-*

Of the three examples of lexical *-ase-* in (12), the first two, *aw-ase-* 'join' and *sir-ase-* 'inform', are attested in Old Japanese (8th century) and thus predate the consolidation of the productive causative suffix *-(s)ase-* (see Frellesvig 2010: 63). This is not the case, however, for the third example, *niow-ase-* 'hint at', for which citations in the NKD begin in 1799. In the same meaning, however, *niow-as-* occurs as early as *The Tale of Genji*, around the year 1000. It seems clear, then, that *niow-as-* represents the original shape of the stem, and that variation with *niow-ase-* dates back only about two hundred years. Today, *niow-ase-* is unquestionably the dominant form, but a degree of variation is still observed: searching both Chinese character and *hiragana* representations of the stem, there are 18 occurrences of *niow-as-* (14%) and 109 of *niow-ase-* (86%) in the BCCWJ over the three forms imperfect X-*(r)u*, perfect X-*ta* (including X-*tara*/*tari*), and gerund X-*te* (below, "the forms I/P/G"). *niow-ase-* 'hint at' is illustrated in the dictionary example (14).[3]

(14) Kare wa gen'eki intai o niowase-ta.
he TOP active play retirement ACC hint.at-PF
'He hinted at retiring from active play.'

Let us take a closer look at the process, still incomplete, as a result of which *-as-* is being replaced by *-ase-* in the verb 'hint at'. Heian period Japanese (9th-12th century) will have had a contrast between [[niow] as $_V$] 'hint at' (among other meanings) and [[[niow]$_V$] ase] 'cause to smell'.[4] The tendency to replace *-as-* in the former by *-ase-*, a suffix that can be identified with the *-(a)se-* of *aw-ase-* 'join' and *no-se-* 'place on', will have produced variation between [[niow] as $_V$] and [[niow] ase $_V$] in the meaning 'hint at' and thus incipient neutralization of the surface contrast between 'hint at' and 'cause to smell'. The structural distinction between [[niow] ase $_V$] 'hint at' and [[[niow]$_V$] ase] 'cause to smell', however, persists to this day; while the former was illustrated in (14) above, the latter is illustrated by an example like (15) (from the internet).

(15) Koosui o heya-zyuu ni niow-ase-ru hoohoo wa?
perfume ACC room-throughout LOC smell-CAUS-IMPF method TOP?
'What about a method for making the whole room smell of perfume?'

If the above account is correct, explication of contemporary uses of *niow-ase-* 'hint at' as "literally, 'cause to smell'" (Miyagawa 1989: 124, Harley 2008: 22) is inaccurate: *niow-ase-* 'hint at' and *niow-ase-* 'cause to smell' involve distinct suffixes, *-(a)se-* and *-(s)ase-*, respectively, and the former stem, but not the latter, is a lexicalized unit.[5]

We have seen that *niow-ase-* 'hint at' arose, apparently around 1800, as a variant of pre-existing *niow-as-*. Under the hypothesis that the existence of a competing transitive stem should block lexical *-(s)ase-* (Miyagawa 1984, 1989, 1998, 2012), however, this is an unexpected development: the existence of the lexical causative *niow-as-* should have blocked the emergence of *niow-ase-*.[6] More precisely, the prior existence of *niow-as-* renders it impossible to maintain

[3] Abbreviations in glosses follow the Leipzig glossing rules (https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf) apart from GER 'gerund', IMPF 'imperfect', and PF 'perfect'.

[4] The *s*-final variant *-(s)as-* of the syntactic causative suffix did not appear until the Muromachi period, 1336-1573 (Yamaguchi and Akimoto 2001: 285, 358). On this point, see also section 4 below.

[5] Given the ban on successive occurrences of syntactic *-(s)ase-* (Martin 1975: 288; see also Kuroda 1993: 8-10, Miyagawa 2012: 198), one might imagine that (14), but not (15), should be subject to productive causativization. In fact, the situation is more complex. One factor making it so is that a stem may undergo replacement of *-as-* by *-ase-* in its basic paradigm without triggering replacement of causative *-as-ase-* by *-ase-sase-*; thus *sum-as-* 'finish (tr.)' has been almost completely replaced by *sum-ase-* in a combination like *syokuzi o sum-ase-* 'finish one's meal' (BCCWJ), but 'let me finish my meal' remains *syokuzi o sum-as-ase-te*, not ?**sum-ase-sase-te*. The testimony of native speaker consultants does not support the idea of a sharp acceptability differential between the causative of 'hint at' and that of 'cause to smell'.

[6] A parallel case is provided by what appears to be the incipient emergence of *tob-ase-* as a variant of *tob-as-* 'make/let fly' in the idiom L *e tob-as-* 'demote to L' (L a location). Kuroda (1993: 59) reports *tob-ase-* as acceptable in his own speech in addition to *tob-as-*, and offers this as a counterexample to Miyagawa's claim that the existence of a lexical causative (here, *tob-as-*) should block idiomatic uses of *-ase-* (the latter construed as syntactic *-(s)ase-*). Miyagawa (1998: 95) clearly agrees that this is a potential counterexample, and his only recourse is to question Kuroda's judgment regarding the acceptability of *tob-ase-* in the idiom. I speculate that *tob-ase-* 'demote' remains marginal because the idiom itself is a relatively recent innovation (first NKD citation 1966).

both that *niow-ase-* 'hint at' includes *-(s)ase-* and that blocking holds; either that stem counterexemplifies blocking or it involves a suffix distinct from *-(s)ase-*. Let us take a brief look at Miyagawa's claims concerning blocking of causative forms.

A stronger and a weaker hypothesis regarding the ability of existing lexical stems to block causatives can be distinguished. On the stronger, there would be cases in which the existence of a transitive stem derived from the same root as a given intransitive would block the formation of any causative stem, even the productive, compositional syntactic causative, on the intransitive stem in question. This is the claim made by Miyagawa (1989: 140) for the case where the intransitive stem is strictly unaccusative; thus, for example, the existence of *wak-as-* 'boil (tr.)' is taken to render ungrammatical the causative *wak-ase-* of *wak-* 'boil (intr.)'. While it is true that *wak-ase-* cannot represent direct or manipulative causation, and that directive causation is excluded in such cases by the inanimacy of the theme argument,[7] Kuroda (1993: 44) points out that *wak-ase-* is unproblematic in the permissive meaning 'allow to (continue to) boil', and Chung and Shibatani (2018: 142-145) note further that that stem may express inducive causation as well. The stronger version of the blocking hypothesis, then, appears to be untenable.

A weaker blocking hypothesis would apply only to lexical causatives. This is the idea that Miyagawa (1989: 124) is appealing to when he says that *niow-ase-* is eligible for lexicalization ("becoming a member of the permanent lexicon") because "*niow-* 'smell' lacks a simple transitive counterpart". But we have just seen that *niow-* does in fact have a simple transitive counterpart, namely *niow-as-* 'hint at' (among other meanings), and, crucially, that it had such a counterpart at the time the variant *niow-ase-* of that stem was introduced. In fact, not only *niow-ase-*, but all of the stems of the form X-*ase-* that are cited by Miyagawa (1989: 124-126) as examples of lexical *-(s)ase-* are in variation with stems of the form X-*as-*. Further, the form in *-as-* appears to be historically prior in all of those examples except *aw-ase-* 'join'. The weaker version of the blocking hypothesis thus also appears to be untenable.

The condition on the appearance of innovative lexical *-ase-* that does hold is that there be a preexisting lexical causative in *-as-*. Lexical *-ase-*, in other words, far from being licensed by the lack of a competing transitive stem, in fact requires such a stem. Before documenting this claim by examining additional cases of the diachronic replacement of *-as-* by *-ase-*, let us ask if there are alternatives to the account of the introduction of innovative *niow-ase-* 'hint at' that we have given above, in particular alternatives that are consistent with the claim that a competing transitive stem will block lexical *-(s)ase-* — equivalently, that *-(s)ase-* can select a given root only if no other transitivizing suffix does.

One possible approach is suggested by Miyagawa's (1984 [2012]: 184-185) treatment of variation between stems in *-as-* and stems in *-ase-* for idioms like *hara o her-as(e)-* 'get/remain hungry'. Miyagawa interprets this as variation between *-(s)as-* and *-(s)ase-* and proposes that in such a case, the stem in *-(s)ase-* is basic, with the stem in *-(s)as-* constituting a "morphological variant" thereof. The *her-as-* of *hara o her-as-*, in other words, will have the structure [[her] (s)ase $_V$], with the final vowel of *-(s)ase-* subject to an optional rule of deletion. In the same way, one might assign *niow-as-* the structure [[niow] (s)ase $_V$], claiming that from the year 1000 to the year 1800, the rule deleting the final vowel of *-(s)ase-* applied with 100% reliability. This account, however, preserves the claim that *-(s)ase-* can select a given root only if no other transitivizing suffix does at the cost of assuming what is to be demonstrated: the suffix *-as-* that threatens to counterexemplify the claim is recharacterized as *-(s)ase-*, so that the counterexample disappears.

Miyagawa (2012: 200) presents an alternate explanation of the origin of *niow-ase-* 'hint at' in proposing that that verb is the result of "semantic drift" and consequent lexicalization of the homophonous syntactic causative; on this account, 'hint at' would be expected initially to have the structure [[[[niow]$_V$] (s)ase] $_V$], presumably later reanalyzed as [[niow] (s)ase $_V$]. This proposal, however, takes no account of the prior and continued existence of *niow-as-* and therefore provides no explanation for the apparent failure of blocking. Furthermore, while lexicalization of syntactic causatives is both plausible and, as we will see in section 3.2.2, actually attested, there will be no motivation for it if, as in this case, a lexicalized stem on the same root in the relevant meaning (i.e. *niow-as-*) already exists. It seems fair to conclude, then, that our account above, according to which *niow-ase-* is in origin simply an innovative variant of *niow-as-*, is both more straightforward than any alternative and, given independent evidence for a general tendency to replace *-as-* with *-ase-* over time, better motivated. From a strictly synchronic point of view, of course, once it is clear that a lexical or derivational suffix *-(a)se-* exists, as argued in section 2, there is no reason to identify lexical *-ase-* with

[7] For discussion of the largely complementary roles of lexical and syntactic causatives in the expression of manipulative and directive causation, see Shibatani 1976: 31-38 and Jacobsen 2017: 86-89.

syntactic *-(s)ase-*; treating it as lexical *-(a)se-* is the unmarked or default interpretation, with the burden of proof falling on those who might wish to do otherwise. And, as we have noted, prior existence of *-as-* militates against the treatment of lexical *-ase-* as *-(s)ase-* if the latter is held to be blocked by a competing transitivizer.

Let us turn now to evidence for the diachronic tendency to replace lexical *-as-* with *-ase-*. First of all, we should note that the historical priority of *-as-* over *-ase-* is particularly clear in the case of *niow-as(e)-*: idiomatic and compositional uses of *niow-ase-* are sharply distinct in meaning, so that no uncertainty arises about which is involved in any given case; and both *niow-as-* and *niow-ase-* have dictionary entries in the idiomatic meaning, with an eight-century gap between first attestations of the two stems. For other verbs in *-as-* ～ *-ase-* that are taken by Miyagawa and Harley to represent lexical *-(s)ase-*, the boundary between compositional and idiomatic uses may be less sharp, and the relative chronology of the forms may be somewhat more difficult to ascertain. Nevertheless, the tendency to replace *-as-* with *-ase-* is unmistakable, and apart from the small handful of verbs in *-ase-* that go back to Old Japanese (notably *aw-ase-* 'join' and *sir-ase-* 'inform'), lexical *-ase-* appears always to have this history. Table 1 illustrates these generalizations with ten verbs, seven of the eight that occur (in VP idioms) as examples of putative lexical *-(s)ase-* in (30), Miyagawa 1989: 125-126 (the eighth will be treated at the beginning of section 3.2.2), plus *niow-as(e)-*, *hasir-as(e)-* 'make run', which appears in idioms like *me o hasir-ase-* 'scan with the eyes', and *kusar-ase-* 'make rot', taken to represent lexical *-(s)ase-* (Miyagawa 1989: 129) because it allows an adversity interpretation (Oehrle and Nishio 1981). The table records dates of first attestation as per the NKD for the stem in *-as-* and, in the minority of cases where it has a separate entry, the stem in *-ase-* as well (stems in *-ase-* without dictionary entries are bracketed). Finally, frequencies in the BCCWJ over the three forms I/P/G are recorded for each stem.

Table 1: Dates and frequencies of stems in *-as-* ～ *-ase-*.

	intr. stem + gloss	stem in *-as-*	date	frequency	stem in *-ase-*	date	frequency
1	aw- 'meet'	aw-as-	1696	176 (1%)	aw-ase-	8th c.	14768 (99%)
2	kagayak- 'gleam'	kagayak-as-	974	51 (12%)	[kagayak-ase-]	—	392 (88%)
3	niow- 'smell (intr.)'	niow-as-	1001	18 (14%)	niow-ase-	1799	109 (86%)
4	uk- 'surface'	uk-as-	1069	118 (35%)	uk-ase-	1904	217 (65%)
5	sum- 'be clear'	sum-as-	1220	241 (74%)	[sum-ase-]	—	86 (26%)
6	her- 'decrease'	her-as-	17th c.	1803 (99.6%)	[her-ase-]	—	7 (0.4%)[8]
7	kusar- 'rot'	kusar-as-	1615	0 (0%)	[kusar-ase-]	—	41 (100%)
8	hikar- 'shine'	hikar-as-	1681	13 (4%)	[hikar-ase-]	—	280 (96%)
9	hasir- 'run'	hasir-as-	1820	28 (3%)	[hasir-ase-]	—	1018 (97%)
10	kik- 'have effect'	kik-as-	1906	78 (36%)	kik-ase-	1949	139 (64%)

Apart from *aw-as(e)-* (item 1), there is no stem for which the *-ase-* variant predates the *-as-* variant; for the six cases in which the *-ase-* variant has no lexical entry (items 2 and 5–9), we may assume that, as in the three remaining cases (items 3, 4, and 10), the *-as-* variant is older, consistent with the claim that, with a small number of exceptions, lexical *-ase-* arises only as a variant of pre-existing *-as-*. It should be noted that the figures of Table 1, which represent search results for character strings, do not distinguish lexical from syntactic causatives. In the next section, in contrast, we will be concerned precisely with the boundary between lexical and syntactic expressions—more specifically, with the question of just what part of an apparent VP idiom is recorded in the lexicon.

3.2 VP idioms

3.2.1 Prolegomenon: possessor-raising causatives[9]

In a typical causative sentence, there is a clear distinction between causing and caused events, and the causative subject,

[8] Out of 64 occurrences of *herase-*, 57 were judged to instantiate potential *her-as-e-* 'can reduce (tr.)' rather than causative *her-ase-*. The possibility that the Table 1 statistics for other stems of the form X-*ase-* include small numbers of potentials X-*as-e-* cannot be excluded, although in many cases the low frequency of X-*as-* can be assumed to render that possibility negligible.

[9] For discussion of Japanese causative sentences (and transitives more generally) in the context of possessor raising, see Hasegawa 2007.

ordinarily an agent, represents an entity that plays no role in the caused event. In certain cases where Japanese *-(s)ase-* takes an unaccusative clause as its complement, however, the causative subject represents the possessor of the theme argument of the unaccusative clause, and the distinction between causing and caused events is subtle or nonexistent. In illustration, consider the relationship between sentences (16a) and (16b).

(16) a. Tubaki no kaori ga tadayot-te i-ta.
camelia GEN fragrance NOM waft-GER be-PF
b. Tubaki ga kaori o tadayow-ase-te i-ta.
camelia NOM fragrance ACC waft-CAUS-GER be-PF
'The fragrance of camelias hung in the air.'

In (16a), unaccusative *tadayow-* 'drift, float, waft' takes a theme argument *tubaki no kaori* 'the fragrance of camelias' that receives nominative case; the possessor *tubaki* 'camelias' is assigned genitive case DP-internally. In (16b), where *tadayow-* is suffixed with causative *-ase-*, on the other hand, *tubaki* is the nominative subject, and its possessum *kaori* 'fragrance' receives the accusative case that *-ase-* assigns. (17) is a parallel pair of examples.

(17) a. Sakura no ki no hana ga migoto ni sai-te i-ta.
cherry GEN tree GEN flower NOM splendidly bloom-GER be-PF
b. Sakura no ki ga migoto ni hana o sak-ase-te i-ta.
cherry GEN tree NOM splendidly flower ACC bloom-CAUS-GER be-PF
'The cherry tree was blooming splendidly.'

Examples (18) and (19), where only the causative version is shown, are cases in which causativization in a subordinate clause allows the matrix subject to control the zero subject of that clause.[10]

(18) [Gyokyoo no keitora]$_i$ ga [Ø$_i$ hata o nabik-ase-Ø], toozyoo si-ta.
fishing co-op GEN light truck NOM flag ACC flutter-CAUS-INF appearance do-PF
'The light truck of the fishing co-op, its flag fluttering, made its appearance.' (lit. 'made its flag flutter and ....')

(19) [Sentoo no naginata-boko]$_i$ ga [Ø$_i$ syarin o kisim-ase-Ø], sizyou-karasuma o syuppatu si-ta.
lead GEN halberd-float NOM wheel ACC creak-CAUS-INF (placename) ACC departure do-PF
'The lead float, its wheels creaking, departed Shijō-karasuma.' (lit. 'made its wheels creak and ....')

(16b), (17b), and (18)-(19) exemplify external possession (Payne and Barshi 1999, Deal 2017), the appearance of a possessor outside the DP that contains the possessum. Cases of external possession can be classified according to whether the possessor bears a thematic role, such as affectee, that can not be attributed to its original position. If it does bear such a role, there are two thematic positions associated with the possessor, and the relationship between them is analogous to control. If, on the other hand, the possessor displays no additional thematic role as a consequence of its external status, the relationship between its surface position and its original position is analogous to raising. In the case of (16b), (17b), and (18)-(19), there appears to be no thematic role that the possessor has acquired by virtue of becoming a causative subject, suggesting a raising analysis. In particular, the possessor in those examples is arguably not a cause, the expected thematic role for an inanimate causative subject. To see this, note first that a causative sentence with inanimate subject and unaccusative complement normally has an unaccusative paraphrase in which the causative subject appears as the complement of *ni yotte* 'as a result of', as illustrated in (20).[11]

[10] (18) and (19) are adapted from a blog entry and a newspaper article, respectively.

[11] Pylkkänen (2008: 91-92) claims that DP *ni yotte* indicates the presence of an implicit argument, either a causer or a causing event, and is consequently inadmissible in unaccusative clauses, which have neither. In fact, unaccusatives (*sin-* 'die', *oti-* 'fall', *kusar-* 'rot', etc.) occur freely with *ni yotte* phrases, as internet searches quickly show. On the assumption that unaccusatives do indeed have no implicit cause or causer argument, then, it follows that DP *ni yotte* in unaccusatives does not illuminate argument structure, but is purely adverbial.

(20) a. Hanako no ayamati ga Taroo o sin-ase-ta.
Hanako GEN mistake NOM Taroo ACC die-CAUS-PF
'Hanako's mistake caused Taro to die.'
b. Hanako no ayamati ni yotte Taroo ga sin-da.
Hanako GEN mistake as a result of Taroo NOM die-PF
'Taro died as a result of Hanako's mistake.'

For sentences like (20a), the ability of the causative subject to appear as the complement of *ni yotte* in an unaccusative paraphrase suggests that, in the causative sentence, that subject bears the thematic role cause. Conversely, unacceptability of a *ni yotte* paraphrase would suggest that the causative subject in question does not bear that thematic role. It is notable, then, that for examples like (16)-(19), the *ni yotte* paraphrases are degraded or frankly unacceptable (for simplicity, I mark both the Japanese sentences and their English translations with the asterisk):

(21) a. Sakura no ki ga hana o sak-ase-te i-ta. (cf. (16b))
cherry GEN tree NOM flower ACC bloom-CAUS-GER be-PF
The cherry tree was blooming (lit. making its flowers bloom).
b. *Sakura no ki ni yotte hana ga sai-te i-ta.
cherry GEN tree as a result of flower NOM bloom-GER be-PF.
*'The flowers were blooming as a result of the cherry tree.'

(22) a. Densya ga syarin o kisim-ase-te i-ta. (cf. (18))
train NOM wheel ACC screech-CAUS-GER be-PF
The train's wheels were screeching (lit. The train was making its wheels screech.)
b. *Densya ni yotte syarin ga kisin-de i-ta.
train as a result of wheel NOM screech-GER be-PF
*'The wheels were screeching as a result of the train.'

If the possessor subjects of examples like (21a) and (22a) bear no thematic role other than that associated with their original position, it follows that either the *-(s)ase-* of such examples introduces no specifier position or else the specifier position it introduces is athematic, with the possessor subjects of those examples moving through the athematic Spec(vP) on their way to Spec(TP) (cf. Hasegawa 2007: 73). Without choosing between those two alternatives, I will refer to such examples below as "possessor-raising causatives". If movement to Spec(TP) in possessor-raising causatives is to be motivated by the need for case, it will also be necessary to assume that, where Spec(nP) is the original position of the possessor, the D that selects that nP is defective in being unable to assign the expected structural genitive. I will further assume that the allomorph of the causative suffix that appears in such examples introduces no causing event and is a semantically null, purely formal element, as the passive suffix is typically understood to be (Parsons 1990: 91). Pairs like the (a) and (b) sentences of (16) and (17), then, may be considered to be in a paraphrase relationship. While many details of this analysis remain to be fleshed out, what is important for our purposes is that possessor-raising causatives indubitably exemplify the syntactic causative suffix *-(s)ase-*.

3.2.2 *-(a)se-* and *-(s)ase-* in VP idioms

There is one example from Miyagawa 1989: 124-126 whose verb does not appear in Table 1, the idiom *hana o sak-ase-*, literally 'make flowers bloom'. The reason the verb of that idiom is absent from the table is that dictionaries, including the NKD, uniformly decline to accord entries to either *sak-ase-* or *sak-as-*. If we follow the intuitions of Japanese lexicographers, then, there are no lexicalized stems of that form. If so, what is the structure of *hana o sak-ase-*, and how is it generated?

Transitive *hana o sak-ase-* has an intransitive counterpart *hana ga sak-*, literally 'flowers bloom'. Dictionaries list two meanings for *hana ga sak-*, 'become animated, lively' (*nigiyaka ni naru*) and 'flourish' (*sakaeru*). Correspondingly, the two meanings listed for *hana o sak-ase-* are 'make animated, lively' (*nigiyaka ni suru*) and 'cause

to flourish' (*sakaeru yoo ni suru*). The dictionary definitions, then, are consistent with the possibility that transitive *hana o sak-ase-* is simply the syntactic causative of intransitive *hana ga sak-*. If so, the idiom recorded in the lexicon will be roughly [[hana $_{DP}$] sak $_{VP}$] 'become animated; flourish'. When this unaccusative VP (following Chomsky 1995: 316) is selected in the syntax by causative *-(s)ase-*, the latter will supply a causative meaning and license an agentive argument and accusative case. Nothing more will need to be said about the form or meaning of *hana o sak-ase-*.

It should be emphasized in this connection that the existence of the apparent idiom *hana o sak-ase-* does not in and of itself establish that *sak-ase-* is a lexical causative, although this is one reading of Miyagawa's (1989: 123-126) treatment of such idioms. More generally, VP idioms in (presumably) any language undergo inflection without entailing that the inflectional elements in question are part of the idiom's lexical form. If *-ase-* can be analyzed as inflectional in *hana o sak-ase-*, then, that suffix is external to the lexicalized idiom, just as is, for example, the past tense marker of *kicked the bucket*. While it might appear that analyzing the *-ase-* of *hana o sak-ase-* as syntactic would make it difficult to account for the variant *hana o sak-as-*, which occurs at least four times in the BCCWJ, it is well known that syntactic *-(s)ase-* is in variation with *-(s)as-*, so that there is no barrier to treating *hana o sak-as-* as involving the syntactic causative suffix as well. We will have more to say in section 4 about syntactic *-(s)as-*.

In section 3.2.1, we saw that there is a class of cases in which the complement of *-(s)ase-* is unaccusative that can be characterized as involving raising of the possessor of the unaccusative clause's theme argument to the causative subject position. Causative sentences involving *hana o sak-ase-* are not possessor-raising causatives; there is no relationship of possession or part-whole relationship, and, in contrast to cases like those of (16)-(19), the causative subject is clearly an agent. But sentences in *hana o sak-ase-* do belong to a well-defined superset of the set of possessor-raising causatives, that defined by identity of the set of participants in the situations represented by the causative and corresponding intransitive sentences—in this case, the situations represented by causative *hana o sak-ase-* and intransitive *hana ga sak-*. This is illustrated by examples (23).

(23) a. Doosookai de omoide-banasi ni hana ga sai-ta.
reunion at memory-story LOC flower NOM bloom-PF
'There was much lively reminiscing at the reunion.'
b. Doosookai no sankasya ga omoide-banasi ni hana o sak-ase-ta.
reunion GEN participant NOM memory-story LOC flower ACC bloom-CAUS-PF
'The participants in the reunion engaged in much lively reminiscing.'

The subject of (23b), *doosookai no sankasya* 'the participants in the reunion', is absent from (23a), but the referents of that noun phrase are present in the situation that (23a) represents. This characteristic sets (23b) apart from an unmarked causative sentence, in which the causative subject represents an entity that is external to the caused event.

A still closer approach to a possessor-raising causative is provided by an example like *me o hikar-ase-* 'keep a close watch' (lit. 'make eyes shine'), illustrated along with its essentially synonymous intransitive counterpart *me ga hikar-* (lit. 'eyes shine') in (24) (either expression may also take a DP in *ni* representing the object of surveillance).

(24) a. Keisatu no me ga hikat-te i-ru.
police GEN eye NOM shine-GER be-IMPF
b. Keisatu ga me o hikar-ase-te i-ru.
police NOM eye ACC shine-CAUS-GER be-IMPF
'The police are keeping a close watch.'

The formal relationship between the (a) and (b) sentences of (24) is precisely parallel to that observed in (16) and (17). Unlike in those cases, however, the causative subject of (24b) is arguably agentive, as attested by the naturalness of, for example, *me o hikaraseru koto ni sita* 'decided to keep a close watch'. If so, the relationship between the causative Spec(vP) position and the position of the possessor of the theme argument *me* 'eye' in (24b) is analogous to control rather than to raising. Nevertheless, if there is no semantic difference between the transitive and intransitive versions of the idiom apart from that attributable to causative *-(s)ase-*, the transitive version may be treated as the syntactic causative of the intransitive, and the lexical form of the idiom will be [[DP me $_{DP}$] hikar $_{VP}$] 'DP keeps a close watch'.

It seems clear, then, that among the putative VP idioms offered by Miyagawa (1989: 125-126) as illustrating lexical *-(s)ase-*, there are some whose *-ase-* is in fact external to the relevant idiom, representing inflectional material composed with the idiom in the syntax. These VPs do involve *-(s)ase-*, but that suffix is syntactic rather than lexical. At the same time, there are idioms involving *-ase-* that are not plausibly analyzed this way, most obviously when no corresponding intransitive idiom exists. This is the case, for example, with *mimi o sum-ase-* 'listen attentively' (lit. 'clarify the ears'; see Table 1, item 5), which has no intransitive counterpart. In this kind of example, the transitive stem in *-ase-* will be part of the lexical representation of the idiom, here [[mimi $_{DP}$] [[sum] ase $_{V}$] $_{VP}$]. Such cases of *-ase-*, then, will be lexical, but they will represent *-(a)se-* rather than *-(s)ase-*, in particular, occurrences of *-ase-* that are replacing or have replaced lexical *-as-*. In the case of *mimi o sum-ase-*, this replacement is still very much in progress; the BCCWJ shows 132 occurrences of *mimi o sum-as-* (64%) over the forms I/P/G versus 74 of *mimi o sum-ase-* (36%). That this variation is salient for speakers is shown by online discussion concerning whether, in addition to conservative (and uncontroversially acceptable) *mimi o sum-as-*, the innovative form *mimi o sum-ase-* is "correct" or not (see references in note 16 below).

Finally, there are instances in which a causative vP headed by syntactic *-(s)ase-* is lexicalized as a whole in an idiomatic interpretation. We may note in this connection that the lexicalization of inflectional material is unremarkable in Japanese, where verbal infinitives are often lexicalized as nouns (*hasami* 'scissors'; cf. *hasam-* 'to place between'), verbal gerunds as adverbials (*sitagatte* 'consequently'; cf. *sitagaw-* 'obey'), and verbal negatives as adnominal expressions (*omowanu* 'unanticipated'; cf. *omow-* 'think'). Among stem-forming suffixes, potential *-e-* appears in lexicalized *hanas-e-* 'easy to talk to; flexible, accommodating' (lit. 'can talk to'), and passive *-rare-* appears in *ate-rare-* 'be made to feel uncomfortable, especially by displays of intimacy on the part of others' (lit. 'be hit'). It should be emphasized that the inflectional suffixes involved do not become derivational as a result of lexicalization of forms that include them, any more than the plural suffix of English *guts* and *balls* becomes derivational when those plurals are lexicalized in unpredictable meanings. (25), based on (17c) from Miyagawa 2012: 201, illustrates lexicalization of a vP headed by *-(s)ase-*.

(25) DP ni saihu o ake-sase-ru
DP DAT wallet ACC open-CAUS-IMPF
'make DP pay'

The lexical verb stem involved is *ak-e-* 'open (tr.)', so that (omitting Spec(vP), the DP of (25)), the idiom has the form [[[[saihu $_{DP}$] [[ak] e $_{V}$]$_{VP}$] v $_{vP}$] sase], with the syntactic status of *-sase-* guaranteed by the fact that it selects a full transitive vP; in morphological terms, the presence of the transitivizer *-e-* makes it clear that *-sase-* attaches to a stem rather than to a root. A parallel analysis is indicated for (26) below, based on Miyagawa's (2012: 200) (15), in spite of the fact that in that case no stem-forming suffix appears.

(26) DP o tabe-sase-ru
DP ACC eat-CAUS-IMPF
'support DP (financially)'

As Miyagawa (2012: 200, 202) notes, it is the (syntactic) causative stem *tabe-sase-* that has been subject to semantic drift and lexicalization in the case of (26); the idiom thus has the form [[[[[tabe]$_{V}$]$_{VP}$] v $_{vP}$] sase], parallel to (25) except that the lexical verb takes no internal argument. While it might look at first sight as if *-sase-* in (26) attaches to a root and thus functions itself as a lexical or derivational suffix, the principle that inflectional suffixes do not become derivational when forms containing them are lexicalized entails that that is not the case and that (26) is consistent with the position that *-(s)ase-* attaches only to a verb stem—in syntactic terms, that it always selects vP (or VP).[12]

[12] Miyagawa (2012: 199) presents a sentence with *i-sase-sase-ta* 'made (X) make (Y) stay' as an example of lexical *-sase-* on the basis of the generalization that lexical causatives but not syntactic causatives are subject to syntactic causativization (cf. note 5 above); if so, the first occurrence of *-sase-* in the cited form must be lexical. The native speakers I have consulted about this example, however, find it anomalous. If that judgment is reliable, *i-sase-* is not lexicalized, and *i-sase-sase-* is a violation of the ban on multiple occurrences of syntactic *-(s)ase-*.

In the present subsection, examining representative VPs of the form [DP o V-ase-] taken by Miyagawa (1989, 2012) and Harley (2008) as evidence for lexical *-(s)ase-* on the basis of apparent idiomatic uses, we have seen that there are some, exemplified by *me o hikar-ase-* 'keep a close watch', whose *-ase-* represents syntactic *-(s)ase-* and is external to the lexicalized idiom. In others, exemplified by *mimi o sum-ase-* 'listen attentively' *-ase-* is lexical, but cannot be *-(s)ase-* even on Miyagawa and Harley's account because of the prior existence of lexical *-as-*. A third set of idioms, finally, reflect lexicalization of full causative vPs headed by syntactic *-(s)ase-*. In the end, then, we have found no evidence that lexical *-(s)ase-* exists, consistent with the conclusion of section 2 that lexical *-ase-* is *-(a)se-*. There is one important question raised by our discussion that remains unanswered, namely that of the motivation for the diachronic tendency to replace stems in *-as-* with stems in *-ase-* that we identified in section 3.1, and I turn to that issue in section 4. First, however, I briefly summarize the implications of the data we have seen for the hypothesis that a lexical transitivizer will block the use of *-ase-* in an idiom.

3.3 Epilogue: the status of blocking in idioms

In closing section 3, let us return to the question of blocking in causatives and survey the types of exception that are found to the claim that *-ase-* in an idiom should be blocked by the existence of a lexicalized transitive stem. One type of exception is illustrated by *mimi o sum-as(e)-* 'listen attentively', where, as indicated above, variation between *-ase-* and the lexical transitivizer *-as-* is a consequence of ongoing replacement of the latter by the former. In such a case, as we noted, the lack of an intransitive counterpart to the idiom renders implausible the interpretation of the form in *-ase-* as the syntactic causative of an intransitive. That is not the case, however, for a second type of exception, exemplified by the idioms *mune ga itam-* (lit. 'one's breast hurts') and *mune o itam-e-* (lit. 'hurt one's breast') 'be grieved, worried'. Because of the appearance of the transitive stem *itam-e-* in the latter, blocking predicts that *mune o itam-ase-*, the causative of intransitive *mune ga itam-*, should be impossible, and in fact Miyagawa (1989: 127) marks it as ungrammatical. But *mune o itam-ase-* appears with some frequency online, and there are two occurrences of it in the BCCWJ over the forms I/P/G, one reproduced in (27) below.

(27) Kono ko ga ore e no hatu-koi de mune o itam-ase-te i-ru.
this child NOM me toward GEN first-love with chest ACC ache-CAUS-GER be-IMPF
'This kid is experiencing the pains of first love for me.'

Unlike the *-ase-* of *mimi o sum-ase-*, the *-ase-* of (27) is clearly not a variant of pre-existing *-as-*. Rather, it is arguably syntactic *-(s)ase-*, with (27) naturally analyzed as a possessor-raising causative.

We have seen two sets of circumstances in which predicted blocking of *-ase-* in a transitive idiom fails, first when *-ase-* is a variant of earlier *-as-*, and second when *-ase-* represents *-(s)ase-* applied to a corresponding intransitive idiom. There are cases in which both of these interpretations are potentially available for a form in *-ase-*. This is true, for example, for *hara o her-ase-* 'wait for a meal, get hungry', since both transitive *hara o her-as-* 'id.' and intransitive *hara ga her-* 'get hungry' exist. The single instance of *hara o her-ase-* in the BCCWJ over the forms I/P/G, the clause containing which is reproduced in (28) below, involves a non-agentive subject, so that the meaning is indistinguishable from intransitive *hara ga her-*, and the example, like (27), is plausibly analyzed as a possessor-raising causative.

(28) Ie de hara o her-ase-ta neko ga gyaagyaa sawai-de (i-)ru.
house at stomach ACC decrease-CAUS-PF cat NOM loudly make.noise-GER (be-)IMPF
'There is a hungry cat squalling at home.'

Given the relatively high frequency of *hara o her-as-* (9 instances in the BCCWJ) and the very general tendency to replace lexical *-as-* with *-ase-*, however, the possibility of lexical *-ase-* in other instances of *hara o her-ase-* cannot be excluded.

Finally, there are also, of course, cases of transitive idioms for which blocking of *-ase-* is predicted and the form in *-ase-* does in fact fail to occur. To begin with, this will be true if neither of the above conditions for the co-occurrence of *-ase-* and a lexical transitivizer is satisfied—if there is a lexical transitivizer other than *-as-*, that is, and no corresponding

intransitive idiom. A typical example (Miyagawa 1998: 69) is *te no hira o kae-s-* 'change one's attitude abruptly' (lit. 'turn over the flat of one's hand'), for which Miyagawa notes the ungrammaticality of the potential alternate form **te no hira o kae-r-ase-*, based on the syntactic causative of the intransitive stem *kae-r-* that corresponds to *kae-s-*. This, then, appears to be a genuine case of blocking. But that appearance is illusory. To support a judgment that a form F is blocked, it is not enough to (a) show that F fails to occur and (b) display a plausible blocker for F; there must in addition be a presumption that F SHOULD occur—reason to believe, that is, that there is some grammatical process that would be expected to generate it. Thus, the claim that **gloriosity* is blocked by *glory* (Aronoff 1976: 43-44) rests on data suggesting that, in the absence of *glory*, **gloriosity* would be produced from *glorious* by the relevant word-formation rule. When the putative blockee is an idiom, however, this last condition cannot be satisfied, since an idiom is by definition the result of an individual instance of lexicalization rather than of any generative process. In the case of **te no hira o kaer-ase-*, for example, there is no reason to expect that form to exist in the first place. If so, however, there are no grounds for saying that it is blocked.

We have seen that the hypothesis that a lexical transitivizer blocks the use of *-ase-* in an idiom is suspect on empirical grounds: many cases of *-ase-* that are predicted to be blocked actually occur, and many non-occurring cases cannot plausibly be said to be blocked. More generally, however, the fundamental premise of the blocking hypothesis is that syntactic *-(s)ase-* can be root (or √P)-selecting; any proposal involving blocking is intended to specify the conditions under which that can occur. But we have seen no reason to believe that syntactic *-(s)ase-* is ever root-selecting to begin with. If our conclusion in that regard is accurate, motivation for any blocking hypothesis for idioms disappears, and blocking becomes an *explanans* in search of an *explanandum*.

4 Toward an understanding of the replacement of *-as-* by *-ase-*

The remaining question that we must confront concerns the motivation for the replacement of *-as-* with *-ase-* over time that we documented in section 3.1. In taking up that question, I will propose that variation between lexical *-as-* and lexical *-ase-* can be understood only in the context of variation between *-(s)as-* and *-(s)ase-* for the syntactic causative suffix, and will start with a consideration of the latter.

Variation between *-(s)as-* and *-(s)ase-* has both a geographical and a temporal dimension. Geographically, *-(s)as-* is to a first approximation limited to Western Japan apart from Kyūshū[13]. As a response to the survey item *kak-ase-ru* 'make write' (map 119) in the *Grammar atlas of Japanese dialects* (Kokuritsu Kokugo Kenkyūjo 1989-2006; below, GAJ), *kak-as-u* is common in the Kansai and Chūgoku regions and in Shikoku, and occurs in Ishikawa, Toyama, and western Niigata Prefectures along the Japan Sea coast, but with the exception of three survey points (one each in Aichi, Shizuoka, and Saitama Prefectures) that report both *kak-ase-ru* and *kak-as-u*, is absent from Aichi, Gifu, and Fukui Prefectures in central Japan and, apart from the Japan Sea coast areas just noted, everywhere north and east of there. It should be noted, however, that before passive *-(r)are-*, causative *-(s)as-* appears with considerable frequency both in Kyūshū and in Eastern Japan, giving *kak-as-are-ru* in place of *kak-ase-rare-ru* for 'be made to write' (GAJ map 125).

Historically, causative *-(s)as-* appears only marginally before the year 1600, as evidenced by its absence up to that date from the period-specific conjugation tables of works like Yamaguchi and Akimoto 2001.[14] During the Edo period (1603-1868), however, *-(s)as-* emerged as a major competitor to *-(s)ase-*, and it maintained that status not only through the era in which the Japanese of Kyoto and Osaka ("Kamigata-go") was the unchallenged prestige and literary dialect, but after 1750, when the dialect of Edo (modern Tokyo) began to increase in status. The contemporary standard or common language, however, has adopted the eastern variant on this point as on a number of other details of verbal and adjectival morphology (see Frellesvig 2010: 399): *kak-as-u* 'cause to write' appears only twice in the BCCWJ, as

[13] I exclude from consideration Hokkaidō, settled heavily by Japanese speakers (from a wide range of regions) only in the late 19th century.

[14] The statement that "Historically, the *sas* form was the original causative morpheme which gave rise to the *sase* form around the 12-15th centuries" (Shibatani 1973: 346 (note 21), quoted in Miyagawa 1984 [2012]: 292 (note 2 to chapter 7)) is at variance with the facts; it seems to be based on a misunderstanding of a passage on page 89 of Miyaji 1969. The crucial point is that for classical (Heian period) Japanese, the verbal citation form, the conclusive, typically underdetermines the stem, and a specification of conjugation type is required in order to resolve the indeterminacy. The classical causative suffix had the citation form *-su*/*-sasu* (where the conclusive ending is zero), but inflected according to the *shimo nidan* ('lower bigrade') conjugation, so that its stem was *-se-*/*-sase-*. (The alternant *-se-* is analyzed as added to a consonant-final stem augmented with *a*; a segmentation that instead assigns that *a* to the suffix yields *-ase-*/*-sase-*.)

opposed to 102 times for *kak-ase-ru*. Reflecting this, *-(s)as-* is absent from conjugation tables for the modern language (Yamaguchi and Akimoto 2001: 908), although it remains in speaker consciousness as an informal or regional variant.

Consider now the morphological relationship between the syntactic causative *niow-ase-* 'cause to smell' and the lexicalized verb *niow-as-* 'hint at' as the use of syntactic *-(s)as-* began to spread in the 17th century. With the establishment of variation between *niow-ase-* and *niow-as-* for 'cause to smell', it would not be surprising if that variation was extended to *niow-as-* 'hint at'. From the point of view of eastern dialect speakers in particular, the innovative variant *niow-as-* 'cause to smell' will have been perceived as a western regionalism, and if that perception were extended to *niow-as-* 'hint at', the creation of a variant *niow-ase-* would follow. It is thus probably not coincidental that the first citation (1799) of *niow-ase-* 'hint at' in the NKD is from a work by an Edo author (Rakutei Bashō, *Kuruwa Setsuyō*).[15]

For the contemporary language, similarly, the idea that ongoing extension of *-ase-* at the expense of *-as-* in cases like *mimi o sum-as(e)-* 'listen attentively' is motivated by the desire to avoid forms that could be perceived as dialectal and thus nonstandard has been proposed in anonymous online commentary.[16] That this tendency operates in particular with respect to forms in perfect *-ta* or gerund *-te*, suffixes that historically were added to the infinitive in *-i*, is suggested by the comments of Hasegawa (2007: 69 (note 3)), who reports that a form like *kusar-as-i-ta* 'caused to rot' as a variant of *kusar-ase-ta* may have a substandard or over-colloquial flavor that does not extend to the corresponding imperfect in *-(r)u*. That the extension of *-ase-* is driven by avoidance of *s*-stem forms with *t*-initial suffixes is borne out by the statistics of the BCCWJ in a number of cases where change is ongoing and both conservative and innovative forms are common. Thus for *mimi o sumas(e)-*, the conservative *s*-stem variant predominates heavily in the imperfect (50 *sumasu*, 11 *sumaseru*), but is favored by a much smaller margin in *t*-suffixed forms (83 *sumasita/te*, 63 *sumaseta/te*). For the combination *kosi o uk-as(e)-* 'raise one's lower back, begin to stand up; do restlessly' (for the idiomatic gloss, see Miyagawa 1989: 126), similarly, the variant in *-as-* predominates narrowly in the imperfect (10 *ukasu*, 8 *ukaseru*), but is outnumbered nearly two-to-one by *-ase-* in *t*-suffixed forms (33 *ukasita/te*, 64 *ukaseta/te*).

If the replacement of *-as-* by *-ase-* is indeed motivated by avoidance of forms that could seem dialectal or substandard, we might expect that replacement to operate most reliably in cases where the corresponding intransitive is suffixless,[17] as it is for example in *mimi o sum-as(e)-* (cf. *sum-* 'be clear'), since in that case the stem in *-as-* will coincide with a western causative. In the majority of examples, this is in fact the case, but ongoing replacement of *okur-as-* 'delay' by *okur-ase-* in the presence of intransitive *okur-e-* 'be late' and of *kir-as-* 'run out of (a product)' by *kir-ase-* in the presence of *kir-e-* '(a product) runs out' (cited by Kuroda (1993: 19) as examples establishing the existence of lexical *-ase-*) shows that this restriction is not absolute. In the case of *okur-as(e)-*, dictionaries have entries only for the form in *-as-*, but the BCCWJ shows a scant 10 instances of *okur-as-* over the forms I/P/G (4%) as against 271 for *okur-ase-* (96%), suggesting that replacement of *-as-* by *-ase-* in this case is essentially complete. In the case of *kir-as(e)-*, on the other hand, conservative *kir-as-* remains dominant, with 137 occurrences in the BCCWJ (58%) versus 100 for *kir-ase-* (42%).

In fact, examples involving the suffix *-(a)kas-* show that the tendency in question is not limited to the suffix *-as-*. Consider the case of *ne-kas(e)-* 'put to sleep' (cf. intransitive *ne-* 'sleep'). The NKD shows that while *ne-kas-* is attested from the middle of the 18th century, *ne-kase-* appears only at the end of the 19th.[18] In the BCCWJ, however, *ne-kase-* is far more frequent, with 369 occurrences over the forms I/P/G (83%) as against 78 for *ne-kas-* (17%). In another stem involving *-(a)kas-*, *amay-akas-* 'indulge, spoil' (cf. intransitive *ama(y)-e-* 'presume upon'), the BCCWJ indicates that replacement with *amay-akase-* is still in an incipient stage, with 146 instances of the conservative form (98%) and only 3 of the innovative form (2%). Internet searches, however, suggest that *amay-akase-* is already quite common.

The picture that emerges from the above observations is that of a very general tendency to replace *s*-stem conjugation with *se*-stem conjugation in transitive verb stems, driven at least in part by speakers' desire to avoid forms

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[15] Conversely, the first citation (1696) of innovative *aw-as-* 'join' (see Table 1), competing with the *aw-ase-* that dates back to the 8th century, is from western Japan (Tominaga Heibee, *Kumanosan Kaichō*).

[16] https://detail.chiebukuro.yahoo.co.jp/qa/question_detail/q1343185618; see also https://oshiete.goo.ne.jp/qa/8070018.html (accessed November 21, 2020).

[17] Harley (2008: 49 (note 22)) claims that "lexical *sase*" is in fact restricted to such cases.

[18] The putative NKD example of *ne-kase-* from 1750-76 appears to be misclassified. The form is *nekaseba* 'if (one) lays (it) down', arguably to be analyzed as an *s*-stem provisional *ne-kas-eba*. The alternative analysis *ne-kase-ba*, with *-ba* added to the *mizenkei* of *ne-kase-*, is rendered unlikely by the fact that conditional *mizenkei* + *ba* had for the most part gone out of use by 1600 (Sakakura 1975: 273).

that might be perceived as nonstandard. Like many other morphological changes, however, this tendency appears to be checked by high token frequency, as illustrated by the resistance to change of *her-as-* 'decrease (tr.)', whose token frequency as recorded in Table 1 is more than ten times greater than that of any of the other verbs surveyed apart from *sum-as-* 'clarify'. While there is a clear need for further work documenting this tendency in detail and exploring its motivation more systematically, it seems undeniable that it will continue to influence the evolution of transitive stem-formation for the foreseeable future.

5 Summary and conclusion

Let us review the conclusions we have reached above.

1. a. In addition to the syntactic causative suffix *-(s)ase-*, which undergoes a morpheme-specific *s*-zero alternation at its left edge depending on the C/V polarity of the preceding segment, there is a lexical transitivizing suffix *-(a)se-* that undergoes under the same conditions an *a*-zero alternation that is general in the stem-level phonology.
   b. Since the UR of *-(s)ase-* must contain the *s* of its post-vocalic alternant, the two suffixes are phonologically distinct.
   c. Failure to recognize *-(a)se-* and consequent identification of lexical *-ase-* with *-(s)ase-* renders it inexplicable that lexical *-ase-* has no postvocalic alternant *-sase-* and makes it impossible to capture the phonologically regular relationship between lexical *-ase-* and the post-vocalic alternant that it does have, *-se-*.
   d. The division of labor between syntactic *-(s)ase-* and lexical *-(a)se-* invites the conclusion that no causative suffix is syntactic in some instances and lexical in others. If so, causatives pose no obstacle to the position that while Japanese inflectional morphology is syntactic, derivational morphology involves lexical listing of stems.

2. a. With minor exceptions, verb stems in *-ase-* are variants of pre-existing stems in *-as-*. The suffix involved is *-(a)se-*; given pre-existing *-as-*, it cannot be *-(s)ase-* under any analysis adopting the principle that lexical *-(s)ase-* is blocked by a competing transitivizer.
   b. The presence of *-ase-* in an apparent VP idiom does not entail that *-ase-* is part of the lexical form of the idiom; in some cases, a transitive idiom in *-ase-* is to be analyzed as the syntactic causative of a corresponding intransitive idiom. While some putative instances of lexical *-(s)ase-* are lexical *-(a)se-*, then, others are syntactic *-(s)ase-*.
   c. The hypothesis that a competing transitivizer should block idiomatic use of *-ase-* is subject to two systematic types of counterexample. Further, it is not a cogent explanation for cases in which idiomatic *-ase-* fails to occur because of the lack of any expectation that the putatively blocked item should otherwise be observed. Finally, the blocking hypothesis is rendered superfluous as an account of the distribution of lexical *-(s)ase-* by the failure of that form to exist.

3. a. The range of examples in which transitivizing *-as-* is replaced by *-ase-* over time includes not only cases in which the corresponding intransitive stem is suffixless (the great majority), but cases in which the intransitive stem has a non-null suffix (*okur-as-* > *okur-ase-* 'delay'; cf. intr. *okur-e-* 'be late') and cases in which *as* is part of a larger suffix (*ne-kas-* > *ne-kase-* 'put to sleep'; cf. intr. *ne-* 'sleep').
   b. Both in the case of syntactic *-(s)as-* ～ *-(s)ase-* and in the case of lexical *-(a)s-* ～ *-(a)se-*, replacement over time of stems ending in *as* by stems ending in *ase* appears to be driven at least in part by a tendency to favor eastern dialect forms over western dialect forms or forms that could be perceived as such.

It is worth considering briefly why our conclusions about Japanese causatives differ from those of Miyagawa and Harley. I would identify the root of those differences with two assumptions that those authors make but that we have not. The first is that any occurrence of causative or transitivizing *-ase-* represents the suffix *-(s)ase-*. We have seen that, because there is also a derivational suffix *-(a)se-*, this assumption is unwarranted. The assumption that all *-ase-* are *-(s)ase-* leads to the misidentification as lexical *-(s)ase-* of items that are in fact lexical *-(a)se-*, as in the case of *aw-ase-* 'join' (Miyagawa 2012: 198-199). The second assumption made by Miyagawa and Harley that we have found unwarranted is that any occurrence of *-ase-* that is "associated with noncompositional meaning" (Miyagawa 2012: 206)

is lexical—that is, root-selecting.[19] We have seen two types of exception to this principle. The first is exemplified by *me o hikar-ase-* 'keep a close watch', where we claimed that the lexicalized idiom is simply [[DP me $_{DP}$] hikar $_{VP}$], with a null possessor DP controlled by the causative subject when the idiom is selected by syntactic *-(s)ase-*. The second kind of exception is exemplified by *saihu o ake-sase-* 'make (someone) pay', where *-(s)ase-* is clearly internal to the lexicalized idiom, but must be syntactic because it selects a transitive vP. The assumption that "associated" noncompositional meaning unfailingly diagnoses lexical status for a causative suffix, then, leads to the misidentification as lexical *-(s)ase-* of items that are in fact syntactic *-(s)ase-*.

In closing, I return to a topic discussed in section 2.2 and comment on what the case of Japanese causatives appears to show about the feasibility of high attachment versus low attachment analyses, in which a single affix plays a role in both inflection and in derivational stem-formation, selecting vP in the former case and √P in the latter. Such analyses raise both semantic and phonological issues, but I concentrate here on phonology.

Many students of Japanese have commented on the similarity between the transitive stem formant *-(a)s-* and causative *-(s)ase-*, on the one hand, and the intransitive stem formant *-(a)r-* and passive *-(r)are-*, on the other. While details of the connection remain elusive (see Frellesvig 2010: 237), it seems fair to say that, in creating the "new" causative and passive suffixes, in particular their postvocalic alternants, in roughly the 9th and 10th centuries, speakers reused and adapted existing suffixal material. In the Japanese case, then, this diachronic development lies behind the similarities between inflectional and derivational morphology that can be seen as motivating an analysis that directly identifies the two.

In order for a high/low attachment analysis to be plausible phonologically, however, any differences of detail between the two versions of the suffix will need to be analyzable synchronically as the result of general principles. In section 2.2, we noted that if a particular analysis of inflectional suffix alternations is adopted, the high/low analysis of *-are-* as both an intransitive formant and a passive suffix will work phonologically: the high and low versions of the suffix undergo distinct alternations, but both of the alternations are regular, one at the stem level and one at the word level. In contrast, *-ase-* cannot be treated both as a transitive formant and as a causative suffix, we claimed, because the morpheme-specific *s*-zero alternation of the latter means that the respective phonological forms of the two suffixes must be distinct. To the extent that the Japanese case is typical, then, the viability of a high/low attachment analysis in any given case is likely to be sensitive to contingent diachronic facts.

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[19] In explicating the relevant phrase structure, Miyagawa (2012: 204-205) writes "VP" rather than "√P", but the heads of his VPs are roots, as in his example *ag-*, a root that underlies intransitive *ag-ar-* 'rise' and transitive *ag-e-* 'raise'.

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