The Vedic -āya-formations *

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0. INTRODUCTION

§0.1. This article is an investigation of the Vedic -āya-formations in the form of a discussion of S. Jamison’s recent book, a revised version of her 1977 Yale University dissertation written under supervision of S. Insler. It offers a thorough study of all -āya-formations attested in the Rgveda and Atharvaveda from a synchronic point of view. These formations, which show strong variation in root vocalism and function, raise several questions concerning their origin, meaning, and vocalism.

J.’s book is a conscientious, thorough and inspiring study, where also minor problems are subject to a meticulous analysis. It leaves no doubt that this book will prove an indispensable tool for any further investigation concerning not only Skt. -āya-formations and their Indo-European antecedents, but also the whole complex of problems in respect with PIE -i-presents. Moreover, I believe that every scholar, when discussing a passage from the Rgveda or Atharvaveda, would find it useful to consult J.’s index of passages because of the wealth of interesting observations to be found throughout the book.

In the following, I first give a rather detailed account of the contents of the book. Then I discuss several points which were either left out of consideration by J. or on which I disagree with her conclusions.

§0.2. Chapter I, "History of the Problem", deals with earlier analyses of Skt. -āya-formations. "By historical accident the investigation of the Skt. -āya-formations and their PIE antecedents has labored under great difficulty, because the study of the formation itself has always been ancillary to the discussion of Brugmann’s Law. Since every -āya-formation, at least in Vedic, was assumed to bear on the question of PIE vocalism, there has been no serious effort to sort out the Vedic evidence to discover what is relevant to the law and what is a later accretion... What is needed for the study of the -āya-formations and their history and of Brugmann’s Law is a synchronic investigation of the Skt. forms, unbiased by the expectations about the law" (23; cf. further on Brugmann’s Law below, §4.2). In her book, J. follows the approach of Thieme, who devoted a chapter to -āya-formations in his 1929 monograph. "In the formal sphere, Thieme recognized other sources for the Skt. -āya-formations beside the inherited *-ēye-formation", and "the major advance in his study is his discussion of the function of the formations in the RV, particularly the function of the forms traditionally labelled causative" (J., p.23). "Furthermore,

Thieme’s insistence on viewing each -āya-formation in the context of its IVS [Individual Verbal System] and his stress on its syntactical function suggest a fruitful method of approach and remove the emphasis from phonological to functional questions. Unfortunately, since Thieme’s monograph focused on various redupl. formations in the RV, with the study of the -āya- formations only as an adjunct to that of the redupl. aorist, his views on the -āya-formation are only presented briefly, and the details are incompletely worked out. It is even more unfortunate that for the most part his suggestions have not been adopted by other scholars" (24).

Chapter II, "Transitivity and Causativity", discusses these two concepts. First, J. gives her definition of the term ‘verb’, which in her book refers to a number of actual occurrences grouped together by formal (the same tense/aspect stem) and functional (mutual substitution in the same syntactic environment) criteria. Further, she states that transitivity is an ‘absolute’ category, as a verb can be classified as transitive without reference to any information outside the sentence. "In contrast, a verb is causative only by virtue of its relation to some other verb, and causativity is therefore a ‘relational’ category" (26).

After rejecting previous definitions of transitivity, J. proposes "to consider every verb frequently attested with the accusative a possible trans. verb. Only verbs that never appear with the accusative will be considered strictly intransitive. The large group of potentially trans. verbs, i.e. those that can take the accusative, can now be divided into transitive and I/T (= intransitive / transitive, AL) verbs by one of several criteria" (31). The first criterion is the variant case usage "without an important semantic difference" (31), which earmarks the verb as an I/T. By the second criterion, "some verbs which do not exhibit this variation in case can still be considered I/T by attraction, as it were", as "I/Ts fall into a small group of semantic categories, comprising verbs of consumption and giving, enjoyment, perception, and ruling" (32). For the further discussion of the I/T category I refer to §1.1.

J. introduces two further terms, ‘double I/T’ and ’double transitives’. The former is a causative to an I/T verb and "can be defined syntactically as a formation that appears with two complements, an obligatory first element in the accusative and an optional second one, which alternates between the accusative and another case" (34) and "can also be defined in another way, by the gloss 'make someone/something do x', where x is an action expressed by an I/T verb" (35). Similarly, the double transitive is a causative to a transitive verb and "can be syntactically defined as a verb that takes two complements in the accusative, one obligatory and one optional". There are no double transitives in the RV and AV, as transitive verbs could form no causatives in the Vedic period.

For causativity J. proposes the following test: "If the noun in the nom. case appearing with the first verb appears as an accusative with the second, the second functions as causative to the first" (36).

At the end of the chapter J. discusses a periphrastic construction with a form of ḫṛ ’make, do’ and a dative infinitive, which expresses causative relations in Vedic.
Chapter III, "Absolute Functions of the Vedic -āya-Formations", is a kind of preface to the material where all -āya-formations are presented in accordance with their syntax (intransitive-I/T-transitive-double I/T) and semantics (verbs of motion, shining, emotion, etc.).

Chapter IV, "Intransitive -āya-Formations", presents all intransitive -āya-formations in accordance with their position in the individual verbal system (IVS) defined by J. (10, fn.7) as "all and only those verbal formations built to a particular root in a particular period": first isolated intransitive -āya-formations are given, followed by -āya-intransitives serving as the only intransitive presents in their IVSs, and, finally, -āya-intransitives competing with another intransitive present in the RV. The same order of presentation is found in Chapters V and VI. At the end of the Chapter, J. shortly discusses the history and the origin of intransitive -āya-formations. For 16 of the 31 -āya-intransitives she assumes secondary origin, which may appear unusual for a moribund formation. According to her, "the motivation for the creation of the new formation was semantic" (66). The remaining 15 -āya-intransitives seem to be old and testify for a Common Indo-Iranian intransitive formation with *-āya-suffix (we shall discuss this formation in detail in section III). J. leaves open the problem of the origin of this formation: "it may be an innovation in Ilr., or it may continue a PIE formation of some type: either one identical to the transitive type with *-eye-suffix, except for its zero-grade vocalism, or a more radically remodelled form, such as the *ē-stative (as suggested to me by S. Insler, and argued for in my 1977 dissertation)" (67). A survey of the history of intransitives in the later language shows that this formation dies out rather soon.

Chapter V, "I/T -āya-Formations", presents all I/Ts with -āya-suffix. It follows that except for citāyati and kṛpayati, the reanalyzed intransitives, all -āya-I/Ts are of denominal origin. In later Skt., the -āya-I/Ts generally remain.

Chapter VI, "Non-Causative -āya-Transitives", discusses those -āya-transitives which do not serve as causatives to corresponding intransitive presents in their IVSs.

Chapter VII, "Causative -āya-Transitives", is the longest chapter of the book (73 pp.). J. proposes a classification of causatives based on the verbal stem to which -āya-transitives serve as causatives. In Types 1 and 2 the -āya-transitive corresponds to a root present (Class 2) or a simple thematic present (Classes 1 and 6), active in Type 1, medial in Type 2. In Types 3 and 4 the intransitive present is a -ya-present, active in Type 3, medial in Type 4. Type 5 is a three-termed relation, where the -āya-transitive appears parallel to another transitive active present, and both function as causative to a medial intransitive present. Beside these five major types, there are some minor ones (to which J. gives no number), comprising causative relations of -āya-transitives to perfects with present value and to various presents (reduplicated, nasal, and *-sko-pres-sents). After presenting the material of every type, J. discusses its history in older and later Skt. An important conclusion is that Types 3 and 4 become a regular pattern only in the post-RVic period.
Chapter VIII, "The History of the -āya-Transitives", deals with the prehistory and later development of all transitive and double I/T -āya-formations. J. points out that besides the PIE *o-grade *-ēye-formation and forms directly based on it, "there are three other distinct sources for -āya-transitives and double I/Ts in Vedic: deverbatives, denominatives, and forms built to roots with a long resonant as root vowel" (178). For deverbatives see below, §3.7, for denominatives fn. 3. A third source of -āya-transitives is not-ablauting roots with long resonants, like īkṣāyati 'makes see, seen', īrāyati 'raises', jīvāyati 'makes live', dūṣāyati 'spoils', sūdāyati 'sweetens', etc. These three types were productive in the Vedic period and must be left out of consideration when discussing the diachronic questions of the PIE *-ēye-formations. The rest of the chapter is dedicated to the questions of the original function of the inherited formation. First J. gives a list of Skt. -āya-transitives which have cognates outside of Indic and then discusses the original meaning of the PIE *o-grade *-ēye-formation in Vedic. She demonstrates that there is no evidence for iterative or intensive value of this formation and that its causative function is secondary. J. opts for Thieme's suggestion that the feature that characterizes all early reflexes of the PIE formation is transitivity (cf. further section 5 below), and explains how transitives have been reanalyzed as causatives, which later led to the creation of double transitive -āya-formations.

Chapter IX, "Voice", seeks to demonstrate that -āya-transitives and double I/Ts are prevailingingly active. The medial forms can be divided into three categories. In Type A, they are synonymous with their active counterparts and are almost entirely 3rd pl. forms ending in -anta (for this type cf. further §§3.5ff). In contrast, medial forms of type B are scattered through the paradigm and are intransitive, cf. 5,3,9 yātāyase 'thou shalt take thy place' to yātāyati 'puts in place'. In Type C, the -āya-transitive is always inflected in the middle, which results from semantic (reflexive or self-beneficial meaning) or systemic (parallelism with the other medial forms of the IVS) reasons. The same situation is found with the I/Ts and -āya-intransitives.

Chapter X, "Vocalism", which treats vocalism of all -āya-formations, is discussed below, section IV.

After a short summary, J. deals in an appendix with two formations associated with the -āya-transitives, viz. the -ita- past participle and the reduplicated aorist. J. shows that "both of these relations exist in the RV, the association with the reduplicated aorist being stronger by far than that with the -ita- past participle, but neither is original. The secondary nature of the relation is especially important to note with regard to the past participle, since this relation is often posited for PIE..., and on this basis arguments for the origin of the *-ēye-suffix (as an ablaut grade of *-i-) are sometimes made..." (214).

The book is concluded by a bibliography and two indexes, one of -āya-formations and one of passages.
I. THE INTRANSITIVE / TRANSITIVES (I/Ts).

§1.1. The category of intransitive-transitive verbs (I/Ts), which is posited by J. in addition to intransitive and transitive verbs, is linguistically relevant (esp. with respect to causativity, as causatives could be formed in Vedic only to intransitives and I/Ts) and I believe that this three-termed distinction allows better understanding of several processes which took place in Vedic (cf. J., p. 187f.). There are, however, two points concerning the I/Ts with which I disagree.

First, I would like to object to the procedure of assigning I/T value "by attraction". J. has observed that "I/Ts fall into a small group of semantic categories, comprising verbs of consumption and giving, enjoyment, perception, and ruling" (32). However, from this observation she draws the conclusion that we can assign a verb I/T value because it belongs to a particular semantic category. For instance, she writes about arthayate (70): "I assign it I/T value because other verbs meaning 'desire, enjoy' are I/Ts". I believe that such line of reasoning is incorrect and can lead to wrong conclusions. One can easily find examples in any language where verbs of the same semantic sphere show different rections, cf. Eng. desire, enjoy, but long for, hear and see, but listen to and look at, etc. Moreover, it appears that none of the twelve -āya-formations which have been assigned I/T value by J. does show both rections. It is certainly correct that verbs of the same semantic category can influence the rection of the verb, but this does not necessarily happen, so that assignment of the I/T value by attraction is unwarranted.

Second, J. writes that "the complement of the I/T can appear in the accusative or in another case without an important semantic difference" (31). I believe that this difference is essential. If variant case usage was purely syntactic, this cannot account for the fact that causatives are formed only to the "intransitive" constructions of I/Ts. We shall return to this matter in §5.2.

II. THE MATERIAL

§2.1. J. put an important restriction on the material, including only verbal forms with -āya- preceded by at least one syllable (9, fn. 3). Excluded by this criterion are presents like dáyate 'distributes', dháyati 'sucks', váyati 'weaves', etc., which, in my opinion, belong to -āya-formations. These verbs are also not mentioned in the index so that it is hard to find out how J. analyzes them. On p. 48f. (fn. 2), J. writes: "Narten cites, as parallel [to iláyati, AL], forms of the type dháyati 'sucks', supposedly from *dhə-ējēti, to root dhā (1968a: 248), but this presents functional difficulties. Though Narten herself sug<ests1 (p. 244) that the zero-grade -āya-

1 I found but few disturbing misprints:
p.27, last line: above → below;
p.31, l.24: stem → step;
p.49, l.15: (1959b) → (1955b);
p.84, fn.14: Jamison 1977, probably referring to J.’s thesis, is absent in the bibliography;
present formation is intransitive, *dhāyati* is not, but rather I/T, and other verbs often grouped with it, such as *vāyati* ‘weaves’, *hva*yati ‘calls’, are transitive. Since all certain zero-grade -*aya*-formations are intransitive, it seems unlikely that this would be violated only in this class. Furthermore, there are problems even in formal terms. In -*āya*-intransitives to other root types, there is an effort to produce a full root syllable before the suffix, even when this was not phonologically necessary, as in CaR roots with possible CR-*ayati* (e.g. *sarāyati*, not *srāyati*, cf. p. 201). The surface form of the *dhāyati* type violates this as well”.

The fact that this group of verbs contradicts J.’s conclusions is not enough reason to leave it out of consideration (for J.’s first argument see §4.1 below, for *sarāyati* section III). Moreover, J. nowhere provides an alternative analysis of type *dhāyati*. I presume that J. follows Insler’s idea (1968: 337, fn.31) that type *dhāyati* reflects *dH*aH-ati. This suggestion is untenable, however, because there is no evidence for -aH-a- yielding -*aya*-. Insler’s parallel, the forms of the personal pronoun *tvāyā* and *tvāyi* (according to him, from *tvāH-ā*, tvāH-i), does not hold because these forms are analogical after *māyā*, māyi, cf. the archaic RVic forms tvā, tvē (Burrow 1973: 265). Moreover, 1pl. *hvāyāmāsī* in 6,26,1 and 6,33,4 counts five syllables, which can only be explained if we assume a trisyllabic stem /hu‘aya-/ . This stem is found in Avestan, too: 1sg.subj. *zbayā* /zu‘ayā/, dat.sg.ppl. *zbayente* /zu‘ayantai/, which points to the PIIr. reconstruction *zH*aH-aya-ti (cf. Kuiper 1973: 194ff). Finally, *vāyati* ‘weaves’ cannot be explained as *vaH-a-ti*, as there is no laryngeal after *u* (cf. the ppl. *uta*-, AiGr. I, 94).

§2.2. It follows that verbs of type *dhāyati* must be included in the material, even though they provide problems with the eventual conclusion, viz. that all zero-grade -*aya*-formations are intransitive (we shall see below that this conclusion must probably be adjusted). Therefore, I give the relevant information about these verbs below, trying to follow J.’s presentation:

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p.104, fn.64, 1.2: *érathayanta* → *śrathayanta*;
p.91, 1.22: *snehīti* → *snehītī*;
p.109, 1.14: *agnī* → *agnih*; 1.28: context → contest;
p.129, last line: *āya*-intransitives → *āya*-transitives;
p.130, 1.25: 1000 → 100;
p.135, 1.21: because → became; 1.28: its → is;
p.142, fn.78, 1.3: sādā ... *abhīṣtaye* → sādā pāhy *abhīṣtaye*;
p.151, 1.18: intrans. → trans.;
p.178, 1.25: add *grbhātī*;
p.181, fn.7: omit *ūkhitā*- and;
p.199, 1.15: 3pl. *rāyan* → nom.sg.ppl. *rāyan*;

On the other hand, there are numerous printer’s mistakes like omitted or added letters, several times *amd* instead of *and*, points instead of comma’s, etc. Also the layout is tiresome: a line is skipped between every two paragraphs, but no line is skipped between passages dealing with different verbs, e.g. on p. 60. I am afraid this is the price we must pay for the first steps of the computerized printing.
kṣāyati 'rules over' RV 24x, AV 3x

This verb occurs 18x with a genitive, and 6x without complement. The verb seems therefore to be intransitive. The antiquity of an -aya-formation to this root follows from Av. and OP xṣayati-‘id.’, and, probably, Gr. κτάωμα ‘get, attain’. The present is isolated in Sanskrit.

dāyate 'distributes' RV 28x, AV 4x

dā 'distribute'

This present is used either with acc., or without complement. I would consider it transitive, but J. assigns I/T value to it in parallel to other verbs of giving (48, fn.2; for the criticism of this position cf. above, §1.1). Other forms of the root are root aor. dāti, dātu and s-aor. ávadisīya (2,33,5), cf. Kuiper 1974: 123ff. In the same article (p.126f), Kuiper argues that dāyate is a present of two other verbs: 'to destroy' < *deiH₁-e- (in 6,6,5; 10,80,2; with vī 3,34,1; 4,7,10; 6,22,9) and 'to pity' (in 7,23,5; etymology uncertain).

dhāyati 'sucks' RV 8x, AV 2x

dhā 'suck'

The only other forms of this root are pf. dadhuṣ (9,99,3 or to dhā- 'to put' ?) and the caus. dhāpayati. The present occurs either with acc. or without complement, but the fact that the causative has been formed to this present implies that dhāyati could also have intransitive value. Therefore, we may assign I/T value to it. Oss. dejyn 'id.' and OCS dojy 'to milk' show that the formation must be old.

vāyati 'weaves’ RV 12x, AV 4x

v “weave”

The verb is always transitive. The only other attested form is 3pl.pf. āvus (1,61,8). In view of Myc. ewepesesomena /ewepsēsomena/ ‘that must be woven’ < *H₁ueb₁-s- (Beekes 1969: 67), we may reconstruct *H₁u-eie-.

vyāyati 'envelops’ RV 8x, AV 8x

vī, vyā ‘envelop’

The present is always transitive and mostly active. Middle forms have the reflexive meaning 'to envelop oneself'. Other forms are pf. vivyē, vivyathus, and aor. vyata, which shows some intransitive forms at the end of book IX (+ loc.: 9,101,15; ā vyata + loc.: 9,101,14; 107,13; parī vyata + instr.: 9,69,5; 70,2; 86,32; 107,18).

śvāyati 'swells’ RV 1x

śū ‘swell’

The RVic hapax visvāyant- (7,50,1) is intransitive. In later Skt. (B.+), the present śvāyati is rather frequent. Further, attested is only pf. (3pl. śūsvuḥ, etc.). Oss.Ir. re-syjyn, Dig. re-sujun ‘id.’ and Gr. κνέω ‘be, become pregnant’ indicate that this present is likely be of IE date (< *kuH₁(e)₁-eie-).
hvāyati 'calls, invokes' RV 44x, AV 41x  

This transitive present is synonymous to two other presents of this root: [1] hāvati, [3] juhūmasi (for [6] huvema cf. Joachim 1978: 178). Beside these presents, we find pf. (juhāva, juhve), root aor. (āhūmahi; for hōma and hūmāhe cf. Joachim, 177f) and s-aor. (3pl.med. juhūṣata). Cognates in Avestan (zbayeiti 'id.') and Old Persian (patiy-azbayam 'ich ordnete an') guarantee at least a common PIIr. present.

III. INTRANSITIVE -āya-FORMATIONS AND THE ACTIVE PARTICIPLE

§3.1. The intransitive -āya-formations have a peculiar distribution, which has escaped J.'s notice. Reconsidering the evidence, we see that the great majority of the forms attested are active present participles or a 3pl.med. in -anta or -ante. In the following I present all forms in the same order as in J.'s book.

§3.2. ISOLATED FORMATIONS:

ilāyati 'is still':  
2pl. ilāyatā (1,191,6).

iṣāyati 'prospers, is strong':  
ppl. iṣāyat (11x), 3pl.inj. iṣāyanta (2,2,11), 1pl.opt. iṣayema (1,185,9), inf. iṣayādhyai (3x); GAv. cognate is equally a ppl. iṣaiās. This verb must be separated from a transitive verb iṣāyati 'sends' (J., p.100).

ūrjāyati 'is strong' (denom. ūrj- 'nourishment'):

ppl. ūrjāyant (2,35,7), ppl.med. ūrjāyamāna (10,37,11). It is not clear why ūrjāyant- in 2,35,7 should have the meaning 'strong' and not 'strengthening, nourishing' as elsewhere (5x). It seems that ūrjāyati is always transitive 'nourishes' (also 1x 3pl. ūrjāyanti), to which medial intransitive ūrjāyate is generated in accordance with J.'s Type B, cf. p. 194ff.

ṛtāyati 'acts according to the truth' (denom. ṛtā-):

ppl. ṛtāyat (5,43,7; 5,12,3), 3pl.med. ṛtayanta (8,3,14); cf. also ppl. ṛtāyant- (5,14,12).

kulāyāyati 'nests' (denom. kulāya- 'nest'):

ppl. kulāyayant (7,50,1).

tuṣāyati 'is still, content':

ppl. tuṣāyant (10,27,16); the intransitive character of this ppl. is uncertain.

vājāyati 'races, seeks booty' (denom. vāja- 'booty'):

ppl. vājāyant (8x); cf. also vājāyat (24x), with the same range of meanings, and trans. vājāyati 'incites' (16x);

vipāyati 'becomes inspired':

3pl. vipāyanti (7,21,2): prá yanti yajñām, vipāyanti barhiḥ, somamādo vidāthe dudhrā-
Sie kommen zum Opfer, sie machen das Barhis beredt, somatrunkan, bei dem Opfer trotzig redend' (Geldner). The passage concerns the pressing-stones (cf. Oldenberg, Noten and Geldner ad loc.), and it seems that *vipāyanti barhiḥ* refers to the trembling of the *barhiṣ* at the pressing of Soma. I do not understand J.'s objection that "in the numerous, rigidly typed passages concerning the ritual in the RV there is no precedent for such an action" (p. 51). In order to explain *vipāyanti* here as intransitive, J. supplies a form of the root *sadb* and translates: "They come forth to the worship. (Sitting) on the barhis, they become inspired, exhilarated on soma in the ceremony". This solution seems rather forced, and we must consider *vipāyati* as transitive.

*Vīra*- yate 'acts like a hero' (denom. *vīra*- 'hero'):
- 2pl.med.impv. -dhvam (10,103,6), 2du.med.impf. -yethām (I').

Suṣvāyati 'is fertile' (denom. suṣū- 'well-bearing'):
- ppl.fem. -anta (10,110,6), 3pl.med. -anta (7,36,6).

Spṛhayati 'is eager':
- 3pl. -anti (8,2,8), 3sg.opt. -ayet (1,41,9), 1sg.impf.-ayam (10,135,2); comp. spṛhayādvarṇa-, ger. spṛhayāyya.

Svarāyati 'shines' (denom. svar- 'sun'):
- ppl. svarāyant-(AV 1x).

§3.3. THE ONLY INTRANSITIVE PRESENTS IN THEIR INDIVIDUAL VERBAL SYSTEM:

Chadāyati 'seems, pleases':
- 7x finite forms, no ppl.; cognate to Av. saḍhaeitī, OP ḫadaya-.

Dhvasāyati 'smokes':
- ppl. dhvasāyant- (1,140,3.5), 2sg.inj. nī dhvasayas (10,73,6) 'envelops with smoke', where it seems to be transitive (J. tries to explain this form as intransitive (p.54f.), but her solution seems rather forced), cf. J.'s fine analysis of snehāyati 'envelops with snow, destroys' on p.91).

Stanāyati 'thunders':
- ppl. stanāyant- (16x), 3pl. -anti (I', IV', X'), impv. -a (5,83,7).

Svanāyati 'resounds':
- 3pl. -an (10,3,6) is secondarily built to stanāyati (J., p. 55f.).

§3.4. COMPETING WITH ANOTHER INTRANSITIVE VERB:

Krpa*yati 'mourns (for)'
- ppl. kṛpayant- (10,98,7), gen.sg. kṛpayatas (?; 8,46,16), 3sg.impf. akṛpayat (10,68,10) are transitive. There is no evidence that the verb was originally intransitive, as J. suggests (the ppl. simply means 'mourning, longing for').
citāyati 'appears':
occurs 21x in the RV and, according to J., is divided among four different meanings: 1. intr. 'appears' (13x); 2. I/T 'perceives' (4x); 3. trans. 'reveals' (2x); 4. double I/T 'makes perceive' (2x). This verb poses many difficult problems (cf. Geldner’s note ad 5,19,2a: "cit, citay ist ein sehr kompliziertes Verb"), but I think J. is right when she considers the intransitive meaning to be original (the I/T meaning 'to perceive' probably does not exist, but the discussion goes beyond the scope of this paper). The following forms of the intr. verb + the I/T are attested: 10x ppl.; 1x -anta; 2x -ante; 2x -ema; 2x -at. The forms in -ema (2,2,10; 4,36,9) occur with āti + acc. and can be analyzed as trans. āti-citayati. One of the -at forms (2,2,5) is used with ánū + acc. and can likewise be seen as trans. ánū-citayati. The other -at form is 1,180,8 and seems to be late.

tujāyati 'presses forward':
   ppl. tujāyant- (7,104,7).
turāyati 'hastens':
   ppl. turayant- (2x), 3pl.med. -ante (2,34,3).
dasayate 'becomes exhausted':
   3pl.med. -anta (5,45,3).
vī dyutayate 'shines forth':
   3pl.med. -anta (2,34,2).

dravayate 'runs':
   3pl.med. -anta (10,148,5).
nadāyati 'resounds':
   ppl. nadāyant- (2x), 3pl.med. -anta (1,166,5); the intransitive value is uncertain.

patāyati 'flies':
   ppl. (9x), finite forms (14x).

riṣayādhyai 'to be harmed' (1,129,8, in a difficult stanza).
rucayate 'shines':
   3pl.med. -anta (3,6,7).
sucāyati 'gleams':
   ppl. sucāyant- (5x).
śubhāyati 'is beautiful, splendid':
   ppl. subhāyant- (5,60,8); 3pl.med. -anta (7,56,16), -ante (1,85,3).
sarāyate 'runs':
   3pl.med. -anta (4,17,2).

heḍayati 'is angry':
   ppl. āheḍayant- (10,37,5).
§3.5. The material can be summarized as follows:
17 verbs occur only as a ppl. or a 3pl.med.;
10 verbs are attested in forms other than a ppl. or a 3pl.med.: ilayati, isayati, citayati, chadayati, patayati, risayadhya, vīrāyate, stanayati, sprāyati, svanayati. Of these ten, however, the finite forms of isayati (the only finite form is 1x -ema in book I), citayati (see above), and vīrāyate (attested only in the book I) are in general late; svanayati is secondary, and risayadhya is difficult;
4 verbs are transitive: ārjayati, vipāyati, dhvasyati, kṛpāyati.

The first question, which arises when we look at this summary, is what do the 3pl.med. forms have in common with the participle? It is significant that there is a clear metrical distribution between the ppl. and the 3pl.med. forms. The latter occur always at the same metrical position in the pāda, viz. in trīṣṭubh or jagati after the late caesura (after the fifth syllable), so that the two last syllables of the verb start the cadence. The forms in -anta are followed by a single consonant, the forms in -ante are followed by a vowel. As the 3pl.med. forms are limited to one single metrical position and are the only medial forms of the paradigm attested (the -aya-formations are in general active, see J., p.190ff.), we may conclude that they are nonce-forms, artificial formations secondarily built in order to suit the metrical demands.

J. considered the problem of the ending -anta in her book (p.190ff.) and in a separate article (Jamison 1979) where she has demonstrated that this ending often appears in verbs with entirely or predominantly active paradigms. These anta-forms are generally present injunctives to trisyllabic stems of metrical shape \( \overline{\text{CV}} \) and occupy the aforementioned metrical position. Moreover, J. has pointed out that the source of the expansion of the ending -anta must be in the -aya-formations (1979: 160). This is a first rate discovery and has important consequences for our understanding of the semantic value of the middle voice in Sanskrit.

However, I do not agree with J.’s conclusion that the ending -anta in these cases is a substitution of the active ending -an, which, according to her, is but weakly characterized. The weak position of -an may have played a role, but in my opinion, this view does not explain why the substitution is limited to augmentless forms in a particular metrical position in the pāda, and why there are so many verbs which contain only the active participles and the -anta-forms. We must rather look for a form which could not be used in this metrical position and was therefore substituted by the ending -anta. Such a form is the nom.pl. of the participle, -antah, which cannot be used in the cadence before a single consonant, as this would yield two subsequent long syllables. Therefore, I believe that the anta-forms were created as a metrical substitute for the nom.pl. ending -antah of the participle (cf. a comparable solution for the form svadayanta at 9,105,1 given by J., p.159\(^1\)). Note that the meaning of the injunctive resembles that of the participle. As to the forms in -ante, they appear in the Sanskrit text as -anta in the position before the vowel (-ante is written only in 1,85,3 subhāyante ānjībhis) and can be a later misinterpretation of the participle.
The fact that the 3pl.med. forms are a substitute of the nom.pl. of the participle metri causa leads us to an unexpected conclusion that 17 (and probably even more) of the 27 -aya-intransitives originally had only participles. Taking into consideration that the existence of a participle does not guarantee the existence of a full-fledged present and that five of the ten -aya-intransitives are unclear or secondary, we may conclude that there are only five "real" intransitive presents in -aya- in J.'s list: ilāyati, chadāyati, patāyati, stanāyati, sprhāyati. To these I would add ksāyati, śvāyati (see above, §2.2), and mrḍāyati 'be merciful', which is considered by J. (p.102f.) transitive on, in my opinion, insufficient grounds.

§3.6. What is the origin of these intransitive participles in -āya-nt-? In order to answer this question, we must look at some other categories of verbs in -aya-. Let us first consider denominative verbs in -aya-., derived from stems in -a. Surprisingly, all these verbs also occur in the RV only as a ppl. or a 3pl.med., cf. the attested forms of verbs listed by Macdonell (1910: 399f.):

amitrāya- 'act as an enemy': 3x ppl.;
indraya- 'behave as Indra': 1x -ante (before a vowel in the cadence);
kṣemaya- 'take a rest': 3x ppl.;
jāraya- 'treat like a lover': 1x 3sg.pass.aor. jārayāyi (6,12,4), doubtless a nonce form created for a word play (cf. Geldner, ad loc.); incidentally, the accentuation of the present cannot be inferred from the aorist form.

devaya- 'serve the gods': 50x ppl.;
yuṣmaya- 'seek you': 1x ppl.;
vasnaya- 'bargain': 1x ppl.;
vājaya- 'race, seek booty' : 24x ppl.;
summaya- 'show benevolence': 2x ppl.

The same holds probably true for the denominatives from stems in -i, iṣaṇaya- 'set in motion' (10,67,8 -anta before a single consonant in the cadence) and dhunaya- 'resound' (1x -anta before a single consonant in the cadence; 3,55,16 3pl.impv. -antām).

In contradistinction to denominatives in -aya-, those in -āya- (also derived from stems in -a) show both finite forms and participles:

2 mrḍāyati occurs 31x with a dative complement 'be merciful to smbd.' or without a complement. J. assigns the transitive value to this verb only because the more or less synonymous mrḍati occasionally occurs with the acc. āgas. The two relevant passages (7,93,7 yat sīm āgas caḵrā tat su mṛla and 1,179,5 yat sīm āgas caḵrā tat su mṛlato 'if we have committed a sin, then be (or let him be) gracious'), however, allow a different interpretation. As a matter of fact, tad can have adverbial function in sentences with yad 'when' (Delbrück 1888: 582) and does not necessarily refers to āgas, cf. also 2,27,14 adite mītra varuṇota mṛla yad vo vayaṁ caḵrā kaccid āgaḥ 'O Aditi, Mitra and Varuṇa! Be gracious, if we have committed any sin against you'.

3 All these verbs are intransitive, as the transitive denominatives have acquired different accentuation, cf. arthāyati, nilayati, mantrayati, mrṛgayati, etc.
aghāya- 'plan mischief': 1x fin.; 7x ppl.;
ajirāya- 'be swift': 1x fin.;
asvāya- 'desire horses': 5x ppl.;
ṛtāya- 'act according to the truth': 12x ppl., cf. also ṛtāyant- (2x);
tilvilāya- 'be fertile': 1x fin.;
priyāya- 'become friends': 1x fin.;
yajñāya- 'sacrifice': 1x ppl.;
rathitāya- 'be conveyed in a car': 1x ppl.;
randhanāya- 'make subject': 1x fin.;
vṛṣāya- 'act like a bull': 8x fin.;
subhāya- 'be beautiful': 1x fin.; cf. also subḥayant- (1x);
sumnāya- 'show benevolence': 3x ppl., cf. also sumnayant- (2x).

This state of affairs makes it probable that participles in -aṇv-nt- show a secondary development of those in -aṇv-nt-, probably due to metrical factors (cf. Inslser apud J., p. 50). The participles in -aṇv-nt- never appear in the above-mentioned metrical position (after the late caesura in trimeter verses) because the two syllables after the late caesura must be short (cf. Arnold 1905: 12), which favoured the replacement of the -aṇv-nt- participles by the those in -aṇv-nt-. This result is important, as it shows that a-stems originally formed denominative verbs in -aṇv-5 and that -aṇv-denominatives are secondary.6

4 As Jamison points out to me (per litteras), the rules for the distribution of -aṇv- and -aṇv- are given in her dissertation (p.79): 'Verbal forms of this type with short root syllables have suffixal form -aṇv- when the word has a certain metrical shape and -aṇv- when it has others. The conditions are the following: 1) -aṇv- appears when three syllables follow the root morpheme and the penultimate is light (hence ṛtāyat 5x, ṛtāyatās 3x). 2) -aṇv- appears when three syllables follow the root morpheme and the penultimate is heavy (hence ṛtāyanta 1x). 3) Either -aṇv- or -aṇv- can appear in a verb whose root morpheme is followed by two syllables, though -aṇv- is more common. The choice of shape in this case depends on the metrical position of the word in the pāda. -aṇv- appears when the root syllable of the form coincides with the first syllable of the break. -aṇv- appears elsewhere, especially in the cadence. Hence, we find ṛtāyan in the break in V.12.3, V.43.7, but ṛtāyan in I.117.22, V.41.1, VII.87.1".

5 The long a in -aṇv- is probably a reflex of Brugmann’s Law: *-o-jê- > PlIr. *-a-ya-.

6 In Avestan five of the ten denominative verbs in -aṇv- derived from a-stems, given by Kellens 1984: 130f., are likewise attested only as a ppl.: LAv. arazoaiant- 'combattant' (araza- 'combat'), GAv. maēkaiant- 'goutant' (maēka- 'goutte'), LAv. māṇaiant- 'resemblant' (*māna- 'apparence'), LAv. varozaiant- 'conférent la prosperité' (varoza- 'vigueur'), LAv. vaso.yaontaiaant- 'donnant libre habitation' (vaso.yaona- 'libre habitation'). If we take into consideration that three of the other five denominatives in -aṇv- are uncertain (the original noun of kāṣaiia- 'tenir' and vīmaōaiia- 'pratiquer la medicine sur' is unknown, whereas for vazoia- 'se trouver sur le chariot de noces' one must assume haplology), we have as the result that five of the seven -aṇv-denominatives are attested only as a ppl. Unfortunately, we cannot see the difference between -aṇv- and -aṇv- because of the Avestan (phonetic?) shortening of long a before -y-, which makes a conclusion about the original distribution impossible.

Recently, Kellens (1987) has provided another example of a denominative participle in -aṇv-, viz. ṭbiṣaiant- 'hating'.

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§3.7. Moreover, the same distribution (ppl. in -aya-nt- vs. ppl. and finite forms in -āya-) is found with the so-called deverbative -aya-formations. Following Bartholomae (1891: 83ff), J. explains several verbs in -āya- as secondary transformations of deverbatives in -āya- derived from -nā-presents (p. 178ff):

\[ \begin{array}{llll}
\text{ishāyati} & \text{`sends'}: & *\text{ishāyati} & \text{(not attested):} & \text{ishnti}; \\
\text{grbhāyati} & \text{`grasps'}: & \text{grbhāyati} & : & \text{grbhnti}; \\
\text{damāyati} & \text{`tames'}: & \text{damāyati} & : & \text{Gr. δόμήπι;} \\
\text{ramāyati} & \text{`stops'}: & *\text{ramāyati} & \text{(not attested):} & \text{ramnti}; \\
\text{śamāyati (AV)} & \text{`appeases'}: & *\text{śamāyati} & \text{(not attested):} & *\text{śamnti}; \\
\text{śrathāyati} & \text{`loosens'}: & \text{śrathāyati} & : & \text{śrathnti}. \\
\end{array} \]

J. mentions two reasons for considering these verbs deverbatives: the unusual vocalism and the absence of consistently intransitive presents beside these forms in the Rgvedic period (apart from rāmate). Both reasons are on itself not compelling, however: there are more zero-grade transitive -aya-formations (see below, §4.1) and isolated -aya-formations. For ishāyati, ramāyati, and śamāyati the proposed explanation is less certain than for the other verbs, as their purported source, a form in -āya-, is not attested. For ramāyati J.'s second reason does not hold either (because of rāmate), so that it seems more appropriate to consider this verb as a short vowel variant of the synonymous rāmāyati (cf. gāmāyati / gamāyati, dhvānāyati / dvānāyati, etc., §4.2). Moreover, the Rgvedic nasal present of śam- is uncertain, as it implies an emendation (proposed by Grassmann) of śamnan (1,104,2) to *śamn.

Reconsidering the attested forms of these verbs, we see that, except for ramāyati and śamāyati, all verbs in -āya- are either participles or a 3pl.med., whereas verbs in -āyā- have also other finite forms:

\[ \begin{array}{llll}
\text{ishāyati}: & 1x \text{ppl.}, 2x \text{-anta (+C- in the cadence);} \\
\text{grbhāyati}: & 1x \text{ppl. vs. grbhāyati}: 15x \text{finite forms;} \\
\text{damāyati}: & 2x \text{ppl. vs. damāyati}: 1x \text{fin.,} 1x \text{ppl.;} \\
\text{ramāyati}: & 4x \text{finite forms;} \\
\text{śamāyati (AV)}: & 7x \text{finite forms;} \\
\text{śrathāyati}: & 1x \text{ppl.}, 2x \text{-anta (+C- in the cadence),} 1x \text{-anta (+a- in the cadence),} 1x \text{-ante (+V- in the cadence) vs. śrathāyati}: 3x \text{finite forms.} \\
\end{array} \]

This means that the two verbs (ramāyati and śamāyati) for which the deverbative origin was less certain are attested as finite forms, whereas the other verbs are attested only as a ppl. or a 3pl.med. We may thus conclude that the original (and the only) locus for the "shortening" and accent retraction in this formation (for which see below, §3.8) was not *ramāyāti, as proposed by J. (p.179),\footnote{I cannot follow the reasoning of fn. 3 (p.179): "If *ramāyāti was the earliest of the deverbatives to remodel itself on the -aya-transitive, it would have disappeared first, and the absence of this form from the RV is then not surprising".} but the participle.
§3.8. Let us review our results so far. We have seen that verbs in -āya- show both finite forms and participles, whereas many verbs in -aya- are attested only as active participles or a 3pl.med., which are late replacements of nom.pl. ending -antah. The following table may illustrate this:

<table>
<thead>
<tr>
<th>finite forms</th>
<th>ppl. / 3pl.med.</th>
</tr>
</thead>
<tbody>
<tr>
<td>intransitive -āya-form.</td>
<td>–</td>
</tr>
<tr>
<td>denominative -āya-form.</td>
<td>–</td>
</tr>
<tr>
<td>denominative -āya-form.</td>
<td>+</td>
</tr>
<tr>
<td>deverbative -āya-form.</td>
<td>–</td>
</tr>
<tr>
<td>deverbative -āya-form.</td>
<td>+</td>
</tr>
</tbody>
</table>

Moreover, we have seen that denominative -ayā-verbs and deverbative -āya-verbs are recent transformations of the -āya-verbs. It seems therefore plausible to assume that those -āya-intransitives which are attested only as participles or a 3pl.med. are of denominal origin and eventually connected with denominatives in -āya-. This presupposes that the participles in -ayant- of some denominative -āya-verbs shortened their ā for metrical reasons (cf. §§3.6-7) and then retracted the accent.

The accent retraction of -ayant- to -āya-nt- does not present any problems. As a matter of fact, participles in -āya-nt- and in -ayant- have the same accentuation in the oblique cases: although participles of -aya-verbs are but rarely found in weak cases, the attested forms show final accentuation (J., p. 49, fn. 3), cf. dat.sg. mahayate (7,32,19), iṣayate (6,16,25), gen.sg. kṛpayatās (8,46,16), etc. Moreover, the both types have merged in governing compounds, which are always accented on the final syllable of the first member (AiGr. II,1, p. 318), cf. sprhayādvāra-, codayān-mati-, śrāvayāt-pati-, etc. If we further take into consideration that infinitives and gerunds of -āya- and -aya-verbs also have the same accentuation (cf. iṣayādhyai, īrayādhyai, nāsayañdhyai; sprhayāyya, panayāyya), it becomes comprehensible that there was uncertainty in the accentuation of participles in -ayant-. This uncertainty can be illustrated by the participle of mṛdayati ‘is merciful’: we find dat.pl. mṛdayādbhyaṁ (1,136,1), comp. mṛdayāttama- (1,94,14, 1,114,9, 5,73,9) and nom.sg.f. mṛdayantī (5,41,18), but also nom.pl. mṛdayāntas (1,107,1). In such a situation it is but natural that the accentuation of participles in -āya-nt-, which strongly outnumbered those in -aya-nt-, become generalized.

§3.9. We may now conclude that -āya-intransitives attested only as a participle or a 3pl.med. are likely to be denominative in origin. Five of the intransitive -āya-verbs are already considered denominative by J.: ṛṭaya-, kulāyaya-, vājaya-, suṣvaya-, and svarāya-. The other verbs may also be of denominative origin: iṣāya- ‘prosper’ (iṣ- ‘prosperity, wealth’), tujāya- ‘press forward’

One may object that it is unlikely that verbs derived from root nouns would have the suffix -aya-. Although we do not know for sure the shape of denominatives from root nouns (a root noun to which a verbal suffix -ya- or -aya- is added is mostly undistinguishable from a "normal" present), we may assume that they were formed with the suffix -ya- in parallel with denominatives from consonant stems (cf. Macdonell 1910: 401). There is, however, one unmistakable denominative from a root noun formed with the suffix -aya-, viz. uṛjāyant- ‘strengthening’ derived from ūṛj- ‘nourishment’.

Furthermore, participles in -āya-nt- have lost their connection with the denominative verb due to the shortening and accent retraction, which led to a two-termed relation between the original noun and a "denominative" participle in -āya-nt-. Thus, the participle served as a kind of adjective to the noun. When this relation became productive, every noun, even a root noun, could form a participle (=adjective) in -āya-nt-. I believe this is also the reason why only intransitive verbs in -āya- are so often attested as participles.

When this section had already been written, I noticed that J., while discussing the history of the -āya-intransitives after the RV and AV, wrote (p.68) that the only -āya-intransitives which occur occasionally in the Brāhmaṇas are ilayati, chadāyati, patāyati, viṛāyate, stanāyati, and sprhāyati, i.e. exactly those verbs that are attested in the RV in finite forms. I believe that there can hardly be a better confirmation of the artificial character of the participles in -āya-nt-, discussed above.

IV. THE VOCALISM OF THE -āya-FORMATIONS

§4.1. One of J.'s general conclusions is that the transitive and intransitive -āya-formations have different vocalism: the former have underlying *o grade, whereas the latter have zero-grade of the root. Notwithstanding the rare occurrence of the intransitive -āya-verbs in the RV and AV, their zero-grade vocalism is indeed clear, cf. ilāyati, Chadāyati (\chand-), patāyati, stanāyati, sprhāyati, ksāyati, śvāyati, mṛdāyati (for the selection see above, §3.5). The apparent full grade of patāyati is due to the fact that there is no *pt- in Sanskrit (cf. also the ppl. patitā-). The root √stan- may be set (cf. impv.aor. stanihi, ppl. stanitā-, Narten 1964: 275f) so that the vocalism of stanāyati is regular (=<*stnH-eie-).
On the other hand, J.’s view that transitive verbs in -"aya- always have underlying *o grade is untenable. It has emerged from the preceding sections that there are several transitive -"aya-formations with zero-grade in the root. These are dayate ’distributes’, dhayati ’sucks’ (possibly I/T), váyati ’weaves’, vyáyati ’envelops’, hváyati ’calls’, which are left out of consideration by J., and vipayati, dhvasayati, kṛpayati, which, in my opinion, cannot be considered intransitive (see above).

It follows that the conclusion about the vocalism must be adjusted: the intransitive -"aya-verbs have zero-grade of the root; the transitive ones can have either zero or *o grade of the root.

§4.2. Another point of the vocalism is the distribution of short and long a’s in the root of the transitive -"aya-formations, i.e. the operation of Brugmann’s Law. On p.204 J. writes: "All -"aya-transitives belonging to CaC/R roots, whether inherited or built according to the patterns established by the inheritances, have descriptive extended grade unless some particular condition (to be discussed) has prevented this". Important is the conclusion that there is no evidence for the restriction of Brugmann’s Law to the position before resonant (the so-called "Kleinhanssche Fassung").

As far as Kuryłłowicz’s condition on Brugmann’s Law (roots ended in a laryngeal that closed the syllable show short vocalism like any other root ending in two consonants) is concerned, J.’s position is rather ambiguous. On p. 204 she explicitly rejects it, but on the next page she writes that as "in regular morphological categories ... the extended grade has been analogically introduced into the disyllabic roots", the reflexes of Kuryłłowicz’s rule have been mixed up, and "the short vowel of forms such as janayati requires another explanation" (p. 205). I have the impression that this paragraph was added later, because it implies a different position, which contradicts her previous statement and plays no part in further discussion in the book. It really makes difference: if one rejects Kuryłłowicz’s rule, all causatives from CaC/R(H)- roots originally had long vocalism; if Kuryłłowicz’s rule did operate, the causatives from disyllabic roots had short vocalism in Proto-Indo-Iranian already.

At any rate, it follows from the discussion on p. 205ff. that J. opts for the former alternative and considers the long vocalism original for causatives of CaR/C(H) roots. We shall return to J.’s own explanation below, but first let us look at her objections to Kuryłłowicz’s rule.

"There are two reasons to reject Kuryłłowicz’s hypothesis: 1) Though it can account for the short vowels in forms such as janáyati ’begets’, jaráyati ’makes old’, maháyati ’makes great’ because they seem to belong to disyllabic roots (e.g. ppl. játá-, jírṇá-, and nominal form máhimánt-,) it cannot account for the short vowels of forms such as namáyati ’makes bow’ (ppl. nátá-), gamáyati ’makes go’ (ppl. gátá-), which appear to belong to monosyllabic roots. 2) A number of disyllabic roots have long-vowel -"aya-formations, such as pátáyati ’makes fly’ (ppl. patítá-), táráyati ’makes cross’ (ppl. túrṇá-), párā bhávayati ’makes perish’ (ppl. bhútá-)".

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However, lists of CaC/R(H)- verbs on pp. 205ff. give an overall impression that in general set-roots have a short vowel and anit-roots a long one. Exceptions are scarce and can be explained. It is essential to see how the short vocalism has been replaced by the short one in the RV, cf. gāmāyati 'makes go' (V1) vs. gamāyati (X2 and AV+), yāvāyati (III1, V1, VI2, VII2, X1) 'makes keep away' vs. yavāyati (I1, VIII2, X3), but several verbs have acquired the short vocalism as early as in the family books, cf. śrāvāyati (I1, IV1, V1, VI1, VIII1, X1), but śravāyati already in I1, II1, VII1. Therefore, the short vowel in gamāyati, yavāyati, and śravāyati must be due to the generalization of the short vocalism. The same explanation is also probable for dhanāyati (I5), jñapāyati (AV), and śrapāyati (AV). I assume the same origin for ramāyati, which, in spite of its early attestation (II1, IV1, V2), seems to be a replacement of rāmāyati (I2, VII1, X1), the antiquity of which is confirmed by Av. rāmaieiti (cf. J., p. 132 and above, §3.7f).

The short root vowel of svadāyati (II1, VIII1=Khila, IX1, X1) and namāyati (VII1, IX1) can also be influenced by the synonymous transitive presents svadāti and namati, for which see below. The hapax kṣayāyati is most probably a nonce form (cf. J., p.111f).

The other short vowel causatives are set: jaryāyati 'makes age', janāyati 'begets', panāyati 'admires', sāmāyati 'appeases' (cf. §3.7), harāyati 'makes enjoy' (cf. Gr. χαρέω < *gṛh-i-), and, probably, dārāyati (cf. dīrṇa-, dura-). J. must consider the verb denominative because of the vocalism, p. 94f.); roots in -th: prathāyati, vyathāyati, śnathāyati; and damāyati, śrathāyati if not deverbative (see above, §3.7).

As to the long vowel causatives, they are generally derived from anit-roots. There are but four exceptions: three AVic verbs prārāyati (cf., however, OP vi-taraya- with short a'!), pārābhāyati, sāmvāyati, all of them described by J. as late and secondary, and āmāyati (X2) 'makes beset, vexatious', the root vocalism of which can only be seen in 10,97,9, glossed by Arnold (p.323) as a very late hymn. The set-character of the root pat- is uncertain so that pātāyati 'makes fly' (I1, VIII1) may be regular. The root of ādhvāyati (6,18,10), dhvanayīt (1,162,15) 'makes smoky, envelops with smoke' (cf. J., p.115) is etymologically difficult: ādhanīt (8,6,13) points to the reconstruction */dquenH-, but the ppl. dhvānta- is then unclear.

J. rejects Kuryłowicz's explanation and assumes that the basic reason for the short vocalism were Type 5 causatives (see above, §0.2 ad Chapter VII), which have adopted the short vocalism of the synonymous transitive present. In this way, J. explains the short vocalism of janāyati, jarañati, namāyati, as depending on jānati, jārati, nāmati. To be sure, the influence of presents on causatives cannot be doubted (cf. dṛṁhāyati and dṛṁhati; sūndhāyati and sūndhati, probably also svadāyati and svādāti, namāyati and nāmati), but, first, this did not always happen (e.g., vātayati vs. vatati), second, J. is forced to assume several rhyming formations in order to explain their unexpected vocalism (panāyati: janāyati, vātayati: yātayati) and to resort to the non-ablauting character of roots in -th without explanation, and, third, J.'s explanation implies that
most of the -áya-causatives are secondary formations, replacing the transitive thematic presents. I think that the latter statement, which is essential for her reasoning, is untenable. We will discuss the matter in the next section.

To sum up: the intransitive -áya-formations have zero grade of the root, whereas the transitive -áya-formations could have either zero grade of the root or the underlying *o-grade. The latter yielded long ā in open syllables (both before C and R) and short a in closed syllables including the position before -RH (Kuryłłowicz’s rule). The short vocalism became productive already in the Vedic period.

V. THE MEANING AND THE ORIGIN OF THE -áya-TRANSITIVES

§5.1. On pp. 183ff., J. discusses the original meaning of the -áya-transitives. She convincingly argues that these verbs hardly have iterative or intensive value and that the causative value is secondary in Vedic. She concludes that we must "return to Thieme’s suggestion (1929: 7-30 ... ) that the feature that characterizes all early Vedic reflexes of the PIE *o-grade *eye-formation is not causativity but transitivity, and that the specifically caus. value of many later Skt. -áya-formations can easily be explained as an outgrowth of this transitivity" (p.186).

This conclusion is certainly preferable to the other theories, as it accounts for the fact that in old language -áya"-causatives" could only be formed from the intransitive verbs and for the fact that there are many isolated -áya-transitives. However, the original pure transitive value of these verbs has one far-reaching consequence, viz. that -áya-presents appear to be synonymous to transitive thematic presents, and as both presents often coexist (J.’s Type 5), it is unclear why Vedic has tolerated two synonymous formations for many centuries. For some verbs Type 5 systems can be reconstructed even for PIir., e.g., várdhati, vardháyati ‘makes grow’ : várdhate ‘grows’ and Av. varádaiti, varádaiiáitii : varádaitē. J. tries to account for this situation by explaining "vardháyati as originally built as replacement for várdhati to serve as better marked causative to várdhate, according to the model provided Type 2 systems (e.g. rócate ‘shines’: rocáyati ‘makes shine’, etc., already established in PIIr.)" (p. 158). For several verbs, however, J. posits the original -áya-present and secondary thematic present (e.g. yātáyati ‘puts in place’ and yátati, p. 131).

What is the evidence for considering -áya-presents secondary? J. does not discuss this in general terms, but her treatment of jánayati is representative. She writes: "Jánáyati is best explained as secondarily built as a clearly marked trans. replacement for jánatí, to serve as causative to jáyate, for several reasons: 1) The distribution of jánáyati appears to be later than that of jánatí. Nearly half of the occurrences of jánáyati are in the younger Mándalas I and X, in contrast to 5 of the 23 forms of jánatí. Jánatí is almost entirely eliminated after the RV, in favor of jánáyati. 2) As will be seen below (p. 206), force of patterning suggests that jánáyati is dependent upon jánatí in vocalism. 3) Though it is relatively easy to account for the formation of
janáyati beside an already existing system of jánati: jáyate, it would be difficult to explain the creation of jánati beside an already well-marked system of janáyati : jáyate" (p. 154).

These three reasons are not compelling, however.

Ad 1: The difference in distribution of janáyati and jánati only means that janáyati has ousted jánati and does not prove the late character of janáyati, which is solidly attested in the family books. Moreover, if OE cennan 'to beget, give birth' reflects *ǵonH₁-eie-, this may be an IE formation.

Ad 2: As we have seen above (§4.2), the vocalism of janáyati is in accordance with Kuryło-wicz's rule and need not be derived from that of jánati.

Ad 3: Here we come to the core of the problem. J. must consider either janáyati, or jánati secondary because they are synonymous in her conception, but this is unnecessary if we assume that there was a semantic difference between these verbs. After this difference had disappeared, probably in the Vedic period, the presents became synonymous, and one of them was eliminated. This seems to be a more likely scenario because otherwise we cannot account for many centuries of coexistence of two synonymous presents.

§5.2. If the -āya-transitives originally had no causative or intensive / frequentative value, and they were not simply transitives, what was then their original meaning? I believe that they were factitive, i.e. they had the meaning 'to accomplish that smbd./smth. achieves some state'. There are several arguments in favour of this view, which is by no means new (e.g. Thieme 1929: 22, Insler 1968, who consistently calls the -āya- -causatives "transitive-factitives", Kortlandt 1981: 127):

1. As we have seen, -āya-formations were semantically different from transitives and were later interpreted as causatives. Factitives are always transitive and may easily become reanalyzed as causatives, as ‘makes smbd. / smth. grown’ or ‘makes smbd. born’ is very near to ‘makes smbd./smth. grow’, ‘begets smbd.’.

2. The difference between transitives and factitives can be clearly seen in verbs of perception, where transitives mean 'see, hear, know, touch, etc.', whereas factitives mean 'make seen, heard, known, touched, etc.', cf. ví caṣte 'sees, appears': ví caḵṣayati 'reveals', védā 'knows': vedaẏati 'dedicates = makes known' (vide 'is known'), śṛṇoti 'hears': śrāvāyati 'makes heard, famed' (śṛṇve 'is heard, famed'), pāśyati 'sees': spāśayate 'makes seen, spied out', sprśati 'touches': sparsāyate 'makes touched', etc. Several of the -āya-formations also have the meaning 'make see, hear, etc.', but this meaning seems secondary. A similar difference between a transitive and a factitive is attested with the verb yudh-: trans. yūdhyati means 'attacks', whereas factitive yodhāyati means 'sets to fighting, makes contend', later serving as a causative to intr. yūdhyate 'contends (mutually)'.


3. There is a close connection between -áya-formations and perfects, which express 'the achieved state'. First, an archaic layer of -áya-formations serve as causative to perfect (J., p. 160ff), cf. cetayati 'makes perceived': cikité 'appears', jácayati 'makes awaken': jágára 'is awake', yámáyati 'holds': yemírë 'are held, remain', yopáyati 'erases': yuyópa 'is erased, is invisible', vakṣayati 'makes strong': vavákṣa 'is strong', vedayati makes known': védë 'is known', etc.\(^8\) The "causatives" here have the meaning of a factitive. Second, several isolated -áya-transitives form one functional paradigm with transitive perfects. For instance, dháráyati 'upholds' (cf. also Av. dāraiia-OP dāraya- 'id.') is in complementary distribution with the pf. dādhrāra: the act. perfect appears only in the singular, non-past indicative, whereas the other forms are supplemented by the present (Cowgill apud J., p. 95f). The same relation exists between panayati 'admires' and 1sg.pf. papanā (J., p. 97). This also indicates that -áya-formations have a meaning comparable to that of the transitive perfect.

4. As is known, -áya-formations can serve as causatives not only to intransitive verbs, but also to verbs with both transitive and intransitive rection (I/Ts). This fact can be sufficiently accounted for only if we assume that -áya-formations were not simply transitives, but factitives. As a matter of fact, besides a syntactic difference in case usage of the I/Ts there must have been an essential semantic difference. In my opinion, I/Ts with transitive rection denote an action directly connected with the noun, whereas I/Ts with intransitive rection denote rather a situation. For instance, ś̄n̄óti 'hears' takes the causative to express the sound heard and genitive to express the entity that produced a sound. In the first case, one hears something, while in the second a situation of hearing is described and what is heard is not expressed. Similarly, with the verbs of consumption, the accusative expresses what exactly is being consumed and the genitive (the so-called partitive genitive) expresses which kind of substance. Therefore, one can form a factitive only to I/Ts with intransitive rection with the meaning 'to bring somebody/something in the situation of hearing, drinking, etc.'.

§5.3. The original factitive value of -áya-transitives sheds some light on their origin. It has been proposed that they are derived from the so-called "passive aorist" in -i (Kortlandt 1981: 127). This passive aorist, attested also in Avestan and Old Persian, is used only in the 3rd person singular and shows exactly the same vocalism as the causative (e.g. (a)srāvi : srāvāyati, (á)yāmi : yámáyati, (á)pāyi : pāvāyati, (á)sāṃsi : sāṃsāyati, (á)jani : jaṇāyati, cf. Insler 1968: 314). As was demonstrated by Migron (1975), this form is not passive, but rather impersonal, and is in fact a perfect, as "its aspectual rôle is to focus the hearer’s attention on the moment at (or since) which the 'Einwirkung' has been accomplished, has become a fact of some consequence to him" (p. 299f.). This observation confirms an old view that the "passive aorists" are original "neuter i-

\(^8\) Three pairs (jácayati: jágára, vakṣayati: vavákṣa, vedáyati: vidé) are probably of PlIr. age (J., p. 167f).
stems, without any termination, which have been adapted to the verbal conjugation" (Burrow 1973: 341).

If this is correct (as I think it is), the -áya-transitives could be derivatives of these i-stems with the factitive meaning 'accomplish the situation expressed by the i-noun'. We are thus back at Brugmann's proposal from 1916 (p. 245) that the -áya-formation was originally a denominative to an i-stem noun, but on a different level and with a different argumentation. The origin of -áya-intransitives and -áya-transitives with zero grade in the root remains unclear.

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