Syntactic and Lexical *-ase-* are Distinct Suffixes [version 2, February 2021]
Brent de Chene, Waseda University (emeritus)

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 postvocalic 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 the phonological realization of syntactic representations, 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 (e.g. *nao-s-* 'make better', *nao-r-* 'get better'), a process that has been widely seen (Harley 2012, Marantz 2013) as supporting the Distributed Morphology (DM) view that the creation of stems from roots is performed by the syntax, cannot in fact be analyzed as syntactic. Perhaps the most decisive evidence is the fact that when two derivational stem-forming suffixes occur in sequence, the outer suffix cancels or overrides the properties of the inner one rather than composing with it semantically. In particular, 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. tuna   [[R]n]   'rope'
     b. tuna-g-   [[R]v_c]   'connect, tie together'
     c. tuna-g-ar-   [[[R]v_c]v_i]   'get connected'

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 ("(t)" and "(i)" abbreviate "(transitive)" and "(intransitive)", respectively).

(2) a. mata-g-ar-   'straddle (i)'   (cf. mata 'crotch, fork', mata-g- 'step over, straddle (t)')
     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 that 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 reason is that if causative *-(s)ase-* can form both syntactic and lexical causatives, that fact might be taken to suggest that both types of causative must be treated in the same grammatical component (Miyagawa 2012: 202) and that, by extension, the same is true of inflectional and derivational morphology more generally. 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 that is so, however, causative *-ase-* poses no obstacle to the view that inflectional and derivational morphology are treated in distinct components of the grammar, with inflected forms generated syntactically, but stems that result from derivational processes 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-*. With regard to the proposal that a stem formed with a competing transitivizer will block the idiomatic use of *-ase-*, it shows that the predictions of that proposal are falsified by two classes of counterexamples and points out that putatively blocked idioms that fail to occur are not in fact 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 stem-internal boundary (typically, 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 $t \sim d$ after all stems, and those that alternate between a consonant-initial form (or zero) after vowel-final stems and a vowel-initial form after

---

[1] In a small number of examples, 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').

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 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. 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)-(11). The suffix *-(a)si-* of (11) forms adjective stems; all other suffixes shown form verb stems.

(4) 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')

(5) a. yur-ag-   'swing (i)' (cf. yur-e 'swing (i)', yur- 'swing (t/i)')
    b. ao-g-   'look up at, look up to' (cf. ao-muk- 'face upward' (muk- 'face'))

(6) a. wak-at-   'divide, separate' (cf. wak-e- 'separate (t)')
    b. ta-t-   'cut off' (cf. ta-e- 'die out', ta-y-as- 'eliminate, exterminate')

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

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

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

(10) a. sam-as-   'cool (t)' (cf. sam-e- 'cool (i)')
     b. utu-s-   'transfer, reflect' (cf. utu-r- 'be transferred, reflected')

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

If, as in DM, stems are syntactically constructed, stem-internal phonology will be generative, with the alternants of derivational suffixes related to each other by phonological rule. In this context, if the longer alternant of each suffix is underlying, hiatus at root boundary will be resolved by deletion of suffixal *a*, as in (12).

(12) $a \rightarrow \emptyset \, / \, V + \underline{\quad}$

a-Deletion will be a rule of the stem-level phonology, as opposed to *r*-Epenthesis, which operates within combinations

of stem and inflectional suffix and is thus part of the word-level phonology. If stems like those of (4)-(11) are lexically listed, on the other hand, the $a \sim \emptyset$ alternation will be represented by a bidirectional redundancy rule of the form (13).

(13) $aC / C + \_\_ \quad \leftrightarrow \quad C / V + \_\_$

The fact that there are no non-alternating *a*-initial suffixes, captured in the generative account by rule (12), will be the result of the rightward implication of (13); the fact that there are no non-alternating consonant-initial suffixes, captured in the generative account by the fact that suffix URs are all vowel-initial, will be the result of the corresponding leftward implication. Section 2.2 considers two further cases of the $a \sim \emptyset$ alternation codified by (12) and (13).

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

In addition to the intransitivizing suffix *-(a)r-* of (9) above, there is an intransitivizing suffix *-(a)re-*, as seen in the examples of (14)-(15).

(14) a.   wak-are-   'separate (i)' (cf. wak-e- 'separate (t)')
     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')

(15) a.   kaku-re-   'hide (i)' (cf. kaku-s- 'hide (t)')
     b.   kobo-re-   'spill (i)' (cf. kobo-s- 'spill (t)')
     c.   tao-re-   'fall over' (cf. tao-s- 'push over')

The postconsonantal alternant *-are-* of this suffix is identical to the postconsonantal alternant of the passive suffix *-(r)are-*. Furthermore, we have suggested that this postconsonantal form coincides with the UR of the suffix in both cases, assuming a generative account of the $a \sim \emptyset$ alternation. Finally, while derivational *-are-* and passive *-are-* are morphophonologically distinct, the first undergoing *a*-Deletion and the second undergoing *r*-Epenthesis, this difference, in accordance with the observations of section 2.1, 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.

Just as intransitivizing *-(a)r-* is paired with *-(a)re-*, the transitivizing suffix *-(a)s-* of (10) coexists with a suffix *-(a)se-*, illustrated in (16)-(17).

(16) a.   aw-ase-   'match (t), bring together' (cf. aw- 'match (i), get together')
     b.   sir-ase-   'inform' (cf. sir- 'know')

(17) a.   mi-se-   'show' (cf. mi- 'see')
     b.   ni-se-   'model on' (cf. ni- 'resemble')
     c.   ki-se-   'dress s.o.' (cf. ki- 'put on')
     d.   abi-se-   'pour over s.o.' (cf. abi- 'pour over oneself')
     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 postconsonantal alternant *-are-* of the suffix of examples (14)-(15) is identical to the postconsonantal alternant of the passive suffix, the postconsonantal alternant *-ase-* of the suffix of examples (16)-(17) is identical to the postconsonantal 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-*

4

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 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 postvocalic environment; the two alternants will thus be collapsible with angled brackets as <s>ase </ V__>. 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-*, and in particular its initial *s*, must thus be part of the phonological representation of the syntactic causative suffix regardless of how the *s* $\sim$ Ø alternation of that suffix is analyzed, it cannot be part of the phonological representation of lexical *-ase-*: the latter, rather than alternating with *-sase-*, undergoes *a*-Deletion after a vowel in the same way as do the suffixes of (4)-(11) and (14)-(15).

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 be observed, 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. Correspondingly, distinguishing lexical *-(a)se-* from syntactic *-(s)ase-* allows the *-se-* of (17) to be treated as an alternant of the *-ase-* of (16) under rule (12) or (13), thus unifying the treatment of that suffix pair with the treatment of the suffixes of (4)-(11) and (14)-(15). 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 postvocalically in its lexical uses, and *-se-* will be a derivational suffix unrelated to the *-ase-* of (16) 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 create no problem, as indicated in section 1, for the position that while inflectional morphology is syntactically derived, derivational morphology involves lexical listing of stems. 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 (i)' 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 (16) 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 postconsonantal 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-* ((10a) 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 it 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, starting with an introduction to the phenomenon of possessor-raising causatives in section 3.2.1. Section 3.2.2, noting that a transitive idiom in *-ase-* whose meaning is predictable in terms of the meaning of a corresponding intransitive idiom does not provide evidence that the *-ase-* in question is lexical, argues that Miyagawa's (1989) proposed examples of lexical *-(s)ase-* in idioms are in fact either syntactic *-(s)ase-* or lexical *-(a)se-*. Section 3.2.3, finally, summarizing the available evidence concerning the hypothesis that *-ase-* in an idiom is blocked by the existence of a lexicalized transitive stem, concludes that that hypothesis is both empirically unsupported and, because the phenomenon it is intended to account for does not in the end exist, superfluous.

3.1 Verb stems: lexical *-ase-* as a historical development of *-as-*

The lexical status of *-ase-* in the two examples of (16), *aw-ase-* 'match (t), bring together' and *sir-ase-* 'inform', is generally held to be established by a ban on successive occurrences of syntactic *-(s)ase-* (Martin 1975: 288, Kuroda 1993: 8-10, Miyagawa 2012: 198) together with the fact that *aw-ase-sase-* 'cause to match (t)' and *sir-ase-sase-* 'cause to inform' are unproblematically acceptable (Kuroda 1993: 23-24); we will return to the restriction on double *-(s)ase-* in section 3.2.2. *aw-ase-* and *sir-ase-* are attested in Old Japanese (8th century) and thus predate the consolidation of the productive causative suffix *-(s)ase-* (see Frellesvig 2010: 63). Other stems that can be argued to illustrate lexical *-ase-*, on the other hand, are first attested much later. A clear example is *niow-ase-* 'hint at' (cf. niow- 'smell (i)'), 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 is evident, 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, the BCCWJ contains 17 occurrences of *niow-as-* (14%) and 104 of *niow-ase-* (86%) in the meaning 'hint at' 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 (18), and the fact that it is subject to syntactic causativization, as in (19) (a constructed example), argues for its lexical status.[3]

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

(19) Ka-tyoo   wa bu-tyoo   o   aser-ase-yoo   to   omot-te
      section-chief TOP department-chief ACC become.anxious-CAUS-VOL QUOT think-GER
          kaname no syain   ni zisyoku   o   niowase-sase-ta.
          linchpin GEN employee DAT resignation ACC hint.at-CAUS-PF
      'The section chief, seeking to rattle the department chief, had a key employee hint at resigning.'

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'. The Japanese of the 11th century will in principle have had a contrast between [[niow] as ᵥ] 'hint at' (among other meanings) and [[[niow]ᵥ] ase] 'cause to smell, give off a smell'; note in this connection (see also section 4 below) that the *s*-final variant *-(s)as-* of the syntactic causative suffix *-(s)ase-* did not appear until the Muromachi period, 1336-1573 (Yamaguchi and Akimoto 2001: 285, 358). Starting by 1800, the tendency to replace *-as-* by *-ase-* in [[niow] as ᵥ] 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; the latter is illustrated in (20), another dictionary example.

(20) Kanozyo wa itumo koosui o honoka-ni niow-ase-te i-ru.
      She TOP always perfume ACC faint-INF smell-CAUS-GER be-IMPF
      'She always gives off a faint 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.

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 if, as Miyagawa and Harley assume, *niow-ase-* 'hint at' exemplifies *-(s)ase-*: the lexical causative *niow-as-* should have blocked the emergence of *niow-ase-*.[4] 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 (t)' is taken to render ungrammatical the causative *wak-ase-* of *wak-* 'boil (i)'. 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,[5] Kuroda (1993: 44) points out that *wak-ase-* is unproblematic in the permissive (or 'noninterventive') 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-*, 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

---

[4] 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).

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

of *-as-* by *-ase-*, let us ask if there are alternatives to the above account of the introduction of innovative *niow-ase-* 'hint at', in particular alternatives that are consistent with Miyagawa's claim that *-(s)ase-* may function as a lexical suffix just when there is no competing transitive stem—equivalently, that *-(s)ase-* can select a given root if and 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 the independent evidence we will see below 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 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 in the case of *niow-as(e)-*, the historical priority of *-as-* over *-ase-* is particularly clear: 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-* 'match (t)' 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 (i)'	niow-as-	1001	17 (14%)	niow-ase-	1799	104 (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%)[6]
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 is recorded as predating 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 the failure of the NKD to recognize the stem in *-ase-* effectively eliminates the possibility that that stem is older than its counterpart in *-as-*. The data of Table 1, then, are 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 that table, 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[7]

In a typical causative sentence, there is a clear distinction between causing and caused events, and the causative subject, 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 (21a) and (21b).

(21) 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 (21a), 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 (21b), 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. (22) is a parallel pair of examples.

(22) a. Sakura no ki no hana ga   migoto-ni   sai-te   i-ta.
      cherry GEN tree GEN flower NOM splendid-INF bloom-GER be-PF

---

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

Examples (23) and (24) (adapted from a blog entry and a newspaper article, respectively), 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.

(23) [Gyo-kyoo no kei-tora]ᵢ ga [Øᵢ hata o nabik-ase-Ø], toozyoo si-ta.
     fishing-coöp GEN light-truck NOM flag ACC flutter-CAUS-INF appearance do-PF
     'The light truck of the fishing coöp, its flag fluttering, made its appearance.' (lit. 'made its flag flutter and ....')

(24) [Sentoo no naginata-boko]ᵢ ga [Øᵢ 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 ....')

(21b), (22b), and (23)-(24) 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 (21b), (22b), and (23)-(24), 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 (25).[8]

(25) 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 (25a), 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 (21)-(24), the *ni yotte* paraphrases are degraded or frankly unacceptable (for simplicity, I mark both the Japanese sentences and their English translations with the asterisk):

(26) a. Sakura no ki ga hana o sak-ase-te i-ta. (cf. (22b))
        cherry GEN tree NOM flower ACC bloom-CAUS-GER be-PF
        The cherry tree was blooming (lit. 'making its flowers bloom').

---

[8] 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.

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.'

(27) a. Densya ga syarin o kisim-ase-te i-ta. (cf. (24))
   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 (26a) and (27a) 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). If so, pairs like the (a) and (b) sentences of (21) and (22) are paraphrases of each other. While many details of this analysis remain unelaborated, what is important for our purposes is that that paraphrase relationship is naturally taken as indicating that possessor-raising causatives 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 the relatively infrequent *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 (21)-(24), 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 (28).

(28) 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 (28b), *doosookai no sankasya* 'the participants in the reunion', is absent from (28a), but the referents of that noun phrase are present in the situation that (28a) represents. This characteristic sets (28b) apart from an unmarked causative sentence, where 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 virtually synonymous intransitive counterpart *me ga hikar-* (lit. 'eyes shine') in (29) (either expression may also take a DP in *ni* representing the object of surveillance).

(29) 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 (29) is precisely parallel to that observed in (21) and (22). Unlike in those cases, however, the causative subject of (29b) 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 (29b) 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 is naturally 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 must be noted, however, that this conclusion is at odds with Kuroda's (1993: 31) claim that the applicability of syntactic causativization to *me o hikar-ase-* entails, under the ban on double *-(s)ase-* noted at the beginning of section 3.1, that that expression involves lexical rather syntactic *-ase-*. Regarding this question, I would like to suggest that the ban on double *-(s)ase-* is probably too strong, and that there are in fact well-defined circumstances under which double causatives are systematically allowed.

Consider the verbs *karam-* 'twine/wrap around (i), come into relation with' and *karam-e-* 'twine/wrap around (t), bring into relation with' (cf. also *karam-ar-* 'twine/wrap around (i), get tangled'). It might be expected that transitive *karam-e-* would block use of causative *karam-ase-*, in particular in the expression of manipulative causation, but this expectation is not borne out. In the meaning 'entwine the fingers (individually or mutually)', for example, both *yubi o karam-e-* and *yubi o karam-ase-* occur freely; the frequencies of those expressions in the BCCWJ over the forms I/P/G are 6 for the former and 4 for the latter. Given that *karam-ase-* is unambiguously a syntactic causative, a strict interpretation of the ban on double *-(s)ase-* would predict the ungrammaticality of *karam-ase-sase-* 'cause to entwine'. It is not difficult, however, to find cases that counterexemplify this prediction, as in (30)-(31), adapted from a blog and an online novel, respectively.

(30) Kagi ni asi o   karam-ase-sase-ta.
     key LOC leg ACC wrap.around-CAUS-CAUS-PF
     'I got it to wrap its legs around a key.' [it = stag beetle]

(31) Kubi ni ude o   karam-ase-sase-ta.
     neck LOC arm ACC wrap.around-CAUS-CAUS-PF
     'He had her wrap her arms around his neck.'

While space limitations preclude in-depth exploration of the issue here, it seems natural to conjecture that the syntactic causative of an unaccusative clause is systematically subject to causativization in spite of the fact that the result is a sequence of two syntactic *-(s)ase-*. Thus, in another of Kuroda's (1993: 9, 32) examples, *hatarak-* 'work' is unergative in the meaning 'perform labor', but unaccusative in the meaning 'function, be activated'; as a result, *X *ni heitai-tati o hatarak-as-ase-ru* 'make X make the soldiers work' (with the short form *-(s)as-* of *-(s)ase-* before another auxiliary) is degraded, but X *ni atama o hatarak-as-ase-ru* 'make X use her head' (lit. 'make her head work') is fine. If this is so, the double causative test does not provide as direct a window on the lexicon as is often assumed, and causativization of an example like *me o hikar-ase-* does not speak against the hypothesis that the *-ase-* in question represents syntactic *-(s)ase-*.[9,10]

I have suggested 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 15 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. (32), based on (17c) from Miyagawa 2012: 201, illustrates lexicalization of a vP headed by *-(s)ase-*.

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

---

[9] Another consequence of taking double causatives on unaccusative clauses to be grammatical is that we will not expect the haplology rule for unacceptable double *-(s)ase-* (Shibatani 1976a: 244, Kuroda 1993: 10, Miyagawa 2012: 198) to apply to them. I note parenthetically that I have had trouble confirming the existence of the haplology rule with nonlinguist native speakers.

[10] If *hikar-ase-* were to be lexical, on the other hand, it would receive a natural interpretation as another case of lexical *-as-* being replaced by lexical *-ase-*, as suggested by the relevant Table 1 entry.

The lexical verb stem involved is *ak-e-* 'open (t)', so that (omitting Spec(vP), the DP of (32)), 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 (33) below, based on Miyagawa's (2012: 200) (15), in spite of the fact that in that case no stem-forming suffix appears.

(33) 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 (33); the idiom thus has the form [[[[[tabe]V]VP] v vP] sase], parallel to (32) except that the lexical verb takes no internal argument. While it might look at first sight as if *-sase-* in (33) 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 (33) is consistent with the position that *-(s)ase-* attaches only to a verb stem—in syntactic terms, that it always selects vP (or VP).[11]

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.

3.2.3 Conclusion: 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 (34) below.

(34) 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.'

---

[11] Miyagawa (2012: 198-199) presents an example with *i-sase-sase-ta* 'made (X) make (Y) remain' and argues that the ban on double (syntactic) *-(s)ase-* entails that the first *-sase-* thereof must be lexical. The native speakers I have consulted about this example, however, find it anomalous. If that judgment is reliable, *i-sase-* (as suggested by its compositional semantics) is not lexicalized, and *i-sase-sase-* is a violation of the double *-(s)ase-* ban. Note in this connection that *i-* 'remain' is unergative (*Iku no? Iru no?* 'Are you going or staying?'), so that the exemption to the double *-(s)ase-* ban proposed above for unaccusatives is inapplicable.

Unlike the *-ase-* of *mimi o sum-ase-*, the *-ase-* of (34) is clearly not a variant of pre-existing *-as-*. Rather, it is arguably syntactic *-(s)ase-*, with (34) 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 (35) below, involves a non-agentive subject, so that the meaning is indistinguishable from intransitive *hara ga her-*, and the example, like (34), is plausibly analyzed as a possessor-raising causative.

(35) 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 kaes-* '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 kaer-ase-*, based on the syntactic causative of the intransitive stem *kaer-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 are in fact observed, and many non-occurring cases cannot plausibly be said to be blocked. More generally, given that the blocking hypothesis is an attempt to specify when lexical *-(s)ase-* can occur, it presupposes that *-(s)ase-* can in fact be lexical—that is, √P-selecting. We have seen no reason, however, to believe that this is ever the case. If our conclusion in that regard is accurate, motivation for any blocking hypothesis for idioms evaporates, 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 was 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 Kyushu.[12] 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,

---

[12] In the following discussion, I exclude from consideration Hokkaido, settled heavily by Japanese speakers only in the late 19th century.

GAJ), *kak-as-u* is common in the Kansai and Chugoku 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 Kyushu 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.[13] 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 common or standard 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 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 (contrast p. 906)), 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*).[14]

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.[15] 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,[16] as it is for example in *mimi o sum-as(e)-* (cf. *sum-* 'be clear'), since in that case the stem in *-as-* will

---

[13] 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-*.)

[14] 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*).

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

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

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 over the forms I/P/G (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.[17] 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 that might be perceived as nonstandard. Like many other morphological changes, this tendency appears to be checked by high token frequency, as illustrated by the resistance to change of *her-as-* 'decrease (t)', 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 results of sections 2 through 4.

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 initial *s* of its postvocalic 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 postvocalic 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

---

[17] 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).

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 reason to expect 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 lexical *-(s)ase-* 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. intransitive *okur-e-* 'be late') and cases in which *as* is part of a larger suffix (*ne-kas-* > *ne-kase-* 'put to sleep'; cf. intransitive *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 that were cited above. 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.[18] 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 formants *-as-/-ase-* and causative *-(s)ase-*, on the one hand, and the intransitive stem formants *-ar-/-are-* 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.

---

[18] 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'.

Acknowledgments

References

Aronoff, Mark. 1976. *Word formation in generative grammar* (Linguistic Inquiry Monograph 1). Cambridge, MA: MIT Press.

Balanced Corpus of Contemporary Written Japanese: http://www.ninjal.ac.jp/corpus_center/bccwj/

Chomsky, Noam. 1995. *The minimalist program* (Current Studies in Linguistics 28). Cambridge, MA: MIT Press.

Chung, Sung-Yeo, and Masayoshi Shibatani. 2018. Causative constructions in Japanese and Korean. In Prashant Pardeshi and Taro Kageyama (eds.), *Handbook of Japanese contrastive linguistics* (Handbooks of Japanese Language and Linguistics 6), 137-172. Berlin: De Gruyter Mouton.

Deal, Amy Rose. 2017. External possession and possessor raising. In Martin Everaert and Henk van Riemsdijk (eds.), *The Wiley-Blackwell Companion to Syntax*, 2nd ed., 1509-1540. Hoboken, NJ: Wiley-Blackwell.

de Chene, Brent. 2016. Description and explanation in morphophonology: the case of Japanese verb inflection. *Journal of East Asian Linguistics* 25. 37–80.

de Chene, Brent. 2017. Root-based Syntax and Japanese Derivational Morphology. In Claire Bowen, Laurence Horn, and Raffaella Zanuttini (eds.), *On Looking into Words (and Beyond)*, 117-135. Berlin: Language Science Press.

de Chene, Brent. 2019. *r*-Epenthesis and Ryukyuan. *Gengo Kenkyū* 155. 101-130.

Frellesvig, Bjarke. 2010. *A history of the Japanese language.* Cambridge: Cambridge University Press.

Harley, Heidi. 1995. *Subject, events and licensing*. Cambridge, MA: MIT dissertation.

Harley, Heidi. 2008. On the causative construction. In Shigeru Miyagawa and Mamoru Saito (eds.), *The Oxford handbook of Japanese linguistics*, 20-53. Oxford: Oxford University Press.

Harley, Heidi. 2009. The morphology of nominalizations and the syntax of vP*. In Anastasia Giannakidou and Monika Rathert (eds.), *Quantification, definiteness, & nominalization* (Oxford Studies in Theoretical Linguistics 24), 321-343. Oxford: Oxford University Press.

Harley, Heidi. 2012. Lexical decomposition in modern syntactic theory. In Markus Werning, Wolfram Hinzen, and Edouard Machery (eds.), *The Oxford Handbook of Compositionality*, 328-350. Oxford: Oxford University Press.

Hasegawa, Nobuko. 2007. The possessor raising construction and the interpretation of the subject. In Simin Karimi, Vida Samiian, and Wendy K. Wilkins (eds.), *Phrasal and clausal architecture: Syntactic derivation and interpretation*, 66-92. Amsterdam: Benjamins.

Jackendoff, Ray. 1975. Morphological and semantic regularities in the lexicon. *Language* 51. 639-671.

Jacobsen, Wesley. 2017. Transitivity. In Masayoshi Shibatani, Shigeru Miyagawa, and Hisashi Noda (eds.), *Handbook of Japanese syntax* (Handbooks of Japanese Language and Linguistics 4). Berlin: De Gruyter Mouton.

Kokuritsu Kokugo Kenkyūjo [National Language Research Institute]. 1989–2006. *Hōgen bunpō zenkoku chizu* [*Grammar atlas of Japanese dialects*], 6 vols. Tōkyō: Kokuritsu Kokugo Kenkyūjo.

Kuroda, S.-Y. 1993. Lexical and productive causatives in Japanese: an examination of the theory of paradigmatic structure. *Journal of Japanese Linguistics* 15. 1-81.

Marantz, Alec. 2013. Locality domains for contextual allomorphy across the interfaces. In *Distributed Morphology today,* ed. Ora Matushansky and Alec Marantz, 95-115. Cambridge, MA: MIT Press.

Martin, Samuel. 1975. *A reference grammar of Japanese*. New Haven: Yale University Press.

McCawley, James. 1968. *The phonological component of a grammar of Japanese*. The Hague: Mouton.

Miyagawa, Shigeru. 1984. Blocking and Japanese causatives. *Lingua* 64. 177-207. Reprinted in Miyagawa, Shigeru. 2012. *Case, argument structure, and word order* (Routledge Leading Linguists), 169-194, 292 (notes). New York: Routledge.

Miyagawa, Shigeru. 1989. *Structure and case marking in Japanese* (Syntax and Semantics 22). San Diego: Academic Press.

Miyagawa, Shigeru. 1998. *(s)ase* as an elsewhere causative and the syntactic nature of words. *Journal of Japanese Linguistics* 16. 67-110.

Miyagawa, Shigeru. 2012. Blocking and causatives revisited. In Shigeru Miyagawa, *Case, argument structure, and word order* (Routledge Leading Linguists), 195-216. New York: Routledge.

Miyaji, Yutaka. 1969. *seru/saseru* (gendaigo) [*seru/saseru* (modern language)]. In Akira Matsumoto (ed.), *Kotengo/gendaigo joshi jodōshi shōsetsu* [*Detailed exposition of the particles and auxiliary verbs of the classical and modern language*], 89-96. Tōkyō: Gakutōsha.

Nihon kokugo daijiten dainihan henshū iinkai/Shōgakukan kokugo jiten henshūbu [Great dictionary of the Japanese language second edition

editorial committee/Shōgakukan Japanese dictionary editorial division], eds. 2000–2002. *Nihon kokugo daijiten* [Great dictionary of the Japanese language], 2nd ed. Tōkyō: Shōgakukan.

Oehrle, Richard, and Hiroko Nishio. 1981. Adversity. In Ann Farmer and Chisato Kitagawa (eds.), *Proceedings of the Arizona conference on Japanese linguistics* (*Coyote Papers* 2), 163-187. Tucson, AZ: University of Arizona Linguistics Circle.

Parsons, Terence. 1990. *Events in the semantics of English: A study in subatomic semantics* (Current Studies in Linguistics 19). Cambridge, MA: MIT Press.

Payne, Doris, and Immanuel Barshi (eds.). 1999. *External Possession*. Amsterdam: Benjamins.

Pylkkänen, Liina. 2008. *Introducing arguments* (Linguistic Inquiry Monograph 49). Cambridge, MA: MIT Press.

Sakakura, Atsuyoshi. 1975. *Bunshō to hyōgen* [*Text and expression*]. Tōkyō: Kadokawa shoten.

Shibatani, Masayoshi. 1973. Semantics of Japanese causativization. *Foundations of Language* 9. 317-373.

Shibatani, Masayoshi. 1976a. Causativization. In Masayoshi Shibatani (ed.), *Japanese generative grammar* (Syntax and Semantics 5), 239-294. New York: Academic Press.

Shibatani, Masayoshi. 1976b. The grammar of causative constructions: a conspectus. In Masayoshi Shibatani (ed.), *The grammar of causative constructions* (Syntax and Semantics 6), 1-40. San Diego: Academic Press.

Yamaguchi, Akiho & Morihide Akimoto (eds.). 2001. *Nihongo bunpō daijiten* [*Great dictionary of Japanese grammar*]. Tōkyō: Meiji Shoin.