The syntax of Hungarian \(-vA\) adverbial participles: A single affix with variable merge-in locations

Huba Bartos

1. Introduction

The Hungarian language has for long had two related constructions, labeled as ‘adverbial participle’ in traditional grammatical terms: the \(-vA\) and the \(-vÁn\) participles. It seems that while they may originally have emerged as dialectal variants, by the early modern times their functional distribution became complementary: the \(-vÁn\) participle was rather consistently used as an adverbial of time or reason, while the \(-vA\) participle usually assumed the role of manner or state adverbial. Later on, however, this division of labor was gradually lost, and by now, in standard colloquial Hungarian, (i) the \(-vÁn\) type has almost entirely disappeared: for many speakers it is clearly archaic, and for the rest its use is very limited (stylistically marked) and rare, its earlier functions basically taken over by the \(-vA\) type; (ii) for those whose dialect has retained the \(-vÁn\) forms, the functions of the two type heavily overlap, with the exception that the \(-vÁn\) participle cannot have a state adverbial reading – the other relevant adverbial functions (time, reason, manner, purpose) can in principle be assumed by both of them; (iii) when both are available, \(-vÁn\) has a strong tendency for a temporally anterior reading (with respect to the time of the matrix), while \(-vA\) is more neutral in this respect.

This chapter will be exclusively devoted to the discussion of the \(-vA\) participles, for the following reasons: (i) the \(-vÁn\) participles play a very limited role (or, for some speakers, no role at all) in present-day Hungarian; (ii) their use is more restricted, with few complications; (iii) arguably, they always project a full-fledged participial clause, whose internals never involve any voice alternation (unlike the \(-vA\) participles, where this is a key problem; see below); and (iv) they have received an essentially satisfactory account already, with \(-vÁn\) as an inflectional affix, licensing its own (potentially overt) subject, in Sárik (1998). Just for the sake of illustration, (1) gives two examples of the \(-vÁn\) participle, by which I part with them for now and turn my attention to the \(-vA\) participles alone.
(1) a. **Beesteledvén(,) hazaindultunk.**
    in-dusk-‘home-started-1pl
    ‘Night having fallen, we left for home.’

    b. **A földre feküdvén álomba merült.**
    the ground-onto lie-‘sleep-into sank(3sg)
    ‘Having lain on the ground, he fell asleep.’

Let us now take a look at a few introductory examples of -vA participle, with traditional function identification given for each occurrence: ‘comple-ment’: (2a), ‘predicate’: (2b), simultaneous state adverbial: (2c), anterior state adverbial: (2d), manner adverbial: (2e), and purpose adverbial: (2f).

(2) a. **Bezárva találtuk az ajtót.**
    in-lock-vA found-1pl the door-ACC
    ‘We found the door locked.’

    b. **Zárva volt az ajtó.**
    lock-vA was(3sg) the door
    ‘The door was locked.’

    c. **Laci a karosszékben ülve várt a vendégeket.**
    Laci the armchair-in sit-vA waited-3sg the guests-ACC
    ‘Laci waited for the guests sitting in the armchair.’

    d. **Laci teljesen felöltözve várt a vendégeket.**
    Laci completely up-dress-vA waited(3sg) the guests-ACC
    ‘Laci waited for the guests completely dressed.’

    e. **Futva igyekszünk haza.**
    run-vA hurried-1pl home
    ‘We hurried home running.’

    f. **Kinyitotta az ablakot, utat engedve a füstnek.**
    out-opened(3sg) the window-ACC way-ACC allow-vA the smoke-DAT
    ‘He opened the window, giving way to the smoke.’

One remark is immediately in order for the function labels: the adverbial in (2a) is easily analysable as a small clause predicate, rather than a comple-ment of the matrix verb talál ‘find’; in fact, all instances of this type can be
analysed this way, conflating the types of (2a) and (2b), simplifying the picture somewhat: adverbial participial phrases/clauses can thus be either predicative complements (small clauses), or adverbial modifiers (as in the rest of the examples), such that the participle itself is a predicate within its phrase/clause domain — as will be argued later in detail.

Given this surface variability of functions and loci in the syntactic structure, as well as the different sizes of the participial, ranging from a single word (2a, b) to a whole clause (2c, d), it is tempting to make use of several different variants of the participial affix in an analysis, but the more challenging (hence probably more interesting) option is to try to stick to the ‘single -vA’ hypothesis, seeking a more unified account of the full set of constructions. In this vein, I will propose to treat the syntax of the -vA participles in an antilexicalist framework, which will be an exercise in pushing the idea of having a single affixal lexical item with variable locus of merging it into the syntactic projection of the host category, rather than positing several homonymic lexical items (as a more traditional and/or lexicalist analysis would have it). The conceptual advantage of this single-item approach is obvious (no need to multiply lexical entries, with different alleged selectonal properties and semantic effects), but it is a viable alternative only so far as no significant price is paid somewhere else — which I hope to be able to show here not to be the case.

2 Previous treatments of the -vA participles in the generative tradition

There have been several attempts to analyse the (morpho)syntax and semantics of the -vA participles in the literature, and the discussion has revolved around two main issues: (i) how far do these participles project: are they word-level, phrase-level, or clause-level entities; (ii) is there a single -vA affix, or do we need (at least) two distinct such affixes in the lexicon to account for various subtypes of the -vA participle constructions — the crucial point here is an active ~ passive alternation, in an oft-alleged correlation between the manner ~ state distinction in construal: (3a) = unergative base V, ‘active’; (3b) = unaccusative base V, ‘active’; (3c) = transitive base V, ‘active’; (3d) = transitive base V, ‘passive’.4

(3a) Laci mosolyogva válaszolt.
   Laci smile-vA answered(3sg)
   ‘Laci answered smiling.’
b. Teljesen megszáradvak a festék védte a fát.
   completely dry-
   the paint protect(3sg) the wood-ACC
   ‘Completely dried, the paint protects the wood.’

c. Laci az újságot olvasva jött be a szobába.
   Laci the newspaper-ACC read-vA came(3sg) in the room-into
   ‘Laci came into the room reading the paper.’

d. (Az ellenségtől) bekerítve a csapat megadta magát.
   the enemy-from in-surround-vA the team surrender itself-ACC
   ‘Surrounded (by the enemy), the team surrendered.’

The manner ~ state split apparently obtains between unergatives and active transitives (manner) vs. unaccusatives and passive transitives (state) – a seemingly clear distinction, easily captured by referring to argument structure (presence vs. absence of an external argument). As will be shown later, in section 4., the semantic distinctions (partly concerning argument structural properties) are much more complicated and fine-grained than this, which suggests (to me) that the relevant semantic variables are interpretive, rather than generative, in the case of adverbal participles: they apply (non-distinct) syntactic structures at the level of interpretations, and cannot reasonably be assumed to drive the syntactic derivations.

Most of the earlier accounts have been built up on the manner~state duality, without paying attention to the facts that (i) not all instances of the -vA participle fall into either of these two readings (see, e.g., (2f)), and that (ii) the two readings cannot always be neatly told apart, especially in the ‘transparent adverbial’ (cf. Geuder 2004, and section 4.1. below) cases:

(4) a. [Kezében puskát tartva] bukkant fel a vadász
   hand-3sg-in gun-ACC hold-vA emerged(3sg) up the hunter
   a bozótból.
   the bush-from
   ‘The hunter emerged from the bush holding a gun in his hand.’

b. Az ingujját sem türve fel(,) a kondérban turkált.
   the sleeve-3sg-ACC nor roll-vA up the cauldron-in poked(3sg)
   ‘Not even rolling up his sleeves, he was poking around in the cauldron.’
In this section, I will sketch the most important accounts, to set up the scene for my own analysis.

2.1. Lexical solutions


Komlósy’s lexical solution uses a single suffix -vA, which can attach either to an active stem, or a lexically passivized one, where passivization involves a null-affix (or conversion), to account for the paradigm in (3):

(5) a. LEXICAL PASSIVIZATION
1. subject → oblique (demotion)
2. object → subject (promotion)
3. AGENT is existentially bound (optional; if it applies, it yields an agentless passive)

b. ADV-FORMATION
- vAn: [V_{stem/non-passive} ___ ]Ad
- vA: [V_{stem} ___ ]Ad

As is clear from these rules, for Komlósy, participle forming is a lexical derivational operation, yielding an adverb. For unergatives, unaccusatives, and non-passivized transitives, the rule is a simple case of V → Adv derivation, while for cases like (3d), the passivization defined in (5a) must precede the Adv-formation. Two points of criticism apply to this account:

− It needs a stipulation to the effect that the null-passives formed by (5a) cannot surface without undergoing some further operation, because we do not find null-passivized finite verb forms in Hungarian. The stipulative constraint he offers is given in (6).
− It does not tell us how/why the Adv’s formed by (5b) project their own modificational domain, which can reach full clausal status (see the examples in (2) and (3)), and how certain argument roles of the base V are identified with arguments in the matrix domain. The reason for the lack of information on these points resides in the sketchy nature of the analysis, since Komlósy’s focus was on adjectival participles in that paper.

(6) The categories of tense/mood-marking and agreement only apply to active stems in Hungarian.
2.1.2. Laczkó (2000) – two -vA suffixes

Laczkó, primarily on the basis of his critique of Komlósy’s account, develops an analysis that makes use of two -vA affixes in the lexicon, such that -vA₂ involves a feature of passivization in itself, hence it primarily attaches to passivizable stems (transitives), but since this ‘passivization’ suboperation is about the promotion of an internal argument, it also applies (in a sense vacuously) to unaccusatives. -vA₁, on the other hand, involves no passivization, and occurs with active transitives and unergatives. This solution establishes a pattern of ‘active_transitive/unergative’ vs. ‘passive_transitive/unaccusative’ grouping, which (Laczkó claims) matches the traditional ‘manner’ vs. ‘state’ distinction in interpretation. In fact, the chief motivation⁵ for him to combine unaccusatives with -vA₂ (when, in principle, unaccusatives would fit the structural description of the -vA₁ rule, too) is precisely the possibility of correlating the -vA₁ ~ -vA₂ opposition with the ‘manner’ ~ ‘state’ opposition.

(7)

<table>
<thead>
<tr>
<th>Passive reading</th>
<th>-vA₂, state</th>
<th>összekötözővő feküdt</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PV-tie-vA</td>
<td>lay(3sg)</td>
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<tr>
<td></td>
<td></td>
<td>‘she was lying tied up’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transitive</th>
<th>-vA₁, manner</th>
<th>a csokrot összekötözővő leült</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>the bouquet-ACC PV-tie-vA down-sat(3sg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘having tied the bouquet she sat down’</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Active reading</th>
<th>-vA₁, manner</th>
<th>kiabálva rohangált</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>shout-vA</td>
<td>run-FREQ-PAST(3sg)</td>
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<tr>
<td></td>
<td>‘she was running around shouting’</td>
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</tbody>
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<thead>
<tr>
<th>Intransitive</th>
<th>-vA₁, manner</th>
<th>kimelegedve rohangált</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>out-warm-ADVPRT run-FREQ-PAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘she was running around sweating hot’</td>
<td></td>
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</table>

The particulars of Laczkó’s analysis are summarized in the following:⁶
The Syntax of Hungarian -vA Adverbial Particiles

(8) a. \(-vA_1\) \(V + [-vA_1]_{\text{PRT}} \rightarrow [V + -vA_1]_{\text{PRT}}\)
   (i) the highest argument with a non-objectlike role becomes the subject
   (ii) subject is realized as PRO

b. \(-vA_2\) \(V + [-vA_2]_{\text{PRT}} \rightarrow [V + -vA_2]_{\text{PRT}}\)
   (i) the object argument becomes the subject
   (ii) subject is realized as PRO

Apart from the neatness of match between \(-vA_2\) and the state reading, there is
some further motivation for assuming that unaccusatives take \(-vA_2\), rather
than \(-vA_1\): this makes it possible to establish the generalization that it is
the \(-vA_2\) participles that occur predicatively in a copular construction:

(9) a. * Laci mosolyogva van. – unergative (-vA)
      Laci smile-vA is
      ‘Laci is smiling.’

b. * Laci meg van írva a levelet. – active transitive (-vA)
      Laci PERF is write-vA the letter-ACC
      * ‘Laci is written the letter.’

c. A levél meg van írva. – passive transitive (-vA)
      the letter PERF is write-vA
      ‘The letter is written.’

d. A festék meg van száradva. – unaccusative (-vA)
      the paint PERF is dry-vA
      ‘The paint (= has) dried.’

One weakness of the analysis is that it says nothing about the identification
of the PRO subjects of these participles. A more serious problem,
though, is that this account sees too much into the ‘manner’ ~ ‘state’ distinc-
tion, and would therefore need considerable augmentation to cater for
(i) other, non-manner non-state adverbial readings; and (ii) interesting
grammaticality effects unrelated to the argument structural factors referred
to in the lexical rules, such as the following contrast type (my take on which
will be presented in section 4.2. below):
(10) TEMPORAL ANTERIOR vs. STATE:
   a. Szépen/Gyorsan felöltözve(,) elindult munkába.
      neatly/quickly up-dress-vA away-start work-into
      ‘Dressed up neatly/quickly, he left for work.’
   b. Szépen/*Gyorsan felöltözve találtuk / ült a szobájában.
      neatly / quickly up-dress-vA found-1pl/sat(3sg) the room-3sg-in
      ‘We found him / He was sitting neatly/*quickly dressed in his room.’

(11) ‘PURE’ STATE vs. REASON/STATE:
   a. (?*Orvul) hátbadőfve feküdt a földön.
      sneakily back-into-stab-vA lay(3sg) the ground-on
      ‘He was lying on the ground, stabbed in the back (*sneakily).’
   b. Orvul hátbadőfve(,) a földön feküdt.
      sneakily back-into-stab-vA the ground-on lay(3sg)
      ‘Stabbed sneakily in the back, he lying on the ground.’

(12) ‘PURE’ STATE vs. TEMPORAL/REASON:
   a. (*Véletlenül) kiborulva találták a levest az asztalon.
      accidentally out-spill-vA found-3pl the soup-ACC the table-on
      ‘They found the soup spilt over the table (*accidentally).’
   b. Véletlenül kiborulva(,) a leves az egész asztalt
      accidentally out-spill-vA the soup the whole table-ACC
      away-covered(3sg)
      ‘Having spilt out accidentally, the soup covered the whole table.’

In closing this section, mention must be made of Németh’s (2007) recent
contribution to the topic, which does not offer any precise technical analysis,
but suggests that at least in the copular predicative ‘V-vA van’ construction,
a lexical solution where -vA affixation is sensitive to aspecual verb classes
could account for a wide variety of semantic/pragmatic limitations on the
availability of -vA participles.
2.2. Syntactic solutions

There is another line of research that has attempted to devise some syntactic account for deriving the adverbial participles and their behavior. Some of these (e.g., É. Kiss 1998, Bene 2005) have essentially followed the lead of the lexical analyses, reorchestrating them in the domain of (narrow) syntax, while others (e.g., Kenesei 2000) have tried to look upon the issue from a completely different angle, arguing that participles are special inflectional forms of verbs, thus they naturally project full clauses, and have no derivational properties, so that all of their peculiarities must have a syntactic (rather than lexical, argument structural) explanation. But the most thorough and successful syntactic analysis to date is Tóth’s (2000), which recognizes that -vA affixation can target different syntactic domains (VP, VoiceP, TP), giving rise to units of different status and function. As will be clear in later sections, my present proposal essentially follows her lead, reproducing its key insights in a different model.

2.2.1. Bene (2005) – Two -vA suffixes, transposing Laczkó’s key ideas to syntax

Bene analyses the -vA (and, irrelevantly for us, also the -vÁn) participles as cases of V → Adv derivation in syntax, in an articulated VP shell structure, positing two distinct -vA suffixes, explicitly calling them ‘manner -vA’ and ‘state -vA’. Manner -vA always attaches to the largest extension of the VP (i.e., vP if present, VP otherwise) — this applies to unergatives and active transitives (at vP, (13a)), as well as unaccusatives (at VP, this being the largest V-projection, (13b)).

(13) a. AdvP
    3 Adv  vP !
    ei 3
    -vA_manner PRO

b. AdvP
    3 Adv  VP !
    ri 3
    -vA_manner V DP
    v_PERF VP PRO

Note that she recognizes that unaccusatives can host the ‘manner’ type suffix, too, as in the following examples (Bene 2005: 83):
the ball bounce-vA rolled(3sg)
‘The ball was rolling bouncing.’

b. *[Peregve] hullik a falmal a vakolat.
trickle-vA fall(3sg) the wall-from the plaster
‘The plaster is falling trickling from the wall.’

While the presence of *v can take care of the accusative case of some internal argument, the external argument in spec,vP remains without nominative (presumably because the AdvP projected by the participial suffix cannot merge with a T, and the whole AdvP is an island), so its only option is to be represented as a PRO, which can then be identified with some argument in the matrix domain.

‘State *vA’, on the other hand, attaches to VPs whose highest argument is a PATIENT, and this highest argument is realized as a PRO, again for case reasons (no *v present to check/assign accusative):

(15)  AdvP

\[
\begin{array}{c}
\text{Adv} \\
\text{VP} \\
\text{!} \\
\text{~vA state} & \text{V} & \text{PRO}
\end{array}
\]

This precludes combining it with unergatives (no PATIENT at all), and forces it to apply to the core VP in transitives, before the vP layer would be built, since at that point their highest argument is still a PATIENT. Whether this is a welcome consequence depends on how you define ‘state adverbial’ — but the following examples suggest that finding the appropriate definition for ‘state adverbial’ may not be an easy job ((4a) is repeated here as (16a)):

(16) a. *Kezében puskát tartva* bukkant fel a vadász a
hand-3sg-in gun-ACC hold-vA emerged(3sg) up the hunter the
bush-from
‘The hunter emerged from the bush holding a gun in his hand.’

b. ?*A maciját szorongatva* találtak rá az.
the teddy.bear-3sg-ACC clutch-vA found-3pl onto the
eltévedt kislányra az erdészek
lost little-girl the foresters
‘The foresters found the lost little girl (as she was) clutching her teddy bear.’

(4a)/(16a) is a good example of the ‘state + manner’ ambivalence of transparent adverbials: ‘holding his gun’ is certainly not the manner of emerging any more than the condition of the hunter on emerging from the bush. And in (16b), the participle is much like a depictive, which is probably the core case of a ‘pure state adverbial’ in a language where depictives are adverbials, rather than bare predicative adjectives.

Bene also notes that the AGENT of a transitive V may optionally surface as an oblique phrase (17), and that “this allows us to conclude that the notion of causation is there in the state adverbial participles derived from transitive verbs, independently of the fact that […] no vP is projected.” (Bene 2005: 86).

(17) Laci útonállóktól / útonállók által megverve feküdt
Laci highwaymen-from / highwaymen by PERF-beat-vA lay(3sg)
az úton.
the road-on
‘Laci was lying on the road beaten up by highwaymen.’

All in all, her analysis suffers basically from the same empirical problems as Laczkó’s (which is no surprise, given that she regards that account as the basis for her own), while on the theoretical side I think she has moved in the right direction, but incurred severe problems and difficulties because of the scantily worked out technicalities (e.g., she ends up with an AdVP, whereby it would be tricky for her to manage to erect the (clause-like) functional superstructure often found (especially in the case of ‘high’, sentence-level adverbials) in the participial construction (more on this in 4.5. below).

2.2.2. É. Kiss (1998) – a sketch of an account in terms of an ‘expanded VP’

É. Kiss in her concise syntax of Hungarian touches upon the issue of adverbial participles cursorily, and suggests that they can best be treated as ‘expanded VPs’ — this makes room for the projection of various functional layers, but also allows for the absence of tense in these almost clausal participial phrases. She depicts these participial structures as “VPs on a non-
finite base which the -va/-ve derivational affix turns into [something] assuming an adverbial role”. Since the V-form is non-finite, it can only have a PRO subject. As regards the manner ~ state distinction, she suggests a (quite important) difference: while the manner adverbial participles indeed project a full-fledged VP, possibly including its own topic and focus positions, and its PRO subject is invariably controlled by the matrix subject, the state adverbial participles are possibly lexically derived adverbs (with their subject argument demoted, and the internal one promoted), given the fact that they can never have surface objects. She clearly relies on Komlósy’s idea of lexical null-passivization preceding the V → Adv derivation. Moreover, the PRO subject (if it has any) can be controlled by either the matrix subject or the matrix object. She notes, however, that the fact that the V-modifier can sometimes excorporate from the “derived Adv” (e.g., el van vetve / away is cast-va / ‘(it) is cast away’) is a problem for this lexical derivation analysis.

2.2.3. Kenesei (2000) – an account in terms of inflection

This, again, is not a well wrought out analysis for the adverbial participles: Kenesei offers an inflectional treatment of Hungarian participles in general, and while most of his arguments against a derivational analysis, and for regarding them as inflectional V-forms, apply to the adverbial participles as well, he only fleshes out a technical account for the adjectival participles, which happens to fail to carry over directly to the adverbial type. His crucial arguments for the inflectional view are the following:

- The alleged word class (category) of ‘participles’ does not independently exist: these classes would contain no underived items.
- The participles cannot be input to any sort of further derivation, in fact, they can hardly take further word-level affixes (and the adverbial participles cannot take any further affix at all). The reason why they cannot be further derived is that the participial affix is a non-finite inflection (tense-marking).
- They display the same argument structure as their base verb, and project full-fledged clausal domains (topic/quantifier/focus slots, negation, binding domain).

His proposed analysis, however, fails to solve the single most problematic and widely discussed aspect of the syntax of adverbial participles: the issue of stem passivization. To wit: he posits an empty relative operator (Op)
for the case of adjectival participles, which can neatly fill in the role of an unpronounced internal argument in the ‘passive’ cases:

\[(18) \left[ \text{DP } \text{az } \left[ \text{NP } \text{egymáshoz } \text{OP}_{\text{ext}} \text{ PRO}_{\text{ext}} \text{ átküldött } \right] \text{ students} \right] \text{ over-send-PAST.PRT}

\] ‘the students (who are/were) sent to each other’

However, this is only available because the adjectival participles serve to modify a head noun (much like a preposed relative clause). Our adverbial participles, on the other hand, do not stand in any such modifi cational relation, so positing some empty operator in a like fashion would be unmoti vated and far-fetched. In the absence of such an available empty element, we are back to square one with respect to the null-passivization problem.

2.2.4. Tóth (2000)

Tóth’s account falls in the ‘single -vA affix’ line of tradition, and is set in a not strictly lexical model, where -vA is a head category that can enter the syntactic structure at various levels/points, and many properties of the emerging construction is derivable from the locus of its insertion. I think that most of the generalizations that she based her analysis upon are perfectly valid, and therefore it is hardly surprising that my account, to be developed below, mostly differs from it on the level of technical implementation, while many insights of her account will be preserved.

She assumes that the affixal lexical item -vA can enter the structure at three points, corresponding to three structural and functional variants of the participial unit:

- It can fill T⁰, and attract V there. T is thus non-finite, hence no nominative, so no overt subject is licensed. This yields a non-finite clause (with a complete set of left-peripheral projections) which serves as an adverbial adjunct clause within a matrix domain, its PRO subject identified logophorically. This is where it (almost) freely alternates with the -vÁn partice. No restriction whatsoever obtains with respect to the verb type it combines with.

- Alternatively, it can fill a Kratzerian Voice⁰, but in this case there can be no clausal projections above, hence no nominative for an overt subject, though Voice licenses an accusative for V’s internal
argument, if it has one. This participial VoiceP is then adjoined to the matrix VoiceP: it must be almost strictly adjacent to the overt copy of the matrix V. These participial phrases function as secondary predicates; the base verb can have either an active or a passive construal, depending on its aspectual properties.

- Finally, -vA can head its own specific functional projection, taking a VP complement. No VoiceP is projected, so neither nominative nor accusative case is licensed. The -vA phrase itself merges with a phonetically zero affixal Asp0. This gives rise to what she terms ‘stative resultatives’, which constitute a primary predicate, and cooccur with a supportive copula, to carry tense/agreement morphology, and provide case for the subject of the -vA phrase.

The following examples illustrate the above options:

(19) a. $[\text{CP1} \ [\text{CP2} \ \text{Furcsa} \ \text{hangot} \ \text{hallva}], \ \text{benyitott} \ \text{a} \ \text{szobába}]$.
    ‘Hearing / Having heard some strange sound, (s)he opened the door to the room.’

b. $[\text{CP1} \ [\text{CP2} \ \ldots \ \text{furcsa hangots} \ \ldots \ [\text{TP} \ \text{PRO} y \ [\text{[T} \ \text{hallz+va} [\text{VoiceP} t_y [\text{Voice'} t_y [\text{VoiceP'} t_y] \ldots \ldots \ldots \ldots]]]]]]$ …

(20) a. $\text{János} \ [\text{VoiceP1} [\text{VoiceP2} \ \text{kötelekkel} \ \text{megkötözve}] [\text{VoiceP1} \ \text{ült} \ \text{a} \ \text{szobában}]$.
    ‘John was sitting in the room tied up with ropes.’

b. $\ldots [\text{VoiceP1} [\text{VoiceP2} \ \text{PRO} \ \ldots [\text{VoiceP2'} \ \text{megkötöz+ve} [\text{VP} t_x \ \ldots \ ]]] [\text{VoiceP1} \ \text{ült a szobában}]$]

(21) a. $\text{A levél meg van irva}$.
    ‘The letter is written.’

b. $[\text{TP A levél} x \ [\text{PRO} y \ [\text{van} [\text{AspP} t_y [\text{Asp'} [\text{irz+va}]_{p+\varnothing} \ [\text{FP} F^\text{-} \text{t}_p [\text{VP} t_z t_x \ldots \ldots \ldots \ldots]]]]]]$
Quite recently, Márkus (2008) has criticized Tóth (2000) in several points, two of which are notable:

- An important point of Tóth’s account is that there is no (verbal) passive in Hungarian, i.e., the derivation of constructions like (21a) involves no passivization. Márkus argues, however, that a variant of this copular predicative construction, with lesz/lett ‘become/became’ in lieu of van ‘is’, displays all properties generally associated with verbal passives.

- Tóth does not account for the ‘unergative gap’, i.e., the fact that the stative predicative construction does not, in general, occur with unergative predicates (cf. (8a)). In fact, she demonstrates that there is a set of unergatives (only having an expletive subject argument) do partake in this construction.\(^9\)

While in the first point Márkus is actually pushing her own agenda, the fact that Tóth’s analysis does not cover the lesz/lett (‘become’) cases and the more typical unergatives does invite some further work to be done on her account.

To recapitulate the findings of this section: there have been various proposals for analysing the Hungarian -vA participles, but some of them (Komlósy, É. Kiss, Kenesei) are too sketchy to stand up to careful scrutiny, while the others (such as Bene’s) are problematic, empirically (for the greater part), and also theoretically (to a lesser extent). There is, however, one account (Tóth’s) that manages to capture the significant properties of -vA participles quite well, and were it not for the subsequent development of syntactic frameworks, it would only need relatively minor corrections, additions, and embellishments. Given some recent trends and results of syntacticist approaches to morphology, however, I have decided to devise an entirely new account, instead of just trying to improve on hers.

3. What a proper account must provide for

From the above sections it is clear that a viable account must cover at least the following properties:

- The adverbial participles can (though not necessarily do) project clausal domains, involving (at least) topic, focus, and negation.
The participial phrase/clause thus projected may appear in various modifier positions (at least at VP/vP-level and clause level), as well as the predicate of a small clause.

The subject of the participial phrase/clause is never overtly expressed within its own domain — it is either PRO, or some other empty category (identified from outside), or just implied.

As a rule, on a ‘manner’ reading, the empty subject is identified with the matrix subject; on a ‘state’ reading it is identified by either the matrix subject or object (but not any other argument, such as oblique-case or PP complements).

Transitive verbs can be participialized in two ways (‘active’ vs. ‘passive’), unergatives always follow the ‘active’ pattern, while unaccusatives can in principle behave either way, though at least in the copular construction they clearly go the ‘passive’ way.

The ‘active’~‘passive’ pattern partly corresponds to the range of available functional readings: the passive ones are more readily (but not exclusively) interpreted as ‘state’ adverbials, while the active ones have a strong tendency for a ‘transparent adverbial’ (manner of action + state of some participant) reading. Neither type seems to be able to predicate of just the event (variable), so they are never construed as pure manner adverbials.

At this point, it is interesting and enlightening to take a short detour and look at the major findings of yet another work, dealing with the predicative use of -vA participles: Kertész (2005). The most important conclusion of that work is that there are numerous very delicate constraints on the use/usability of the ‘state’ adverbial participles (in strong contrast with the rather unrestricted ‘manner’ adverbial participles), especially in the copular predicative construction (as in (1b)) and most of these constraints are about the lexical semantics of the base verb. To spell out but a few:

- ‘state’ -vA can only attach to verbs that have an argument that undergoes a change of state. (22a, b)
- predicative -vA participles are more acceptable if (i) the result state after the change is ‘clearly visible’, (ii) the resulting state holds for a longer period, (iii) the resulting state is relevant and more in quality than just the result of the given change (22c, d), (iv) some agent is implied (22e, f)
- of the unaccusatives, only those may occur in the predicative construction that are telic (23a, b), but not even all of them, e.g., verbs
of creation, although telic, do not occur in this construction: (23c); etc.

(22) a.*Laci énekelve van. – no change-of-state (unergative)
Laci sing-vA is
‘Laci is sung.’ (intended: ‘Laci is singing.’)

b.*Laci látva van / meg van látva. – no change-of-state (transitive)
Laci see-vA is / PERF is see-vA
‘Laci is (being) seen.’

c. Az autó össze van törve. – relevant for the car
the car PERF is break-vA
‘The car is crashed broken.’

d.?A váza össze van törve. – not relevant for the vase: it has
the vase PERF is break-vA ceased to exist
‘The vase is broken to pieces.’

e. Az autó meg van javítva. – an agent is implied
the car PERF is repair_{acc}-vA
‘The car is (= has been) repaired.’

f. *Az autó meg van javulva. – no agent is implied
the car PERF is repair_{acc}-vA
‘The car has become good.’

(23) a.*A hinta pörögve van . – atelic
the swing spin-vA is
‘The swing is spun. (intended: The swing is spinning.)’

b. A motor fel van pörögve. – telic
the engine up is spin-vA
‘The engine is revved up.’

c.*Egy vendég van érkezve.
a guest is arrive-vA
*‘A guest is arrived.’
The complex and complicated nature of this set of restrictions questions the usefulness and viability of basing the structural analysis of adverbial participles on these semantic distinctions. Even though these constraints appear to be selectional in nature, it is highly unlikely that syntax (whether lexical or not) should be sensitive to such grammar-external notions like ‘relevance’, or ‘length of the period, and visibility, of the resulting state’. Instead, it is more promising to let syntax more freely generate these structures, and let the semantic interpretation (and/or pragmatics) sort out the possibilities.

4. The syntax of adverbial participles

4.1. The ingredients of the analysis

For the analysis, I will assume the basics of Marantz’s (1997, 2001) view of the syntacticization of morphology, including a decompositional/VP-shell treatment of predicates. Under this view, the building blocks of syntax are morphemic roots, which are turned into category-specified words by syntactic processes (such merging them with category specifying heads like (various flavors of) v/voice, n, D, etc.). This model also frees us from having to try to force the traditional categorization of derivation vs. inflection on participial morphology: as can be seen quite clearly from the literature, there is a considerable amount of uncertainty whether participle formation is derivational (and yields a peculiar kind of category) or inflectional (though its relation to tense-marking is left vague). We can now afford to ignore this terminological issue completely, and establish that the participial affix can merge at different points of projecting VP (or clause) structure, with different consequences.

In particular, I will assume, following the lead of Pylkkänen (2002) and Alexiadou (2006), both building on Kratzer (1996), that all predicates are syntactically structured as shown in (24). Each atomic component, represented by a separate syntactic head, introduces at most one argument of the whole ‘predicate’ in the traditional sense of the word. The root is responsible for the innermost argument, while Voice closes off the projection of the entire ‘predicate’ by adding (if need be) the ‘external argument’. Little $v$ is the verbalizing morpheme, defining the predicate as a verb (since roots are category neutral in themselves), and $\text{CAUS}$ is the morpheme introducing the notion of causation (agentivity) into the compositional structure. Little $v$ also
constitutes the borderline between ‘inner’ and ‘outer’ affixation (see Marantz 2001).

\[ \text{(24) } \left[ \left( \text{external arg} \right) \text{Voice} [ \text{CAUS} [ \text{v} [ \sqrt{\text{ROOT}} \left( \text{internal arg} \right) ]] ] \right] \]

I want to break with a certain tradition, and avoid basing the analysis on the ‘manner’ ~ ‘state’ duality (because, as we have seen, it is neither a duality, nor a clear cut distinction), which means that we will posit a single -\(vA\) affixal morpheme, as the null hypothesis. As regards the various adverbial interpretations of our participles, I assume the approach taken by Geuder (2004) to be both valid and relevant, and although not much hinges upon the choice of a particular semantic account (as long as it does not try to drive the syntactic analysis), I will rely on Geuder’s classification and assume the semantics proposed by him.

In Geuder’s treatment of manner and state adverbials, there is a spectrum ranging from pure manner adverbials, which merely predicate of the event variable, as illustrated in (25), through transparent adverbials (as in (26)), which denote a transparent relation between the event and an individual (represented by one of the arguments), to depictives, or pure state adverbials (see (27)), in the case of which there is just an incidental temporal overlap between the event and a stage-level property of an argument-individual (where the extent of the overlap is determined pragmatically).

\[ \text{(25) a. } \text{Max solved the problem quickly.} \]
\[ \text{b. } \text{Max was quick.} \]
\[ \text{c. } \text{VP} = \lambda x [ \exists e [ \text{solve}(e, x, \text{the problem}) \land \text{quick}(e)] ] \]

\[ \text{(26) a. } \text{He discovered sadly ?sad that the solution was wrong.} \]
\[ \text{b. } \text{Joe angrily left the meeting.} \]

\[ \text{(26′) a. } \text{VP} = \lambda x [ \exists e [ \text{discover}(e, x, p) \land \exists s [ \text{sad}(s, x) \land s \circ e \land \text{CAUSE}(e, s)] ] ] \]
\[ \text{b. } \text{VP} = \lambda x [ \exists e [ \text{left}(e, \text{the meeting}, x) \land \exists s [ \text{angry}(s, x) \land s \circ e \land \text{Rmotivate}(s, e)] ] ] \]

\[ \text{(27) } \text{Max ate tired.} \]

\[ \text{(27′) } \text{VP} = \lambda x [ \exists e [ \text{eat}(e, x) \land \exists s [ \text{tired}(s, x) \land s \circ e] ] ] \]
Due to inferences, the (semantically clear) border between manner and transparent adverbials can easily become blurred in actual interpretations, as in the following example:

(28) She walked out calmly.

\[ \exists e [\text{walk-out}(e, \text{she}) \& \text{calm}(e)] \]

+ inference: visual evidence \(\rightarrow\) calm(she) may be true as well

As is clear from the examples presented in the previous sections, the Hungarian adverbial participles are never construed as pure manner adverbials: they always predicate of an individual involved in the event. That is, the 'classic' cases of the manner readings of these adverbial participles are in fact transparent adverbials in Geuder's terminology, while the state readings (as far as we can tell at all, given the lack of any precise definition of the term in the literature) are either typical instances of depictives, or transparent adverbials, hence not genuinely distinct from the 'manner' ones.\(^{13}\)

The following points summarize the basic assumptions for my proposal:

- As a null-hypothesis, I assume that there is a single adverbial participial affix in the (narrow) lexicon, corresponding to the affixal vocabulary item \(-vA\) (whereby I will refer to it in the rest of the paper as \(\text{`-vA'}\)).
- The various adverbial readings (manner, depictive, transparent) emerge only at the level of semantic interpretation, and they are influenced by manifold semantic and pragmatic factors (cf. Kertész 2005, and Section 3. above).
- Affixal \(-vA\) can, in principle, enter the structure at any point in the extended projection of the predicate, and the actual point of entry has consequences both for the further projection of the predicate and its arguments, and for the available interpretations. In particular:
  - the higher it is inserted, the stronger the tendency for a transparent adverbial reading;
  - the controller of the unpronounced argument of the participle (see below for the details) can only be a DP that has an A-position (A-chain-link) higher in the matrix domain that the position of the participial phrase/clause;
  - the higher \(-vA\) enters the structure of the participial phrase, the higher the position of the participle within the matrix domain.\(^{14}\)
In the next subsections, I will turn to the various insertion options of -vA, and the emerging syntactic and semantic structures.

4.2. Low insertion

When a root is picked from the lexicon, the first step to be taken is invariably the merging of this root with its (sole) argument, if it has any — that is, we must satisfy its selectional requirements as a first step. This cannot be preceded by any other merge operation. Note, though, that its relation to its innermost argument is not always direct, as depicted in (29b), but may sometimes be indirect, via a small clause structure, in which the argument of the root is the subject, and some aspectual (delimiting/measuring) secondary predicate is the small clause predicate (loosely following here Winkler’s 1996 suggestion, and the leading idea concerning the semantics, though not the actual syntactic analysis, of Hungarian V-modifiers (VM) in É. Kiss 2006), see (30c).

In principle, we could now merge in the adverbial participial head -vA, as an ‘inner affix’ in Marantz’s (2001) sense. Inner affixation, however, is associated with the potential of idiosyncratic combination with the root, and a decreased level of productivity, neither of which characterizes -vA, which is a hallmark case of ‘outer affix’ (cf. its productivity and transparent, predictable semantic combination with the base verb). Furthermore, on the basis of its attachment pattern illustrated with a certain verb type in (29), we can conclude that it necessarily enters the structure after/outside little v: as seen here, the verbalizing suffixes -(U)l ‘ergative/unaccusative’ and -(í)t ‘transitive’, which are rather obvious instances of v, precede the participial affix -vA.

(29)  
gur-ul-vA,  gur-it-vA;  sü-l-ve,  sü-t-ve  
roll-ERG-vA  roll-TR-VA  bake-UNACC-VA  bake-TR-VA  
‘rolling’  ‘rolled’  ‘being baked’  ‘baked’

Suppose now that we merge in -vA immediately after verbalization (by v) takes place. ((30a) shows this for unergatives (no internal argument), and (30b, c) for other root-types).
This step disrupts the further projection of the root (in particular: no further V-component/shell (e.g., CAUS), and importantly, no Voice-layer is built), and yields a participial phrase with relatively little internal structure. No external argument is projected (it is at best implied), and even when there is an internal argument, no accusative case is available for this DP. The root then picks up the v and -vA affixes by some appropriate mechanism. These are the participials found in the copular (or: stative) predicative construction, embedded under some copular verb (such as van ‘is’, volt ‘was’, lesz ‘will be / become’, lett ‘became’). The basic options are schematized in (31), and exemplified in (32):

(31) a. COP [V-vA [DP VM]] \( \rightarrow \) VM COP [[V-vA [DP VM]] \( \rightarrow \) [T [VP VM-COP [V-vA DP VM]] \( \rightarrow \) \[z---- case ----m

or:

b. COP [V-vA DP] \( \rightarrow \) V-vA COP [V-vA A DP] \( \rightarrow \) ...

or:

c. COP [V-vA DP] \( \rightarrow \) XP adj COP [V-vA DP] \( \rightarrow \) ...
As seen in these examples, the internal argument will be promoted to become the subject of the clause built on the copula, whereby it will avail itself to nominative case-marking/checking in relation to the finite matrix domain, too. Some key properties of the construction are given in (33):

(33) \[ \text{COP} \{ \text{V-eA} X \} = \text{‘X is in the state expressed in “V-eA”’} \]

\[ \rightarrow \{ \text{V-eA} X \} \text{ must denote either a resulting state (34), or a process viewed as stativized (35–36)} \]

\[ \rightarrow \text{V must therefore be either telic or a process verb} \]

\[ \rightarrow \text{X cannot be an external argument (EA): the V-root (√STATE) expresses the relevant state, and it predicates of the internal argument (IA): (37)} \]

(34) a. A levél el van küldve. cf. *A levél küldve van.
   the letter away is send-vA
   ‘The letter is (= has been) sent.’

b. A szalag ketté van szakadva. cf. *A szalag szakadva
   the ribbon two-into is tear-vA
   ‘The ribbon is torn into two.’

(35) a. A szoba (épp) takarítva van. – progressive
   the room (just) clean-vA is
   ‘The room is (being) cleaned (just now).’

b.?A bajai szerelvény (ma) dízellel van vontatva.
   the Baja train (today) Diesel-with is haul-vA
   ‘The Baja train is hauled with a Diesel today.’
(36) a. Kati haja (mindig/gyakran) aranyfésűvel van fésülve.
   'Katie’s hair is always/often combed with a golden comb.'
   (generic/habitual)

   b. Ezen a lemezen a jól ismert dal szokatlan módon alt hangon van énekelve.
   'On this record, the well-known song is sung by an alto voice.'

(37) a.* Laci vissza van futva a házba.
   '*'Laci is run back into the house.'

   b.* Laci be van vásárolva.
   ‘Laci is shopped.’
   (intended: ‘Laci has done/finished the shopping.’)

   c.* Laci le van győzve Jocit.
   '*'Laci is beaten Joci.’ (intended: ‘Laci has beaten Joci.’)

   d. %Laci el van utazva / fel van mászva a fára.
   'Laci is (lit.: traveled) away. / Laci is (lit.: climbed) up the tree.'

A possible reason why only transitives and unaccusatives partake in this game is that the unergatives truncated by -vA have no argument to offer as a subject. The illusion of ‘passivization’ of the transitive V is due to the essential similarity of this scenario to genuine passivization: no external argument is projected, the internal argument is deprived of accusative-marking, and a subject position opens up as a dual remedy for both of these ‘problems’.

Since no agent role is projected for the transitives, it is predicted that even a demoted, oblique representation of an agent is impossible, and this is borne out to a large extent:
(38) a. A festék le van mosva (*Laci által / Lacitól).
    the paint down is wash-vA Laci by / Laci-from
    ‘The paint is (= has been) washed off (by Laci).’

    b. Az autóm meg van javítva (*a szerelő
    the car-1sg PERF is repair-vA the mechanic
    által / szerelőtől).
    by / mechanic-from
    ‘May car is (= has been) repaired (the mechanic).’

There are surface exceptions though:

(39) a. A levél közjegyző által van hitelesítve.
    the letter notary.public by is certify-vA
    ‘The letter is certified by a/the notary public.’

    b. A levél hitelesítve van közjegyző által.
    ‘= (39a)’

    c. A kép híres festő által van festve.
    the picture famous painter by is paint-vA
    ‘The picture is painted by a famous painter.’

    d.* A kép festve van híres festő által.
    ‘= (39c)’

    e. ‘A kép Mari / egy barátom által van festve.
    the picture Mari / a friend-1sg by is paint-vA
    ‘The picture is painted by Mary / by a friend of mine.’

But this adjunct-represented agent can only appear in this construction, if it
specifies and characterizes the effected object (or, possibly, the result state),
cf. (40), with attributive counterparts:

(40) a. Ez egy közjegyző hitelesítette levél / ... híres
    this a notary.public certify-PAST.PART letter / … famous
    festő festette kép.
    painter paint-PAST.PART picture
    ‘This is a letter certified by a notary public / … a picture painted
    by a famous painter.’
BUT:

\[\begin{align*}
\text{b.} & \quad \text{Ez egy Péter lemosta / megjavította} \\
& \quad \text{this a Peter down-wash-PAST.PRT / PERF-repair-PAST.PART} \\
& \quad \text{autó.} \\
& \quad \text{car} \\
& \quad \text{‘This is a car washed / repaired by Peter.’}
\end{align*}\]

Moreover, since the lowest layer of the VP essentially denotes some state that can undergo a change just in case it is brought into relation with an event, and eventivity would be introduced by a separate, higher head (CAUS), no event\[^{20}\] is involved at this lower level, hence we predict that no event-related modifiers are possible — which seems to be a correct prediction:

\[\begin{align*}
\text{(41) a. } & \quad \text{szépen / *gyorsan fel van öltözve} \\
& \quad \text{neatly / *quickly up is dress-vA} \\
& \quad \text{‘is dressed up neatly/*quickly’} \\
& \quad \text{(gyors ‘quick’ must predicate of some event e)} \\
\text{b.*könnyen el van törve} \\
& \quad \text{easily away is break-vA} \\
& \quad \text{‘is broken easily’} \\
& \quad \text{(könnyű ‘easy’ must predicate of some event e)}
\end{align*}\]

Note how some of these ill-formed examples are ameliorated if the matrix copular verb itself denotes an event of change (licensing the manner adverb), rather than a state:

\[\begin{align*}
\text{(42) könnyen el lesz törve} \\
& \quad \text{easily away will.be break-vA} \\
& \quad \text{‘will be broken easily’} \\
& \quad \text{(lesz in the ‘become’ sense, not the ‘will be’ one)}
\end{align*}\]

4.3. Insertion above CAUS

As depicted in (24) above, if -vA (or anything else) does not intervene, the projection of the predicate will be taken to the next level: CAUS, a head related to causation,\[^{21}\] as well as eventivity. This leads us to a distinction be-
between transitives and unaccusatives: even though the two types are similar up to this point since only IAs have been merged in as yet, the transitives are now expanded with CAUS, while plain unaccusatives are not. This should have the obvious consequence that any modification of transitives can now involve the notions of eventivity and causation. And in fact, two relevant patterns can be detected in -vA participles, on the (by our terms natural) assumption that the -vA head can merge in above CAUS, just as well as it could merge in before (and precluding) the projection of the predicate to the level of CAUS. First, post-CAUS -vA participles of transitives, which can still be embedded in the copular construction presented in the previous subsection, have the option of modification by certain circumstantial adverbs (cf. the availability of instrumentals and by-agents in Alexiadou & Anagnostopoulou’s (2007) account of Greek participles), an option not open for unaccusatives, which necessarily lack a CAUS layer:

(43) a. A hús zsírban van megsütve / *megsülve.
   the meat fat-in is PERF-fryvA / PERF-fry unacc-vA
   ‘The meat is (= has been) fried in fat.’

   b. A festék forró levegővel van ?megszárítva/*megszáradva.
      the paint hot air-with is PERF-dryvA/PERF-dry unacc-vA
      ‘The paint is (= has been) dried with hot air.’

   c. A festék forró levegővel van szárítva.
      the paint hot air-with is dryvA
      ‘The paint is (being) dried with hot air.’
      (cf. (43b) – this one is a process)

Second, there is a relevant matching effect: those copular matrix verbs that themselves contain an eventivity component (‘BECOME’), namely, lesz (on its ‘become’ reading) and lett, only embed the CAUS-transitive -vA participles:

(44) a. A hús meg lett sütve / *sülve.
    the meat PERF became(3sg) fryvA / fry unacc-vA
    ‘The meat has become fried.’
Thus the generalization that emerges is the roughly the following:

(45) a. -vA below CAUS \(\rightarrow\) no circumstantial adverbial modification
    b. -vA above CAUS \(\rightarrow\) certain circumstantial adverbials are possible

4.4. Insertion above Voice

Another option for merging in the -vA affix is to wait until a Voice layer (Kratzer 1996) is built on the VP. This will have two straightforward structural consequences: (i) the projection, i.e., the syntactic representation of an EA is now possible in the spec of Voice, and (ii) accusative marking/checking by the Voice head is now available for any IA. But the EA will still have to rely on further functional projections for case, so if TP is not projected (for whatever reason) then the EA can only be represented by some caseless category. On the other hand, a TP superstructure could license an overt EA, if T has the appropriate feature content. This, however, never happens with -vA participles, since the participial head projects its own non-verbal category, which will not be extended by the usual clausal architecture (TP, CP). Thus the only chance for the EA within a -vA participle phrase to license any structural case is to be embedded in a raising (or ECM) type of matrix domain, as was the case in the copular structure in 5.1., for instance. Another such context will be treated presently. But in the majority of cases, the -vA participles built on VoicePs function as adjunctive, left-branch (hence opaque) domains within their embedding construction, leaving the EA without structural case, whereby these EAs must often be non-overt.23

4.4.1. Predicative complements

One type of construction where the participial expression functions as a predicative (small clause) complement is where it is embedded under the matrix predicates hagy ‘leave’ or talál ‘find’: talál [sc Xace V-vA] ‘find X V-ed/in a state of V’; hagy [sc Xace V-vA] ‘leave X V-ed/in a state of V’. Some illustration is given in (46):
Given the availability of (i) circumstantial adverbials in the participle phrase, and (ii) an EA for the participle, we conclude that in these cases the base predicate projects a CAUS layer (for transitives), and optionally a Voice layer. The accusative marking that occurs on either the EA, when there is one, or the IA, is licensed from outside, by the matrix V, in an ECM fashion (whatever its technical execution). Examples like (46d) testify that the ‘passive’ flavor characteristic of the participle in the copular construction is absent here, as is the telicity condition. On the semantics side, these are hallmark cases of ‘state’ adverbials, of the depictive type, with the participle denoting a state or process temporally overlapping with (in fact: containing) the matrix event time, i.e., the time of finding/leaving.

4.4.2. Adjunct secondary predicates

The other construction involving a VoiceP-based -vA participle is where the participial phrase constitutes a depictive or a transparent adverbial with adjunct status. As established by Tóth (2000), these cases involve participials that are (minimally?) VoicePs themselves (though?) with some information-structural architecture possible, and which occupy a position left-adjointed to the matrix VoiceP — only focus or negation may intervene between them and the overt copy of the matrix verb. Consider these examples:
(47) a. Laci [PRO\textsubscript{LM} mosolyogva] fotózta le Marit.

‘Laci photographed Mary smiling.’

b. Laci [PRO\textsubscript{LM} az autóban fáradtan üldögéve]

mesélt Marinak.

‘Laci was telling stories to Mary sitting tired in the car.’

c. Laci [PRO a kabátja gallérját teljesen felhajtva]

álldogált a hidegben.

‘Laci was standing in the cold with the collar of his coat fully lifted up.’

d. Laci [PRO kötelekkel megkötözve]

ült a szobában.

‘Laci was sitting in the room tied up with ropes.’

(48) a. A vízbe esett kisfiút [PRO\textsubscript{he} kimerülve]

követtem a hullámok köztt.

‘I was following the little boy (who had) fallen in the water exhausted.’

b. A vízbe esett kisfiút [PRO\textsubscript{he} kimerülve]

húztam ki a partra.

‘I pulled the little boy (who had) fallen into the water out to the shore exhausted.’

Semantically, there is again a temporal overlap between the matrix and the embedded eventualities, which may either be unmotivated, yielding a depictive reading for the participle, or in the motivation relation characteristic of transparent adverbials, as in Geuder’s (2004) typology.
Just as was the case with the predicative complements in the previous subsection, neither the 'passivization' effect, nor the telicity requirement is valid here: the PRO subject of the participle can equally well represent an agent or a patient, and process or state predicates can serve as the base of the participle without a hitch (as in (47a, b)).

Another important aspect of the construal of these structures concerns the question of the reference of the PRO subject of the participial domain. As shown in the examples above, the subject of the matrix domain is always a potential controller for this PRO, but in some cases, like (47b, 48b), the matrix object may control it, as well. Given Tóth’s (2000) assumption about the locus of the participial phrase within the matrix domain (left-adjointed to the matrix VoiceP), the subject control facts are as expected, but object control is somewhat problematic, since the highest A-chain-link of object phrases is in spec,VoiceP (as is widely assumed in the minimalist literature), i.e., even the highest A-chain-link of the controller is lower in the structure than the adjunct containing the controllee. The next subsection will show that if a participial phrase/clause is attached even higher in the matrix structure, the option of controlling its PRO subject by a matrix object is completely lost, i.e., the height of attachment figures significantly in the computation of control possibilities, which suggests that here, for the cases at hand, we must seek a solution that makes reference to the relative height of the controller and the adjunct containing the controllee. The most straightforward move is to place the participial phrase lower in the matrix structure: to somewhere below the outer specifier of Voice. But it will still have to be higher than the position of the overt copy of the matrix verb, which (in view of the general word order facts of Hungarian amply discussed in the literature) is not likely to be lower than Voice. This leaves Voice’ as the adjunction site for the participial phrase, at least for the object control depictive cases.

At the same time, there is a correlation between the choice of controller and the adverbial interpretation of the participle, too: with object control, the participle functions as a pure depictive (no motivation relation between the event — in (47a), Mari’s smiling is not necessary related to / induced by the photographing event; in (48b) the boy is surely not exhausted by being pulled to the shore), while with subject control, a transparent adverbial reading is possible (or maybe even preferred): there is a sense of motivation between the act of photographing Mary, and the smile on Laci’s face, and, likewise, between the act of pulling the boy to the shore, and the exhaustion of the savior.
4.5. The -vA participle as a sentential modifier

In full agreement with Laczkó (2000) and Tóth (2000), I distinguish a final case of -vA participles the two key properties of which are:

- The participle projects a full clause, with the entire functional layer, including positions associated with CP-space functions (topic, focus, distributivity), as well as some of those of the IP-space (like negation, tense). This clause has its own non-finite tense (see below), so it cannot license an overt subject, just a covert one (PRO).
- The participial clause enters into the matrix structure rather high, somewhere in its clausal functional architecture, whereby its own PRO subject cannot be controlled by any other argument of the matrix domain than the subject, whose topmost A-chain-link is high enough in the structure to c-command the participial clause.

Some illustration is given in (49):

(49) a. [PRO kabátját lazán a vállára vetve]  
   Laci reggel kilépett a kapun.  
   ‘Throwing his coat loosely over his shoulder, in the morning Laci stepped out of the gate.’

b. Laci [PRO a következményektől egyáltalán nem is félve] benyitott a szobába.  
   ‘Not fearing the consequences at all, Laci opened the door of the room.’

For most speakers who actively use the -vÁn participles in their dialect, the -vA and -vÁn participles are usually interchangeable in this construction (Tóth 2000):

(50) a. % [pro kabátját lazán a vállára vetvén] Laci reggel kilépett a kapun.  
   cf. (49a)

b. % Laci [pro a következményektől egyáltalán nem is félvén] benyitott a szobába.  
   cf. (49b)
No wonder, therefore, that Tóth proposed to analyse \(-vA\) in this use as an exponent of \(T^0\), in line with her (and Sárik’s (1998)) assumption that \(-vÁn\) is \(T^0\), the only crucial difference being that \(-vÁn\) has the capability of licensing non-null case on its subject, unlike the entirely non-finite, non-agreemental \(-vA\). My proposal differs minimally from Tóth’s: since I essentially consider \(-vA\) to be a single lexical item, I do not find it a good idea to allow for a categorial choice there (Asp/Voice/T). Instead, keeping to the leading idea of this paper, I assume that it heads its own projection, but this time it merges with some clausal functional category built above VoiceP.  

\[
\begin{array}{c}
\text{\(-vA\)} \\
\circ \\
\text{\(-vA\)} \\
\hat{6} \\
\text{FP} \\
\text{a kabátját} \quad \text{a vállára} \quad \text{vethet a} \\
\text{the coat-3sg-ACC} \quad \text{the shoulder-3sg-on} \quad \text{throw-} \\
\end{array}
\]

Temporally, the event/state expressed in the participial clause can be simultaneous or anterior/posterior to the event time of the matrix clause. For such temporal relations to be expressible, and in view of the architectural richness of this type of \(-vA\) participles, it is reasonable to assume that such participial clauses always include a (non-finite, dependent) \(T^0\), and they attach to some functional category of the matrix clause below TP, from where they may undergo further movement to the C-space (as, e.g., in (49a)).

The temporal relation between the matrix and the participial clause can technically captured as dependency relations between their Ts, but there is some reason to believe that it falls under a particular application functional principle of temporal sequencing (PTS), attributed to Tai (1985):

\[
\begin{array}{c}
\text{PRINCIPLE OF TEMPORAL SEQUENCING} \\
\text{The interpretation that an event depends on the event preceding it is} \\
\text{based on our understanding of the real world, in which events unfold} \\
\text{along a time dimension.} \\
\end{array}
\]

The particular way Tai thought this principle applied to syntactic structures is that the linear ordering of real-world events and that of their linguistic expression is isomorphic: a linguistic unit \(u1\) expressing an event \(e1\) that precedes another event \(e2\) is bound to precede the unit \(u2\) expressing the latter event in the linear order of the linguistic units.
Some illustration of this functional principle at work in the Hungarian adverbial participial constructions is given in (54–55):

(54) a. *Kinyitotta* az ablakot, utat *engedve*  
out-opened(3sg) the window-ACC way-ACC allow-vA  
a a *füstnek*.  
the smoke-DAT  
‘(S)he opened the window, giving way to the smoke.’

b. *Kinyitva* az ablakot, utat *engedett*  
out-open-vA the window-ACC way-ACC allowed(3sg)  
a a *füstnek*.  
the smoke-DAT  
‘Opening the window, (s)he gave way to the smoke.’

(55) a. #*Utat engedve a füstnek, kinyitotta az ablakot.* cf. (54a)  
b. *(#)* *Utat engedett a füstnek, kinyitva az ablakot.* cf. (54b)  

Quite obviously, the two clauses in these examples are more or less on a par, either can serve as a participial modifier within the other one, but their ordering is functionally determined in either case, roughly along the lines of the PTS and (53). Any detailed investigation of such effects lies beyond the scope of this chapter, though, and is therefore left for future work.

On another note, mention must be made of the fact that (possibly in correspondence with the relative independence of these clausal participial units, as compared to the cases treated in the preceding subsections) the clausal -vA participles have a much wider range of available adverbial interpretations: apart from the accessibility of transparent state readings comparable to those of the lower-attached -vA participles, we find (at least) temporal, purpose, and reason adverbials here, too (witness the temporality of (49a, 54), the reason/purpose component in (54a, b)).

As briefly mentioned already, the reference of the covert subject of the clausal -vA participles is both more limited and less restricted, at the same time, than was the case with the VoiceP-level ones. Here the general pattern is subject control — object control is entirely impossible, given the low A-positions of the (chain of the) object DPs relative to the locus of the -vA clauses. However, as pointed out by Tóth, logophoricity must be allowed as
an option, too: (56a). Interestingly, though, this only seems available in the absence of an appropriate syntactic controller, and even then, the logophoric controller cannot be something deeply embedded:

(56) a. [PROx furcsa hangokat hallva], természetes volt
   strange sounds-ACC hear-vA natural was
   számára, benyitni.
   for.him/her in-open-INF
   ‘Hearing strange sounds, it was natural for him/her to open the door.’

   b. [PROy,x furcsa hangokat hallva], Laci megpróbált
   strange sounds-ACC hear-vA Laci PERF-tried(3sg)
   neki, segíteni
   (s)he-DAT help-INF
   ‘Hearing strange sounds, Laci tried to help him/her.’

   c. *[PROx hazugságoka kiabálva], természetes
   lies-ACC shout-vA natural
   lett volna megverni Őt
   would.have.been PERF-beat-INF him/her
   ‘Shouting lies, it would have been natural to beat him/her up.’

4.6. Summary

To conclude this section: we have established the basic attachment patterns/possibilities of -vA in the (extended) projection of its host predicate, and found that there are at least four crucial merge points, yielding constructions with markedly different properties:

- **Merge right above v** → a minimal participial phrase emerges, which can then be embedded in a copular matrix domain; the sole projected overt IA of the host root is then promoted to be the subject of the copula clause, getting its case licensed there. No EA can appear, because the structure is too minimal for that. The participle serves as the main semantic predicate.

- **Merge above CAUS, but below Voice** → a somewhat richer structure emerges, with an event variable that licenses further modifiers;
the embedding construction is still copular, with further structural and semantic properties identical with the previous type.

- **Merge above Voice** → this gives rise to predicative complement or adjunct participials (appearing in a small clause selected by certain matrix predicates in the former case, appearing as adverbial modifier to a matrix VoiceP in the latter). Here the Voice-layer licenses the case of any IA, and allows for projecting an EA, but in the absence of a case licenser for the latter, it surfaces as a covert DP (PRO), the reference of which is determined by syntactic (subject or object) control. The participial phrase is construed as a secondary predicate, with a depictive or a transparent adverbial reading.

- **Merge in the IP-space** → this yields a clausal structure for the participle, which then appears as a ‘high’ adverbial in the matrix domain. The participial clause has a rich clausal functional structure, but its T being non-finite, its subject is still covert, and (syntactically or logophorically) controlled.

5. **Conclusion, with some speculation about the ‘matching effect’**

This chapter has aimed to show that an account of -vA participles relying on the variable merge point of a single affixal morpheme in the syntactic structure, in a Marantzian antilexicalist framework is viable, and can explain the behavioral pattern of the -vA participles to a large extent (faring no worse than the previous accounts). For the greater part, I believe that I have succeeded; however, there remains at least on crucial effect in the system that has not been explained: this is the effect of matching in the size of the participial domain and its hosting matrix domain, mentioned in 4.1. above:

\[(57)\] The higher -vA enters the structure of the participial phrase, the higher the position of the participle within the matrix domain.

The fact that larger participial chunks don’t occur lower in the matrix structure can largely be derived independently: the copula in the predicative constructions needs a small and transparent domain to operate on, and the invariable temporal overlap semantics of depictives and transparent adverbials is easiest to derive if the modifier and the modifeye share the same T above them. If I had a good account of the inverse direction of matching, i.e., of why the smaller participials don’t occur in higher positions in the matrix, the story could (and should) end here, and the effect in (57) could probably be
waved away as insignificant and epiphenomenal. In the absence of such a good account, though, I must speculate somewhat on how (57) can be derived, so that I can patch the cooccurrence account this way.

The essential idea is that -vA is a conjunction forming element: it takes two arguments in a special kind of coordination, in an asymmetric syntactic configuration:

(58)  
  \[ \text{Conj-}vA \]  
  e i  
  X  \[ \text{Conj-}vA \]  e i  
  Y  

The first argument (Y in (58)) is what is turned into a participial phrase/clause morphosyntactically, while the second one (X in (58)) corresponds to the ‘matrix domain’. Initial motivation comes from the semantics of the VoiceP-level and clause-level participial constructions. Consider (47d) again, repeated here as (59), with its Geuder-type semantic representation:

(59)  
Laci [PRO kötelekkel megkötözve] ült a szobában.  
Laci ropes-with PERF-tie-vA sat(3sg) the room-in  
‘Laci was sitting in the room tied up with ropes.’

(59′) VoiceP = λx [∃e [sit_in_room(e,x) & ∃s [is_bound_up(s,x) & s □ e]]]  
(59″) [s, x kötelekkel megkötözve] & [s, x ült a szobában]  
 x ropes-with PERF-tie-vA & x sat(3sg) the room-in

That is, if we think of the structure of (47d) as a VoiceP-coordination under a common (ATB) subject, instead of a finite matrix clause embedding a participial VoiceP adjoined to the matrix VoiceP, we arrive at the intended meaning in a straightforward way.

A minimally modified version of (49a), given here as (60), illustrates the same for the clause-level participial:

(60)  
Laci [PRO kabátját a vállára vetve] kilépett  
Laci coat-3sg-ACC the shoulder-3sg-on out-stepped(3sg)  
a kapun.  
the gate-on  
‘Throwing his coat over his shoulder, Laci stepped out through the gate.’
If we accept this hypothesis then the matching effect follows from a general constraint on coordinative structures: that the conjoined items must be of the same category. In our particular cases: conjoin a VoiceP with a VoiceP, or a clause with a clause. The final (surface) orders are then reached by various movements into a clausal functional superstructure above the ConjP. For example, in the particular case of (47d), Laci would be topicalized in that domain, while the participial VoiceP would move to a focus-like position; in (49a’), Laci would again be topicalized, while the participial clause would move to some position typical of sentential adverbials.28

Turning now to the ‘low insertion’ cases, I assume that what we have there as the participial phrase is just the downstairs part of the conjunction: -vA and its first argument. Conj-vA being unsaturated, it behaves as a predicate phrase, and is selected by the embedding construction (the copular construction, or the hagy/talál verbs) as such.

Needless to say, this is just a rough speculative idea, with many details waiting to be spelled out (e.g., the ‘control’ patterns), and it will take further research to confirm or disprove its validity, but at first sight it appears as a promising path to follow.
Notes

1. The writing of this paper owes very much to the persistence and patience of Katalin É. Kiss, for which I am greatly indebted. I also wish to express my gratitude to all members of our project group for very helpful discussions and suggestions, especially to Balázs Surányi and Barbara Úrögdi. Earlier versions of this paper have been presented at the MaMaNyelv7 conference (Szeged, 2007), and at a public lecture in the Research Institute for Linguistics (Hungarian Academy of Sciences); I am grateful for all comments of those audiences.

2. The use of capital for the letter of the vowel in the affixes abbreviatively reflects the fact that they are involved in vowel harmony, i.e., they have variable forms with harmonizing vowels: -va/-ve and -ván/-vén, the choice depending on phonological properties of the vowels of the hosting stem.

3. There are lexical exceptions (paradigm gaps?): lesz ‘become/will be’ only has the -vÁn form: lévén, but not *léve, and for the verb hisz ‘believe’ the -vA form is rather marginal: hívén, but *híve. Naturally, in these cases the only available form is the one with -vÁn, and these are used for every accessible adverbial role (if used at all).

4. These examples are taken from, or based on examples in, Laczkó (2000).

5. It must be noted, though, that the behavior of adverbial participles as predicatives, as in (2a, b), also favors analysing unaccusatives as taking the -vA2 suffix, on grounds of simplicity (Laczkó 2000: 447).

6. Some aspects of the technicalities have been simplified here to avoid lengthy but not directly relevant technical discussions, partly on LFG, partly on the morphology of Hungarian — for the precise details the reader is referred to the original source.

7. This suffers from terminological looseness, of course: it glosses over the question whether this is a genuine category changing derivation. For this reason, it is difficult to assess the viability of this proposal.

8. As regards the category (and exact make-up) of the domain hosting the copula I am necessarily vague: Tóth does not specify this.

9. An example of this type (Tóth 2000: 252, (24b)):

(i) (A szobákban) pro kí van takarítva.

    the rooms-in out is clean-vA

    lit.: ‘It is/has been cleaned (in the rooms).’ [ = The rooms have been cleaned.]

10. Most of these constraints had been established in the literature before Kertész’s work (esp. Laczkó 1995, Alberti 1996, 1997, É. Kiss 2004), but she gives a very comprehensive survey and summary of whatever had been found out about this.
11. Note in this context that the lexical reflexive predicates (e.g., felőltözik ‘dress up’, levetkőzik ‘undress’, megfürdik ‘take a bath’) pattern with unaccusatives, and do occur in the stative predicative (copular) -vA-construction, as expected, since their sole argument is of the undergoer type:

(i) Fel vagy öltözve?
(ii) Meg vagyok fürödve.

‘Are you dressed up?’ ‘I am (= have) bathed.’

12. I will completely ignore the question of where an applicative head appears for ditransitives, and abstain from using examples involving this complication, to keep the discussion reasonably simple.

13. This way, as an extension to Geuder’s typology of the ‘category – function’ matchings, Hungarian embodies the option where both transparent adverbials and depictives are represented by adverb-like entities, as opposed to English, where depictives are adjectives and transparent adverbials are adverbs, and to German, where both are adjectives (Geuder 2004: 155).

14. This observation was made by Balázs Surányi (p.c.).

15. This may be head movement (à la Baker 1988), morphological merger (Halle & Marantz 1993), or morphosyntactic merger (Bartos 2003, 2004), depending on one’s favorite theory of syntactic affixation – we do not pursue this issue here.

16. And often the participle or the verbal modifier predicate of the SC raises to the left of the finite V (van) for reasons having to do with aspectual and/or prosodic properties of the copula, irrerelevantly for us here.

17. Note that the examples in (35–36) describe the process, not the resulting state, cf. the use of time adverbials in (35), for example.

18. X may be implicit:

(i) Tálalva van / Ki van takarítva. (cf. Tóth 2000)

‘It is served. / It is cleaned.’ [intended: The meal is served. / The place is has been cleaned.]

19. Pragmatic factors can obviously cause interference (occasionally, a state can be predicated of an EA, too), therefore the combination of unergative verbs and -vA is not morphosyntactically ill-formed, but semantically inappropriate, hence the possibility of pragmatic overriding. As regards the origin of the subject, the simplest assumption is that here they are ‘occasional’ IAs, merged with the root, so these examples are not built upon genuine unergative predicates, but ‘occasional’ unergative-turned-unaccusatives.

20. Here we make a distinction between ‘event’ in the wider, general sense (= eventuality) and in the more specific sense (eventivity, event as opposed to state), making use of the more specific sense.
21. This CAUS category is not the same as the (affixal) head introducing external causation (-tAt) corresponding to the make X do sth. construction in English — the latter head is higher up in the structure, above VoiceP.

22. For more on the differential behavior of stative vs. eventive (van ‘is’ vs. lesz ‘become’) copulas in the stative/predicative construction, see Márkus (2008).

23. For simplicity’s sake, I assume here that these non-overt D(P)s are PROs, which need no structural case, and disregard the ‘null-case’ tradition of the literature on PRO and control. A more precise, more detailed (and complicated) account of the licensing of these non-overt EAs would certainly involve some sort of weak T in the participial phrases.

24. Control by any other argument (or adjunct) is impossible — and this is all the more notable because non-participial adverbials in similar functions do allow such a construal, cf. (ii):

(i) Az elemek [PRObatt./*M teljesen kimerülve] adtam át Marinak. ‘I gave the batteries to Mary completely exhausted.’

(ii) a. [PROwe/*he súlyosan megsebesülve] is bíztunk a parancsnokban. ‘We trusted in the commander even when (we were/he was) seriously wounded.’

b. [[PROwe/he súlyos sebesült-en] is bíztunk a parancsnokban. ‘We trusted in the commander even when (we were/he was) seriously wounded.’

25. For a recent detailed presentation see É. Kiss (2002).

26. Note that I completely and consistently ignore here the effects of various A′-movements of all the parties involved (subject, object, participial VoiceP), to the operator domain in the matrix clause, in relation to information structural and other functions (such as topic, focus, distributive quantifier). My reasons: (i) these are not expected to interfere with binding/control relations, which are exclusively linked to A-positions; (ii) these A′-type movements yield an immense number of word-order variants, impossible to treat fully within the limits of a book chapter of this size.

27. In this scenario, -vÁn could possibly be analysed as the morphological merger of -vA and -Vn, the latter occupying T0, and -vA adjoining to it.

28. Such an account would of course face various technical challenges (such as: why/how these structures can disobey the coordinate structure constraint?), but would also open up interesting new paths (e.g., the shared subject of the clausal participial construction could possibly be analysed as ATB-moved, hence the
subject of the participle would in fact be a trace/copy, not a PRO, whose case deficiency would then be circumvented by the ATB movement).