

Taming the Hungarian (in)transitivity zoo

*Undiagnosed species and a complete
derivation of the morphosyntactic patterns*

—
Andrea Nilsen Márkus

A dissertation for the degree of Philosophiae Doctor – July 2015



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University of Tromsø
Center for Advanced Study in Theoretical Linguistics



July 2015

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Contents

| | |
|---|-----------|
| Acknowledgements | vii |
| Letter-to-sound correspondences | xi |
| Abbreviations | xiii |
| Teaser | xv |
| 1 The T1DP/2DPC contrast | 1 |
| 1.1 The jellyfish lays the groundwork | 1 |
| 1.2 T1DP/2DPC: further illustrations | 6 |
| 1.3 Preliminary generalizations | 16 |
| 1.4 Summary | 17 |
| 2 The Hungarian half-passive | 19 |
| 2.1 Productive <i>Ód</i> : an introduction | 19 |
| 2.2 Anticausative <i>Ód</i> | 22 |
| 2.2.1 A sample of data | 22 |
| 2.2.2 Productive and default | 25 |
| 2.2.3 A comparison with lexical inchoatives | 29 |
| 2.2.4 T1DP and <i>Ód</i> | 30 |
| 2.2.5 Interim summary | 31 |
| 2.3 Half-passive <i>Ód</i> | 31 |
| 2.3.1 The half-passive function | 31 |
| 2.3.2 The half-passive use: a sample of examples | 33 |
| 2.3.3 Contrasting half-passives and inchoatives | 39 |
| 2.3.4 Interim summary | 45 |
| 2.4 Variation | 46 |
| 2.4.1 Liberal and conservative speakers | 46 |
| 2.4.2 Half-passives, passives and the eastern dialect | 47 |
| 2.5 Literature review | 59 |
| 2.6 Summary | 63 |

| | | |
|----------|--|-----------|
| 3 | Containment and the (in)transitivity scale: an integration of the data | 65 |
| 3.1 | Containment structures and (in)transitivity | 65 |
| 3.2 | T1DP \subset half-passive | 65 |
| 3.2.1 | Syncretism and containment | 65 |
| 3.2.2 | T1DP/half-passive syncretisms | 68 |
| 3.2.3 | Size matters: morphological, syntactic and semantic clues about agency | 69 |
| 3.2.4 | Interim summary | 76 |
| 3.3 | 2DPC \subseteq TR-caus | 77 |
| 3.4 | A panorama picture of the scale | 81 |
| 3.4.1 | Weaving together the results | 81 |
| 3.4.2 | Exceptions: accidental homonymy | 82 |
| 3.5 | HP \subset 2DPC: a morphological puzzle | 83 |
| 3.6 | Morphological variation enters the picture | 85 |
| 3.6.1 | The complete pattern emerges | 85 |
| 3.6.2 | Literature review: the morphological diversity of the causative/ inchoative alternation | 89 |
| 3.7 | Summary | 92 |
| 4 | Towards an analysis: nanosyntax, gaps and the functional sequence | 95 |
| 4.1 | Nanosyntax: an overview | 96 |
| 4.1.1 | Features, morphemes and terminals | 96 |
| 4.1.2 | Syncretism and the Superset Principle | 98 |
| 4.1.3 | Constraining the competition: <i>Minimize Junk!</i> | 99 |
| 4.1.4 | Phrasal spell-out and spellout-driven movement | 102 |
| 4.1.5 | Life outside Nanosyntax: a quick glance at DM | 107 |
| 4.2 | The spell-out of gapped structures | 109 |
| 4.2.1 | Intervening material disrupts the fseq | 109 |
| 4.2.2 | Missing material disrupts the fseq | 113 |
| 4.3 | Putting together the fseq | 116 |
| 4.3.1 | A formalization of the T1DP/2DPC opposition | 116 |
| 4.3.2 | Incorporating the half-passive | 117 |
| 4.3.3 | The preliminaries of the fseq | 119 |
| 4.3.4 | Multiple fseqs and the preliminaries of a gap-based analysis | 120 |
| 4.4 | The lexicon: preliminary entries | 128 |
| 4.4.1 | (Non-)productivity | 128 |
| 4.4.2 | Variation | 132 |

| | | |
|----------|--|------------|
| 5 | Derivations | 137 |
| 5.1 | The causative alternation | 138 |
| 5.1.1 | <i>fagy</i> ('freeze')-type verbs | 138 |
| 5.2 | The anticausative alternation | 153 |
| 5.2.1 | \sqrt{teker} ('coil')-type verbs | 154 |
| 5.2.2 | $\sqrt{tép}$ ('tear')-type verbs | 162 |
| 5.3 | The equipollent alternation | 167 |
| 5.3.1 | \sqrt{gur} ('roll')-type verbs | 167 |
| 5.3.2 | \sqrt{fejl} ('develop')-type verbs | 177 |
| 5.3.3 | \sqrt{faxol} ('fax')-type verbs | 189 |
| 5.3.4 | $\sqrt{összesít}$ ('total')-type verbs | 204 |
| 5.4 | The labile alternation | 215 |
| 5.4.1 | $\sqrt{leereszt}$ ('deflate')-type verbs | 215 |
| 5.4.2 | A note on zero morphemes | 223 |
| 5.5 | Revised lexical entries | 225 |
| 5.5.1 | Liberal speakers | 225 |
| 5.5.2 | Conservative speakers | 227 |
| 5.6 | Potential clues for more variation | 228 |
| 6 | Conclusions | 231 |
| 6.1 | Summary | 231 |
| 6.2 | The contributions of the thesis | 237 |
| A | Morphological subtypes: a mini-catalog | 239 |
| A.1 | Regular forms | 239 |
| A.1.1 | The causative alternation | 239 |
| A.1.2 | The anticausative alternation | 240 |
| A.1.3 | The equipollent alternation | 241 |
| A.1.4 | The labile alternation | 242 |
| A.1.5 | Summary | 243 |
| A.2 | Irregular forms | 243 |
| A.2.1 | Type-1 verbs | 245 |
| A.2.2 | Type-2 verbs | 246 |
| A.2.3 | A note on overriding and inheriting | 247 |
| B | RAT-speakers: a possible extension | 251 |
| B.1 | A clue for further decomposition | 251 |
| B.2 | A note on extra- and intra-speaker variation | 253 |
| B.3 | Revisions from a RAT perspective | 254 |
| B.4 | Red flags for the RAT generalization | 266 |

| | | |
|----------|--|------------|
| C | Data details on <i>billeg</i> | 269 |
| C.1 | Filtering out <i>billeg</i> ('preen') | 269 |
| C.2 | Contexts with <i>billeg</i> ('wobble, seesaw') | 272 |
| C.2.1 | The wobbling table | 272 |
| C.2.2 | The seesawing bird | 275 |
| C.2.3 | A note on methodology and unruly data | 277 |
| | Bibliography | 279 |

Acknowledgements

In retrospect, working on this thesis feels as if I had taken a trek through rough, unknown terrain with poor visibility. Very often all I could see was the next few meters of the path – the next few steps with the data – without having an inkling where it would take me. After a while, the weather started to clear, and many times I thought I could catch a glimpse of the peak. But a peculiarity of Norwegian mountains is that you struggle to reach a top only to find out that there is another top behind it – yet after each mountaintop you see more and more of the landscape. It has been exactly like this with this thesis, too. Now I have passed a number of smaller and bigger tops, I can spot some tops which are still to be reached, and there are probably many mountaintops I cannot even make out from where I am standing now. But if I turn in the direction where I was coming from, I can see that an exciting landscape has emerged. On real hikes, I would ask myself many times if it was going to be worth the trouble – but then, when you finally reach a top and lift your eyes and see the landscape by your feet – then you know that it was worth it.

When I came to the Land of the Fjords from the capital of mountainless Hungary, my would-be husband had to teach me how to proceed to be able to tackle a demanding hike to a seemingly unreachable peak. And I think that in many ways, my supervisor did a very similar job: neither of us had been to this particular top before, but like an experienced guide, he accompanied, advised and helped me on the way just as Aksel did on the rocky mountainsides of Lofoten. So first and foremost, I wish to thank my supervisor, Michal Starke, for guiding my steps on this trek. It has been a great experience, and I feel privileged that I have had the opportunity to work with you, Michal. You have shaped my thinking and the way I look at things immensely, and your knowledge and perspective on language have been a constant source of inspiration to me. You also taught me to not be afraid to dig deep into the data, and that no matter how big the chaos is, chances are that the mess is hiding a beautiful pattern. I got much stimulus from our discussions, which shaped this thesis, and which in all possible ways contributed to my growth as a linguist. I am equally grateful that you kept an eye not only on how it was going with the thesis but also on how it was going with me on the road. You encouraged me, stressed me, calmed me – depending on what I

needed most. And in spite of your repeated warnings that "there is no room for drama", you took all my ups and downs with cheerful tranquility and a smile, and helped me through all the drama that emerged, anyway. I do feel that I could not have wished for a better supervisor.

I would also like to thank the rest of CASTL for all the linguistic input I received here during my years as a graduate student. I am especially grateful to Gillian Ramchand for the discussions we had in an early phase of my work on *Ód*-verbs; I have greatly benefitted from these meetings. I am grateful to my fellow Ph.D students at CASTL for their company, particularly to Éva Dékány, Violeta Martínez-Paricio, Anna Wolleb and Naoyuki Yamato. Special thanks to Éva Dékány, who has been a companion and friend from the beginning of our undergraduate studies, for everything from lunches and laughs and hikes to patient assistance with LaTeX and the delicate portions of home-made *csalamádé* she provisioned me with. I also thank my office buddy Violeta Martínez-Paricio for her cheerful company, the internet-abstinence competitions and for coaching me in taking proper *siestas*. Many thanks to Pavel Iosad for help with seemingly unsolvable LaTeX issues.

Writing acknowledgements is in a way a journey back in time, and I find it inevitable to cast a glance at my linguistic roots, which go all the way back to Hungary. So now I would like to grab the opportunity and thank those who got me hooked on linguistics: Huba Bartos and Balázs Surányi. I remember their classes, exams and home assignments as the best fun of my undergraduate years, and I am also grateful for all the time they spent discussing linguistics with me and for getting me started in academic life with all its challenges and beauties. Later in my studies I had the opportunity to learn from Katalin É. Kiss, who was the one to open my eyes for the mysteries of Hungarian syntax. I owe much to her, too, and I would like to express my gratitude for her kind support throughout the years – even when I deserted from Hungarian fields for the sake of "some Norwegian". I would also like to thank Csaba Olsvay for his friendship, for his loyalty with grammaticality judgements, for getting his students to fill in numerous questionnaires for me, and that I can always count on him. I would also like to thank – you see, in my eyes you guys come in the ranks of Hungarian linguists – Chris Piñón for the long conversations we would have about life; and I wish to thank Marcel den Dikken for all his support, for the e-mails we exchanged throughout the years and for that memorable hike on snow-covered Fløya, when on your first day in Tromsø I managed to drag you across a snowy marshland, soaking your only pair of shoes – presumably for the rest of you stay. I would also like to thank Sylvi Blaho, Kati Balogné Bérces, Barbi Egedi and Vera Hegedűs for occasional grammaticality judgements, and the audiences of the conferences parts of this thesis were presented at for their comments.

The contribution of my informants has been invaluable to the coming

about of this thesis, and I would also like to render my thanks to them. I thank especially my friend and colleague Éva Dékány and my brother Máté Márkus for enormous help with the data. These two were my guinea pigs, and I ran basically every test on them before I would have presented the tests for a bigger circle of informants. You guys have not only been the most reliable informants, but you also contributed with valuable insights. Máté even provided me with some real pearls he gathered from his friends and classmates. Éva, Máté, a big 'thanks' to you!

I would also like to thank my good friends in Timótheus kör for the many rounds with testing on every data issue I had. You always responded promptly – and if it was necessary, persistently. I would also like to say how much I appreciate that you put up with me all these years, when in the middle of a profound conversation I would suddenly produce paper and pen from my pocket and start taking notes - on the half-passive forms you were inconsiderate enough to utter. Thank you that you are my friends! I am also grateful to all those in Jóséb-Basebet ifi who did a testing round on the T1DP/2DPC contrast, and to the members of Sámuel ifi for judgements on the half-passive. I would also like to thank Betty Mihók for putting me in touch with her friends in Kárpátalja, thus making it possible to map out the eastern use of *-Ód*.

Last but not least, I want to thank my family – my dear parents, my sisters, brothers and their families – for always being there for me, for all the conversations on skype or over the phone, for all the teasing, and for keeping dragging me back to reality. And I want to thank Aksel and our son Filip for holding out during the finishing stages of the writing process and for filling the rest of my days with so much joy. I thank especially Aksel for his unconditional support throughout. Aksel, *tusen takk!*

Letter-to-sound correspondences

Consonants

| | | |
|---|----|-------------------|
| b | b | <i>bold</i> |
| c | ts | <i>its</i> |
| d | d | <i>deep</i> |
| f | f | <i>fire</i> |
| g | g | <i>gap</i> |
| h | h | <i>high</i> |
| j | j | <i>yellow</i> |
| k | k | <i>key</i> |
| l | l | <i>light</i> |
| m | m | <i>may</i> |
| n | n | <i>night</i> |
| p | p | <i>play</i> |
| r | r | (trill <i>r</i>) |
| s | ʃ | <i>ship</i> |
| t | t | <i>time</i> |
| v | v | <i>van</i> |
| z | z | <i>zoom</i> |

Digraphs

| | | |
|----|----|--|
| cs | tʃ | <i>chart</i> |
| gy | ʒ | <i>dew</i> (British English pronunciation) |
| ly | j | <i>yellow</i> |
| ny | ɲ | <i>canyon</i> |
| sz | s | <i>sight</i> |
| ty | c | <i>stew</i> |
| zs | ʒ | <i>measure</i> |

Vowels

| | | |
|---|----|---|
| a | ɔ | <i>what</i> |
| á | a: | <i>father</i> |
| e | ɛ | <i>edge</i> |
| é | e: | <i>café</i> |
| i | i | <i>bit</i> |
| í | i: | <i>keen</i> |
| o | o | <i>force</i> |
| ó | o: | <i>tall</i> |
| ö | ø | approximately as in <i>her</i> |
| õ | ø: | approximately as in <i>curtain</i> |
| u | u | <i>bull</i> |
| ú | u: | <i>cool</i> |
| ü | y | <i>début</i> |
| ű | y: | long version of the vowel in <i>début</i> |

Abbreviations

| | |
|-----------------------|--------------------------------------|
| ACC | accusative case |
| CAUS or <i>caus</i> * | causative suffix |
| DEF | definiteness agreement |
| FUT.PRTCP | future participial suffix |
| HP | half-passive |
| INCH or <i>inch</i> * | inchoative suffix |
| INF | infinitive |
| INTR | intransitive |
| NOM | nominative case |
| PASS.PRTCP | passive participial suffix |
| PL | plural |
| PRT | verbal particle |
| PRTCP | participial suffix |
| R | root |
| SG | singular |
| TR | transitive |
| TR-caus | transitive-causative |
| T1DP | true one DP (construction), cf. 1.1. |
| 2DPC | 2DP (construction), cf. 1.1. |
| <i>v</i> * | verbalizing suffix |

Teaser

Imagine the following situation:

- (1) When a voracious predator is around, the jellyfish seek to hide, completely motionless, until the danger is over. Last time a huge ocean sunfish was around for such a long time that a bright little jellyfish, which hid stock-still among the corals, went totally numb from the prolonged immobility. But in the end, the predator pulled out of the area, and the jellyfish, figuring that it was safe again, [*A medúza végre biztonságban érezte magát, úgyszólván ...*¹.]:

- a. lebeg - ni kezdett.
√float - INF began
'began floating'
- b. lebeg - tet - ni kezdte magát.
√float - CAUS - INF began itself.ACC
'began floating'

Speakers of Hungarian accept both the intransitive form in (1-a) and the causative form coupled with a reflexive pronoun in (1-b). But, importantly, speakers observe an explicit meaning difference between the two forms: example (1-a) means to them that the jellyfish simply resumed floating, its natural technique to move around, while in (b) the jellyfish is doing some warming-up or stretching to get the numbness out of its tentacles and stimulate blood circulation.

The construction in (1-b) is one of the animals in the rich zoo of Hungarian (de)transitivizing constructions that has remained unobserved to date. Consider now another, comparably overlooked, creature:

- (2) A group of divers have a pet jellyfish. One day, they dive at a place that teems with ocean sunfish. When a huge, one-ton sunfish closes in on them, the diver who is in charge of the pet jellyfish panics. Assuming that the sunfish prepares to attack them, the diver decides

¹The original Hungarian sentence stands here to make it easier for native speakers to reconstruct the context.

to sacrifice the jellyfish. So she flourishes the pet, which is instantly spotted and gobbled up by the sunfish. The fellow divers are very upset about the demise of their pet, and when they are back to dry land, a heated discussion evolves. The person responsible for the jellyfish claims that they should never have dived on this spot, to begin with. 'No, that's not the problem' – interjects a fellow diver – 'sunfish are friendly creatures. The problem was that ... – or else the sunfish would never have noticed it!' [*Az volt a baj, hogy ... máskülönben a naphal nem vette volna észre!*]

- a. a medúza meglebeg - tet - őd - ött.
 the jellyfish.NOM PRT.float - CAUS - ÓD - PAST.3SG
 'the jellyfish got floated.'

In this thesis I set out to show that the three constructions (1-a), (1-b) and (2-a) align along a scale that ranges from genuine intransitivity to full transitivity. The first construction type, illustrated in (1-a), is a true intransitive. In (1-b), a transitive form predicates about a single entity, which is then made to appear twice in the syntax: both as a subject and a reflexive object DP. The third type, demonstrated by (2-a), is the mirror image of (1-b): it presupposes two participants, but allows only one of them to surface overtly. The three constructions are closely interrelated, and they will be shown to constitute progressively growing syntactic structures with encompassing semantics, which read off the syntactic structure. The data will favor a ranking on which syntactic complexity increases with transitivity.

Once the syntactic make-up of the examined constructions is worked out, an issue arises concerning the morphological realization of these constructions. This is because morphology does not immediately line up with the proposed syntactic/semantic ordering along the (in)transitivity scale. For the first, the intermediate level construction morphologically contains the encompassing structure. For the second, the overall pattern is fuzzed to a large extent by morphological diversity and speaker variation. Therefore, subsequent to the fleshing out of novel data and the establishing of the proposed syntactic/semantic hierarchy, I will take up the gauntlet to derive the morphology of the three constructions introduced here, accommodating morphological diversity, speaker variation and a blatant syntax/morphology mismatch in an elaborate morphosyntactic account. Grounded in meticulously collected data from present-day Hungarian, the thesis provides a fine-grained analysis of both familiar and little-studied aspects of the lower verbal domain.

Chapter 1

The T1DP/2DPC contrast

1.1 The jellyfish lays the groundwork

Consider the following example from the introduction; the dots in the English and Hungarian contexts designate the slot where the appropriate form of *lebeg* ('float') gets inserted:

- (1) When a voracious predator is around, the jellyfish seek to hide, motionless, until the danger is over. Last time a huge ocean sunfish was around for such a long time that a bright little jellyfish, which hid among the corals, went totally numb from the prolonged immobility. But in the end, the predator pulled out of the area, and the jellyfish, figuring that it was safe again, ["*A medúza végre biztonságban érezte magát, úgyhogy ...*"¹.]:

- a. lebeg - ni kezdett.
√float - INF began
'began floating'
- b. lebeg - tet - ni kezdte magát.
√float - CAUS - INF began itself.ACC
'began floating itself'

In this particular context, speakers of Hungarian accept both the intransitive form in (1-a) and the causative form coupled with a reflexive pronoun in (1-b). But it would be a premature conclusion to draw that Hungarian can use either an inchoative form or a reflexive construction to describe the same event. On the contrary, there is not only an explicit difference in meaning between the inchoative and the causative-reflexive construction, but the two forms turn out to be completely uninterchangeable. Example (1-a) means that the jellyfish simply resumed floating, its natural technique to move

¹The original Hungarian sentence stands here to make it easier for native speakers to reconstruct the context.

around, while in (b) the jellyfish is doing some warming-up or stretching to get the numbness out of the tentacles and stimulate blood circulation. The same contrast is observed in example (2):

- (2) A great ocean sunfish is around, so all the jellyfish are hiding among the corals. Presumably by chance, the predator gets too close to a baby-jellyfish. The mother-jellyfish, anxious for its baby, kicks herself away from its hiding place, and ... to distract the sunfish. ["*A medúzaanyuka elrugaszkodik a tengerfenéktől, és ...*"]:
- a. lebeg - ni kezd
float - INF begins
'begins to float'
 - b. lebeg - tet - ni kezdi magát.
float - CAUS - INF begins itself.ACC
'begins to float itself'

Again, both (2-a) and (b) are acceptable, but they describe different scenarios. In example (2-a), the jellyfish-mother starts floating around as usual, maybe because she pretends to be an unsuspecting prey. In (2-b), however, the jellyfish-mother shakes her tentacles fervently in a desperate attempt to catch the attention of the sunfish.

The meanings associated with the respective forms seem to be stable across the examples. The intransitive form, which in the case of this particular verb is a bare root, describes ordinary floating, the natural displacement strategy of a jellyfish in both (1-a) and (2-a). This kind of floating results from an interplay between some instinctive property of the jellyfish and the way the water masses in the ocean move. On the other hand, there is something special about the activity expressed by the reflexive forms in (1-b) and (2-b). The kind of movement described by these examples falls outside a jellyfish's normal range of activities: the jellyfish has to strain itself to achieve the desired motion. Additionally, these particular examples depict an extra intensive, vigorous motion; however, a wider range of examples indicate that the key ingredient is rather that the jellyfish has to chip in a little 'extra' to achieve the desired outcome: the reflexive form *lebeg-tet + DP_{refl}* invariably refers to floating that does not come naturally to the jellyfish. This is illustrated in (3) by a few additional contexts in which speakers would use the reflexive form:

- (3) a. A male jellyfish notices an attractive female, and shows off his tentacles to catch her attention and impress.
b. A jellyfish is woken by some lava streaming out from the sea-bed, and it takes pains to keep itself floating as close to the surface as possible to stay away from the lava.

- c. The jellyfish stretches itself or its tentacles to create a bigger surface with the intention of catching more plankton.

In (3)(a-c) the reflexive form is not necessarily accompanied by vigorousness, but on each scenario the jellyfish exerts itself to perform a floating that does not come naturally to it.

The examples presented so far prefigure that there is a fundamental difference between the intransitive and reflexive uses of *lebeg* ('float'): the intransitive form describes ordinary, spontaneous *V-ing*, whereas the reflexive construction presupposes that the jellyfish is actively engaged in bringing about the desired *V-ing*. This is why emphasizing the effort the bringing about of the *V-ing* costs is a secure way to force the reflexive form: this makes the contribution of the participant, in the current examples the jellyfish, particularly prominent. Therefore, in many of the examples which will be presented, the intransitive and the reflexive construction will be set apart by the notion of effort: the intransitive form will describe effortless *V-ing*, while the reflexive construction will presuppose some extra effort, concentration or labor on behalf of the affected participant of the *V-ing*. I would, however, like to pin it down at the outset that the intransitive/reflexive opposition is not about the notion of effort, which is simply one way to bring out the contrast between the two constructions.

This distinction between the intransitive and the corresponding reflexive construction supplies two clear predictions. Relying, for the moment, on the effortless/effortful contrast, the predictions can be phrased as follows. For the first, if a context is formulated in such a way that it is only compatible with effortless floating, then the reflexive form will be unacceptable; for the second, if a context is specific enough to force effortful floating, then speakers will use the reflexive form and reject the intransitive form. For these predictions to be validated, such contexts need to be constructed which are strong enough to exclude one of the two readings². The strong contexts (4) and (5) emphasize that the jellyfish does not strive to move. To back up my own intuitions, I went through both types of strong contexts with 35 speakers, with surprisingly unanimous responses throughout:

- (4) Having sated its appetite, the jellyfish ... in the water completely drained. [*A medúza, miután úgy belakmározott, hogy moccani se volt ereje, ernyedten ... a vízben.*]

²An additional adjustment concerns the use of embedding verbs such as *kezd* ('begin'). The first, informal contexts contained the higher verb *kezd* ('begin') for an easier context and a more natural effect. But for clean results, all higher verbs need to be eliminated, because they have their own domain, and therefore a higher verb could interfere with the lower verb – in this case *lebeg* ('float') – by being effortless/effortful itself. Therefore, in the coming contexts I will do away with all higher verbs, including *kezd* ('begin').

- a. lebeg - ett
float - PAST3SG
'floated'
- b. *?lebeg - **tet** - te **magát**
float - CAUS - PAST3SG.DEF itself.ACC
'floated itself³'

(5) As a result of global warming, the ocean currents have stopped. There is a shortage of plankton, and all sea creatures avoid being in motion unnecessarily. Also the jellyfish, to save its energy, ... in the despairingly still water. [*A globális felmelegedés következtében megálltak az áramlatok. Nagy a planktonhiány, minden tengeri élőlény kerül a felesleges mozgást. A medúzák is, hogy kíméljék az energiataralékaikat, csak ... a reménytelenül mozdulatlan vízben.*].

- a. lebeg - nek
float - PRES.3PL
'float'
- b. *?lebeg - **tet** - ik **maguk**
float - CAUS - PRES3PL.DEF themselves.ACC
'float themselves'

Native speaker judgements verify the first prediction: in these contexts, all of my informants went for the intransitive form. This means that it is the intransitive form and only that that describes natural, effortless floating.

The second prediction makes us expect the exact reverse pattern with a context which forces floating that goes with extra labor and sweat. The first context I devised for this purpose is a sharper version of (2). In both (2) and (6), a sunfish comes, the jellyfish goes numb, the sunfish leaves, the jellyfish begins to float. The crucial difference is that in (2) the context was underspecified, which left it compatible with both types of floating: what interpretation the context receives in the end was contingent on whether it was the intransitive or the reflexive form of *lebeg* ('float') that got inserted into the context. The context I provide in (6) differs from (2) in that it pinpoints that the jellyfish makes a directed effort to get the numbness out of its feelers. So here, the question is whether such a sharp context will exclude the intransitive form – as is predicted – or not:

(6) Some excitement at the bottom of the ocean. A great ocean sunfish shows up in the vicinity of our jellyfish. The jellyfish hides, but the sunfish is circling around for such a long time that the jellyfish

³Reflexive pronouns trigger definiteness agreement in Hungarian. This is why the inflection on the reflexive verb form differs from the inflection on the intransitive verb.

goes completely numb. After what feels like ages for the jellyfish, the sunfish takes its leave, and the jellyfish, to stimulate its blood circulation and get the numbness out of its feelers, ... vigorously for a few minutes(, while it is floating towards the open ocean). [*Izgalom az óceán fenekén: egy méretes holdhal megjelenik medúzánk közelében. A medúza meglapul a korallok között, de a holdhal olyan sokáig köröz a környéken, hogy a medúza a mozdulatlanságtól teljesen elzsibbad. Egy idő után a holdhal végre elúszik, és a medúza(, miközben a nyílt óceán felé lebeg), hogy beindítsa a vérkeringését és kirázza a tapogatóiból a zsibbadtságot, néhány percen át energikusan ...*]

- a. *?lebeg -
float - PRES.3SG
'floats'
- b. lebeg - **tet** - i **magát**
float - CAUS - PRES.3SG.DEF itself.ACC
'floats itself'

The prediction is borne out in this case as well: in a context where the jellyfish exerts some special physical exercise that requires extra sweat, the only form that survives is the reflexive; again, all my informants were of one mind. Let another example stand here to make the same point:

- (7) As a morning gym, the jellyfish ... thoroughly. [*A medúza reggeli torna gyanánt alaposan meg... .*]
- a. *?lebeg - ett
float - PAST3SG
'floated'
- b. lebeg - **tet** - te **magát**
float - CAUS - PAST3SG.DEF itself.ACC
'floated itself'

These minimal pair contexts confirm that Hungarian presents a fresh distinction with reference to semantically intransitive verbs/constructions. It turns out that in Hungarian, verbs which alternate between an intransitive and a transitive form can describe a situation with a single participant both by means of an intransitive form and a reflexive construction, depending on the contribution of the participant. Thereby, the data show that semantically intransitive verbs decompose into (at least) two types: those which are indeed realized as monoargumentals, and those which surface as a reflexive construction. True one-DP constructions (hence, T1DP) describe run-of-the-mill *V-ing* of a single DP, while in the two-DP construction (hence, 2DPC), the sole participant exerts itself to inflict the *V-ing* on itself.

1.2 T1DP/2DPC: further illustrations

The first section introduced the T1DP/2DPC opposition by probing into the behavior of *lebeg* ('float'). In this section I will show that the contrast illustrated by the floating jellyfish is not a mere coincidence but has a solid empirical basis both verb-wise and speaker-wise. Verb-wise, I will broaden the empirical domain of the investigation by going through a whole array of verbs that include change of state verbs, verbs of emission and motion verbs to ascertain that the T1DP/2DPC distinction generalizes to other verbs as well. Backing up the distinction speaker-wise means that I did not rely on my own judgements alone but checked the data with another 35-40 speakers of Hungarian. The data my informants were tested for embrace the contents of the present section along with the jellyfish-examples of the previous section. The emerging results are surprising in that speakers have come with remarkably uniform grammaticality judgements, which provide massive corroboration for a systematic difference between T1DP and 2DPC constructions.

Before we take a plunge into the data, another comment on methodology is also in order: many of the examples I provide go with a fairly detailed context. This is because in the course of the testing, several factors had to be controlled for to ensure that a given context would include information which prompts exactly one reading and disallows the other one. As slightly different contexts can yield different results, I found it necessary to include the unabridged contexts in the presentation of the data and results. In each case, the English translation will be accompanied by the authentic Hungarian context, or at the very least, the original of the key sentence with the missing forms, so that native speakers could verify the results for themselves. Recall also that the dots in the context designate the slot where speakers were asked to insert the appropriate form. Here is the first pair of examples:

- (8) A student is abroad with a scholarship. The first days are hectic, so she decides to relax for a day and just sit on a bench on the promenade. On her way back to the dorm, dog-tired and ready to drop, she bumps into a new acquaintance, who is inviting to party. The new student turns down the offer: "I just can't wait to flop into my bed. I totally wanted to have a relaxing day today, but I've just been exposed to so many impressions that I ..., anyway." [*Ma mindenképp egy nyugis napot akartam, de így is annyi benyomás ért, hogy ...* .]

- a. teljesen ki - fár - ad - tam
completely PRT - $\sqrt{\text{tire}}$ - INCH - PAST.1SG
'got completely exhausted'
- b. *teljesen ki - fár - aszt - ottam magam.
completely PRT - $\sqrt{\text{tire}}$ - CAUS - PAST.1SG myself.ACC
'exhausted myself completely'

In this context, the student makes no effort whatsoever to run herself into the ground: it is all the impressions she is exposed which take their toll on her. In this context, all speakers opt for the intransitive form. By contrast, if someone makes a conscious effort to drain oneself, speakers choose the reflexive construction:

- (9) He wanted to sleep well, so he [*Jól akart aludni, ezért ...* .]
- a. *ki - fár - ad - t
PRT - $\sqrt{\text{tire}}$ - INCH - PAST.3SG
'got exhausted'
- b. ki - fár - aszt - otta magát.
PRT - $\sqrt{\text{tire}}$ - CAUS - PAST.3SG.DEF herself.ACC
'exhausted himself'

Consider the next pair of examples:

- (10) She ... because the medications she was taking changed her metabolism.
[... , *mivel a gyógyszerek felborították az anyagcseréjét.*]
- a. híz - ott
gain.weight - PAST.3SG
'gained weight'
- b. *híz - lal - ta magát
gain.weight - CAUS - PAST.3SG.DEF herself.ACC
'fattened herself'

In this context, the weight gain is completely unintended and will therefore be expressed by the intransitive form. However, an effort made to gain weight calls for the reflexive construction:

- (11) An actress is eating out with her pals, and the friends watch in a shock that the otherwise picky actress shovels in an enormous dinner. After three menus and four portions of dessert, the actress finally looks up and notices the shocked faces of her friends. Impatiently, she blurts out: What are you glaring at? I'm ... because I want to land the role of the protagonist in the movie my studio is about

to make! [*Mit bámultok? Azért ..., mert mindenáron meg akarom kapni a főszerepet a új filmben, amit a stúdióm forgat!*]

- a. *híz - ok
gain.weight - PRES.1SG
'gaining weight'
- b. híz - lal - om magam
gain.weight - CAUS - PRES.1SG.DEF myself.ACC
'fattening myself'

The same contrast can be observed between intransitive 'worry' and the corresponding reflexive construction:

- (12) a. Hiába nem akarom, egyfolytában agg - ód -
in.vain not want.PRES.1SG, constantly worry - ÓD -
om.
PRES.1SG
'Even though I don't want to, I worry all the time.'
- b. Szerintem élvezi, hogy valamivel mindig
in.my.opinion enjoy.PRES.3SG that something.with always
agg - aszt - hat - ja magát.
worry - CAUS - POSS - PRES.3SG herself.ACC
'In my opinion, she enjoys that she can always worry herself
about something.'

The next pair of examples comes from the realm of animals. The first of the contexts is based on genuine, but slightly altered facts; to be able to create a suitable context for the reflexive construction, I was forced to make the second example fictive⁴:

- (13) The tiny mirror-like spheres on the outer shell of the flashy disco clam, also known as the electric clam, reflect ambient light even when the clam is in repose. Therefore, disco clams ... incessantly. [*A diszkókagylók, vagy más néven elektromos kagylók külső köpenyén található tükrögömbök a tenger vizén áthatoló fényeket nyugalmi állapotban is visszaverik, ezért a kagylók folyamatosan*]
- a. villog - nak
flash - PRES.3PL
'flash'

⁴For recent research on flashy disco clams, see www.sciencerecorder.com/news/secrets-of-disco-clams-brilliant-light-show-now-revealed/

b. *?villog - tat - ják magukat.
 flash - CAUS - PRES.3PL.DEF themselves.ACC
 'flash themselves'

In this context the flashing effect comes about as a result of the structural make-up of disco clams coupled with underwater light conditions; this is the way disco clams are, and there is nothing they can do about it. The only acceptable form here is the intransitive. However, as soon as the disco clams begin to actively do for light production, the reflexive construction takes over:

- (14) It is not for nothing that disco clams are dubbed the ultimate party animals. Male disco clams can produce strong bioluminescent light inside their shell by opening and closing their lips. This is an ability put into service in the mating season, when the male disco clams compete for the dominant female of the colony, the disco clam queen. The extent to which a male can produce such bioluminescent light depends on how quickly the male can open and close its lips. This is a difference from the light ripples caused by reflection, which are the same for all the males. Naturally, the light ripples caused by reflection in the mirror spheres do not cease during the courting session, which makes such a disco clam rivalry a breathtakingly spectacular sight with constant, uniform light ripples and varying degrees of bioluminescent light spurting from the different males. At the end of the contest, the clam queen mates with the male that ... most impressively. [*A hím diszkókagylók képesek erős biolumineszens fényt termelni a köpenyükön belül azáltal, hogy a köpenyüket ki-be forgatják. Ezt a párzási időszakban használják ki, amikor a verseny elkezdődik a kolónia domináns nőtényének, a kagyló-királynőnek a kegyeiért. A hím által kitermelt fény kibocsátásának a mértéke változó: attól függ, hogy a hím milyen gyorsasággal képes a köpenyét ki-be forgatni. Természetesen a szokásos tükörgömb-visszaverte villódzás, aminek a mértéke egyébként teljesen egyforma minden hím esetében, a fényviszonyok miatt tovább folytatódik. Így aztán a diszkókagylók párzása rendkívüli látványosság: az egyenletes tükörgömbös fényjáték a változó erősségű biolumineszens fények produkálásával nem mindennapi látvány. A hímek minden erejüket bevetve forgatják a köpenyüket, mert tudják, hogy a menet végén az a hím kagyló nyeri el a királynőt, amelyik a leglátványosabban]*]

a. *?villog - ott
 flash - PAST.3SG
 'flashed'

- b. villog - tat - ta magát.
 flash - CAUS - PAST.3SG.DEF itself.ACC
 'flashed itself'

An analogous pair of examples can be fabricated for *csillan* ('sparkle'). Again, the first context will force the intransitive form: the structural make-up of the diamond is such that it mechanically emits light at regular intervals.

- (15) An expert is conducting visitors in a museum: "There is a special diamond type. The structural make-up of these diamonds is such that they automatically emit light at certain intervals. This diamond here, for instance ... once in every minute." [*Egy szakértő turistákat vezet körbe egy múzeumban: "Van egy különleges gyémántfajta. Az ebbe a fajtába tartozó gyémántok a szerkezeti felépítésüknek köszönhetően bizonyos időközönként automatikusan fényt bocsátanak ki. Ez a gyémánt itt például percenként ..."*]⁵:

- a. meg - csillan - ∅.
 prt - sparkle - PRES3SG
 'sparkles'
- b. *?meg - csillan - t - ja magát.
 prt - sparkle - CAUS - PRES3SG.DEF itself.ACC
 'sparkles itself'

However, if the context is modified in such a way that the diamond has to exert itself to emit light, speakers will switch to the 2DPC form. To be able to create an appropriate context here, we need to imagine that the diamond is the protagonist in a cartoon or animation movie with animate attributes such as volition and the ability to perform different actions, which seems to be a requisite for forcing the use of the 2DP construction. With this in mind, consider the next situation, in which the diamond makes an effort to sparkle:

- (16) Speaking of this mechanically sparkling diamond type, diamonds of this kind can also produce additional flashes with an extra intense light. This makes an elementary Morse-type communication possible for this particular family of diamonds. Unfortunately, this extra intense flashing requires full concentration and considerable physical effort: the diamond has to shrink and expand rapidly to induce the extra bright flashes. So if the diamond is desperate to communicate something, it pulls out all the stops and ... as brightly as possible. [*Ha a gyémánt mindenképp kommunikálni akar valamit, akkor ezzel a zsugorodási-tágulási módszerrel él, es minden erejét összeszedve*

⁵The Hungarian verb *csillan* is a semelfactive that designates singular flashes, which of course may be repeated, rather than continuous light emission.

...]:

- a. *?meg - csillan - ∅.
 PRT - sparkle - PRES.3SG
 'sparkles'
- b. meg - csillan - **t** - ja **magát.**
 PRT - sparkle - CAUS - PRES.3SG.DEF itself.ACC
 'sparkles itself'

An alternative, but equally efficient way to force the reflexive construction is to assign hands to the diamond. Notice that in this context, there no need to emphasize effort, which incidentally confirms that it is not effort *per se* that licenses the use of the 2DP construction:

- (17) Another family of the mechanically sparkling diamonds have developed tiny hands. These diamonds can also produce additional flashes with an extra intense light by using their hands to squeeze a flash out of themselves. So if the diamonds need to signal something important, they [*Úgyhogy ha a gyémántoknak jelezniük kell valami fontosat, akkor*]
- a. *?meg - csillan - nak.
 PRT - sparkle - PRES.3PL
 'sparkle'
- b. meg - csillan - **t** - ják **maguk.**
 PRT - sparkle - CAUS - PRES.3PL.DEF themselves.ACC
 'sparkle themselves'

These examples further enhance the contrast between inherent sparkling and self-imposed sparkling.

The next pair of examples center on a geyser in the different stages of eruption⁶. Geysers are inanimate, but to make the reflexive construction a real alternative, the geyser will be taken to be animate in both contexts.

- (18) Geyser activity comes about as water comes into contact with rocks heated by magma at places where narrow tubes connect the underground water reservoirs with the surface. The cooler water on the surface presses down on the hotter water beneath, allowing the water deep down in the reservoir to become superheated as in a pressure cooker. At one point steam bubbles begin to rise to the top of the water column. On the surface, this results in pulses of water swelling upward and splashing out. This reduces pressure on the

⁶For some technical details I consulted wikipedia: <http://en.wikipedia.org/wiki/Geyser>

water underneath, which in turn causes the superheated water to flash into steam. Eventually, expanding steam and hot water ejects through the geyser vent, thus producing what is generally known as a geyser eruption. The relevant science fiction story about geysers is the following. A geyser erupts at regular intervals. As described above, each eruption is preceded by blobs of hot water breaking the surface with increasing intensity, until the process culminates in a spectacular eruption. The bubbling stage is rather dangerous in itself: as the evolving blobs of water can explode any moment, spectators who stand too close can get scalded. The geyser in the story is animate, and is acutely aware of the tourists standing around it. On one occasion, something goes wrong. Right after an eruption, there should be left an hour until the next bubbling stage. But this time, just minutes after the latest eruption, the geyser feels that new bubbles are developing in the lower layers. This is rather unfortunate, as it is assumed to be safe around the geyser right after an eruption, and there are tourists swarming all around the geyser. For fear of scalding the tourists, the geyser tries to hold its water back from developing into a swelling blob, but it's all in vain: within a few seconds, the geyser ... again. [*Félelmében, hogy leforrázza a turistákat, a gejzír megpróbálja visszatartani a buborékképződést, de hiába; néhány másodperc múlva újra ...* .]:

- a. bugyog
 bubble - PRES.3SG
 'bubbles'
- b. *?bugyog - **tat** - ja **magát.**
 bubble - CAUS - PRES.3SG.DEF itself.ACC
 'bubbles itself'

In this context, speakers unanimously settle on the intransitive form⁷. But just as before, it is again possible to devise a parallel context in which the bubbling is self-inflicted. As expected, on such a scenario the only natural option is the reflexive construction:

- (19) A slightly different scene with another animate geyser. In this national park, guides are obliged to keep the tourists away from the geyser during the stages of bubbling and eruption. During the resting stage, the tourists can line up around the vent. Guides who let the tourists stand close to the geyser apart from the resting stage lose their license. There is, however, a problem: the geyser is animate, and it can exert itself to bubble any time outside the predictable time

⁷Interestingly, this context does involve effort, but not effort to bubble but rather to *not* bubble. This again indicates that 'just effort' does not justify the 2DPC form.

frame. Luckily, this does not happen often; nevertheless, there was an accident as recently as yesterday, all because a tourist had thrown litter into the geyser, and the geyser was determined to take revenge. In the end, eight people were taken to hospital with burns. It was clearly not the guide's mistake, though, she let the group go close to the geyser when it doesn't bubble. The accident happened because the geyser [Az vezető nem hibázott, akkor engedte közel a csoportot, amikor a gejzír nem bugyog. Sajnos mégis szerencsétlenség történt, mert a gejzír akarattal ..., hogy bosszút álljon a szemetelő turistán.]:

- a. *?bugyog - ott.
 bubble - PAST3SG
 'bubbled.'
- b. bugyog - **tat** - ta **magát**.
 bubble - CAUS - PAST3SG.DEF itself.ACC
 'bubbled itself.'

The reason why such fanciful contexts can be necessary is that on the one hand, contexts with an active involvement on the part of the participant presuppose animacy, while on the other hand, many of the monadic verbs which can alternate with a transitive form denote *V-ing* which is uncharacteristic of humans or even animates. Such alternating verbs include *abrade*, *tick*, *sparkle* or *bubble*. Therefore, with alternating verbs of this kind, an animation movie setting is indispensable for the creation of contexts which bring out the T1DP/2DPC contrast. This is why many of the contexts that aim to elicit the T1DP/2DPC contrast call for a cartoon setting with objects which are attributed animate traits, like the ability to act volitionally, speak, eat or move.

The contexts with the flashing disco clam and the sparkling diamond displayed a light emission verb, whereas the scenarios with the geyser featured a substance emission verb⁸. But on no account is the contrast between T1DP and 2DP constructions restricted to verbs of emission: while *lebeg* ('float') is a motion verb, *exhaust* and *gain weight* were examples for change of state verbs. The next verb to be examined is another change of state verb: *kop* ('erode, wear away'). This time, too, both the T1DP and 2DPC contexts should be visualized as a scene from an animation movie.

- (20) In a town, some of the stairs are carved from tufa, which deteriorates quickly from the wear and tear of the weather. This in practice means that the stairs slowly crumble away to the point of complete

⁸For a characterization of verbs of emission, the reader is referred to Levin and Rapaport (1995:91-92) and Perlmutter (1978:163).

disintegration. Other stairs are made of more massive stuff, such as granite and marble. There are two gangs in the town, the members of which amuse themselves with abrading the stairs, both those made of tufa and those of granite and marble. The stairs in the town are animate: they cannot speak, but they can move with limitations; for instance, they can undulate. At one point, a committee is set up to examine the damages on the stairs and to try to identify the reason for the abrasion in each case. At the moment, the committee is scrutinizing the steps leading up to the town hall, and the leader of the committee proclaims: "No gang abrades these stairs. They are made of such material that they ... without human intervention." [*Ezeket a lépcsőket nem rongálja semmiféle banda. Ezek olyan anyagból vannak, hogy anélkül is ...* .]

- a. kop - nak.
erode - PRES3PL
'erode'
- b. *?kop - **tat** - ják **maguk**
erode - CAUS - PRES3PL.DEF themselves.ACC
'erode themselves'

In this context, the erosion of the stairs happens due to their structural make-up, and in this context speakers pick the intransitive form. But when I added a twist to the story, and the stairs turned out to have gone out of their way to erode, all my 35 speakers opted for the reflexive form:

- (21) Some stairs with suicidal inclination would rub themselves violently against the wall to abrade. This makes them crumble away much faster. One of the committee members has witnessed such a rubbing scene, so now he speaks up: "I saw it when these stairs ... in an all-out effort." [*Bizonyos lépcsők vadul a falhoz dörzsölik maguk, hogy kopjanak. Namost egy bizottsági tag szemtanúja volt egy ilyen jelenetnek, és most felszólal: "Én láttam, mikor ez a lépcső teljes erőbedobással ..."*]:

- a. *?kop - ott.
abrade - PAST3SG
'abraded'
- b. kop - **tat** - ta **magát.**
abrade - CAUS - PAST3SG.DEF itself.ACC
'abraded themselves'

A similar effect is achieved if the stairs have hands which they can use to make their surfaces smoother and their edges less blunt:

- (22) Some stairs are in the habit of rubbing themselves with their hands. Someone has witnessed such a rubbing scene, and now he speaks up: "I saw it when these stairs" [*Bizonyos lépcsők a kezükkel dörzsölik maguk, hogy az éleiket eltűntessék. Namost valaki szemtanúja volt egy ilyen jelenetnek, és most felszólal: "Én láttam, mikor ez a lépcső"*]:

a. *?kop - ott.

abrade - PAST3SG

'abraded'

b. kop - **tat** - ta **magát.**

abrade - CAUS - PAST3SG.DEF itself.ACC

'abraded itself'

I would like to conclude this array of T1DP/2DPC contexts with the motion verb *pattog* ('bounce'):

- (23) There is a ball on a table. For some reason it is imperative that it makes no noise. Unfortunately, it inadvertently rolls off the table. To make the harm as little as possible, the ball tries to stay put, but despite its efforts it ... for about a minute before it loses impetus. [*Hogy ne üssön még több zajt, a labda megpróbál mozdulatlan maradni, de sajnos minden igyekezete ellenére ... még vagy egy percig.*]:

a. pattog

bounce - PRES.3SG

'bounces'

b. *?pattog - **tat** - ja **magát.**

bounce - CAUS - PRES.3SG.DEF itself.ACC

'bounces itself'

- (24) There are balls on a table. These are special balls: they have hands. They get easily bored, too, and then they roll off the table and, laid back and cool with hands on back of the head, enjoy bouncing. They are of superb quality, so the bouncing goes all by itself. There is, however, one ball which is not only of worse quality but has also got deflated, so when it jumps off the table, it stays put on the floor. This is extremely embarrassing, so the ball simulates bouncing: it pushes itself up into the air with its hands, then drops, pushes itself up again, drops again, and ... this way for a while, hoping that the other balls don't notice that he can't bounce – it would be mortifying if they found out about it! [*De mivel szégyelli magát a többi labda előtt, pattogást szimulál: a két kezével felnyomja magát a levegőbe,*

aztán hagyja magát visszahullani a padlóra, újra felnyomja magát, újra visszahullik, és így ... egy darabig, remélve, hogy a többiek nem veszik észre, hogy ő nem tud pattogni – az tényleg vérciki lenne!]:

- a. *?pattog
 bounce - PRES.3SG
 'bounces'
- b. pattog - **tat** - ja **magát.**
 bounce - CAUS - PRES.3SG.DEF itself.ACC
 'bounces itself'

Several other examples could be presented to reinforce the T1DP/2DPC contrast. Just to mention one more motion verb and one more change of state verb without reiterating the specifics of their stories, I have developed contexts for rolling dumplings and railings which can bend (themselves).⁹ .

The sample of examples surveyed in this section confirms that the proposed T1DP/2DPC distinction is not restricted to an isolated case with floating jellyfish: the contexts presented here arch over an array of different verb types, and the T1DP/2DPC distinction applies across the board. It has also come out that verbs which participate in the T1DP/2DPC alternation in Hungarian are not restricted to inchoatives, but embrace emission verbs and alternating motion verbs.

1.3 Preliminary generalizations

This chapter has methodically contrasted a series of minimal pair contexts, all of which involved a single semantic argument. Some of the contexts called for an intransitive form (T1DP), whereas others contexts fell back on a reflexive construction (2DPC). The systematic comparison of T1DP and 2DPC contexts leads up to the following observations.

With the T1DP contexts, at least two factors can be identified which prompt the intransitive form: trigger by some internal quality or trigger by

⁹T1DP/2DPC pairs are numerous. Notwithstanding, just as there are some verbs which can only be transitive (as for instance *meggyilkol* ('murder') has no T1DP form), there are also verbs which only have a T1DP form. Also, the T1DP/2DPC contrast does not carry over to idiomatic expressions: by way of illustration, while the root \sqrt{pukk} ('burst') has both a T1DP and 2DPC form, the expression 'burst with anger' has no corresponding idiomatic 2DPC form:

- (i) a. mérgében megpukk - ad
 anger.in PRT.burst - INCH
 'burst with anger'
- b. *mérgében megpukk - aszt - ja magát
 anger.in PRT.burst - CAUS - PRES.3SG him/herself.ACC
 Intended: 'cause oneself to burst with anger'

the environment, or possibly a combination of these, maybe helped by the intention of the participant. By way of illustration, the 'effortless' sparkling of the diamond followed from some internal quality, in particular the structural make-up of the diamond; likewise, the unintentional bouncing of the ball resulted from its inherent properties. On the other hand, the persons who unintentionally got tired or gained weight were affected by some environmental impact. The contexts with the rolling dumplings and the bending railings exploit a mix of some inherent aptness and an intention to *V*. The spontaneous flashing of the disco clams evolved from some inherent property, the make-up of the outer shell of the clams, and the light effects in the environment; similarly, the abrading of the tufa stairs is consequent on the interplay of the properties of tufa and the wear and tear of the weather. And finally, in the relevant examples the jellyfish consented to be floated by the motion of the water masses in the ocean, so its 'effortless' floating was brought about by a combination of intention and environment. Here, the importance of the environment is bolstered by fact that the jellyfish would have struggled to float 'effortlessly' on land. So on the basis of the examples enumerated in this chapter, it can be extrapolated that as long as the *V-ing* is triggered by the environment or some internal quality, possibly coupled with intention/willpower, the *V-ing* will be expressed by an intransitive construction in Hungarian.

On the other hand, if the single, affected participant of the *V-ing* inflicts the *V-ing* upon itself, that is to say, if it has to perform or actively play a part in the realizing of the *V-ing* which affects it, the reflexive construction will be resorted to. This is why it often helps to emphasize effort to force the reflexive form: then the participant physically contributes to the bringing about of the *V-ing*. These descriptions I provide for the moment may sound rather vague, but it is clear that **the reflexive construction involves an affected participant which at the same time acts rather agentively – unlike (or much more than) the affected participant of the corresponding intransitive construction.**

1.4 Summary

This chapter has inquired into the behavior of verbs which can alternate between an intransitive and a transitive form. Specifically, the investigation has centered on semantically intransitive constructions. A priori, the expectation is that intransitive meanings will be realized by the intransitive form, once the language has such a form. But this prediction is borne out only partially in Hungarian. As demonstrated by the data, the intransitive form is only resorted to if the *V-ing* involves an archetypal affected participant. But if the participant to be affected by the *V-ing* contributes actively to the execution of the *V-ing*, the reflexive construction is put to use.

In the subsequent chapters, I will move on to formalize the distinction between the two constructions. But before that, we shall take a closer look at a third construction, which will be argued to form a transitional layer between T1DP and 2DPC constructions: the Hungarian half-passive.

Chapter 2

The Hungarian half-passive

2.1 Productive *Ód*: an introduction

Hungarian boasts a telltale little suffix which has received undeservedly little attention in the descriptive and generative approaches to the language. This suffix is *-Ód*¹, and as a first approximation, we can call it a "de-transitivizing" suffix, which turns a transitive form into a monadic verb. This alternation is illustrated below: (1-a) and (2-a) present a dyadic verb each, and the corresponding "de-transitived" forms are shown in (1-b) and (2-b), respectively.²

- (1) a. A lámpákat szándékosan kapcsol - ták le?
the lamps.ACC intentionally turn.off - PAST.3PL - PRT?
'Was it intentionally that they turned off those lights?'
- b. A lámpák szándékosan kapcsol - ód - tak le?
the lamps.NOM intentionally turn.off - ÓD - PAST.3PL PRT?
'Was it intentionally that those lights got turned off?'
- (2) a. Vigyázz, nehogy elkényeztesd a gyereket!
watch.out lest PRT.spoil.IMP2SG the kid.ACC
'Watch out that you don't spoil the kid.'

¹The form *-Ód* stands for the phonologically conditioned allomorphs *-ód* and *-őd*. The choice between the two of them is determined by the backness of the stem vowel(s), cf. *pazarol.ód* ('get wasted') vs. *elfelejt.őd* ('get forgotten').

²The *Ód*-examples in (1-b), (2-b), and (3) are all taken from real life. The sentences with the corresponding dyadic forms in (1-a) and (2-a) were constructed for the sake of the contrast.

- b. Vigyázz, nehogy elkényeztet - őd - jön a gyerek!
 watch.out lest PRT.spoil - ÓD - SUBJ3SG the kid.NOM
 'Watch out that the kid wouldn't get spoiled.'

Here are some further examples which illustrate "de-transitive" *Ód*-verbs:

- (3) a. Jól felspannol - őd - tunk a baleset után.
 well PRT.make.worked.up - ÓD - PAST1PL the accident after
 'We got really worked up after the accident.'
- b. Így újratermel - őd - ik az
 this.way re.produce - ÓD - PRES.3SG the
 elpakolnivaló.
 things.to.be.cleared.away.NOM
 'This way the things to be cleared away reproduce.'
- c. Basszus, kiszak - ít - őd - ott az ajtód!
 damn PRT.rip - CAUS - ÓD - PAST.3SG the door.your.NOM
 Damn, your door got ripped out (of its frame)!
- d. Csupán egy tejeskávé kell reggel, de anélkül elcsesz -
 only a caffe.latte must morning, but without.it crap.up -
 őd - ik az egész nap.
 ÓD - PRES.3SG the entire day.
 'All you need in the morning is a caffe latte, but without that
 the entire day gets spoiled.'
- e. Segítsünk, gyerekek! Oszd - őd - jon!
 help.IMP, fellas! Distribute - ÓD - IMP.3SG
 'Let's help, fellas! Let it get circulated!'
- f. Egyedül én sem fogok énekelni, úgyhogy aktivizál - őd -
 alone I neither will sing.INF, so activate - ÓD -
 ni tessék!
 INF please
 'I won't sing alone either, so please get activated.'

Although *Ód*-forms are used frequently in everyday speech, the role *-Ód* plays in current Hungarian has passed largely unnoticed in the literature. The most acute shortage has probably been the absence of extensive empirical work on these forms, which could have served as a basis for subsequent theoretical work.³ This means that when I embarked on this topic, there was

³A detailed overview of the available literature needs to be postponed until after the data are laid out and the main generalizations are made. It is only then that we will be in the position to be able to assess related works.

no well-established data set on or solid empirical generalization about what *-Ód* does in contemporary Hungarian. Consequently, the data I present here is a result of my own collecting activity. This body of data consists primarily of utterances that I gathered from family members, friends and acquaintances, or overheard from complete strangers on public transportation and in the street. A minor part of the data comes from posts on facebook, utterances on the radio and from various newspapers. Some of the examples result from google searches for specific forms.

A major empirical generalization which emerged in the course of my investigation of *Ód*-forms is that the suffix has at least two distinct, productive uses in contemporary Hungarian. One describes a spontaneous event and the other involves an unexpressed (and unexpressable) causer, whose contribution is being downplayed by the speaker. I will refer to the first use as the *anticausative*⁴ and the second use as the *half-passive*⁵ use. The anticausative use is accepted and employed by all speakers of Hungarian; the half-passive is used by a large number of speakers, but not everyone. Arguably, the half-passive has evolved more recently than the well-established anticausative use; therefore, those speakers who have the half-passive as well as the anticausative use of *-Ód* will be labelled as liberal speakers, whereas those who only use the anticausative variant of *-Ód* will be referred to as conservative speakers. Both uses are fully productive, also the half-passive use for those speakers who have it. The conservative/liberal distinction is lent weight to by a survey I conducted among 45-50 speakers of Hungarian.

The collected data turn out to be directly relevant to the fine structure of the verbal domain, as *Ód*-verbs can be shown to have a twofold contribution to the decomposition of intransitivity. For the first, anticausative

⁴The terms 'inchoative' and 'anticausative' are sometimes used interchangeably to denote the intransitive member of the inchoative/causative alternation. Confusingly enough, the term 'anticausative' (or de-causative) is additionally used to describe the inchoative member of the alternation specifically when it is marked by some de-transitivizing affix, clitic or a reflexive pronoun. In view of the morphological diversity of alternating verbs in Hungarian, I will adopt the stricter terminology, applying 'anticausative' only to marked inchoatives. As *Ód*-suffixation derives morphologically marked intransitives, 'anticausative' will still be a fitting label for this particular use of *-Ód*. But speaking of the intransitive member of the inchoative/causative alternation in general, without specifying the exact morphological shape, I will consistently resort to the more general term 'inchoative'. At the same time, as inchoatives are often characterized as alternating change of state verbs, it should be noted that the intransitive members of the alternating pairs are predominantly, but not exclusively, change of state verbs: we have just seen that emission verbs and an entire class of motion verbs alternate routinely between intransitive and transitive forms in Hungarian.

⁵The term 'half-passive' is intended to express that the construction is similar/related to the passive, but differs from it in important aspects. It is not to be confused with 'semi-passive', a term used sometimes to describe constructions like *He is very interested in philosophy*. In earlier work I used the label 'mediopassive', but as this term is applied in the literature to everything from middles like *This shirt irons well* to Icelandic *-st* to all sorts of obscure constructions, I abandoned it to avoid unwelcome associations.

Ód-suffixation will be argued to be the default strategy to produce T1DP forms in Hungarian. But even more importantly, the half-passive use will provide evidence for a transitional layer between T1DP and 2DPC constructions.

2.2 Anticausative *Ód*

2.2.1 A sample of data

In its anticausative function, the suffix *-Ód* derives verbs which describe spontaneous events. An assortment of real-life examples is provided below. From here on, all the collected examples will be marked with @:

- (4) a. @Amikor megőszülünk, a pigment kivon -
 when PRT.turn.grey.PRES.3PL, the pigment PRT.extract -
 ód - ik a hajból.
 ÓD - PRES.3SG the hair-from
 'When one turns grey, the pigment extracts from the hair.'
- b. @Érlel - ód - ött az elhatározás.
 ripen_{TR} - ÓD - PAST.3SG the decision
 'The decision ripened.'
- c. @Az ember agya átprogramoz - ód - ik:
 the man brain.POSS prt.program - ÓD - PRES.3SG:
 szerintem így lesznek a munkakoholisták.
 think.1SG this.way become.3PL the workaholics
 'One's brain reprograms: I think that's how workaholics come about.'
- d. @Nagyon felspannol - ód - tunk a baleset
 very PRT.make.worked.up - ÓD - PAST.1PL the accident
 után.
 after
 'We got really worked up after the accident.'
- e. @Azóta bonyol - ód - ott a helyzet.
 since.then√complicate - ÓD - PAST.3SG the situation
 'Since then, the situation got (even more) complicated.'
- f. @Az elemek most tölt - ód - nek.
 the batteries now charge - ÓD - PRES.3PL
 'The batteries are charging now.'

- (5) a. @Ilyen helyzetekben nagyon leszív - ód - ik az
 such situations.in very PRT.drain - ÓD - PRES.3SG the
 ember.
 man.NOM.
 'In such situations, one gets really drained.'
- b. @Antibiotikummal kezelték, hogy el ne fertőz - ód -
 antibiotics.with treat.PAST.3PL the PRT not infect - ÓD -
 jenek a sebek.
 SUBJ.3PL the wounds.NOM
 'S/he was treated with antibiotics, so that the wounds should
 not get infected.'
- c. @A szandálok és papucsok zacskóban vagy ládában
 the sandals and slippers plastic.bag.IN or box.IN
 erősen megvisel - ód - nek.
 heavily wear.out - ÓD - PRES3PL
 'The sandals and slippers wear out if stored in a plastic bag or
 in a box.'
- (6) @'On the new types of Swiss watches, ...
- a. ... ahogy mozog a kezed, folyamatosan felhúz - ód -
 ... as moves the hand.your continuously up.wind_{TR} - ÓD -
 ik egy kis kar.
 PRES.3SG a little arm
 ... as your hand moves, a little arm keeps winding up continu-
 ously'.
- (7) @'Finally, they managed to cut off from the whale the remaining 15
 meters of rope, ...
- a. ... amely a szája és az uszonyai köré fon - ód -
 ... which the mouth.its and the fins.its around twine - ÓD -
 ott.
 PAST.3SG
 ... which had twined around its mouth and fins.'
- (8) @It can be verified on the basis of radar measurements from the
 space that the terrain around the red sludge reservoir in Kolontár
 for years. (Az úrből készült radarmérések alapján kimutatható,
 hogy évek óta a kolontári vörösiszap-tározó átszakadt gátjának
 területe.)

- a. sülyedt és deformál - ód - ott
 sink.PAST.3SG and deform - ÓD - PAST.3SG
 'sank and deformed'

A common technique to emphasize that the event takes place without external intervention is to append *by itself*:

- (9) @Jöhetnek az alakváltó evőeszközök ...
 "Cutlery that changes its own shape may come ..."
 a. ... és a maguktól összehajt - ód - ó ruhák.
 ... and the themselves.from fold - ÓD - PRTCP clothes
 ... and clothes that fold by themselves.
- (10) a. @Megszáradni ugyan megszárad magától, de megmos
 dry_{inch}.INF though dry.PRES3SG itself.from but PRT.wash
 - ód - ni még nem mos - ód - ik meg.
 - ÓD - INF yet not wash - ÓD - PRES.3SG PRT
 'Even though it dries by itself, it won't yet get washed by itself.'
- (11) @Ha véletlenül beszakad a feje [a kullancsnak], az nem olyan nagy
 baj,
 "It's not such a big problem if the head [of the tick] tears off and
 remains stuck in the skin;"
 a. ... néhány nap múlva általában magától ki - lök - ód -
 few day after generally itself.from PRT - push - ÓD -
 ik.
 PRES.3SG
 as a rule, a few days later it sheds by itself.
- (12) a. @Nem fog magától beágyaz - ód - ni.
 not will itself.from PRT.make.the.bed - ÓD - INF
 'The bed won't get made by itself.'
- b. Magától nem rak - ód - ik le a telefon.
 itself.from not hang - ÓD - PRES.3SG PRT the phone
 'The phone doesn't get hung up by itself.'
- c. @Magától fog beköt - ód - ni a cipőnk a jövőben.
 itself.from will tie - ÓD - INF the shoes.our the future.in
 'Our shoelaces will tie by themselves in the future.'

Or consider the following dialogue about the preparation of the supper, also from real life:

- (13) a. A: Csinálod?
 A: do-PRES2SG
 A: 'Are you making (the food)?'
 b. B: Csinál - ód - ik az magától.
 B: do - ÓD - PRES3SG that itself.FROM
 B: 'It's getting made all by itself.'

2.2.2 Productive and default

Ód-suffixation is not the only mechanism that derives anticausatives. Compare the examples below:

- (14) El.tép - **őd** - ött a szelvény a zsebemben -
 PRT.tear_{TR} - **ÓD** - PAST.3SG the voucher.NOM the pocket.my.in -
 be fogják váltani így is?
 PRT will.3PL exchange.INF like.this too?
 'The voucher tore in my pocket – will they still accept it?'
- (15) El.szak - **ad** - t a szelvény a zsebemben
 PRT.√tear - **INCH*** - PAST.3SG the voucher.NOM the pocket.my.in
 – be fogják váltani így is?
 – PRT will.3PL exchange.INF like.this too?
 'The voucher tore in my pocket – will they still accept it?'

In (14), the verb *tép* ('rip, tear') merges with *-Ód* to form an inchoative, whereas in (15), the root $\sqrt{\text{szak}}$ with the same meaning combines with the suffix *-Ad* to derive an anticausative construction.⁶ Further suffixes which can derive an anticausative form include for instance *-Ul*, *-Ad*, *-Od*⁷, and in a large number of cases the inchoative form can even be an unaffixed bare root. Here is a table to illustrate some root/suffix combinations:

⁶Again, upper case vowels stand as an abbreviation for harmonizing vowels.

⁷The idiosyncratic suffixes *-Od* and *-Ad* should not be confused with productive *-Ód*. The suffix *-Od* stands for the allomorphs *-od/-ed/öd*, and *-Ad* conflates the allomorphs *-ad/-ed*, while *-Ód* is an abbreviation for the allomorphs *-ód/-ød*. All of these suffixes have an anticausative function, but they differ from each other with regard to (i) productivity (only *-Ód* is productive), (ii) whether they combine with nominal/adjectival or verbal roots (only *-Od* combines with nominal or adjectival roots), (iii) whether the inchoative and half-passive form look identical (only with *-Ód*), (iv) conjugational class (only *-Ad* anticausatives fall into the \emptyset conjugation, the other two belong to the *-ik* conjugational class). See also Rebrus 2000: 778-780.

| | <i>-Ul</i> | <i>-Ad</i> | <i>-Od</i> | \emptyset |
|--|------------|------------|------------|-------------|
| (16) $\sqrt{\text{gur}}$ ('roll') | ✓ | * | * | * |
| $\sqrt{\text{görb}}$ ('bend') | ✓ | * | * | * |
| $\sqrt{\text{ébr}}$ ('wake') | * | ✓ | * | * |
| $\sqrt{\text{szak}}$ ('rip') | * | ✓ | * | * |
| $\sqrt{\text{gombolyod}}$ ('reel') | * | * | ✓ | * |
| $\sqrt{\text{savanyod}}$ ('turn sour') | * | * | ✓ | * |
| $\sqrt{\text{fagy}}$ ('freeze') | * | * | * | ✓ |
| $\sqrt{\text{csökken}}$ ('diminish') | * | * | * | ✓ |

Even though there is a relatively large number of roots which combine with such anticausative suffixes, their use is limited: none of these suffixes can be regarded as fully productive any longer, and they combine with the connected roots in an unpredictable, idiosyncratic fashion.⁸

The suffix *-Ód* stands out from this assortment of suffixes as the only fully productive anticausative suffix in present day Hungarian. Practically, any transitive verb with a root which is compatible with inchoative semantics but which lacks a lexically specified inchoative manifestation can be turned into an anticausative by means of *Ód*-suffixation:

- | | | | | |
|------|----|--|----|---|
| (17) | a. | gyűr crease 'crease _{TR} ' | b. | gyűr - ód crease - ÓD 'crease _{inch} ' |
| (18) | a. | hegyez sharpen 'sharpen _{TR} ' | b. | hegyez - ód sharpen - ÓD 'sharpen _{inch} ' |
| (19) | a. | elcsesz ruin/spoil 'ruin/spoil _{TR} ' | b. | elcsesz - ód ruin/spoil - ÓD 'get ruined/spoiled' |
| (20) | a. | besároz make.muddy 'make muddy' | b. | besároz - ód make.muddy - ÓD 'get muddy' |

⁸Some of these suffixes seem more productive than others for certain subclasses of roots, but even there there is a lot of idiosyncrasy and unpredictability going on. For more on this, cf. e.g. Kiefer and Ladányi 2000: 202-206 and Komlósy 2000: 280-281. I will say a little more about this issue in chapter 4.4.

A palpable illustration of the point comes from makeshift bilingual creations. For internal use, bilinguals often 'create' verbs, which are non-existent in official Hungarian, and the average speaker would not have a clue what the verb means. In my *Omi*'s jargon, *flankeliz* ('divide something into pieces, disintegrate') and *vucliz* ('make fluffy') are such 'verbs'. From here, it is only one step to anticausativization, which happens invariably by means of *Ód*-suffixation:

- (21) a. @Az uborkát is meg kéne enni, mert annyira
 the gherkin too PRT should eat.INF because so.much
flankeliz - *ód* - ik.
flankeliz - *ÓD* - PRES.3SG.
 'Also the gherkins should be eaten, because they keep disintegrating.'
- b. @Úgy vucliz - *ód* - ik ez a jankerli,
 so *vucliz* - *ÓD* - PRES.3SG this the cardigan.NOM,
 pedig alig használok.
 even.though hardly use.PRES.1SG
 'This cardigan sheds so much fluff, even though I barely use it.'

This takes us to the next point: commonly recognized loanwords. All newly imported verbs combine with *Ód* to form an anticausative. This is a two-step procedure: verbs of foreign origin enter the language as (possibly underspecified⁹) roots, which are in the first round turned into transitive verbs (or verbal roots, it is not evident from the data) by means of different 'verbalizing' suffixes (*-Ol* and *-Oz* in the examples below). The resulting dyadic verb can in turn be transformed into an anticausative by stacking *-Ód* on top:

- (22) a. *fax* ('√fax')
 b. *fax* - *ol* ('fax_{TR} something')
 c. *fax* - *ol* - **ód** ('fax_{INTR}')
 (23) a. *ímél* ('√e-mail')
 b. *ímél* - *ez* ('e-mail_{TR} something')
 c. *ímél* - *ez* - **ód** ('e-mail_{INTR}')

⁹Although very often these roots look identical with the corresponding nominal forms, the fact that the root may not always be able to stand on its own or correspond to a specific noun indicates that it is probably more correct to call the foreign roots simply roots, which can subsequently be turned into verbs or nouns (or verbal or nominal stems). Roots that lack a direct nominal counterpart include for instance *szken* ('scan') or *print*; cf. e.g. Kiefer and Komlósy (2011: 202). For more verbalizing suffixes, consult Rebrus (2000:779).

This piece of data with makeshift bilingual creations and newly imported verbs not only confirms that anticausative *-Ód* is productive, but also shows that *-Ód* is the default/elsewhere anticausative suffix of the language.

It was said that any transitive verb can be turned into an anticausative by means of *Ód*-suffixation provided that (i) the underlying root is compatible with anticausative semantics and (ii) the transitive form lacks a lexically determined anticausative counterpart from before. Condition (i) pertains in the first place to agentive roots which necessarily imply an external causer. Such roots cannot have an anticausative manifestation (cf. e.g. Alexiadou 2006/4):

- (24) *A férfi magától meggyilkolódott.
 the man itself.from murder-ÓD-PAST.3G
 'The man got murdered by itself.'

Condition (ii) concerns the issue of lexical blocking, by which productive forms are blocked by a lexically specified form^{10, 11}. Compare the lexically determined forms in (16) with the non-existing *Ód*-forms below:

- (25) a. * $\sqrt{\text{gur-Ód}}$, intended: 'roll_{inch}'
 b. * $\sqrt{\text{görb-Ód}}$, intended: 'bend_{inch}'
 c. * $\sqrt{\text{felébr-Ód}}$, intended: 'wake_{inch}'
 d. * $\sqrt{\text{szak-Ód}}$, intended: 'rip_{inch}'
- (26) a. * $\sqrt{\text{gomboly-Ód}}$, intended: 'reel_{inch}'
 b. * $\sqrt{\text{savany-Ód}}$, intended: 'turn sour'
 c. * $\sqrt{\text{befagy-Ód}}$, intended: 'freeze_{inch}'
 d. * $\sqrt{\text{csökken-Ód}}$, intended: 'diminish_{inch}'

Let me further illustrate the blocking effect with a context:

- (27) The owner of the red sludge reservoir attempts to convince potential investors that his reservoir is as safe as it can get: 'The dam won't ..., not even in an earthquake. We follow the safety instructions and are prepared for all sorts of natural disaster' [*"Nem fog a gát, még egy földrengés során sem. Száz százaléig betartjuk a biztonsági előírásokat, és mindenfajta természet katasztrófára felkészültünk."*].

¹⁰There is one possible exception I am aware of: $\sqrt{\text{zár}}$ ('close, lock'). The commonly used inchoative form is *zár-Ód*, but I have a lexically determined inchoative manifestation with the idiosyncratic suffix *Ul* as well: *zár-Ul_{inch}*. It is not impossible, however, that I am mixing two registers, a modern and an archaic one. Alternatively, the *Ód*-form may turn out to be half-passive. This I have not tested.

¹¹Some verbs with *-Od* (e.g. *teker-ed* ('wind_{inch}')) can also occur with the *Ód*-form: *teker-ød*. Here, there is a very clear contrast in meaning between the two forms: the *Ed*-form is anticausative, whereas the *Ód*-form is half-passive: 'get winded'. For more on the half-passive, see the coming sections.

Let us assume that the empty slot in the context is to be filled in with some form of $\sqrt{\text{szak}}$, which means not only 'tear, rip', but also 'rupture'. As this root is associated with the lexically specified, idiosyncratic anticausative suffix *-Ad*, the intended *Ód*-anticausative is blocked:

- (28) a. $\sqrt{\text{át}}$ - szak - ad - ni
 PRT - $\sqrt{\text{rupture}}$ - INCH - INF
 'rupture_{inch}'
- b. * $\sqrt{\text{át}}$ - szak - (ít) - ód - ni
 PRT - $\sqrt{\text{rupture}}$ - (CAUS) - *ÓD* - INF
 Intended: 'rupture_{inch}'

The verb *tönkrevág* ('shatter, ruin') can also be used in this context. However, there is no lexically specified, idiosyncratic anticausative suffix that would combine with this particular root to derive an inchoative. Therefore, speakers resort to productive *Ód*: this is the only way to turn the root $\sqrt{\text{tönkrevág}}$ ('shatter, ruin') into an inchoative:

- (29) $\sqrt{\text{tönkre}}$ - vág - ód - ni
 PRT - cut_{TR} - ód - inf
 'shatter_{inch}'

To sum up: in this section it has been contended that *Ód*-suffixation is a productive process and the elsewhere strategy for deriving an anticausative form in Hungarian: it can turn roots/verbs without a lexically specified inchoative form into an anticausative. We have also seen that there is a blocking effect found with inchoative-formation: anticausative *Ód*-suffixation is applicable only if there is no lexically specified inchoative form available for a given verb.

2.2.3 A comparison with lexical inchoatives

As regards the syntactic behavior of lexically specified inchoatives and *Ód*-anticausatives, there is no difference to be detected. For the first, both types can be modified by *by itself*:

- (30) a. Miért kéne nekünk szárítógép, mikor a ruhák
 why should.be for.us tumble.dryer, when the clothes.NOM
 meg.szár - ad - nak maguktól is?
 PRT $\sqrt{\text{dry}}$ - INCH - PRES.3PL themselves.from too?
 'Why would we need a tumbler dryer, when the clothes dry by
 themselves, too?'

- b. Magától fog beköt - őd - ni a cipőnk a jövőben.
 itself.from will tie - ÓD - INF the shoes.our the future.in
 'Our shoelaces will tie by themselves in the future.'

Second, both lexically specified inchoatives and *Ód*-inchoatives can be modified by non-agentive *from*-phrases:

- (31) a. Az ajtó kinyíl - t a huzattól.
 the door PRT.open_{inch} - PAST.3SG the draft.from
 'The door opened from the draft.'
- b. Teljesen felspannol - ód - tunk a hírtől.
 completely PRT.make.worked.up - ÓD - PAST.1PL the news.from
 'We got completely worked up from the news.'

Third, agentive *by*-phrases are unacceptable both with productive and lexically specified inchoatives:

- (32) a. *A labda elgur - ul - t az egyik játékos által.
 the ball \surd away.roll - INCH - PAST3SG the one.of player
 by
 Intended: 'The ball rolled away by one of the players.'
- b. *A helyzet bonyol - ód - ott a résztvevők által.
 the situation \surd complicate - ÓD - PAST.3SG the participants
 by
 Intended: 'The situation grew more complicated by the participants.'

2.2.4 T1DP and *Ód*

We have now seen that anticausative *Ód* is used to derive inchoatives. T1DP constructions, which were introduced in the first chapter, were argued to embrace not only inchoatives, but also motion verbs, emission verbs and some static verbs. Now emission verbs, as far as I know exclusively, have the intransitive form as the unmarked, 'base' form; the same goes for the motion verbs I have checked. This means that they do not need to resort to *Ód* to derive the T1DP form. Let an illustration stand here:

- (33) a. villog
 $\sqrt{\text{flash}}$
 'flash_{inch}'
- b. villog - tat
 $\sqrt{\text{flash - CAUS}^*}$
 'flash_{TR}'

Nevertheless, there is at least one static verb which forms the T1DP by means of *Ód*-suffixation:

- (34) a. agg - **ód**
 $\sqrt{\text{worry - ÓD}}$
 'worry_{inch}'
- b. agg - aszt
 $\sqrt{\text{worry - CAUS}^*}$
 'worry_{TR}'

This suggests that anticausative *-Ód* is not reserved exclusively for inchoative formation, but is used to derive the broader category T1DP in cases where it is necessary, *i.e.* where the root needs to combine with an anticausative suffix to form an intransitive verb (and where there is no other lexically specified, idiosyncratic suffix associated with that particular root, which could perform the same function). If this is correct, *-Ód* should rather be called a T1DP-suffix, although I will continue to refer to it as an anticausative suffix.

2.2.5 Interim summary

Let me recapitulate the main points made thus far. It has been contended that there is one productive use of the suffix *Ód* which is accepted and used by all speakers of Hungarian: the anticausative function. This use of *Ód* is the default strategy for anticausative-formation in the language, and the resulting anticausatives behave on a par with lexically determined inchoatives, which are either bare or are derived by some non-productive inchoative ending.

2.3 Half-passive *Ód*

2.3.1 The half-passive function

The other use of *Ód* is what I call the half-passive. Half-passives are used to downplay the contribution of an implicit causer. Contexts in which the half-passive can occur span over a range of different situations, but it is probably most common in situations where the speaker attempts to shun responsibility or wishes to put blame on others indirectly/avoid blaming others to their face. Let an illustration stand here:

- (35) The owner of the red sludge reservoir is planning to get the dam damaged to collect money from the insurance company. His managing director is waiting for his instructions, but the owner finds out in the end that the damage would be significantly greater than what

the insurance would cover. He calls his managing director to call off the action, and says: 'I have changed my mind, – the dam won't' [”Meggondoltam magam, – nem fog(ja) a gát.”]

- a. *át - szakít - ani magát
 prt - rupture_{caus} - inf itself.ACC
 'rupture_{2DPC}'
- b. #át - szakad - ni
 prt - rupture_{inch} - inf
 'rupture_{inch}'
- c. ✓át - szakít - ód - ni
 prt - rupture_{caus} - ód - inf
 'get ruptured'

In this context, the 2DPC form (35-a) is unthinkable. The inchoative form (35-b) is infelicitous: the director cannot control or make a decision about whether or not the dam would rupture for instance as a consequence of some inherent problem or an earthquake. To use a transitive or external causative form like 'I won't have the dam ruptured' would be way too risky – if someone records this utterance, he could get into trouble for considering it. But to resort to the half-passive (35-c) is a relatively safe option: his responsibility in the affair is somehow minimized, and there is no indication made as to who exactly would have got the dam damaged.

As the example shows, half-passive *Ód*-verbs are passive-like. There is an implicit causer whose contribution can vary in the different contexts, but what all instances of the half-passive share is that this implicit causer can never surface, not even in the form of a *by*-phrase¹². Incompatibility with *by*-phrases is illustrated by the examples below:

- (36) a. @A három kiló meggy és cseresznye már cukroz -
 the three kilo sour.cherry and cherry already sugar -
 ód - ik (*az apum által).
 ÓD - PRES.3SG (*the dad.MY by)
 'Those three kilos of sour cherry and cherry are already getting sugared (*by my dad).'

¹²Speakers of Hungarian in Eastern Hungary, Romania and West-Ukraine accept *by*-phrases, but in their language variant *Ód*-verbs can be canonical passives. This is not the case in liberal Hungarian. For more on the eastern use of *Ód*, cf. chapter 2.4.2.

- b. @Mindenhol az sugall - ód - ik (*a kollégák
 everywhere that prompt - ÓD - PRES.3SG (*the colleagues
 által), hogy estig bent kéne maradni dolgozni.
 by) that evening.until inside should stay.INF work.INF
 'It gets prompted everywhere (*by the colleagues) that one
 should stay and work until the evening.'

There are of course strategies which make it possible to name the agent, for instance in the preceding clause, or as a locative phrase – but not as a *by*-phrase:

- (37) @Apum nekiállt, és a három kiló meggy és
 dad.MY buckled.down and the three kilo sour.cherry and
 cseresznye már cukroz - ód - ik.
 cherry already sugar - ÓD - PRES.3SG
 'My dad buckled down, and those three kilos of sour cherry and
 cherry are already getting sugared.'
- (38) @A svédeknél csomó minden elpazarol - ód - ik –
 the Swedes.AT bunch everything waste - ÓD - 3SG –
 egy kilós sajtokat kidobnak mert egy kis penész van rajta.
 'At the Swedes', a whole bunch of things get wasted – they throw
 out pounds of cheese because there is a little mold on them.'

Incompatibility with agentive *by*-phrases is a characteristic that half-passives and anticausatives have in common. At the same time, non-agentive *from*-phrases are possible. Also in this respect half-passives resemble anticausatives:

- (39) Poor maestro asks for help on phone from like twenty places in vain,
 so ... that in the end there is more 'fuck' and 'what the hell' in the
 story than facts.' [*Szegény mester hiába kér telefonos segítséget úgy
 húszféle helyekről, ..., hogy a végén már több a bazmeg meg a miafasz
 a történetben, mint a tényállás.*]
- a. @szegénynek annyira meg - visel - őd - ik a
 poor.DAT so.much PRT - wear.out - ÓD - PRES.3SG the
 rohadt cirkótól az idege
 rotten gas.boiler.FROM the nerves.his
 'the nerves of the poor guy get so worn out from that wretched
 gas boiler'

2.3.2 The half-passive use: a sample of examples

As it has just been touched upon, the role of the implied causer can vary greatly in the different utterances which feature a half-passive. The contri-

bution of the causer is the slightest in situations in which the causer brought about the *V-ing* unintentionally. Notice that even these utterances have a flavor of responsibility dodging:

- (40) a. @Aztán az sms valahogy elfelejt - ód - ött.
 then the sms somehow forget - ÓD - PAST.3SG
 'The sms somehow got forgotten.'
- b. @Az első feladat kitol - ód - ott.
 the first task postpone - ÓD - PAST.3SG
 'The first task got postponed.'

Sometimes there is also some intentionality implied, although the identity of the causer remains irrelevant or unimportant:

- (41) @A conversation about a spoiled youth who, according to the speaker, is used to get everything without ever having to make an effort: 'The brat lives in a world in which ...' [*'A gyerek abban a világban él, hogy ...'*]
- a. ... a paprikás krumpli odatálal - ód - ik elé
 ... the paprika potato serve - ÓD - PRES.3G front.POSS
 az asztra.
 the table.ONTO
 ... the paprika potatoes (and everything else) get served for him.

Here are some more examples to illustrate the point:

- (42) @A tojást kéne még föltenni ['The eggs should yet be put on to boil'],
- a. ha itt minden elpucol - ód - ott.
 if here everything prt.clear.away - ÓD - PAST.3SG
 'after everything got cleared away from here.'
- (43) @Azok a ruhahalmok azóta már felszámol - ód - tak.
 those the clothes.piles.NOM since.then already liquidate - ÓD - PAST3PL
 'Since then, those piles of clothes have got cleared out.'

- (44) @Jó lenne, ha addigra nyélbe üt - ód - ne egy
 good would.be if by.then shaft.into hit - ÓD - COND an
 lakás.
 apartment
 'It would be nice if by then an apartment would get landed.'
- (45) @A fiatal szülők egymással is összebarátkoztak, ... [The young par-
 ents made friends with each other, and ...]
 a. ... a gyerekruhák állandóan csereberél - ód - tek.
 ... the child.clothes constantly swap - ÓD - PAST.3SG
 '... the kids' clothes got constantly swapped among them.'
- (46) @A "háromóránként" pedig [However, this 'every third hour']
 a. az első etetés elejétől a második elejéig
 the first feeding beginning.from the second beginning.to
 számol - ód - ik.
 count - ÓD - PRES.3SG
 'gets calculated from the beginning of the first feeding to the
 beginning of the second one.'

Instructions also fall into this category when all that matters is that the job gets done:

- (47) @Annak a gyümölcsnek meg kéne mos - ód - ni - a.
 that the fruit.DAT PRT should wash - ÓD - INF - 3SG
 'That fruit should get washed.'
- (48) @A fenti ablakok most már csuk - ód - ja - nak
 the upstairs windows now already close - ÓD - IMP - PRES.3PL
 be!
 PRT
 Those windows upstairs (should) get closed now!

But, as pointed out at the outset, half-passive *Ód* is used most of all in situations where the speaker actually wants to conceal the agent/causer. Typically, the reason for this is either to evade responsibility or to put blame on others indirectly/ avoid blaming others to their face. Consider the following situations:

- (49) A shop assistant to a customer, feeling slightly uncomfortable about accusing the unknown customer with a tendency to lose things:
- a. @A kupon értékét felírtam, hogy ne veszt - őd -
 the coupon value.ACC write-PAST.1SG that not lose - ÓD -
 jön el.
 SUBJ.3SG PRT
 'I wrote down the value of the coupon so that it wouldn't get lost.'
- (50) A conversation, where the speaker avoids saying "you were rude enough to hang up while I was talking to you", but at the same time gives voice to some irritation:
- a. @Mondtam, hogy merre gyere, de lerak - ód -
 say.PAST.1SG that where come.2SG but put - ÓD -
 ott a telefonod.
 PAST.3SG the phone.your
 'I was telling you how to come but your phone got hung up.'
- (51) While acknowledging the existence of a bully, the speaker sidesteps his/her identity:
- a. @Hogyhogy így megkarmol - ód - tál, Dév?
 how so scratch - ÓD - PAST.2SG, Dév?
 How come you got scratched like this, Dév?
- (52) In this example, a student is complaining that professors teach interesting introductory courses, but later on there is no opportunity for more advanced studies:
- a. @Felkel - t - ód - ik az érdeklődésed, aztán nem
 rise_{inch} - CAUS - ÓD - PRES.3SG the interest.your then not
 indul kurzus, amire járhatnál.
 start.PRES.3SG course which.ON attend.POT.COND.2SG
 'Your interest gets raised, and then no course is launched that you could attend.'
- (53) Here, the speaker is being careful about making reference to identity of the person who makes the beds in another family:
- a. @Nálatok is beágyaz - ód - ik minden nap?
 you.AT also make.the.bed - ÓD - PRES.3SG every day
 'Do the beds get made every day at your place, too?'

- (54) Someone is careless when cleaning kitchen equipment with bleach, and some tactful warning is due:
- a. @Nagyon fröcsköl - őd - ik a hipó.
 very.much splash - ÓD - PRES.3SG the bleach
 'The bleach gets splashed a lot.'
- (55) In this utterance, the speaker only dares to accuse the addressee obliquely of overstating others' mistakes:
- a. @Vagy talán azért nagyít - ód - ott fel ennyire
 or maybe so.that enlarge - ÓD - PAST.3SG PRT so.much
 mások hibája, hogy a tiedet nehogy
 others mistake.POSS that the yours.ACC lest
 meglássák?
 PRT.see.PRES.3PL?
 'Or maybe the mistakes of others got overstated so that yours
 won't be noticed?'
- (56) Someone obviously sprung the question at the speaker, but the speaker sidesteps the identity of this person:
- a. @Nagyon nekem szegez - őd - ött a kérdés.
 very me.to aim - ÓD - PAST.3SG the question.NOM
 'The question really got sprung on me.'
- (57) In a summer camp, there are sport contests from year to year. One year there was little interest, and next year the person who normally organizes the contests decides to discontinue with this practice. After a few days in camp, the participants begin to inquire about the sport contest. The organizer then tells that she did not think that people were interested: 'After all,'
- a. @Tavaly nagyon nem játsz - ód - tak le a
 last.year very not play - ÓD - PAST.3PL PRT the
 meccsek.
 matches.NOM.
 Last years' matches simply didn't get played.
- (58) Finally, an utterance which leaves it unsettled if the speaker evades responsibility or blames others allusively for distracting him/her:

- a. @Meg akartam nézni, de elterel - őd - ött
 PRT want.PAST.1SG look.INF, but divert - ÓD - PAST.3SG
 a figyelmem.
 the attention.my
 'I wanted to check it, but my attention got diverted.'

And some examples where the speaker clearly refrains from taking responsibility:

- (59) Somewhat vehemently, my teenage brother enters my room for some cosy chat, and the door remains in his hands, detached from its frame:

- a. @Andi, basszus, kitép - őd - ott ez a szar!
 Andi, damn rip - ÓD - PAST.3SG this the shit
 Andi, damn, this shit got ripped out (of its frame)!

- (60) The only person who can neglect his relationship with his girlfriend is the speaker himself. Yet there is little sign of the speaker in the sentence below:

- a. @A barátnőmmel való kapcsolat hanyagol - őd - ott.
 the girlfriend.my.with being relationship neglect - ÓD -
 PAST.3SG
 'The relationship with my girlfriend got neglected.'

- (61) @A dolgok mindig elnapol - őd - nak.
 the things always postpone - ÓD - PRES.3PL
 'Things always get postponed.'

Notwithstanding, the boundaries are often blurred: in many cases, it is not possible to ascertain how much intention, tact, blame and responsibility-shunning is involved. The following statement is formulated in such a way that it cannot be verified whether the speaker considers the emerging situation a coincidence or a conscious decision:

- (62) @ [...] kérdés, hogy miért választ - őd - nak ki
 [...] question that why select - ÓD - PRES.3PL PRT
 mostanában vezető pozícióba olyanok, akikben ez az
 nowadays leading position.into such whom.in this the
 eszelős motor működik.
 crazy motor work-PRES.3SG
 'The question is why such people get selected for leading positions nowadays who are driven by this crazy drive.'

2.3.3 Contrasting half-passives and inchoatives

Morphology: contrastive forms and look-alikes

There are no lexically specified half-passive forms in Hungarian: the half-passive is always derived by productive *Ód*. This implies that verbs which have a lexically specified inchoative form are morphologically different in the inchoative reading and in the half-passive reading. For an illustration, here is a couple of contrasting inchoative and half-passive forms. The (a) examples show the inchoative forms, and the (b) examples the half-passive forms:

- | | | |
|------|--|---|
| (63) | a. gur - ul √roll - INCH* 'roll _{inch} ' | b. gur - <i>ít</i> - ód √roll - CAUS* - ÓD 'get rolled' |
| (64) | a. teker - ed √coil - INCH* 'coil _{inch} ' | b. teker- ∅ - ód √coil - CAUS* - ÓD 'get coiled' |
| (65) | a. fagy - ∅ √freeze - INCH* 'freeze _{inch} ' | b. fagy - <i>aszt</i> - ód √freeze - CAUS* - ÓD 'get frozen' |

The basic difference is the choice of the suffix: an idiosyncratic inchoative suffix or productive *-Ód*. With roots which have a non-bare causative form, there is an additional difference. The half-passive builds on the causative form, so verbs with a marked causative form will have a half-passive which bears causative morphology in addition to *Ód*. But provided that the inchoative suffix is lexically determined, the inchoative and the half-passive will yield a contrast even when the causative form (cf. (64)) is bare:

- | | |
|------|----------------------------------|
| (66) | a. inchoative: √ - <i>inch</i> * |
| | b. half-passive: √ - ÓD |

The inchoative and half-passive forms will be morphologically distinct also when the inchoative is bare (cf. (65)), regardless of the shape of the causative:

- | | |
|------|--|
| (67) | a. inchoative: √ |
| | b. half-passive: √ (- <i>caus</i> *) - ÓD |

This, however, means that verbs which select for *Ód* to form an inchoative can be morphologically ambiguous between the inchoative and the half-passive, provided that their transitive form is bare:

- (68) a. gyűr
 $\sqrt{\text{crease}}$
 'crease_{TR}'
- b. gyűr - **ód**
 $\sqrt{\text{crease}} - \text{ÓD}$
 'crease_{inch}' OR
 'get creased'
- (69) a. tép
 $\sqrt{\text{tear}}$
 'tear_{TR}'
- b. tép - **ód**
 $\sqrt{\text{tear}} - \text{ÓD}$
 'tear_{inch}' OR 'get torn'
- (70) a. be.kapcsol
 PRT.turn.on
 'turn on_{TR}'
- b. bekapcsol - ód
 PRT.turn.on - ÓD
 'turn on_{inch}' OR
 'get turned on'

For verbs with a marked transitive form, the inchoative and the half-passive are clearly distinguishable even when both take *-Ód*. As the half-passive builds on the causative form, if a causative form is explicitly marked by a causative suffix, the point of attachment for *-Ód* will be different on the inchoative and the half-passive scenario. In inchoative contexts, *-Ód* attaches directly to the root, but it stacks on top of the causative (*caus**) suffix to form a half-passive:

- (71) a. fejl - eszt
 $\sqrt{\text{develop}} - \text{CAUS}$
 'develop_{TR}'
- b. fejl - **ód**
 $\sqrt{\text{develop}} - \text{ÓD}$
 'develop_{inch}'
- c. fejl - eszt - **ód**
 $\sqrt{\text{develop}} - \text{CAUS} - \text{ÓD}$
 'get developed'
- (72) a. bonyol - ít
 $\sqrt{\text{complicate}} - \text{CAUS}$
 'complicate_{TR}'
- b. bonyol - **ód**
 $\sqrt{\text{complicate}} - \text{ÓD}$
 'grow complicated'

- c. bonyol - *ít* - **ód**
 √/complicate - CAUS - ÓD
 'get made complicated'

This practically means that the inchoative and the half-passive are morphologically indistinguishable only when the causative form is, on the one hand, morphologically unmarked and, on the other hand, lacks a lexically specified inchoative counterpart. In such cases both the inchoative and the half-passive will be derived by productive *Ód*-suffixation, and in the absence of an overt causative marker no morphological clue is provided as to the site of attachment.

The fact that inchoatives and half-passives may surface with identical forms can create some additional confusion with regard to how much causation the speaker wishes to imply. Without morphological hints and in a sufficiently vague context, it can be hard to ascertain whether something happened completely by itself or the speaker for some reason refrains from hinting at the agent. The following dialog with *bekapcsol* ('turn on') illustrates how this ambiguity can be exploited by speakers:

- (73) a. Tanár: Mi történik ott, Máté?
 Teacher: What's happening there, Máté?
- b. Diák: Semmi, csak bekapcsol - ód - ott a
 Student: Nothing, just turn - ÓD - PAST.3SG the
 számítógémem.
 computer.my
 Student: Nothing, just my computer (got) turned on.
- c. Tanár: Micsoda?
 Teacher: What?
- d. Diák: Bekapcsol - ód - ott a számítógémem!
 Student: Turn - ÓD - PAST.3SG the computer.my
 Student: My computer (got) turned on!
- e. Tanár: Úgy érted, magától?!
 Teacher: You mean, by itself?!
- f. Diák (megelégtelve a kihallgatást): Nem, tanár úr. ÉN KAPCSOLTAM BE A SZÁMÍTÓGÉPET!
 Student (getting fed up with the interrogation): No, sir. IT WAS ME WHO TURNED IT ON!

In this real-life episode, the student who turned on his computer in class can use an *Ód*-form with a clear conscience. He is a speaker that has the half-passive, and the fact that *bekapcsol - ód* is ambiguous between the inchoative and the half-passive reading makes it possible for him to comfortably understate his role in the computer's turning on, while sticking fully to the truth. On the other hand, the teacher wants the responsibility taken – maybe he

does not even have the half-passive – and insists that the student should "correct" (or disambiguate) his utterance, and exclude the interpretation on which the computer turned on all by itself.

Let some further examples stand here with *Ód*-verbs which are ambiguous between the inchoative and the half-passive:

- (74) Said about a relationship, it is not clear whether the speaker considers his/her partner blamable or thinks that it is the normal course of life that relationships get affected by gravitation:

a. @Egy idő után elszar - ód - ott/ elbasz - ód -
 a time after shit - ÓD - PAST.3SG/ fuck - ÓD -
 ott minden.
 PAST3SG everything
 'After a while everything got screwed up.'

- (75) My horticulturalist brother takes pity on a withering plant and moves it to his room. A few weeks later my mother finds the plant in full bloom, and the utterance in (75-a) leaves her lips, with me taking notes and wondering if she attributed the prospering of the plant to my brother's green fingers, or just a seasonal recovery that would have happened, anyway.

a. @Milyen szépre felturbóz - ód - ott ez a
 how pretty turbo.charge - ÓD - PAST.3SG this the
 növény!
 plant
 'How much this plant got turbocharged!'

- (76) When it is not obvious whether the person at issue is responsible for ruining his own life or just got blow after blow from life until he was ravaged:

a. @Nagyon eltol - ód - ott az élete.
 very mess.up - ÓD - PAST.3SG the life.his
 'His life got really screwed up.'

- (77) In (77-a), the speaker may feel that she is at fault in not disposing of her time well – but maybe all she means is that the many tasks parceled out the time at her disposal:

a. @Egy kicsit úgy elapróz - ód - ott az időm
 a little.ACC so chop - ÓD - PAST.3SG the time.my
 'My time got in a way frittered away/used up.',
 literally: 'My time got in a way chopped up.'

- (78) Here, the tugging of the wheel could have been a result of the driver's carelessness or a bump on the road:
- a. @A kormány elránt - ód - ott.
 the steering.wheel tug - ÓD - PAST.3SG
 'The steering wheel got tugged.'
- (79) In the next example it is not straightforward if the speaker is indirectly blaming others for laying their burdens on him/her, or if s/he just attributes it to life in general:
- a. @Elviselhetetlen terhek rak - ód - nak rám.
 unbearable burdens place - ÓD - PRES.3PL me.on
 'Unbearable burdens get placed on my shoulders.'
- (80) In an a radio interview, the reporter is interested in the cleaning methods used for outdoors swimming pools, and finds out that the pools are washed with bleach. In the next question the reporter asks, it is impossible to guess if he ascribes the possible washing of the bleach into the water to human carelessness or some unspecified environmental factor like rain:
- a. @És ez a hipó a vízbe is belemos - ód -
 and this the bleach the water.into too PRT.wash - ÓD -
 ik?
 PRES.3SG
 'And this bleach gets washed into the water as well?'

One way to disambiguate apparently ambiguous utterances is to use agentive adverbials such as *szándékosan* ('intentionally'). Those roots which morphologically distinguish between the inchoative and the half-passive show us that the half-passive can, but the inchoative cannot, be modified by *szándékosan* ('intentionally') with inanimate objects in real-life contexts:

- (81) a. *A gát szándékosan szak - ad - t át.
 the dam intentionally rupture - INCH - PAST.3SG PRT
 Intended: 'The dam ruptured intentionally.'
- b. ✓A gát szándékosan szak - ít - ód - ott át.
 the dam intentionally rupture - CAUS - ÓD - PAST.3SG PRT
 'The dam got ruptured intentionally.'

Applied to verbs like *felkapcsol* ('turn on') or *lekapcsol* ('turn off'), which are ambiguous between the inchoative and the half-passive reading, the adverbial *szándékosan* forces the half-passive reading:

- (82) @Az a lámpa szándékosan kapcsol - ód - ott le?
 that the lamp intentionally turn.off - ÓD - PAST.3SG PRF
 'Was it intentionally that those lights got turned off?'

Even though it is possible to disambiguate undifferentiated inchoative/ half-passive forms, the fact that inchoative and half-passive forms can come out identical makes *Ód*-suffixation a more "innocent" tool than ordinary passivization: as with a number of verbs the inchoative and half-passive forms are indistinguishable without some additional disambiguation, in many cases the listener cannot be sure whether the speaker contends that an event took place all by itself or responsibility should be ascribed to someone the speaker does not want to name.

Semantics: contrastive contexts

Morphology provides irrefutable evidence in favor of a distinction between two distinct uses of *-Ód*, which were labelled as the inchoative and the half-passive. But it is also possible to adduce semantic evidence for the separation of the inchoative and half-passive readings by creating contexts which either exclude or require implicit human intervention. Recall (27), repeated here for convenience:

- (83) The owner of the red sludge reservoir attempts to convince potential investors that his reservoir is as safe as it can get: 'The dam won't ..., not even in an earthquake. We follow the safety instructions and are prepared for all sorts of natural disaster' [*"Nem fog a gát, még egy földrengés során sem. Száz százalékig betartjuk a biztonsági előírásokat, és mindenfajta természet katasztrófára felkészültünk."*].

In this context human intervention is not even considered. Accordingly, the half-passive form will be inappropriate in this context:

- (84) a. ✓át - szak - ad - ni
 prt - √rupture - INCH - INF
 'rupture_{inch}'
 b. *át - szak - ít - ód - ni
 prt - √rupture - CAUS - ÓD - INF
 'rupture_{inch}'

Now consider the following situation:

- (85) The owner of the red sludge reservoir is planning to get the dam damaged to collect money from the insurance company, but later on

he changes his mind: 'I have made up my mind, – the dam won't I came to realize that the damage would be significantly greater than what the insurance would cover.' [”Eldöntöttem a dolgot, – nem fog a gát. Rájöttem ugyanis, hogy a kár jóval nagyobb lenne, mint amit a biztosító megtérít.”]

This contexts strongly implies some human intervention, which makes the inchoative form infelicitous:

- (86) a. #át - szakad - ni
 prt - rupture_{inch} - inf
 'rupture_{inch}'
- b. ✓át - szakít - ód - ni
 prt - rupture_{caus} - ód - inf
 'get ruptured'

Modificational possibilities

The table in (87) provides a brief comparison of the modificational possibilities for inchoatives and half-passives¹³:

(87)

| | inchoative | half-passive |
|---|------------|--------------|
| <i>by itself</i> | ✓ | * |
| non-agentive <i>from</i> -phrase | ✓ | ✓ |
| <i>intentionally</i> with inanimate undergoer | * | ✓ |
| agentive <i>by</i> -phrase | * | * |

2.3.4 Interim summary

Let me conclude this section by summarizing the main points that have been made. First and foremost, it has been put forward that the suffix *-Ód* has at least two distinct productive uses in contemporary Hungarian: the anticausative and the half-passive. Anticausative *Ód*-verbs describe spontaneous events, while half-passives involve an invisible causer whose contribution is being downplayed by the speaker. We have also seen that anticausatives can be derived from transitive forms productively by means of *Ód*-suffixation, and half-passive *Ód*-formation was also claimed to be a fully productive procedure for those speakers who have this construction. Furthermore, it has

¹³Recall that lexically specified inchoatives and *Ód*-anticausatives pattern together in all relevant aspects.

been demonstrated that even though inchoatives and half-passives surface with identical forms for a group of roots, for another class of verbs the two forms are morphologically distinct:

| | inchoative | half-passive |
|--------------------------------|--|--------------|
| verbs with productive inch* | - <i>Ód</i> | - <i>Ód</i> |
| verbs with idiosyncretic inch* | - <i>Od</i> / <i>-Ul</i> / <i>-Ad</i> / <i>-∅</i> etc. | - <i>Ód</i> |

Minimal pair contexts and *intentionally* modification were useful tools to tease apart anticausatives and half-passives. The observation that some speakers only accept the anticausative use, whereas other speakers have the half-passive as well reinforces the division between the two types.

2.4 Variation

2.4.1 Liberal and conservative speakers

A major generalization I came up with concerning the use of *Ód* in contemporary Hungarian is that this suffix has two distinct functions: the anticausative and the half-passive. The different uses of *Ód* divide speakers of Hungarian: a great number of speakers have both the anticausative and the half-passive use, while many others only have the anticausative:

| | anticausative <i>Ód</i> | half-passive <i>Ód</i> |
|----------------------------|-------------------------|------------------------|
| (88) conservative speakers | YES | NO |
| liberal speakers | YES | YES |

By controlling for the age, geographical origin and current place of residence of my 45-50 informants, I tried to identify some of the factors that may bring about the conservative/liberal split. In this context, the most conspicuous finding is probably the role of age: in the Budapest area, people who belong to the older generation (40+) are often conservative, while the younger generation (under 25) tends to be liberal. People between these two age groups can come out either as liberal or conservative – but the scale probably tips in favor of the liberal use of *Ód* already with the 25-40 generation. This suggests the half-passive use of *Ód* is a recent innovation in the language; it is for this reason that I call those speakers who have this construction *liberal speakers*, while those who use *Ód* only as an anticausative suffix are referred to as *conservative speakers*.

As regards the role of geography, I have not managed to identify clear conservative or liberal areas: it looks like West-Hungary is more liberal than the middle part of the country, but the picture is not black and white. To

investigate the role of geography, a small number of additional informants, handpicked from the different regions of the country as well as from outside the boundaries of Hungary, were tested specifically for this purpose. This ancillary sample of about 15 informants did not testify to any clear tendency as to the regional distribution of conservative and liberal language use either, but called the attention to what looks like a third use of *Ód*. In the survey, the eastern stripe of the country together with the territories that fall outside the eastern boundary of Hungary, such as Transylvania in Romania or Kárpátalja in Southwest-Ukraine stand out as different. This region seems to use *Ód* in a way which is more reminiscent of canonical passives rather than half-passives. 'Eastern speakers' and their use of *Ód* will be discussed in the next sections.

2.4.2 Half-passives, passives and the eastern dialect

The half-passive contra adjectival and verbal passives

That *by*-phrases are unacceptable with the half-passive *Ód*-construction could, in principle, lead us to think that the half-passive is some sort of adjectival/state passive. But this is incorrect: half-passive *Ód*-constructions describe events the same way as canonical eventive passives do. In this section I will demonstrate that the half-passive *Ód*-construction is not an state passive, nor can it be equated with canonical eventive passives.

Traditionally, the literature distinguishes between verbal or eventive passives on the one hand, and adjectival participles, also known as state/stative passives, on the other hand (e.g. Wasow 1977, Jackendoff 1977, Abney 1987¹⁴). Eventive passives describe the taking place of an event, and contain a potentially implicit agent:

(89) The dam was recently damaged by the rioting workers.

State passives portray a state:

(90) The dam is damaged (*by the rioting workers).

There are different diagnostics to tell eventive passives apart from state passives. The first group of tests is commonly used to ascertain whether the passive construction at issue describes an event or a state. These diagnostics can also be applied to the half-passive. With these tests the results are remarkably clean, and they all confirm that the half-passive describes an event. One such eventivity diagnostic is the use of adverbials referring to a

¹⁴The recent distinction (e.g. Parsons 1990, Kratzer 1998, 2000; Embick 2003, 2004; Alexiadou and Anagnostopoulou 2008) between resultant state/resultative and target state/stative passives is inconsequential for the present discussion, so I will not go into it here.

specific point of time, such as *tegnap négykor* ('yesterday at four')¹⁵. With stative constructions, a certain state held at the time specified by the time adverbial, whereas with eventive constructions a certain event took place at the given time. Consider the following state passive:¹⁶

- (91) a. A gát tegnap négykor (már) át volt szak
 the dam.NOM yesterday four.at (already) PRT was_√rupture
 - íté - va.
 - CAUS - PRTCP
 'Yesterday at four the dam was (already) (in a) ruptured (state).'
- b. A gát tegnap négykor (már) át volt szak
 the dam.NOM yesterday four.at (already) PRT was_√rupture
 - ad - va.
 - INCH - PRTCP
 'Yesterday at four the dam was (already) (in a) ruptured (state).'

There are two variants of the state passive shown in (91). This is because Hungarian has a large number of inchoative/causative pairs, and state passives can be based on the transitive form as well as on the corresponding intransitive form. The meaning difference between the two constructions has to do with the extent to which the construction remains neutral about the cause of the rupture, but this is immaterial in the context of half-passives: all that matters for our purposes is that in these examples, the dam was in a ruptured state at four o'clock.

By contrast, if the half-passive *Ód*-construction is modified by a time adverbial, it clearly means that it was the rupturing event itself that took place at four o'clock, and the resulting state only held afterwards:

- (92) A gát tegnap négykor átszak - íté - ód -
 the dam.NOM yesterday four.at PRT_√RUPTURE - CAUS - ÓD -
 ott.
 PAST.3SG
 'The dam got ruptured yesterday at four.'

¹⁵In the Hungarian literature, this test along with the telicity test further down, was applied by Tóth (2000) to what she calls the 'stative resultative' construction: resultant state passives. Here, I extend their use to the half-passive.

¹⁶It is debated in the literature whether Hungarian has eventive or state passives at all. In Márkus (2009a,b), I apply a series of well-established diagnostics to *-vA* and *-t* participles to demonstrate that Hungarian has both eventive, resultant state and target state passives, both attributively and predicatively. Further studies on Hungarian *-vA* and *-t* participles include Alberti (1994, 1996), Bartos (2009), Bene (2005, 2011), É. Kiss (1998, 2002), Groot (1995), Horvath and Siloni (2005), Kenesei (2000, 2005), Kertész (2005), Komlósy (1992, 1994), Laczkó (1995, 1999, 2000, 2005), Németh (2007) and Tóth (2000).

The second eventivity diagnostic exploits telicity: states are inherently atelic, while events may be bounded. This implies that the usual telicity tests can also be applied to confirm eventivity: constructions that are compatible with *alatt* ('in an hour') modification are telic; hence, they cannot be states. As expected, the state passive cannot combine with 'in an hour':

- (93) a. *A gát pillanatok alatt át volt szak - ít -
 the dam.NOM seconds under PRT was $\sqrt{\text{rupture}}$ - CAUS -
 va.
 PRTCP
 'The dam was (in a) ruptured (state) in a few seconds.
- b. *A gát pillanatok alatt át volt szak - ad -
 the dam.NOM seconds under PRT was $\sqrt{\text{rupture}}$ - INCH -
 va.
 PRTCP
 'The dam was (in a) ruptured (state) in a few seconds.

By contrast, the half-passive is perfectly fine with *alatt*-modification:

- (94) A gát pillanatok alatt átszak - ít - ód -
 the dam.NOM seconds under PRT $\sqrt{\text{RUPTURE}}$ - CAUS - ÓD -
 ott.
 PAST.3SG
 'The dam got/was ruptured in a few seconds.'

Furthermore, it is observed that stative and eventive passives behave differently as to the availability of the so-called (pseudo)-resultative and counterfactual reading. The (pseudo)-resultative reading means that a certain process was launched but never got completed; the counterfactual reading refers to a situation in which the given process almost got launched, but after all it did not. Statives are claimed to have a (pseudo)-resultative reading but resist a counterfactual reading. Accordingly, the stative passive below can only mean that some cracking process started and then stopped before the dam would have ruptured; the scenario one may envision on encountering (95) is that there was a huge crack on the dam almost all the way down, but the dam was still standing:

- (95) A gát majdnem át volt szak - ad - va.
 The dam almost PRT was $\sqrt{\text{rupture}}$ - INCH - PRTCP
 'The dam was almost ruptured'.

For eventives, the dominant reading is the counterfactual: the process almost got launched, but after all it did not. This is the prominent reading not only for canonical eventive passives, but also for the half-passive: in the dam-

context, it was decided that the dam would be ruptured, but the owner changed his mind in the last minute. The action was called off before the workers would have laid their hands upon the dam, so the dam is untouched:

- (96) A gát majdnem átszak - ít - ód - ott.
 The dam almost PRT_√RUPTURE - CAUS - ÓD - PAST.3SG
 'The dam got almost ruptured.'

In sum, it can be said that the eventive diagnostics, three of which were demonstrated here, show uniformly that the half-passive describes an event and not a state. Thereby, it is safe to conclude that the half-passive is not an adjectival/state passive.

Another batch of tests, which includes (in)compatibility with *by*-phrases, control facts and the (un)availability of self-action, is used to detect the presence/absence of an agent. It has already been demonstrated that half-passive *Ód*-constructions differ from eventive passives in being incompatible with agentive *by*-phrases. It is, however, important to note in passing that the impossibility of *by*-phrases is not a characteristic of the Hungarian language as such, but specifically of the half-passive construction: ordinary eventive passives can be combined with *by*-phrases also in Hungarian. The construction which I consider to be an attributive eventive passive in Hungarian (Márkus 2009a,b, cf. also Lackó 2000 for a similar conclusion) can be accompanied by *by*-phrases freely:

- (97) a. @a nők által használt kilenc halálos kifejezés
 the women.NOM by used nine deadly expression.NOM
 'nine deadly expressions used by women'
- b. @kiközösítik a csimpánz által szétmarcangolt
 ostracize.PRES.3PL the chimpanzee.NOM by torn.to.shreds
 nőt
 woman.ACC
 'the woman who was torn to shreds by a chimpanzee is being frozen out'
- c. @EGT által támogatott projekt
 EGT.NOM by supported project
 'a project supported/financed by EGT'

It is somewhat less common to use *by*-phrases with what I take to be predicative eventive passives (for more on these constructions, cf. Márkus 2009a,b) in Hungarian, but it does not take long before one encounters utterances like the ones below:

- (98) a. @Ismerős által lett intézve.
acquaintance.NOM by became fixed
'[It] was fixed by an acquaintance.'
- b. @Mi is közreműködtünk, és egy közeli
we too assisted, and a good
ismerősünk által lett megcsinálva.
acquaintance.ours.NOM by became done
'We assisted, too, but it was done by a good acquaintance.'
- c. @Mondom, teljes egészében az USA kormánya
say.PRES.1SG, whole entirety.in the US government.NOM
által lett megszervezve.
by became organized
'As I say, it was organized by the US government in its entirety.'

These examples show that agentive *by*-phrases are possible in Hungarian. But, as it was argued earlier, half-passive *Ód*-constructions are incompatible with *by*-phrases. This is a strong argument for treating half-passives as distinct from classic eventive passives.

At the same time, another agentivity test, control, seems to point in another direction. The logic behind the control test is that provided that a passive construction has an implicit external argument, it will be able to control into purpose clauses. That in such control constructions state passives are ungrammatical is generally taken to confirm the absence of an implicit agent in both target state and resultant state constructions. The relevant state passive examples are provided below:

- (99) a. *A gát át volt szak - ít - va, a biztosítást
the dam PRT was $\sqrt{\text{rupture}}$ - CAUS - PRTCP, the insurance
begyűjtendő.
PRT.collect
Literally: 'The dam was (in a) ruptured (state) to collect the insurance.'
- b. *A gát át volt szak - ad - va, a biztosítást
the dam PRT was $\sqrt{\text{rupture}}$ - INCH - PRTCP, the insurance
begyűjtendő.
PRT.collectFUT.PARTCP.
Literally: 'The dam was (in a) ruptured (state) to collect the insurance.'

By contrast, eventive passives can exert control into purpose clauses, a characteristic which is generally taken to indicate the presence of an implicit

agent in eventive passives:

- (100) A gát át lett szak - ít - va, a biztosítást
 the dam PRT became_√rupture - CAUS - PRTCP, the insurance
 begyűjtendő.
 PRT.collect.FUT.PARTCP.
 'The dam was caused to rupture to collect the insurance.'

The intuitions about half-passives in a control environment are not straightforward, but (101) does not sound bad; somewhat unusual, but certainly not downright ungrammatical:

- (101) ??A gát átszak - ít - ód - ott, a biztosítást
 the dam PRT_√rupture - CAUS - ÓD - PAST.3SG, the insurance
 begyűjtendő.
 PRT.collect.FUT.PARTCP.
 'The dam got ruptured to collect the insurance.'

Thus, the control data can be taken to be a cautious indication towards the presence of some implicit agent that is not allowed to surface overtly in half-passives.

Another way to ascertain the presence/absence of an implicit agent is to see if the implied agent and the undergoer can be coreferent or not; this is often referred to as (in)compatibility with self-action. Kratzer (2001) observes that in state passives the implicit agent can be identical with the undergoer, but eventive passives can only be understood in such a way that the implied agent and the undergoer have disjoint reference. To illustrate the point: the state passive in (102-a) is compatible with the children having combed themselves, but the eventive passive in (102-b) is not:

- (102) a. Das Kind war gekämmt.
 the child was combed
 Stative: compatible with self-action.
- b. Das Kind wurde gekämmt.
 the child became combed
 Eventive: incompatible with self-action.

Again, the fact that disjoint reference is forced with the eventive passive is generally thought to evidence the obligatory presence of an implicit impersonal pronoun which realizes the verb's external argument; by the same token, the availability of self-action in state passives is taken to indicate the complete absence of an external argument.

Turning to Hungarian half-passives, the constructed examples below demonstrate that half-passive *Ód*-constructions are not compatible with self-action: the *V-ing* in each case was performed by persons other than the surface sub-

ject.¹⁷

- (103) a. Eszméletlenül felideges - ít - ód - tem.
 terribly PRT√vex - CAUS - ÓD - PAST.1SG
 'I got terribly vexed.'
- b. Végül kiszak - ít - ód - tam ebből a
 finally PRT.rip - CAUS - ÓD - PAST.1SG this.from the
 környezetből.
 environment.from
 'In the end, I got ripped out of this environment.'

Instead, speakers use the corresponding reflexive constructions to express self-action:

- (104) a. Eszméletlenül felideges - ít - ettem magam.
 terribly PRT√vex - CAUS - PAST.1SG myself.ACC
 'I vexed myself terribly.'
- b. Végül kiszak - ít - ottam magam ebből a
 finally PRT.rip - CAUS - PAST.1SG myself.ACC this.from the
 környezetből.
 environment.from
 'In the end, I ripped myself out of this environment.'

This way, agentive tests indicate that the half-passive *Ód*-construction differs from eventive passives with regard to compatibility with *by*-phrases, and from stative passives with regard to the degree of acceptability in con-

¹⁷ NB. Some occurrences of *Ód* can be reflexive, as shown by the examples below:

- (i) a. @bevág - ód - nak a skodába
 throw - ÓD - PRES.3PL the skoda.into
 'they throw themselves into their Skoda'
- b. @most fogok nekidurál - ód - ni
 now will.PRES.1SG buckle.down_{TR} - ÓD - INF
 'I will buckle down to it now'
- c. @Milyen jó, hogy vannak önálló nők, akiknek nem
 how good that are independent women whose not
 céljuk másokra ragaszt - ód - ni
 ambition.POSS others.onto glue - ÓD - INF
 'How good it is that there are independent women whose main ambition in life is not to cling on others'

The cases in which an *Ód*-verb can have a reflexive interpretation involve roots which do not distinguish morphologically between the T1DP and the half-passive forms. For half-passives which are morphologically distinct from the corresponding T1DP form, the reflexive reading is unavailable. This strongly suggests that examples (i-a), (i-b) and (i-c) with the reflexive interpretation are not manifestations of the half-passive but of T1DP (or of a separate reflexive construction).

trol environments and the availability of a reflexive interpretation. If correct, these data point towards **an implicit causer in half-passive *Ód*-constructions, which is present** (cf. control and reflexivity data) **but cannot surface overtly** (as indicated by the unavailability of *by*-phrases).

To summarize: the diagnostics used to differentiate between eventive and state passives show that the half-passive can be equated with neither canonical eventive passives nor with stative passives. While the half-passive clearly describes the taking place of an event, it does differ from canonical eventive passives with regard to how much agency is allowed to surface overtly in the construction. This difference with respect to agency may be related to what looks like a stylistic difference between ordinary passives and the half-passive: whereas the passive is stylistically unmarked, half-passive *Ód*-verbs typically involve some weird tension: an unnatural absence of an implied external causer, which is sought to be downplayed, preferably to the point of an unprompted happening. How these peculiar facts about the half-passive can be captured will be laid out when the functional sequence gets assembled in chapter 4.

The passive and the eastern dialect

We have now seen that even though half-passive *Ód*-verbs bear significant resemblance to canonical passives, there is reason to believe that they are not 'proper' passives. As mentioned several times before, one important difference relates to the degree of agency, notably to (in)compatibility with *by*-phrases. Canonical eventive passives can, in general, occur with *by*-phrases, while I have argued that half-passive *Ód*-verbs cannot be accompanied by *by*-phrases. However, if we look at the *Ód*-use of eastern speakers, we find that *by*-phrases can appear with eastern *Ód*-passives:

- (105) a. @Ha már amúgy is el van 'intézve' itt minden,
if already anyway too PRT is 'settled' here everything,
és a demokracija megev - őd - ött a fene által!
and the demokracija eat - ÓD - PAST.3SG the heck by
'If everything is already 'settled' here anyway, and the demokracija
has been taken by the heck!'
- b. @Az már rég megev - őd - ött a
that already long.ago PRT.eat - ÓD - PAST.3SG the
víziló által!
hippopotamus by
'That was eaten by the hippopotamus a long time ago!'

At the same time it needs to be pointed out that eastern speakers whom I asked for judgments do not accept *by*-phrases with *all* passive-looking *Ód*-verbs; possibly, the use of *by*-phrases is restricted to agentive verbs or inten-

tional *V-ing*. But the difference is clear: under certain conditions, eastern speakers allow for *by*-phrases with *Ód*, but liberal speakers do not. This fact suggests the *Ód*-verbs of the eastern language use are more likely to be canonical passives.

Another difference is that eastern *Ód* has a generic reading, whereas half-passive *Ód* has only punctual readings. Let me illustrate the difference between the eastern and the liberal use with the following example¹⁸:

- (106) Édesanyjáról csúnya pletykák mond - ód - tak.
 mother-about ugly rumors.nom say - Ód - past3pl
 'Ugly gossips were said about her mother.'

In the eastern language use, this sentence simply means that people – it is not important who exactly, just people in general – were gossiping about someone's mother. By contrast, if this sentence is uttered by a liberal speaker, then it is understood in such a way that the speaker knows about a certain person who spread some ugly gossip about someone's mother, but in this utterance the speaker wants to remain politically correct, or maybe tries to cover the tracks of the gossip. In other words, in the eastern use the agent is simply unknown or unimportant, while with the half-passive an explicit effort is made to downplay the role of the causer.

Let us consider another example. The first sentence, which illustrates the eastern language use, is taken from a short story¹⁹, and simply describes the fact that the bear did not die by itself:

- (107) Arra van elég tanunk, hogy a medve megöl - ód -
 that.for is enough witnesses.our that the bear kill - ÓD -
 ött.
 PAST3SG
 'For that we have enough witnesses that the bear was killed.'

At the same time, the sentence in (108) made outraged headlines in the 'mainland' Hungarian news a few years ago:

- (108) Cozma megöl - ód - ött.
 Cozma kill - ÓD - PAST3SG
 'Cozma got killed.'

The background for this sentence is the following: a fight developed in a tavern, and someone stabbed the known handball player Marian Cozma. The person who committed the murder later testified that a fight emerged, and the victim "got killed". This formulation triggered an enormous reaction,

¹⁸From: Károly Kós: *A Varju nemzetség*, page 37, edition from 1984.

¹⁹From: Kelemen és Pattantyus, in *Elbeszélések és tárcák*, available from <http://mek.oszk.hu/10400/10466/10466.htm>. The author, Viktor Rákosi grew up in Transylvania.

and became the iconic case for sidestepping responsibility. Ironic comments (which are hard to translate, they sound so absurd in Hungarian) like the ones below flourished on the internet during and after the trial:

- (109) a. Cozmát nem ölték meg, csak megöledött. [*No one killed Cozma, he just ended up killed.*]
- b. [...] látták, hogy [...] Cozma ott fekszik leszúródva (mint később kiderült, megöledve) [[...] *they saw that [...] Cozma is lying there in a somehow stabbed (or, as it turned out later, killed) state*]

These differences between the two language varieties suggest that *Ód*-verbs stand closer to the canonical passive in the eastern language use.

What put the bee in my bonnet about the liberal/eastern contrast was that at conferences and through testing, I got feedback from speakers who come from Eastern Hungary (notably from Katalin É. Kiss and Gyuri Rákosi, p.c., whom I thank for sharing their judgements and some examples), and who differed from my liberal speakers in allowing for *by*-phrases at least in a variety of cases, and used *-Ód* in contexts where I, a liberal speaker, would not have sought to use a half-passive. Subsequently, I tested one speaker of Hungarian from Transylvania and eight speakers from the Hungarian-speaking territories of West-Ukraine, and the judgements point in the direction of a proper passive.

The passive use of *Ód* is also mentioned in linguistic works, albeit from a few decades earlier²⁰. Ferenc Szilágyi (1983:208) writes the following about the passive: "... the reflexive suffix [*Ód*] was used in a similar sense in the earlier stages [...] and the vernacular in Debrecen [*a city in Eastern Hungary, my remark*] still uses it this way:²¹

- (110) a. a paszuly először kiter - ít - ód - ik,
the bean first $\sqrt{\text{spread}}$ - CAUS - ÓD - PRES3SG,
the beans are first spread,
- b. megszár - ít - ód - ik,
 $\sqrt{\text{dry}}$ - CAUS - ÓD - PRES3SG,
dried,

²⁰I would like to thank Éva Dékány that she brought the work of Szilágyi (1983) and Kálmán (1966) to my attention.

²¹The original quote in Hungarian: "... s hasonló értelemben használták a régi nyelvben az *-ódik*, *-ődik* visszaható képzőt is, [...] s a debreceni népnelyv ma is így használja: "a paszuly először kiterítődik, megszáritődik, csak azután rakódik a hombárba".

- c. csak azután rak - ód - ik a hombárba".
 only then put - ÓD - PRES3SG the granary.INTO
 and it is only afterwards that they are put in the granary."

Béla Kálmán (1966:50) makes a similar observation in his book on Hungarian dialects: "On the Great Hungarian Plain and in Transylvania, the reflexive suffix *-Ód* often has a passive meaning as well²²:

- (111) a. Mékken - ód - ött - ë már a kocsi?
 oil_{TR} - ÓD - PAST3SG - QM already the carriage
 Has the carriage been oiled yet?
- b. Mér nem sujkol - ód - ik a ruha?
 why not beetle - ÓD - PRES3SG the clothes
 Why are the clothes not being beetled?
- c. Mэгver - ód - ött a fattyú."
 beat - ÓD - PAST3SG the kid.
 The brat was beaten."

Also works of fine literature written by Transylvanian authors swarm with the passive use of *Ód*, although these often emulate archaic language. Nonetheless, to illustrate the point, let a few examples stand here from a novel by the Transylvanian writer Károly Kós²³:

- (112) a. eddig csak hátasul használ - ód - tak
 so.far only saddle.horse use - ÓD - PAST.3PL
 '[they] have only been used as saddle-horses until now', p.192
- b. jó lesz, oszt - ód - jék a birtok.
 good will.be, divide - ÓD - IMP.3SG the estate
 'it will be all right, let the estate be divided', p.109
- c. beszéd támad és ad - ód - ik tovább
 talk arises and pass - ÓD - PRES.3SG further
 'talk arises and is passed on', p.127

²²The original text runs like this in Hungarian: "A visszaható *-ódik*, *-ődik* képzőnek az Alföldön és Erdélyben gyakori a szenvedő jelentése is: Mékkenődött-ë már a kocsi? Mér nem sujkolódik a ruha? Mэгverődött a fattyú."

²³Károly Kós: *A Varju nemzetség*, 1921.

- d. még nem vev - őd - tek számba a
 yet not take.stock.of - ÓD - PAST.3PL PRT the
 boroshordók
 wine.barrels
 'the wine barrels have not yet been taken stock of', p.90
- e. a Gyurka lakodalma Kabósékkal egyértelemben
 the Gyurka wedding Kabós.PL.WITH agreement.in
 aratás utánra határoz - ód - ott
 harvest after.on set - ÓD - PAST.3SG
 'Gyurka's wedding, in agreement with the Kabós', was set for
 after the harvest', p.239

There are also current examples on the internet, for instance in online Transylvanian and Ukrainian-Hungarian newspapers and comments:

- (113) a. Ha a gyermek hazudik és kiderül, megszid - ód -
 if the child lies and turns.out, scold - ÓD -
 ik [...].
 PRES3SG
 'If the child is telling a lie, and it gets discovered, s/he will get
 scolded for it [...].'
- b. Ha későn értek haza, otthon megver - ód - tek.
 if late arrive home, at.home beat - ÓD - PAST3PL
 'If they got home late, they were beaten at home.'
- c. Biztosan megijedt, hogy megszid - ód - ik.
 surely became.scared that scold - ÓD - PRES.3SG
 'S/he surely got scared that s/he would get scolded.'

Kádár and Németh (2009) cite the following example from a recent *csángó*²⁴ corpus (p. 206):

- (114) Ahol meg - mutit - ód - ott Szűz Mária, ott
 where PRT - show - ÓD - PAST3SG Virgin Mary, there
 látod-e, kijött egy víz.
 see.pres.2sg-Q came a water.
 There, where Virgin Mary was shown, can you see it, there came
 water out.

All these examples seem to point in the direction of a widespread, passive-like construction in the language use of eastern speakers. As regards the relationship between the half-passive of liberal speakers and what looks more

²⁴The *csángós* are a Hungarian-speaking ethnic group in Moldavia.

like a proper passive in the eastern dialects, the sociolinguist Attila Hegedűs (p.c.) points out to me that what we see in the speech of eastern speakers is a reportedly old phenomenon, and what looks like a related construction in the speech of the younger generations or in colloquial speech in Budapest could have developed completely independently. Although I do not have proper evidence to corroborate this claim, I think it is very likely to be the case.

In any case, a comparison of the passive *Ód* of eastern speakers and the half-passive *Ód* of liberal speakers suggests that these two differ from each other in several respects, and the eastern version stands closer to canonical passives than the half-passive of liberal speakers. However, an in-depth empirical study of current eastern *Ód*-passives still needs to be conducted before a proper analysis of this construction can be attempted.

2.5 Literature review

The literature on the productive uses of *Ód* is scarce, and its probably greatest shortcoming is that it overlooks the distinction between the anticausative, half-passive and eastern uses of *Ód*. However, even though the difference between the three types is not spelled out in the literature, they are not given a uniform treatment. The eastern, passive-like use is generally accepted as a regional phenomenon in non-standard language use. As regards anticausative forms, they are often blended with lexicalized, opaque forms and a handful of fossilized forms with a reciprocal meaning. Besides, it is hardly ever discussed in merit to what extent anticausative *Ód*-suffixation is productive. Half-passive forms can be completely overlooked, mistaken for eastern-passives, or considered to be "bad grammar" or simply non-core, and hence uninteresting. I will now review the works that, to the best of my knowledge, mention *Ód*-verbs, and I will show how they relate to findings of the present work.

Hegedűs (2000) provides an overview of Hungarian verb types. The author attributes three functions to the *Ód*-suffix: reflexive, reciprocal and what she calls the middle function. Unfortunately, almost all of the examples she gives for the middle have an opaque meaning (115), and the remaining case in point is one of the most commonly found anticausative forms (116-a):

- (115) a. *tép - el - őd*
 rip - EL - ÓD
 'fret about something'
- b. *vív - ód*
 fence - ÓD
 'vacillate, be of two minds'

- (116) a. be - csuk - ód
 PRT - close - ÓD
 'close_{inch}'

On the basis of her examples, what I conjecture is that Hegedűs' middle category embraces anticausatives and a number of lexicalized, bizarre forms.

As regards the reciprocal use, there are only few verbs that contain *Ód* and describe reciprocal action. One case in point is shown below:

- (117) a. Tegezitek egymást?
 informally.address-2PL each.other.ACC
 'Are you on a first name basis with each other?'
- b. Tegez - ód - tök?
 informal.address - ÓD - 2PL
 'Are you on a first name basis with each other?'

These forms are all lexicalized, as attaching the *Ód*-suffix to a random verb will not yield a reciprocal form in contemporary Hungarian. To express reciprocity productively, contemporary Hungarian puts the reciprocal pronoun *egymás* ('each other') to use. The *Ód*-form is simply out, as illustrated by the following pair of examples:

- (118) a. Látjátok egymást?
 see-2PL each.other.ACC
 'Can you see each other?'
- b. *Lát - ód - tok?
 see - ÓD - 2PL
 Intended meaning: 'Can you see each other?'

As *Ód*-verbs with the reciprocal reading are unproductive, frozen forms, they will be laid aside in this thesis.

Regarding reflexive forms, Hegedűs (2000) gives no examples for this particular use. I have come across one reflexive example in an old translation of the Bible, but in present day Hungarian, this form is completely out:

- (119) †Mos - ód - jatok, tisztuljatok!
 wash - ÓD - IMP.2PL, clean.IMP.2PL
 'Wash yourselves, clean yourselves!'

The only possible way to ask someone to wash oneself in contemporary Hungarian is with a reflexive pronoun instead of *Ód*:

- (120) Mos - sátok meg magatokat!
 wash - IMP.2PL PRT yourself.ACC
 'Wash yourselves.'

In my collection of *Ód*-forms, I have three additional occurrences of *Ód*-verbs with a reflexive reading. These were cited in fn. 17 in this chapter. To what extent the reflexive use is productive in contemporary Hungarian will not be investigated in the present work. There are also some verbs which consist of *Ód* or a combination of *Vl* and *Ód*, which are frequentative or express decreased intensity, such as *mozgolódik* ('move around, fidget'), *nézelődik* ('look round'), vagy *forgolódik* ('keep turning around'). I do not examine these, either.

As regards the public opinion, many speakers feel that the use of half-passive *Ód* is 'bad language' or at least not 'proper Hungarian' – even when they may use the construction themselves, either inadvertently or even consciously but with a feeling of guilt. There are also some prescriptivists who speak up against the spreading of *Ód*-forms beyond the anticausative usage: for instance, Horváth (2006) warns against the reckless use of *Ód* in a squib in a Ukrainian weekly newspaper. Another defender of the language condemns recently spreading, modern *Ód*-forms, as they are used to shun responsibility, and thus contribute to the demoralizing of the society.

Nevertheless, renown guardians of the Hungarian language do, as a matter of fact, defend certain half-passive forms from "laymen prescriptivists" who comment on the incorrect use of *Ód*-forms. Kemény (2004) reacts to the following utterance by a radio reporter:

- (121) Csúnya kifejezéssel élve: nem költ - őd - nek
 ugly expression.with live.PRTCP: not spend - ÓD - PRES3PL
 el.
 PRT
 'To express myself in an ugly way: it [the money] doesn't get spent.'

Kemény (2004) advises his readers to not be ashamed of using such forms, especially if they intend to express themselves with a flavor of the vernacular. He cites the famous prescriptivist, Grétsy, who stands up for the passive use of *Ód*. Grétsy (2002:58-60) backs up his supporting of the "passive" forms by listing some passive *Ód*-forms from the vernacular, the Transylvanian use of Hungarian and from older versions of Hungarian. So it seems that for prescriptivists, the main argument for keeping or promoting certain occurrences of the half-passive is that they feel that this is a way of carrying on what they consider to be an old Hungarian tradition, which they set as an encouraging example for modern speakers in the capital. Of course it is another issue if the existence of some construction in one language variety makes it a natural part of another variety. Likewise, it can be disputed whether the passive of Transylvanian or old-time speakers is identical with the form

used by the Budapest-reporter, who probably felt that the form he chose to use was a relatively novel and non-standard way to express himself. As I mentioned before, my personal take is that the vernacular and eastern uses of *Ód* along with the clearly passive-like old-time use are not identical with the half-passive which is currently taking off in Budapest and elsewhere.

Szili (1996, 1999) recognizes the spreading of passive-flavored *Ód*-verbs, and sets out to identify the shades of meaning for *Ód*. These works establish the functions of *Ód* as ranging from what she calls the reflexive use and to the passive, but they rely on relatively vague semantic definitions, and do not aim higher than revising the conventional classification of *Ód*-verbs in traditional linguistics.

Nádasdy (2002) is a short squib in a series aiming to popularize linguistics for non-professionals. Here, Nádasdy touches on what he calls the "half-passive" or "middle" use of *Ód*.²⁵ Nádasdy identifies the half-passive as different from passives by informally pointing out that the half-passive presents some action as if it would have taken place by itself, even though there is an obvious "doer" involved. Nádasdy further observes that these forms are extremely productive in contemporary Hungarian, which he illustrates with a handful of proper, real-life half-passive examples. But, naturally, the genre of this piece of work does not allow for proper syntactic diagnostics or a formal analysis, so the squib does not go beyond a concise but fair 'popularizing' overview of the half-passive use.

To the best of my knowledge, the only piece of work that gives special attention to *Ód* while entertaining an actual analysis is Komlósy (2000). This work is a chapter in a monograph on the morphology of Hungarian, and Komlósy's chapter centers on argument structure. The author provides an overview of the causative-inchoative alternation and higher level causativization in Hungarian, and devotes a number of sections to the discussion of *Ód*-verbs. But as it is pinned down by the author himself, Komlósy does not take a standpoint concerning the productivity of the *Ód*-suffix (p. 230, 275-276). Instead, the issue Komlósy focuses on is the form-meaning paradox raised by *Ód*-anticausatives, which are morphologically more complex than their causative counterparts. Although this is a problem not only for anticausative but also for half-passive *Ód*-verbs, Komlósy only examines the anticausative use of *Ód*. This is probably because Komlósy considers the half-passive forms to be ungrammatical, although he notes that these forms may be acceptable in some non-standard varieties of Hungarian (p. 276). In any case, the semantics/morphology conflict between anticausative *Ód*-verbs and their causative counterparts pushes him towards the conclusion that inchoative *Ód*-verbs are semantically more complex than their transitive counterparts; this way, the semantics/morphology mismatch can be

²⁵After wrecking my own "mediopassive" label, I adopted the term "half-passive" from Nádasdy (2002).

sidestepped. Unfortunately, the analysis does not deal with other morphologically complex inchoatives – or, to use Haspelmath’s (1993) terms, the ‘anticausative alternation’ (cf. 3.6.1), so the problem keeps lingering on.

On illustrating the causative-inchoative alternation, other works with a theoretical inclination but a different focus tend to list *Ód* in the same breath as the idiosyncratic anticausative suffixes of the language (e.g. Horváth and Siloni 2011:663, Piñón 2001a:278-279, Rákosi 2006:44, 2009:171).

In sum, it can be said that the literature on *Ód*-verbs is rather limited. In the first place, much of the existing literature is occupied with opaque or fossilized forms. When it comes to the works that focus on the productive forms, the most typical shortcomings are the following: there is no explicit distinction made between anticausative and half-passive *Ód*-verbs; anticausatives *Ód*-verbs are not recognized as productive; and half-passive forms are branded as incorrect or non-core, and hence uninteresting. And while some note that certain *Ód*-forms are spreading without analyzing them, others analyze some of the *Ód*-forms without recognizing that they are productive or fall into different categories. Even at the level of description, few works consider less prototypical, not to say real-life, examples. And finally, there are hardly any works which actually aspire to go beyond prescription or, on better case scenarios, beyond description, and intend for an actual analysis.

Nevertheless, this chapter has demonstrated that a glance at real-life language furnishes ample evidence for the claim that the formation of *Ód*-verbs is a productive and vigorously active process in contemporary Hungarian. And it turns out, too, that a non-core phenomenon has, in point of fact, a lot to contribute to the exploration of the fine structure of the verbal domain. What exactly this contribution is will be investigated in the coming chapters.

2.6 Summary

This thesis has thus far investigated two largely unknown constructions of Hungarian: the 2DPC and the half-passive. While both of these constructions are pushing the boundaries of intransitivity, they do it as each other’s mirror images. The 2DPC involves a single participant, which is made to appear twice in the syntax: both as the subject of the *V-ing* and as an apparently dummy, reflexive object DP. The half-passive, on the other hand, presupposes the existence of two distinct participants; however, it is only one of the participants, the undergoer, which is allowed to surface overtly. I will now move on to examine how these two constructions relate to each other, and to the T1DP construction. The three constructions will be proposed to be in a subset/superset relation, and I will formalize the difference between them in terms of θ -roles and Case.

Chapter 3

Containment and the (in)transitivity scale: an integration of the data

3.1 Containment structures and (in)transitivity

The purpose of this chapter is to explore how T1DP, 2DPC and the half-passive relate to each other. Although all three constructions were said to bear hallmarks of syntactic and/or semantic intransitivity, the differences between them cannot be overlooked. T1DP, which was argued to subsume inchoatives, comes across as the most genuine single-argument construction of the three. And while 2DPC and the half-passive were both shown to share a number of characteristics with intransitives, they are clearly pushing the boundaries of intransitivity either syntactically or semantically. I will now proceed to propose that the three constructions under investigation align along a scale that stretches from genuine intransitivity and towards complete transitivity. Assuming that morphology and semantics read off syntax, I will present evidence in favor of progressively growing syntactic structures for the examined constructions, where syntactic complexity increases with transitivity.

3.2 T1DP \subset half-passive

3.2.1 Syncretism and containment

It has been a recurring problem for that slice of the Hungarian literature which deals with *Ód* that *Ód*-verbs on some occasions behave like anticausatives, and on other occasions not (cf. Szili 1996, 1999). This puzzle unravels in a snap if it gets recognized that the *Ód*-suffix is ambiguous between an anticausative function (for all speakers) and a half-passive function

(only for some speakers). However, provided that it is not a case of accidental homonymy that anticausative and half-passive *-Ód* look the same, these two manifestations of *-Ód* must be related. Structural approaches seek to relate systematically syncretic forms by hypothesizing that the feature content of one use subsumes the feature content of the other use (cf. Starke 2002, 2006, Wiese 2004, 2005, Bobaljik 2006, 2012 for a theoretical underpinning; subsequent case studies of syncretism include e.g. Caha 2009, Taraldsen 2010, Pantcheva 2011). This is exactly what I would like to propose for T1DP/half-passive constructions. I will commence with reviewing the major facts and hypotheses concerning syncretism.

Syncretism can be defined as a lack of differentiation with regard to form: we talk about syncretism when distinct grammatical functions or meanings are expressed by the same form. This is precisely what we see with a large number of *Ód*-anticausatives and the corresponding half-passives:

- | | | | | |
|-----|----|---|----|---|
| (1) | a. | gyúr - ód √crease - ÓD 'crease _{inch} ' | b. | gyúr - ód √crease - ÓD 'get creased' |
| (2) | a. | tép - ód √tear - ÓD 'tear _{inch} ' | b. | tép - ód √tear - ÓD 'get torn' |

In current studies it is taken to be uncontroversial that syncretic cells in a paradigm are adjacent. This means that if we have three distinct structures but only two morphological forms, the syncretic forms should be ordered next to each other.¹:

- | | | | | | | | |
|-----|----|---|---|---|---|---|---|
| (3) | a. | <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="text-align: center;">✓</td><td style="width: 10px;"> </td><td style="text-align: center;">A</td><td style="text-align: center;">A</td><td style="text-align: center;">B</td></tr></table> | ✓ | | A | A | B |
| ✓ | | A | A | B | | | |
| | b. | <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="text-align: center;">✓</td><td style="width: 10px;"> </td><td style="text-align: center;">B</td><td style="text-align: center;">A</td><td style="text-align: center;">A</td></tr></table> | ✓ | | B | A | A |
| ✓ | | B | A | A | | | |

Consequently, if two forms are systematically syncretic, the ordering in (4) is expected to not exist:

- | | | | | | | |
|-----|---|---|---|---|---|---|
| (4) | <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="text-align: center;">✗</td><td style="width: 10px;"> </td><td style="text-align: center;">A</td><td style="text-align: center;">B</td><td style="text-align: center;">A</td></tr></table> | ✗ | | A | B | A |
| ✗ | | A | B | A | | |

¹This is of course in no way a requirement for spurious (or accidental) syncretism. Consider for instance the following verb paradigm from German: *spiele* (1Sg), *spielst* (2Sg), *spielt* (3Sg), *spielen* (1Pl), *spielt* (2Pl), *spielen* (3Pl). Now, from what we know about the featural make-up of pronouns, it is more plausible that the syncretism between 3Sg and 2Pl is a coincidence than that it highlights some underlying connection between 3Sg and 2Pl.

This is the so-called *ABA-pattern, which is strikingly absent from the morphological paradigms. The pinpointing of the restriction goes back to Wiese (2004, 2005), Bobaljik (2006, 2012) and unpublished work by Starke (2002, 2006). Bobaljik (2006) examines the comparative and superlative forms of adjectives, and observes that "[i]f the comparative degree of an adjective is built on a suppletive root, then the superlative will also be suppletive" (Comparative-Superlative Generalization or CSG, Bobaljik). In other words, the pattern *nonsuppletive* - *suppletive* - *nonsuppletive* is unattested (from Bobaljik 2006, highlighting by me):

- (5) a. **gut* - **besser** - am *gutsten* (German)
 b. **bad* - **worse** - *baddest*

Rather, a suppletive comparative calls for a suppletive superlative:

- (6) a. *gut* - **besser** - am **besten** (German)
 b. *bad* - **worse** - **worst**

Yet the comparative and superlative need not have the same suppletive root:

- (7) *bonus* - *melior* - *optimus* (Latin)

Wiese (2004, 2005) reaches a similar conclusion in his study on the German Ablaut. He observes that German verb forms: *infinitive* - *past participle* - *finite past* can have the following forms:

- (8) a. *arbeiten* - *arbeitet* - *arbeitete* ('work')
 b. *giessen* - **gegossen** - **goss** ('pour')
 c. *werfen* - **worfen** - **warf** ('throw')
 d. *geben* - *gegeben* - **gab** ('give')

The abstract pattern identified by Wiese (2004, 2005) is shown below:^{2,3}:

(9)

| | | | |
|-------------------|---|---|---|
| regular | A | A | A |
| suppletive | A | B | B |
| doubly suppletive | A | B | C |
| A-A-C | A | A | C |

But, as Wiese (2004, 2005) observes, what we never get is the infamous A-B-A pattern:

- (10)

| | | | |
|------------|---|---|---|
| unattested | A | B | A |
|------------|---|---|---|

²Note that for Wiese, A-A-A does not denote identical forms, but identical roots, for instance without changes in the root like ablaut.

³A-A-C is, for some reason, unattested for comparative suppletion, cf. Bobaljik (2006), but can be found elsewhere.

The lack of attested A-B-A was dubbed as the *ABA theorem, and states that syncretism can only target adjacent cells of a paradigm.

Wiese (2004, 2005), Bobaljik (2006, 2012) and Starke (2002, 2006) all search for an explanation for the lack of the A-B-A pattern in structural terms. Bobaljik (2006, 2012) puts forth the Containment Hypothesis, which holds that the superlative properly contains the comparative. The basic idea is that the comparative cannot be changed without affecting the superlative because of the nested word structure Bobaljik proposes:

(11) [[[adjective] comparative] superlative]

Wiese's account for German Ablaut runs along similar lines: there, as Wiese suggests, the feature specification for past participles is a proper subset of the feature specifications for finite past forms, and the feature specification for infinitival forms is a proper subset of the feature specification for past participles.

(12) feature specifications

| | | |
|-------------------------|--------|-------|
| infinitive forms | | |
| past participle forms | [past] | |
| finite past tense forms | [past] | [fin] |

As Wiese argues, this feature composition implies that any rule that refers to the past participle will automatically refer to the finite past tense as well, and so on. Starke's (2002, 2006) take on *ABA will be outlined in 4.1.

Although the technical details are different, the drift of these works is clear: syncretism is a consequence of cumulative syntactic structure, where the feature content of one structure subsumes the feature content of another structure. Then, by transitivity, the changing of the feature content of one structure entails that the subsuming structures will be affected, too; therefore, non-adjacent cells will never be systematically syncretic across another cell. Work by Bobaljik, Starke and Wiese opened a new avenue for exploration, and the notion of syncretism and the *ABA theorem came to play an important role in a number of recent works (cf. above). And even if the framework or the technical implementation may differ, the main idea has been preserved throughout: syncretism derives from a subset/superset relation between structures and/or feature content.

3.2.2 T1DP/half-passive syncretisms

With Wiese's (2004, 2005) and Bobaljik's (2006, 2012) insights about syncretism in mind, we will now return to T1DP, 2DPC and half-passive constructions in Hungarian. First, recall that the T1DP and the half-passive

look identical for all roots which, for the first, combine with productive *-Ód* to form T1DP and, for the second, are not equipped with an overt causative suffix in 2DPC. Some of the examples are repeated below:

(13)

| | gloss | T1DP | half-passive | 2DPC |
|------------|-----------|--------------|--------------|-----------|
| √tép | 'tear' | tép-ÓD | tép-ÓD | tép |
| √gyűr | 'crease' | gyűr-ÓD | gyűr-ÓD | gyűr |
| √bekapcsol | 'turn on' | bekapcsol-ÓD | bekapcsol-ÓD | bekapcsol |
| √hegy.ez | 'sharpen' | hegy.ez-ÓD | hegy.ez-ÓD | hegy.ez |

I have also showed that new roots which enter the language follow this pattern, too. Here are two examples from before:⁴

| | gloss | T1DP | half-passive | 2DPC |
|----------|----------|------------|--------------|---------|
| √fax.ol | 'fax' | fax.ol-ÓD | fax.ol-ÓD | fax.ol |
| √ímél.ez | 'e-mail' | ímél.ez-ÓD | ímél.ez-ÓD | ímél.ez |

The fact that new roots which get imported into the language join this morphological group implies that the T1DP and half-passive forms are ambiguous for an open class of verbs. This is a case of massive syncretism, which indicates that T1DP and the half-passive are in a containment relation.

(15) { T1DP, HP, \subset }

That there is a size difference between T1DP and the half-passive is evidenced by an array of morphological, syntactic, and semantic facts independent of syncretism. These data, which I will review in the coming section, clearly suggest that the half-passive involves more agency than T1DP.

3.2.3 Size matters: morphological, syntactic and semantic clues about agency

In the previous chapter it was demonstrated that the half-passive differs from the T1DP construction, a broader category which subsumes inchoatives, in its semantics, in its syntactic modificational possibilities, and often with respect to morphological realization as well. In this section I proceed to show that T1DPs and half-passives are not only different, but the semantic, syntactic and morphological evidence at our disposal suggests that the half-passive is "bigger" than T1DP with regard to its syntactic makeup. There

⁴NB. The verbalizing suffixes *-Ez*, *-Ol* in *hegy.ez*, *fax.ol* and *ímél.ez* are not causative suffixes. For more on these, cf. 5.3.3.

will be an overlap of data between this subsection and the previous chapter, but the drift of the data is going to be different: instead of demonstrating that the two constructions are simply different, I will now set out to show through the differences that the half-passive involves more agency than the T1DP construction.

A window through morphology

For the first, there is neat morphological evidence which not only demonstrates that anticausative *Ód*-verbs and half-passives can be morphologically distinct, but which also indicate that half-passives involve more (agentive) structure than the T1DP construction. This is due to a few verbs which reveal a bit more of their structural makeup than many others. We have already seen that some roots combine with *-Ód* both to form a T1DP and a half-passive. With those roots which in addition combine with an overt causative suffix to form a transitive-causative verb, it is undisguised that *Ód* gets attached higher/further away from the root in half-passives than in T1DPs:

- (16) a. fejl - ód
 √develop - ÓD
 'develop_{inch}'
- b. fejl - eszt - ód
 √develop - CAUS - ÓD
 'get developed'
- (17) a. bonyol - ód
 √complicate - ÓD
 'grows complicated (by itself)'
- b. bonyol - ít - ód
 √complicate - CAUS - ÓD
 'get made complicated'

As disclosed by these verbs, in the T1DP construction *-Ód*, which in this case functions as an anticausative suffix, builds directly on the root, whereas in half-passives *-Ód* stacks on the complex [root+causative suffix]. Thus, morphology indicates that half-passives involve more structure – minimally the syntactic reflex of the causative suffix –, which happens to be associated with some type of agency/causation. However, as morphology cannot always be taken at face value, I will now move on to back up this morphological clue with further arguments.

Modification by agentive adverbials

It was mentioned in the previous chapter that as long as the surface subject is inanimate, adverbials like *szándékosan* ('intentionally') can modify half-passives, but not T1DPs⁵. Here is the T1DP example:

- (18) *A gát szándékosan szak - ad - t át.
 the dam intentionally rupture - INCH - PAST.3SG PRT
 Intended: 'The dam ruptured intentionally.'

Adverbs like *szándékosan* ('intentionally') presume the presence of a volitional agent at some level of representation. That the T1DP construction is incompatible with agentive adverbials substantiates the complete lack of a volitional agent beyond the obvious presence of an affected undergoer. However, that *szándékosan* is consistently accepted with half-passives indicates that the half-passive involves an agent at some level of representation:

- (19) A worker was instructed by the managing director to damage the dam, which as a result ruptured and caused a natural catastrophe. Criminal charges are filed against the red sludge company, and the worker has to give a testimony. He tells the truth, but he is careful not to give away his employers:
- a. ✓A gát szándékosan szak - ít - ód - ott át.
 the dam intentionally rupture - CAUS - ÓD - PAST.3SG PRT
 'The dam got ruptured intentionally.'

Instrumental phrases

Another difference between T1DP forms and half-passives concerns eventive *with*-modification. Consider the following pair of examples:

- (20) a. A kép kalapáccsal függ fenn a falon.
 the picture hammer.with \surd hang.PRES.1SG up the wall.on
 'The picture hangs on the wall with a hammer.'

⁵Balázs Surányi, p.c., calls my attention to the fact that apparently agentless copular constructions can be modified by *szándékosan*:

- (i) Az a könyv szándékosan van az asztalon.
 that the book.NOM intentionally is the table.on
 'That book is on the table on purpose.'

This difference shows first and foremost that copular 'be' is different from classic T1DP. However, the behavior of 'be' and how it can possibly implicate a causer is something I will not investigate here.

- b. A kép kalapáccsal $\sqrt{\text{függ}}$ - eszt - őd - ött fel
 the picture hammer.with hang - CAUS - ÓD - PAST.3SG up
 a falra.
 the wall.to
 'The picture got hung on the wall with a hammer.'

The sentence in (20-a) contains a T1DP form, and the only available interpretation of the sentence is that a hammer is hanging on the wall together with the picture; it is simply impossible to understand (20-a) in such a way that the hammer was used as an instrument to hang the picture on the wall. Contrastingly, the half-passive construction in (b) is fully compatible with the instrumental interpretation.

The licensing of the instrumental interpretation is generally taken to presuppose agentivity or volition (e.g. Alexiadou, Anagnostopoulou and Schäfer 2006:19); it has also been correlated with the absence/presence of a causing event (e.g. Svenonius 2006:32). It is not necessary for the moment to take a stance about the exact identity of the licenser; what matters for now is that constructions which license such instrumental phrases have a higher degree of agency or causation than those constructions that do not allow for the same type of instrumental modification. Thereby, also this piece of data points in the direction of more agency with half-passives, as these, unlike T1DPs, allow for instrumental modification of this type.

The same point can be reinforced by the minimal pair in (21). Here, the unavailability of instrumental modification with the T1DP form is even more obvious: as it is relatively uncommon that needles would puncture, the comitative reading is not an option with (21-a), so the sentence comes out as ungrammatical:

- (21) a. *A labda egy tűvel lyuk - ad - t ki.
 the ball a needle.with $\sqrt{\text{puncture}}$ - INCH - PAST.3SG PRT
 'The ball punctured with a needle.'
- b. A labda egy tűvel lyuk - aszt - ód - ott
 the ball a needle.with $\sqrt{\text{puncture}}$ - CAUS - ÓD - PAST.3SG
 ki.
 PRT
 'The ball got punctured with a needle.'

The contrast between the (a) and (b) examples bolsters the conjecture that half-passives involve more agency than the corresponding T1DP forms.

Minimal pair contexts

Finally, it is possible to contrast T1DP and the half-passive by constructing minimal pair contexts. I will now present three sets of minimal pairs, with

two contexts each. The first context in each set describes a happenstance situation, an event that takes place by itself. These contexts are only compatible with the T1DP form, and not with the half-passive. By contrast, the second context in each set depicts a situation which involves a causer/agent, whose contribution is being downplayed by the speaker. Contexts of this type call for the half-passive form. The observation that T1DP describes an untriggered event while the half-passive presupposes contribution by an agent implies that half-passives involve more agency than the T1DP construction.

The first pair of contexts involve \sqrt{oszl} ('disperse'). The T1DP manifestation of \sqrt{oszl} is a bare form⁶; the half-passive, as always, is based on the transitive-causative form, which in this case means that *-Ód* stacks on top of the overtly causative marked *oszl-at*.⁷ The context in (22) describes a spontaneous event, and thereby forces a T1DP form: the crowd dispersed all by itself:

- (22) *Context A:*
 Nem volt ott semmi látnivaló, így ... [There was nothing to see there, so...]
- a. A tömeg szét - oszl - ott.
 the crowd PRT - $\sqrt{\text{disperse}}$ - PAST.3SG
 'The crowd dispersed.'
- b. #A tömeg szét - oszl - at - ód - ott.
 the crowd PRT - $\sqrt{\text{disperse}}$ - CAUS - ÓD - PAST.3SG
 'The crowd got dispersed.'

In this context speakers only accept the T1DP form *oszl* ('disperse'). The half-passive form, which is the transitive-causative form plus *-Ód*, is impossible.

On the second scenario, the military dispersed the crowd with brutal methods, but later on some of the officers are held accountable, and now one of them has to give an account of the happenings of the day in court. In this situation, the use of the *Ód*-verb, though it minimizes the responsibility of the speaker, is still consistent with the truth – while the use of the T1DP form seems to imply that the demonstrators decided to leave for home all by themselves, and would thus sound like a way too blatant falsification of the truth:

⁶With an epenthetic vowel showing up under certain morphophonological conditions.

⁷Notice that I had to select roots which have different T1DP and half-passive forms, or else the two uses could not have been teased apart within the same context.

- (23) *Context B:*
 ”Azt a parancsot adták, hogy a tömeget szét kell oszlatni. Hát ... ”
 [”The order was to disperse the crowd, so...”]
- a. #szét - oszl - ott - ak.
 PRT - √disperse - PAST - 3PL
 ’they dispersed.’
- b. szét - oszl - at - ód - tak.
 PRT - √disperse - CAUS - ÓD - PAST.3PL
 ’they got dispersed.’

Recall that not all speakers of Hungarian have this form, but those who have it, can use it in this context uninhibited. If we compare the two contexts, we see that the second context involves an implied, hidden agent, whereas the first contexts describes an unprompted happening. This points in the direction of more agency with half-passives.

We get the same contrast with the inchoative verb *átszakad* (‘rupture_{inch}’) and its half-passive counterpart *átszakítód* (‘get ruptured’), which may both be familiar from the previous chapter. Here, the two red sludge reservoir examples are now set side by side in order to enhance the contrast between the T1DP and the half-passive use. The dam of the red sludge reservoir ruptures, on the first scenario due to bad maintenance and the wear and tear of weather and time; in the second case, human hands play a role in bringing about the accident:

- (24) *Context A:* Nem volt karbantartva, így történhetett, hogy ... [It was not properly maintained, that’s why....]
- a. A gát át - szak - ad - t.
 the dam PRT - √rupture - INCH - PAST.3SG
 ’The dam ruptured.’
- b. #A gát át - szak - ít - ód - ott.
 the dam PRT - √rupture - CAUS - ÓD - PAST.3SG
 ’The dam got ruptured.’
- (25) *Context B:* A vörös iszaptól valahogy meg kellett szabadulnunk, így történt, hogy ... [We had to get rid of the red sludge in one way or another, that’s how...]
- a. #A gát át - szak - ad - t.
 the dam PRT - √rupture - INCH - PAST.3SG
 ’The dam ruptured.’

- b. A gát át - szak - í t - ó d - ott.
 the dam PRT - $\sqrt{\text{rupture}}$ - CAUS - ÓD - PAST.3SG
 'The dam got ruptured.'

Again, the happenstance context in (24) requires a T1DP form, while (25) calls for the half-passive.

The last set of examples contrasts the inchoative verb *fejlőd* ('develop_{T1DP}') with the half-passive *fejlesztőd* ('gets developed'). Recall that the root $\sqrt{\text{fejl}}$ ('develop') is one of those roots which combine with anticausative *-Ód* to form T1DP and merge with half-passive *-Ód* to derive the half-passive.⁸ Although both forms are suffixed with *-Ód*, with $\sqrt{\text{fejl}}$ -type roots the T1DP and the half-passive form are still distinguishable, as the half-passive contains an overt causative suffix in addition. The contexts run as shown below: in the happenstance context in (26), an evolutionist biologist explains how eucaryotes came to existence:

- (26) *Context A:* "Eszerint az eukarióta élőlények a baktériumok és gazdasejtjeik endoszimbiózisából ... ["According to these results, it was from the endosymbiosis of bacteria and the cells hosting them that eucaryotes"]
- a. fejl - ód - tek ki."
 $\sqrt{\text{develop}}$ - ÓD - PAST.3PL PRT
 'developed'
- b. #fejl - eszt - ód - tek ki."
 $\sqrt{\text{develop}}$ - CAUS - ÓD - PAST.3PL PRT
 'got developed'

Here again, the T1DP is the only possible form to be used. However, if a half-evolutionist–half-intelligent design biologist wants to emphasize the influence of some intelligent being in the background without being too explicit about it, he may say something along the following lines:

- (27) *Context B:* "Eszerint az eukarióta élőlények a baktériumok és gazdasejtjeik endoszimbiózisából... ["According to these results, it was from the endosymbiosis of bacteria and the cells hosting them that eucaryotes"]
- a. #fejl - ód - tek ki."
 $\sqrt{\text{develop}}$ - ÓD - PAST.3PL PRT
 'developed'

⁸Later on I will argue that these are two functions of one and the same *Ód*, but this would take us too far for the moment.

- b. fejl - eszt - őd - tek ki.”
 $\sqrt{\text{develop - CAUS - ÓD - PAST.3PL PRT}}$
 'got developed'

With this background, the T1DP form makes the opposite point the speaker intends to make, namely that eucaryotes developed completely by themselves. The only form that serves the purpose is the half-passive, provided that the scientist belongs to those speakers who have this form.

So all in all, the drift of the data is clear: in contexts which describe spontaneous events, the half-passive turns out to be impossible, but if there is a presupposed causer whose contribution to the bringing about of the event is to be downplayed, those speakers who have the half-passive use that and only that form⁹. This difference confirms that half-passives involve more agency than their T1DP counterparts.

3.2.4 Interim summary

Let me recapitulate the main points made thus far in this chapter. For the first, it was argued that syncretism facts indicate that T1DP and the half-passive are in a syntactic containment relation; for the second, we have seen that the accumulation of morphological (place of attachment in the morphological string), syntactic (eventive *with*-modification; agentive adverbials) and semantic (minimal pair contexts) clues strongly suggests that half-passives involve more agency than T1DP constructions. Putting these two data streams together, and assuming that morphology and semantics read off syntax, I conjecture that the half-passive syntactically subsumes T1DP:

$$(28) \quad \text{T1DP} \subset \text{half-passive}$$

Syntactic containment and growth, as expressed by (28), is one of the issues these constructions raise; degree of (in)transitivity is another one. In current research, it is no longer considered to be evident that intransitives are less complex than their transitive counterparts. As for the Hungarian constructions under investigation, we have seen that they can be characterized by varying degrees of (in)transitivity: T1DP is a genuine intransitive construction, while the half-passive was shown to gravitate towards transitivity. Provided that my conjecture is correct and half-passives involve more structure than T1DP constructions, and that morphology and semantics read off syntax, syntactic growth is from intransitivity and towards transitivity, and not the reverse. Therefore, relying on the drift of the Hungarian data, I will assume that syntactic complexity grows towards transitivity: the most intransitive construction involves the least structure, and constructions with

⁹Those speakers who did not have the half-passive were forced by their own grammar to rephrase the entire context and/or use alternative means to express the same content.

most structure are most transitive.

We will now continue with the 2DP construction. But before measuring 2DPC against T1DP and the half-passive, we are going to look at the syncretism pattern between 2DPC and the transitive-causative construction.

3.3 2DPC \subseteq TR-caus

Thus far I have only examined constructions which bear traces of syntactic or semantic intransitivity. But at this point I would like to extend the domain of investigation to the transitive-causative construction, which will be abbreviated as TR-caus. What I label as transitive-causative is the transitive (or causative) member of causative/inchoative alternation.¹⁰ Here is an illustration of the alternation, with the T1DP form on the left-hand side, and the transitive-causative form to the right:

- (29) a. szak - ad
 $\sqrt{\text{rupture}} - \text{INCH}$
 'rupture_{inch}'
- b. szak - ít
 $\sqrt{\text{rupture}} - \text{CAUS}$
 'rupture_{TR}'

- (30) a. tép - ód
 $\sqrt{\text{tear}} - \text{ÓD}$
 'tear_{inch}'
- b. tép
 $\sqrt{\text{tear}}$
 'tear_{TR}'

What makes the transitive-causative construction relevant here is its remarkable similarity to the 2DPC construction: these two always pattern together with respect to morphology and argument realization. (31-a) repeats one of the 2DPC examples with the jellyfish, while (31-b) illustrates a classic, transitive-causative construction with *float*:

- (31) a. Reggeli torna gyanánt a medúza néhány percig
 morning gym as the jellyfish few minutes.for
 intenzíven *lebeg* - *tet* - te magát.
 intensely float - CAUS - PAST.3SG itself.ACC
 'As a morning gym, the jellyfish floated itself intensely for a few minutes.'

¹⁰There are different terms used in the literature for this construction, notably 'causative', 'transitive', 'transitive-causative'. However, the term 'causative' is often associated with external causatives, *ie.* the causative of a transitive verb; and as for the 'transitive' label, there are many transitive verbs which do not have an intransitive alternant and fall outside the scope of this study. So to avoid obscurity, I opt for the label 'transitive-causative'.

- b. A gyerek *lebeg - tet* - te a medúzát az
 the kid float - CAUS - PAST.3SG the jellyfish.ACC the
 áttetsző tengervízben.
 transparent sea.water.in
 'The kid floated the jellyfish/caused the jellyfish to float in the
 transparent sea water.'

At the same time, the T1DP form is unimaginable in a transitive-causative context (recall that the T1DP form for 'float' is a bare stem in Hungarian):

- (32) *A gyerek lebeg - te a medúzát.
 the kid float - PAST3SG.DEF the jellyfish.ACC

This seems to be the case across the board: T1DP forms are monadic, with inchoative morphology, whereas 2DPC is always realized as a dyadic predicate with causative morphology, just as the transitive-causative verb itself. So the cutoff point seems to be invariably between T1DP and 2DPC, and not between 2DPC and the transitive-causative form¹¹. So the table in (33) shows the T1DP, 2DPC and transitive-causative forms for a sample of verbs. Hungarian displays remarkable diversity as to the morphological realization of the T1DP/2DPC/transitive-causative alternation, but 2DPC and the transitive-causative will always appear with identical morphology and two syntactic arguments:

| $\sqrt{\text{root}}$ | <i>gloss</i> | T1DP | 2DPC | TR-causative |
|----------------------------|--------------|----------|------------|--------------|
| $\sqrt{\text{lebeg}}$ | 'float' | lebeg | lebeg-TAT | lebeg-TAT |
| $\sqrt{\text{bugy}}$ | 'bubble' | bugyog | bugyog-TAT | bugyog-TAT |
| $\sqrt{\text{csill}}$ | 'sparkle' | csillan | csillan-T | csillan-T |
| (33) $\sqrt{\text{teker}}$ | 'coil' | teker-ED | teker | teker |
| $\sqrt{\text{tép}}$ | 'tear' | tép-ÓD | tép | tép |
| $\sqrt{\text{fár}}$ | 'tire' | fár-AD | fár-ASZT | fár-ASZT |
| $\sqrt{\text{gur}}$ | 'roll' | gur-UL | gur-ÍT | gur-ÍT |
| $\sqrt{\text{leereszt}}$ | 'deflate' | leereszt | leereszt | leereszt |

The verb *leereszt* in the last row is realized by the same morphological form across the board, but in the T1DP form it is monadic, while the 2DPC and transitive-causative forms are dyadic. This means that the demarcation line runs between T1DP and 2DPC even for this verb. That the cutoff point is uniformly between T1DP and 2DPC is not a triviality, as 2DPC constructions involve one semantic argument just like T1DPs.

The verb which in all probability has most to contribute to this issue

¹¹To keep the discussion simple, I chose to omit half-passives for the moment, but I will return to them later on in this chapter.

is *billeg* ('wobble, seesaw'). This verb is exceptional in that it can combine with two different causative suffixes: *-At* and *-tAt*; for more on this, see Appendix C:

- (34) *billeg* - **At**
 $\sqrt{\text{wobble}} - \text{AT}$
 'wobble_{TR}'
- (35) *billeg* - **tAt**
 $\sqrt{\text{wobble}} - \text{TAT}$
 'wobble_{TR}'

Therefore, it is expected that if 2DPC and transitive-causative forms ever surface with distinct morphology, it should be most likely to be observed with this particular verb. And indeed, this slightly wider array of available forms gives rise to a certain degree of variation. As (36) shows, the morphological paradigm of *billeg* divides speakers into at least three groups: in a T1DP context, some speakers use the bare form, while others vacillate between the bare form and the *At*-form; 2DPC and the transitive-causative are expressed either by the *At*-form or the *tAt*-form:

| | T1DP | 2DPC | TR-causative |
|----------------|---------|------|--------------|
| speaker type-1 | ✓ | AT | AT |
| speaker type-2 | ✓ | TAT | TAT |
| speaker type-3 | ✓ or AT | TAT | TAT |
| unattested | ✓ | AT | TAT |

That *billeg* is compatible with two different causative suffixes makes it possible for speakers to openly differentiate between 2DPC and transitive-causative forms by resorting to distinct causative suffixes. Nonetheless, my informants were unanimous about choosing to not mark the difference between 2DPC and the transitive-causative construction even when the required morphological means were at their disposal. The data with the relevant contexts is laid out in Appendix C.2.

That 2DPC and the transitive-causative construction always surface with identical morphology speaks in favor of a tight bond between the two. Returning to the establishing of the (in)transitivity scale, it is probably beyond question that the transitive-causative construction constitutes the transitive endpoint of the scale; and in view of the pervasive syncretism between 2DPC and the transitive-causative, it sounds like a plausible assumption that 2DPC functions as the 'lower' neighbor of the transitive-causative construction:

- (37) 2DPC \subset TR-causative

But the full syncretism between 2DPC and the transitive-causative construction points even further, hinting that two constructions may even be identi-

cal. A possible way to capture the similarities and differences between 2DPC and the transitive-causative is to hypothesize that it is one and the same construction with two syntactic arguments; if the arguments are co-indexed, the 2DPC reading is obtained; if the subject and the object have disjoint reference, the construction has the semantics of the transitive-causative.

A potential problem for this approach is the semantic differences between 2DPC and the transitive-causative with regard to external/internal causation. I will immediately sketch what I mean by this, but consider first the following pair of examples: a transitive-causative form with contra-indexed arguments (38-a), and a 2DPC construction with co-indexed arguments (38-b):

- (38) a. A gyerek_i elgur - ít - otta a labdát_j.
 the kid.NOM PRT√roll - CAUS - PAST.3SG the ball.ACC
 'The kid rolled (away) the ball.'
- b. A labda_i elgur - ít - otta magát_i.
 the ball.NOM PRT√roll - CAUS - PAST.3SG itself.ACC
 Lit: 'The ball rolled itself', '
 The ball caused itself to roll.'

If someone or something rolls a ball, the ball is caused to roll due to some external cause, as in (38-a). But what happens, if the subject and the object of a verb get co-indexed, as in the 2DPC construction? Should we not expect a reading on which the ball (externally) does a gesture to roll its own body? We may, and the data in the first chapter actually supports such an interpretation: recall the examples in which the ball had hands and used those to roll itself, or the stairs that abraded by rubbing themselves with their hands. In these contexts, the stimulus comes from 'outside' (from the hands, which perform an external gesture, and which, for instance, may not even be affected by the abrading they induce), even though the ultimate source of the *V-ing* is the causer-undergoer itself. If this is correct, then the difference between the transitive-causative construction and 2DPC is rather that 2DPC has an additional reading, on which the trigger of the *V-ing* is inside: think of all the examples which required an internal effort or willpower. It is not irrational to assume that the transitive-causative construction does not have this reading exactly because in such constructions the causer and the undergoer must, by definition, have disjoint reference. This way, the internal causation reading would, by its very nature, be unavailable for contra-indexed arguments.

Although the ranking of the examined (in)transitivity constructions does in no way hinge on the sameness of 2DPC and the transitive-causative, capitalizing on the lack of non-syncretic 2DPC and transitive-causative forms, I hypothesize that the difference between 2DPC and the transitive-causative

construction is an issue of reference: while the classic causative construction involves two contra-indexed participants, in 2DPC the same participant appears both as the subject and object of the construction:

(39)

| | subject | morphology | object |
|--------------|---------|------------|--------|
| T1DP | DP_i | inch* | – |
| 2DPC | DP_i | caus* | DP_i |
| TR-causative | DP_i | caus* | DP_j |

Returning to the ranking issue, I will use the following abbreviation to mark that the equating of 2DPC and the transitive-causative is a highly probable, but not a mandatory move:

(40) $2DPC \subseteq TR\text{-causative}$

3.4 A panorama picture of the scale

3.4.1 Weaving together the results

Thus far, this chapter has investigated isomorphic forms between T1DP and the half-passive on the one hand, and between 2DPC and the transitive-causative construction on the other hand. The T1DP/HP syncretism, combined with the insights of recent work on syncretism by Starke (2002, 2006), Wiese (2004, 2005) and Bobaljik (2006, 2012) spoke in favor of a containment relation between T1DP and the half-passive, while various syntactic, semantic and morphological clues revealed that the half-passive involves more agency than T1DP. This has led to the ordering $T1DP \subset half\text{-passive}$. Thereby, the bottommost members of the (in)transitivity scale were located. The other endpoint of the (in)transitivity scale is picked by the full-fledged transitive-causative construction. The sweeping syncretism between the transitive-causative construction and 2DPC minimally implies that 2DPC is ordered right below the transitive-causative; but in absence of evidence to the contrary, the default assumption is that 2DPC and the transitive-causative are two manifestations of the same construction, in my proposal with different co-indexation strategies. But regardless of what one's preferred version is for the separation/unification of 2DPC/ TR-caus constructions, the following mini-scales can be identified:

(41) a. $T1DP \subset half\text{-passive}$ b. $2DPC \subseteq TR\text{-causative}$

With the two endpoints set, what remains is to interweave the two mini-scales, and the following hierarchy emerges:

$$(42) \quad \text{T1DP} \subset \text{half-passive} \subset \text{2DPC} \subseteq \text{TR-causative}$$

3.4.2 Exceptions: accidental homonymy

Over and above T1DP/HP and 2DPC/TR-caus syncretisms, I have come across three isomorphic forms between T1DP and 2DPC¹²:

$$(43)$$

| | gloss | T1DP | half-passive | 2DPC/TR-caus |
|----------------------------|-----------------|------------|---------------|--------------|
| $\sqrt{(\text{le})ereszt}$ | 'leak, deflate' | (le)ereszt | (le)ereszt-ÓD | (le)ereszt |
| $\sqrt{(\text{le})enged}$ | 'leak, deflate' | (le)enged | (le)enged-ÓD | (le)enged |
| $\sqrt{\text{tör}}$ | 'break' | tör | tör-ÓD | tör |

The existence of syncretism between T1DP and 2DPC across the half-passive is unexpected; in fact, it is precisely a case of the notorious *ABA-pattern which should not exist.

There are two possible solutions to avoid an emergent *ABA-violation in this particular situation.¹³ The weakest point of the scale, as put together in (42), is the connection between the half-passive and 2DPC: these two forms are never syncretic, and their morphological relation is more ambivalent, as we will see in the next section. Therefore, the first option is to attempt to rank 2DPC below T1DP. This would allow for a syncretism between 2DPC and T1DP with *(le)ereszt*-type verbs as well as between T1DP and the half-passive with *fax.ol*-type verbs:

$$(44)$$

| | gloss | 2DPC | T1DP | half-passive |
|----------------------------|-----------------|------------|------------|---------------|
| $\sqrt{(\text{le})ereszt}$ | 'leak, deflate' | (le)ereszt | (le)ereszt | (le)ereszt-ÓD |
| $\sqrt{\text{fax.ol}}$ | 'fax' | fax.ol | fax.ol-ÓD | fax.ol-ÓD |

Notwithstanding, ranking 2DPC below T1DP does not fit with the overall picture. On standard assumptions about structure, both case marking and the number of arguments speak in favor of more syntactic layers with 2DPC than with T1DP; and, as we will see later on, also the proposed semantics of these constructions seem to go against this ordering. Moreover, it has been demonstrated that 2DPC is always syncretic with the transitive-causative

¹²The preverbal particle *le-* slightly modifies the meaning of the root: *ereszt/enged*='leak', *le.ereszt/le.enged*='deflate'.

¹³In principle, there are two additional alternatives. However, ranking 2DPC between T1DP and the half-passive is a non-starter due to the massive syncretism between T1DP and the half-passive. Likewise, the ordering $HP \subset T1DP \subset 2DPC$ runs counter to extensive evidence for half-passives being 'bigger' than T1DPs, as argued at length in 3.2.3.

construction. So *2DPC* and the transitive-causative are either identical, ordered below *T1DP*, or in order to preserve the adjacency between *2DPC* and the transitive-causative construction, also *TR-caus* should be ranked below *T1DP*. This would raise a problem not only with regard to ranking along the (in)transitivity scale, but would also imply that the transitive-causative construction is structurally less complex than the corresponding inchoative or half-passive. As pointed out before, this is not impossible, but it is not a line of research I would like to push here. All the more so, because three instances of syncretism between *T1DP* and *2DPC* do not seem to constitute a solid enough ground for such reordering and the concomitant repercussions; especially as the three instances of *T1DP/2DPC* syncretism which I could unearth stand in a stark contrast with complete syncretism between *2DPC/TR-caus* on the one hand, and the potentially endless number of verbs which can be syncretic between *T1DP/half-passive* on the other hand. And indeed, the alternative is to hypothesize that the attested instances of *T1DP/2DPC* syncretism are cases of accidental homonymy. This is what I believe to be the most reasonable choice. I will have more to say about the syncretic *T1DP/2DPC* forms in 5.4.1.

3.5 *HP* \subset *2DPC*: a morphological puzzle

A synthesis of the lower and higher ends of the (in)transitivity scale yielded the overall ordering (45), suggesting that there is syntactic, and thereby semantic, growth on the way from the half-passive to the *2DPC(/TR-caus)*:

$$(45) \quad \text{T1DP} \subset \text{half-passive} \subset \text{2DPC} \subseteq \text{TR-causative}$$

Case distribution and the number of syntactic arguments seem to substantiate the conjecture that *2DPC(/TR-caus)* is syntactically more complex than the half-passive. *2DPC* involves two explicit DP arguments: a nominative-marked subject and an accusative-marked object. The half-passive contains only one overt DP argument, a nominative-marked undergoer. And even though there are signs of an implied causer, it cannot even surface in the form of a *by*-phrase, not to say in the form of a nominative causer subject. As both the introduction of the external argument (e.g. Kratzer 1996, Pylkkänen 2008) and the assignment of accusative case is considered to be tied in with additional syntactic layers in recent theory, these differences seem to confirm that the half-passive ranks below *2DPC(/TR-caus)*. The close kinship (or identity) between *2DPC* and *TR-caus* bolsters this conclusion, with *TR-caus* serving as the transitivity endpoint of the scale.

Morphology indicates a containment relation as well: the half-passive and *2DPC* build discernibly on each other. There is, however, a severe problem: the direction of morphological containment seems to be the reverse of

what everything else suggests. In pure morphological terms, the half-passive consistently subsumes the 2DPC form, with its contingent causative suffix: every time the corresponding transitive-causative form is overtly causative marked, the half-passive appears with an overt causative suffix tucked under $-Ód$:

- (46) a. teker
wind
'wind_{TR}'
- b. teker.ód
wind.ÓD
'get winded'
- (47) a. szak - **ít**
rip - CAUS
'rip_{TR}'
- b. szak - **ít** - ód
rip - CAUS - ÓD
'get ripped'

So, to all appearances, morphological complexity does not reflect the presumed semantic complexity of the ordering:

- (48) a. **half-passive** \subset 2DPC
b. szak.**ít**.ód \subset szak.**ít**

Such cases are, in fact, not unique to the relation of the half-passive and the 2DPC/transitive-causative construction. Starke (2002, 2005, 2006, 2011) points out that Standard English verbs face the same problem: it is widely acknowledged that 'clean' in "natural born housewives clean the house every day" has more features/structure than a participle or a passive ("the entire house has been cleaned"), although the passive is obviously morphologically a superset of the present tense. The same can be said about finite past tense forms and passive $-t$ participles in Hungarian (Márkus 2009a,b).

There are several ways to unravel the *half-passive* \subset 2DPC paradox, with varying appeal. One possibility could be to show that the suggested ordering is incorrect, and $Ód$ -half-passives are semantically more complex than their transitive-causative/2DPC counterparts. This is not impossible, but the data at our disposal do not support such a rendering.

Provided that the proposed *half-passive* \subset 2DPC ordering is given credence to, the classic method is "undoing", which practically means adding more morphology to invalidate what has been built earlier. In the context of half-passives, this would mean that $Ód$ is slapped on top of the 2DPC/transitive-causative form to remove from the representation whatever the causative suffix has contributed, namely, some agentive properties. This method is generally considered to be unappealing; consider for instance Koontz-Garboden's (2007, 2008) Monotonicity Hypothesis:

- (49) The Monotonicity Hypothesis
Word formation operations do not remove operators from lexical semantic representations.

But irrespective of whether this hypothesis is correct or not, there are other ways to overcome the problem of half-passive *Ód*, which makes the importing of the machinery of "undoing" unnecessary, at least for the sake of half-passives.

In the next chapter I put forth a novel technical solution, which is able to capture morphology vs. syntax/semantics mismatches of this kind; the core idea is that in certain syntactic configurations, it takes more morphemes to spell out less structure. The concrete morphosyntactic derivations will require a tight coupling of syntax and morphology, so before we can embark on the analysis, it is necessary to take stock of the exact morphological pattern.

3.6 Morphological variation enters the picture

3.6.1 The complete pattern emerges

We have now seen a range of constructions which align along a transitivity scale:

| | subject | morphology | object |
|--------------|------------------------|------------|------------------------|
| (50) T1DP | DP _{<i>i</i>} | inch* | – |
| half-passive | DP _{<i>i</i>} | caus*+Ód | – |
| 2DPC | DP _{<i>i</i>} | caus* | DP _{<i>i</i>} |
| TR-causative | DP _{<i>i</i>} | caus* | DP _{<i>j</i>} |

Up to this point I have largely managed to sidestep the issue of morphological variation, but now it is about time to address the morphological diversity that is characteristic of these constructions. As it was pinpointed in 3.3, 2DPC patterns with the transitive-causative construction to the hilt with respect to both morphology and the number of syntactic arguments. This implies that T1DP/2DPC forms inherit all the morphological variation from the inchoative/causative alternation. Haspelmath (1993) observes that languages use four main strategies to form inchoative/causative pairs. There are cases/languages in which both the transitive-causative and the inchoative are morphologically unmarked: they simply look the same. This is the so-called labile alternation, which is relatively rare, not only in Hungarian but in the languages of the world in general:

- (51) the labile alternation:
- leereszt* ('deflate_{*inch*}') ~ *leereszt* ('deflate_{*caus*}')
 - leenged* ('deflate_{*inch*}') ~ *leenged* ('deflate_{*caus*}')

In other cases/languages there is a shared root that combines with inchoative morphology to form inchoatives, and with causative morphology to form TR-

causatives. This is called the equipollent alternation, which is, according to Haspelmath, the third most common way to form inchoative/TR-causative pairs:

- (52) the equipollent alternation:
- a. *felolv-ad* ('melt_{inch}') ~ *felolv-aszt* ('melt_{caus}')
 - b. *felébr-ed* ('wake_{inch}') ~ *felébr-eszt* ('wake_{caus}')

There are other cases/languages in which only the transitive-causative form is marked with extra morphology, whereas the inchoative is bare. Haspelmath (1993) refers to these cases as the causative alternation, and this is regarded as second in frequency among the available patterns:

- (53) the causative alternation:
- a. *felkel* ('rise_{inch}') ~ *felkel-t* ('raise_{caus}')
 - b. *befagy* ('freeze_{inch}') ~ *befagy-aszt* ('freeze_{caus}')

And finally, in some cases/languages, the inchoative is marked and the transitive-causative form is unmarked.¹⁴ This is the so-called anticausative alternation, which is considered to be the predominant strategy for deriving inchoative/TR-causative pairs:

- (54) the anticausative alternation:
- a. *kitár-ul* ('open up_{inch}') ~ *kitár* ('open up_{caus}')
 - b. *teker-ed*¹⁵ ('wind_{inch}') ~ *teker* ('wind_{caus}')

In Hungarian, anticausative formation by means of *Ód*-suffixation belongs here, as well.

Many languages opt for one or two predominant strategies, but as the examples show, Hungarian has all four types. As regards the frequency of the different strategies, the productivity of *Ód*-suffixation makes the anticausative alternation the default strategy for inchoative formation in Hungarian, deriving an open class of causative/anticausative pairs. But Hungarian has a high number of lexically determined causative/inchoative pairs, too. Among these, the equipollent and causative alternations are prevailing, although it is possible to come across a number of examples for the anticausative alternation, and three instances of the labile alternation.

¹⁴Notice that, similarly to half-passives, the intransitive member of the anticausative alternation morphologically encompasses the corresponding transitive-causative form. But while the half-passive *Ód*-form invariably subsumes the transitive-causative form, the anticausative alternation is only one of four strategies to derive inchoative/transitive-causative pairs.

¹⁵This verb belongs to the *-ik*-conjugation, which means that in present tense third person singular the verb marks the relevant phi-features overtly – with *-ik*, cf. *tekeredik* – instead of the usual zero. To make the data easier to follow, I will ignore ϕ -features, which are extraneous for the present investigation.

The four strategies become pertinent to the present discussion because the diversity of the inchoative/TR-causative alternation carries over to the morphological realization of T1DP/2DPC forms. The table below shows the morphological patterns. As for the abbreviations, 'R' denotes the bare form, while *inch** and *caus** refer to inchoative and causative morphology, respectively:

| | alternation type | T1DP | 2DPC/TR-caus |
|-------|---------------------------|-----------------|--------------|
| (i) | causative alternation | R | R-caus* |
| (ii) | anticausative alternation | R- <i>inch*</i> | R |
| (iii) | equipollent alternation | R- <i>inch*</i> | R-caus* |
| (iv) | labile alternation | R | R |

As for half-passives, they are derived by stacking *-Ód* onto whatever the 2DPC/transitive-causative form is:

| | alternation type | T1DP | half-passive | 2DPC/TR-caus |
|-------|------------------|-----------------|--------------------|--------------|
| (i) | causative | R | R-caus* <i>-Ód</i> | R-caus* |
| (ii) | anticausative | R- <i>inch*</i> | R- <i>Ód</i> | R |
| (iii) | equipollent | R- <i>inch*</i> | R-caus* <i>-Ód</i> | R-caus* |
| (iv) | labile | R | R- <i>Ód</i> | R |

To this we need to add the variation between speakers who have the half-passive and those who do not. The conservative/liberal split provides us with the following distinctions:

| | T1DP | half-passive | 2DPC/TR-caus |
|--------------|------|--------------|--------------|
| liberal | ✓ | ✓ | ✓ |
| conservative | ✓ | ✗ | ✓ |

Notice that deriving the unruly half-passive form for liberal speakers is not the only challenge the analysis has to face. The existence of two speaker types is an additional problem, as it is of equal importance to make the half-passive underivable for conservative speakers. This is a challenge, as conservative speakers use *Ód* as a productive anticausative suffix, but for some reason they cannot put this suffix into service to produce half-passives.

A compilation of the three levels, four morphological classes, and two speaker types yields the following pattern:

| | | T1DP | half-passive | 2DPC/TR-caus |
|-----------|--------------|---------|--------------|--------------|
| (i) | liberal | R | R-caus*.-ÓD | R-caus* |
| (ii) | liberal | R-inch* | R-ÓD | R |
| (iii) | liberal | R-inch* | R-caus*.-ÓD | R-caus* |
| (58) (iv) | liberal | R | R-ÓD | R |
| (i) | conservative | R | – | R-caus* |
| (ii) | conservative | R-inch* | – | R |
| (iii) | conservative | R-inch* | – | R-caus* |
| (iv) | conservative | R | – | R |

(58) shows that either T1DP or 2DPC or both forms can be bare – or marked. And while conservative speakers do not have the half-passive, the half-passive for liberal speakers has always the most complex morphology of the three constructions, stacking *-Ód* onto whatever the 2DPC form is.

But this is not the entire picture yet. A closer look at the morphological behavior of the individual verbs reveals that the four main morphological classes divide into several subclasses. For instance, some of the inchoative forms involve an idiosyncratic suffix (cf. ii/a, iii/a, ii/a', iii/a' in (59) below), whereas others are derived by productive *-Ód* (ii/b, iii/b,c,d and their primed variants). Furthermore, some roots need to combine with a 'verbalizing' suffix *v** to be able to function as a full-fledged verbal root (cf. iii/c, iii/c' below). Yet other verbs contain what looks like a causative suffix as low as in their T1DP form (cf. iii/d, iii/d'). All these subtypes will be discussed in detail in the next chapter, and I will provide a morphosyntactic derivation for each type. Taking this micro-variation into account, the pattern that emerges by the end of the day is the following (NB. the liberal language use (i-iv) precedes the conservative variant with the primed numbers (i'-iv')):

(59) the complete pattern for morphologically regular forms

| | | T1DP | half-passive | 2DPC |
|----------|-------------------------------|------------|--------------|---------|
| (i) | \sqrt{fagy} ('freeze') | R | R-caus-ÓD | R-caus* |
| (ii/a) | \sqrt{teker} ('coil') | R-inch* | R-ÓD | R |
| (ii/b) | $\sqrt{gyúr}$ ('crease') | R-ÓD | R-ÓD | R |
| (iii/a) | \sqrt{gur} ('roll') | R-inch* | R-caus*-ÓD | R-caus* |
| (iii/b) | \sqrt{fejl} ('develop') | R-ÓD | R-caus*-ÓD | R-caus* |
| (iii/c) | \sqrt{faxol} ('fax') | R-v*-ÓD | R-v*-ÓD | R-v* |
| (iii/d) | $\sqrt{összesít}$ ('total') | R-caus*-ÓD | R-caus*-ÓD | R-caus* |
| (iv) | $\sqrt{leereszt}$ ('deflate') | R | R-ÓD | R |
| (i') | \sqrt{fagy} ('freeze') | R | – | R-caus* |
| (ii/a') | \sqrt{teker} ('coil') | R-inch* | – | R |
| (ii/b') | $\sqrt{gyúr}$ ('crease') | R-ÓD | – | R |
| (iii/a') | \sqrt{gur} ('roll') | R-inch* | – | R-caus* |
| (iii/b') | \sqrt{fejl} ('develop') | R-ÓD | – | R-caus* |
| (iii/c') | \sqrt{faxol} ('fax') | R-v*-ÓD | – | R-v* |
| (iii/d') | $\sqrt{összesít}$ ('total') | R-caus*-ÓD | – | R-caus* |
| (iv') | $\sqrt{leereszt}$ ('deflate') | R | – | R |

This is the full morphological pattern to be derived. In addition, there is a number of irregular forms; these will be addressed briefly in Appendix A.2. For further examples for the regular subtypes, the reader is referred to Appendix A.1. The next section reviews the main trends and tendencies in the literature in the topic of morphological diversity in the causative/inchoative alternation.

3.6.2 Literature review: the morphological diversity of the causative/ inchoative alternation

As it was mentioned before, T1DP/2DPC inherit the morphological diversity from the inchoative/causative alternation. Therefore, any prospective account has to calculate with Haspelmath's (1993) four alternation types. Recall that to avoid terminological ambiguity, I refer to the intransitive member of the intransitive/transitive alternation as an 'inchoative', while the term 'anticausative' is reserved for a special subtype of inchoatives: those that are morphologically marked. This means that in my terms inchoatives subsume 'unmarked inchoatives' and 'anticausatives/ marked inchoatives'.

In the literature, it has been uncontested that the inchoative and transitive-causative forms are in some way related (though not necessarily derivationally, cf. e.g. Alexiadou 2010). Accordingly, much of the discussion on the

morphological diversity of the inchoative/causative alternation centers on the direction of the derivation between the two forms. Traditionally, there are two main schools. Adherents of the causativization approach take the inchoative to be the basic form, and derive the transitive-causative from the underlying intransitive. On this view, the inchoative verb has no cause present in either the syntactic or semantic representation. Proponents of the causativization approach include Dowty (1979), Hale and Keyser (1993), Pesetsky (1995), Harley (1995) and Pytkänen (2008), among others. In contrast with the causativization view, the decausativization approach contends that it is the inchoative that derives from the causative form. While some authors assume that anticausativization involves deletion of a CAUSE operator (Grimshaw 1982, Reinhart 2002, Härtl 2003, Reinhart and Sioni 2005, Kalluli 2006, Horvath and Sioni 2011a,b), others have proposed that the anticausative retains the CAUSE operator in the lexical semantic representation, cf. Levin and Rappaport (1995) and Chierchia (2004). Koontz-Garboden (2009) belongs here as well, although the focal point of his work is the anticausative alternation, and he makes no attempt to force a decausativization analysis on the verb pairs with unmarked intransitives. Levin and Rappaport Hovav (1995) attribute the valency reduction to the lexical binding of the causer argument; Chierchia (2004) suggests reflexivization, an idea endorsed and further developed by Koontz-Garboden (2009). From a morphological perspective, approaches that promote exclusive causativization or decausativization seem to fight a trench war: morphological variation makes the weakness of one approach to the strength of the rivalling approach. While on the one hand the morphology of the causative alternation speaks in favor of the causativization view, on the other hand the morphology of the anticausative alternation lends support to the decausativization approach. At the same time, the anticausative alternation gives a hard time for the causativization view; in turn, the decausativization approach struggles to come to grips with the pattern exhibited by the causative alternation.

There are, however, a number of proposals that take different paths; most of these can and have been described as the least common denominator approaches. One such approach has been developed by Parsons (1990) and Piñón (2001a, 2001b), who propose a semantic account on which transitive-causative and inchoative forms are both derived from a shared base. For Parsons (1990), the shared base is a corresponding adjective; for Piñón (2001a, 2001b), it is a common verb stem. Such an approach is compatible with all the four morphological patterns: the causative, anticausative, equipollent and labile alternation, and can possibly be translated into a morphosyntactic framework like Distributed Morphology. Another influential piece of work that is primarily concerned with the syntax-semantics of the inchoative/causative alternation, and does not engage in concrete morphological issues, is Ramchand (2008b): a syntactic, or constructional, intransitive base approach.

A number of other works that assume a shared base include Alexiadou, Anagnostopoulou and Schäfer (2006), Schäfer (2008) and Alexiadou (2010). The analysis promoted by these authors draws on the possibility that inchoatives do not necessarily have a uniform structure across the board. To capture the difference between marked and unmarked forms, these authors propose that the presence or absence of anticausative morphology marks an actual difference in syntax. Marked anticausatives are argued to involve more structure than unmarked inchoatives: the projection that differentiates between the two types is claimed to be Voice, which is associated with the role of an external argument. At the same time, the two structures are supposed to be undistinguishable, at least with respect to agentivity; otherwise, marked anticausatives would not be inchoatives. Therefore, the Voice head of marked anticausatives is specified as [-AG], and the specifier is [-ext.arg].¹⁶ So in marked anticausatives, the Voice projection with the [-AG]-[-ext.arg] specification is in practice a place-holder for anticausative morphology. According to the authors, the intuition behind this setup is that anticausative morphology is the "morphological instantiation of the lack of external argument" (Alexiadou 2006, handout 2:1); in inchoatives which completely lack a Voice projection, there is no need to mark the absence of the external argument. An important facet of the approach is the attempt to find cross-linguistic regularity as to when an inchoative is marked or unmarked. The authors suggest that de-adjectival, internally caused and cause unspecified verbs have a tendency to be unmarked, whereas externally caused verbs are more likely to be marked¹⁷ and thus involve the extra Voice layer. At the same time, as the authors themselves admit, the observed pattern is merely a tendency: "verbs that are class I [*unmarked inchoative, my remark*] in one language are class II [*marked anticausative*] in another language" (Alexiadou 2010, fn.10). This is particularly palpable with Hungarian, where it is very often the opposite of the predicted form (marked/unmarked) that appears. This, however, raises a methodological issue: as tendencies are hard to deal with, it is debatable to what extent it is possible to build a large-scale analysis on a pure tendency. At the same time, the core idea of this approach, namely that inchoatives may not have a uniform structure across the board, has emerged elsewhere, too: for instance, the preliminary

¹⁶Notice that such an analysis presupposes a system of binary features: the difference between marked anticausatives and passives boils down to the [-/+AG(entive)] nature of the Voice head.

¹⁷This observation is consistent with Haspelmath's (2008) "spontaneity scale", which is a frequency-based explanation for the attested morphological variation with (anti)causative pairs. The basic observation is that some verbs are more likely to have an inchoative meaning in their bare, "non-derived" form, whereas other verbs have a tendency to have a causative meaning in their unmarked, "non-derived" form. The more likely it is that the event a given verb describes takes place spontaneously, the more likely it is that the verb will have the inchoative form as the bare, "non-derived" form; the less spontaneous the event is, the more likely it is that the inchoative form will be morphologically marked.

results of an experimental project by Lundquist, Ramchand and Tungseth (2013-2016) indicate that anticausatives may be semantically reflexive in one language but not another.

We have now reviewed the major approaches to the causative/inchoative alternation on the market. What we should minimally take with us from this discussion is that whatever approach one subscribes to, it should be able to handle the full morphological diversity of T1DP/inchoative vs. 2DPC/transitive-causative forms, while preserving the direction of semantic complexity. Moreover, as in the present case the pattern is further complicated by the morphological make-up of the half-passive, this should also be incorporated into a prospective analysis in a satisfactory way.

3.7 Summary

This chapter has presented arguments for a cumulative hierarchy of the examined constructions:

$$(60) \quad \text{T1DP} \subset \text{half-passive} \subset \text{2DPC} \subseteq \text{TR-caus}$$

A compilation of the three constructions, two speaker types and four morphological classes culminated in the pattern below, with additional variation within the four main morphological classes:

$$(61) \quad \text{basic morphological pattern for (in)transitivity constructions}$$

| | T1DP | half-passive | 2DPC/TR-caus |
|---------------------------------|---------|--------------------|--------------|
| (i) causative liberal | R | R-caus* $\bar{O}D$ | R-caus* |
| (ii) anticausative liberal | R-inch* | R $\bar{O}D$ | R |
| (iii) equipollent liberal | R-inch* | R-caus* $\bar{O}D$ | R-caus* |
| (iv) labile liberal | R | R $\bar{O}D$ | R |
| (i) causative conservative | R | – | R-caus* |
| (ii) anticausative conservative | R-inch* | – | R |
| (iii) equipollent conservative | R-inch* | – | R-caus* |
| (iv) labile conservative | R | – | R |

This is the basic pattern to be derived by any aspiring morphosyntactic ac-

count. There were three major challenges identified with the accumulated data pattern:

- (62) a. a blatant morphology vs. syntax/semantics mismatch in the morphological vs. structural makeup of half-passives;
- b. the non-derivability of half-passives for conservative speakers;
- c. and the long-standing issue of morphological diversity.

Chapter 4

Towards an analysis: nanosyntax, gaps and the functional sequence

I will now set the scene for the derivation of T1DP, half-passive and 2DPC forms for all the regular alternation types, with speaker variation accommodated as well. The full pattern to be derived is repeated below. Recall that 'R' denotes the bare root, while *caus** refers to causative morphology and *inch** to unpredictable inchoative morphology; *v** stands for a verbalizing suffix which turns a non-verbal root into a verbal root (or potentially to a transitive form; this will be discussed later on); *-Ód* derives half-passive forms for liberal speakers, and it is also the productive, elsewhere anticausative suffix for both liberal and conservative speakers:

- (1) the complete pattern for regular alternating verbs

| | | T1DP | half-passive | 2DPC |
|----------|-------------------------------|------------|--------------|---------|
| (i) | √ <i>fagy</i> ('freeze') | R | R-caus-ÓD | R-caus* |
| (ii/a) | √ <i>teker</i> ('coil') | R-inch* | R-ÓD | R |
| (ii/b) | √ <i>gyűr</i> ('crease') | R-ÓD | R-ÓD | R |
| (iii/a) | √ <i>gur</i> ('roll') | R-inch* | R-caus*-ÓD | R-caus* |
| (iii/b) | √ <i>fejl</i> ('develop') | R-ÓD | R-caus*-ÓD | R-caus* |
| (iii/c) | √ <i>faxol</i> ('fax') | R-v*-ÓD | R-v*-ÓD | R-v* |
| (iii/d) | √ <i>összesít</i> ('total') | R-caus*-ÓD | R-caus*-ÓD | R-caus* |
| (iv) | √ <i>leereszt</i> ('deflate') | R | R-ÓD | R |
| (i') | √ <i>fagy</i> ('freeze') | R | – | R-caus* |
| (ii/a') | √ <i>teker</i> ('coil') | R-inch* | – | R |
| (ii/b') | √ <i>gyűr</i> ('crease') | R-ÓD | – | R |
| (iii/a') | √ <i>gur</i> ('roll') | R-inch* | – | R-caus* |
| (iii/b') | √ <i>fejl</i> ('develop') | R-ÓD | – | R-caus* |
| (iii/c') | √ <i>faxol</i> ('fax') | R-v*-ÓD | – | R-v* |
| (iii/d') | √ <i>összesít</i> ('total') | R-caus*-ÓD | – | R-caus* |
| (iv') | √ <i>leereszt</i> ('deflate') | R | – | R |

4.1 Nanosyntax: an overview

4.1.1 Features, morphemes and terminals

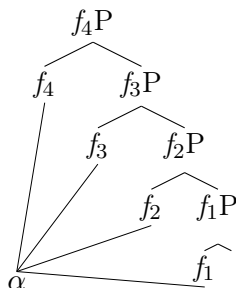
To get a grip on this intricate morphosyntactic pattern, I start out with adopting Nanosyntax's (cf. Starke 2002, 2005, 2009, 2011) central hypothesis that the building blocks of syntax are submorphemic: syntax projects from features. Let me explain what this means and how this idea diverges from the mainstream.

A morpheme is often associated with a number of features. At the same time, the traditional view links a morpheme to a single terminal. An effort in the literature to maintain the one-to-one correspondence between terminals and morphemes leads to a proliferation of phonologically null heads and the necessity of bundling features in order to be able to squeeze the relevant feature content into a single terminal. But letting go of the conviction that a morpheme can only correspond to a single terminal allows the computation to actually build its morphemes, and that from the atoms of syntax: features. Assigning internal syntactic structure to morphemes leads to spectacular empirical gains, as it will be demonstrated also with

the Hungarian data. So Nanosyntax explores the idea that there is a one-to-one correspondence between features and terminals, rather than between morphemes and terminals. The one-to-one relation between features and terminals implies that a morpheme may span several terminals, where each terminal embodies a (unary) feature that the given morpheme is associated with. So on the nanosyntactic approach, morphemes are split into binary branching tree structures with one feature per terminal. The features are ordered in accordance with a universal hierarchy: this yields a particularly fine-grained functional sequence. Therefore, Nanosyntax can be defined as a cartographic approach which goes below the morpheme-level. It is syntax all the way down, just as in Distributed Morphology, but crucially, morphemes have internal syntactic structure.

In the example below, α stands for a morpheme, which lexicalizes a series of features f_1, f_2, f_3, f_4 . These features are not lumped together in an opaque bundle, but are ordered into a binary branching syntactic structure according to a universal functional sequence:

(2)



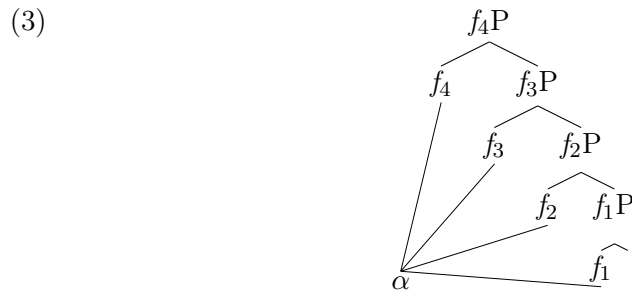
What chunk of syntactic structure a morpheme lexicalizes is information that needs to be stored in the Lexicon. In Nanosyntax, the Lexicon is a list of entries, where each entry contains syntactic information in the form of a syntactic tree, just as in (2). Besides the syntactic information, the Lexicon supplies the relevant phonological and semantic information that is associated with the syntactic structure in a given entry. An entry will always contain syntactic information, but the phonological representation may be missing, for instance with null morphemes. Likewise, the conceptual content can also be absent, for example with functional morphemes.

In the course of the nanosyntactic spell-out procedure, a piece of the syntactic tree in the syntax is replaced by a corresponding tree from the Lexicon along with the connected semantic and phonological information. This way, the main task of spell-out is the matching of a syntactic (sub)tree with a corresponding, matching tree from the Lexicon. A natural requirement for matching is identity: a perfect match between the tree in the syntax and

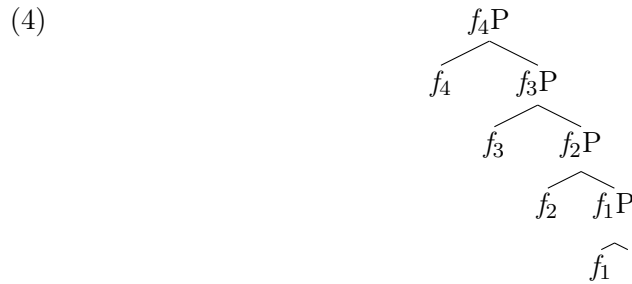
the tree stored in the lexical entry. Nonetheless, it seems to lead to empirical gains if the requirement about identity is relaxed in a principled way. Notably, if the structure in the syntax is allowed to be a subconstituent of the syntactic tree stored in the Lexicon, a restrictive theory of syncretism emerges (cf. Starke 2002, 2005, 2009 on English *-ed*). Let me show how.

4.1.2 Syncretism and the Superset Principle

Let us presume that α is a morpheme that stretches over a sequence of terminals. Its entry in the Lexicon contains the following representation:



By identity, α can pronounce the syntactic tree below:



Let us now hypothesize that syntax has built (5), but the language has no lexical item that would fulfill the identity requirement:



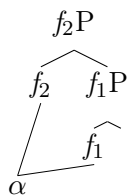
If a lexical tree is allowed to be a superset of the syntactic structure that it spells out, then both (4) and (5) can be spelled out as α in (3). More generally: if the lexical tree and the syntactic tree to be matched need not be identical, but the lexical tree is allowed to be a superset (more precisely, a supertree) of the syntactic tree it aspires to spell out, any lexical tree will map onto a range of syntactic trees. This provides a principled account of polysemy: two syntactic structures may come out as systematically syncretic if they are both subsets (proper or non-proper) of the same lexical tree¹. Thereby, the proposed condition for matching is the following:

- (6) *The Superset Principle, Starke (2002, 2005)*: A phonological exponent is inserted into a node if its lexical entry has a (sub-)constituent that is identical to the node (ignoring traces).

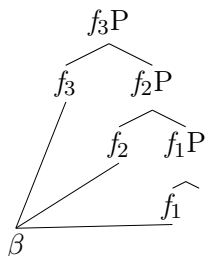
4.1.3 Constraining the competition: *Minimize Junk!*

That identity is no longer a requirement and the lexically stored tree is allowed to be a supertree of the syntactic tree opens up the possibility for several matching entries for one and the same syntactic structure. Consider the following lexically stored trees:

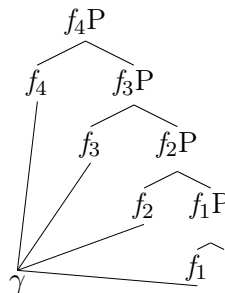
(7)



(8)

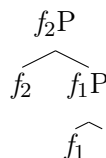


(9)



If the computation builds the syntactic tree below, the three lexically stored trees (7), (8) and (9) are all matching entries, which can then compete to spell (10) out:

- (10) Tree built by the syntax:



¹Provided that neither of them has a closer match. I will move on to examine what a better match is in the next subsection.

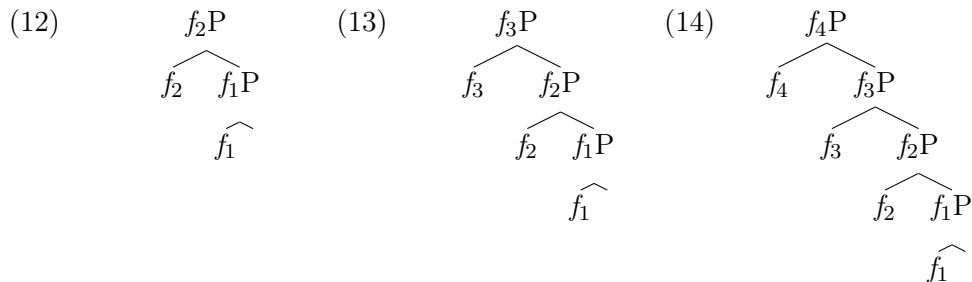
Data which I will not reproduce here (but cf. e.g. Starke 2009, p. 4) suggest that in such cases the lexical tree with the least unused material wins. This principle is informally dubbed *Minimize Junk!*, and it is an extended application of Kiparsky's (1973) Elsewhere Condition, which contends that if there is a choice between two rules, the specific rule blocks the general rule from application. The following definition is a version of the Elsewhere Condition based on a simpler formulation by Neeleman and Szendrői (2007), which I adopted from Caha (2009):

- (11) *The Elsewhere Condition* In case two rules R_1 and R_2 can apply in an environment E , R_1 takes precedence over R_2 if it applies in a proper subset of environments compared to R_2 .

The extending of the dominion of the Elsewhere Condition to competing lexical items like (7), (8) and (9) above makes it a convenient tool for Nanosyntax (cf. Starke 2009, Caha 2009, Pantcheva 2010, 2011 and Taraldsen's 2010 *Minimize Underattachment* constraint) to resolve the rivalry between the lexical items which compete to pronounce a given piece of syntactic structure. In the spirit of the Elsewhere Condition, spell-out chooses the most specific item, that lexically stored tree that is the 'closest' or 'best' match: the one with the least superfluous structure.

If we now return to our examples, we see that although (7), (8) and (9) all match (10), (9) contains two redundant layers f_4 – f_3 , while (8) contains one layer with junk: f_3 . The entry with (7), on the other hand, is a perfect match. If we go one step further and hypothesize that there is no perfect match available, *i.e.* that (7) is missing from the Lexicon of the hypothetical language under discussion, (8) will still be a better match than (9) by virtue of containing one layer less junk, and will thereby win over (9).

The *Minimize Junk!* principle comes handy not only in the task of selecting the best candidate for spell-out, it also helps to prevent the unattested *ABA pattern. The *ABA pattern could, if ever, arise when the language has only two morphemes to pronounce three containment structures. For an illustration, here three containments structures, built by the syntax:

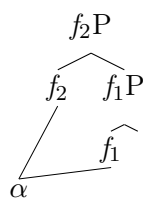


Let us further assume that there are only two morphemes in the language that correspond to these structures or to some subconstituent of them. The

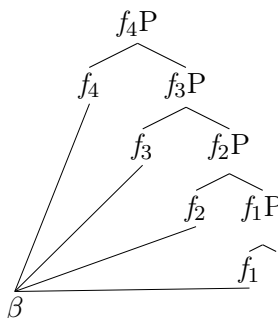
absence of *ABA tells us that what never happens is that the smallest and the biggest structures spell out by one of the available morphemes, α , and the medium-sized structure, sandwiched in between two α s, gets pronounced by β . With the nanosyntactic assumptions I have just sketched, such a set-up is simply impossible. Let me demonstrate how and why.

Given the Superset Principle, there are two possible ways to associate these structures with morphemes. One option is to have the following two entries, with the syntactic tree and morphological form specified for each as below (conceptual content is not necessary for the exposition, so this will be ignored):

(15)



(16)

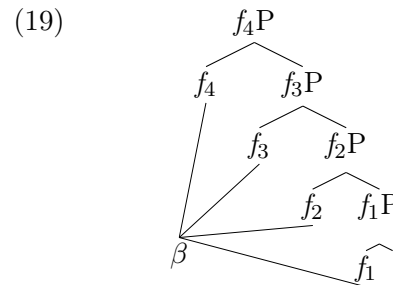
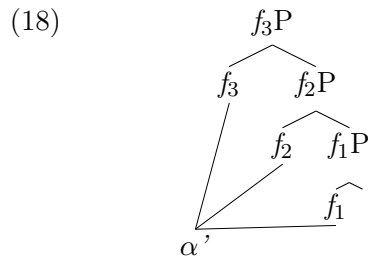


On this scenario, the biggest of the syntactic trees (14) can only be pronounced by the morpheme β ; the tree structure associated with α is simply too small to tackle this sequence, and would leave the features f_3, f_4 unpronounced. The same goes for the medium-sized syntactic tree in (13). Here, the tree structure associated with β has one superfluous layer: f_4 ; however, by the Superset Principle, it remains a suitable candidate, while the structure associated with α is again too small. The smallest of the syntactic trees, (12), could also be spelled out by β , but the structure associated with α is a better – in fact, a perfect – match. Thereby, this structure will be pronounced by α .

(17)

| | | | |
|----------------|---------------------|---------------------------|-------------------------------|
| syntactic tree | (12):{ f_1, f_2 } | (13): { f_1, f_2, f_3 } | (14) { f_1, f_2, f_3, f_4 } |
| morpheme | α | β | β |

The alternative setup is the following: the three containment structures remain. Also, we need to keep (16) to be able to handle to biggest of the three syntactic trees. However, it is possible to create an alternative to (15): (18).(16) is repeated below as (19):



With these entries, the following spell-out pattern emerges. Similarly to α in the first scenario, α' is too small for the biggest of the syntactic trees; therefore, the only candidate to pronounce (14) is again β . The medium-sized syntactic tree (13) can in principle be pronounced by both α' and β , but α' is a perfect match. And finally, (12), the smallest of the structures with only two layers, can in principle be spelled out by both α' and β , but as α' contains less junk, it wins by the Elsewhere Condition:

(20)

| | | | |
|----------------|---------------------|---------------------------|-------------------------------|
| syntactic tree | (12):{ f_1, f_2 } | (13): { f_1, f_2, f_3 } | (14) { f_1, f_2, f_3, f_4 } |
| morpheme | α' | α' | β |

These are the only two scenarios, if there are only two morphemes available to spell out three containment structures. With the assumptions that have been sketched so far in this chapter, it is simply impossible to derive *ABA: if the α form lexicalizes the biggest structure, and β is supposed to pronounce the medium-sized structure, then β would always be a better match for the smallest of the three structures. This makes the unattested *ABA pattern underivable within the nanosyntactic framework with standard cumulative structures.²

4.1.4 Phrasal spell-out and spellout-driven movement

It follows directly from the assumed one-to-one correspondence between terminals and features that a morpheme may span a range of terminals. Thereby, non-terminal spell-out is a requisite. There is a number of recent works which explore the idea that a single formative can lexicalize multiple terminals; for work outside Nanosyntax, the reader is referred to Weerman

²Michal Starke's (2011b) Nanosyntax class in Tromsø touched on how quasi-ABA can be captured with gaps, and this is an issue I will take up in 5.4.1.

and Evers-Vermeul (2002), Williams (2003), Neeleman and Szendrői (2007), and the analysis of pro-NPs in Uriagereka (1995) and Corver and Delfitto (1999). What I adopt here is Starke's (2005, 2010, 2011a) notion of phrasal spell-out.³ Phrasal spell-out means that a single lexical item spells out an entire (sub)constituent in the syntactic representation: a phrasal node in the syntax is replaced/spelled out by a corresponding phrase from the Lexicon (cf. Starke 2009, 2011a):⁴

- (21) a. ENTRY for α :
 Phonology: $/\alpha/$
 Syntactic structure: $[f_3 [f_2 [f_1]]]$

- (22)
- 

In addition to being phrasal, spell-out in Nanosyntax is taken to be bottom-up and cyclic. Cyclic spell-out means that it is not first at the end of the derivation that the spell-out compares the syntactic representation with the available lexical items: each merge defines a cycle. Thereby, every operation

³Phrasal spell-out is the approach that is most compatible with the idea that lexical entries can contain entire syntactic phrases. But even within Nanosyntax, there are different strategies to implement non-terminal spell-out. Works that build on Starke's (2010, 2011a) phrasal spell-out include Caha (2009) and Pantcheva (2011). The sequential spanning approach, which resembles Williams (2003), is advocated by Ramchand (2008a,b, 2011), and allows a morpheme to span a contiguous sequence of heads. This approach is adopted in Abels and Muriungi (2008), Lundquist (2008), Taraldsen (2010), Bye and Svenonius (2011), and much of Dékány (2011), among others.

⁴The convention is that phrasal spell-out is marked by an arrow at the phrasal node that is being targeted by spell-out, as in (22), while the spanning approach uses the following representation:

- (i)
- 

As in the course of the derivations it will be easier to decipher complex spell-out patterns with the spanning representation, I will resort to this denotation, even though I am committed to phrasal spell-out throughout the thesis. Also, in cases when the phrasal spell-out representation is visually more helpful, I will use that to drive my point home.

of merge should be followed by lexical insertion before the next merge is allowed to take place. If spell-out opts for a certain lexical item at one point, this choice can, and if necessary will be, overridden in a subsequent cycle: each successful spell-out overrides previous successful spell-outs.

An important argument for cyclic spell-out is Nanosyntax's attempt to reduce cross-linguistic variation to the Lexicon (for details, the reader is referred to Starke 2011a). The core idea here is that languages differ from each other in how they lexicalize what seems to be a rigid and universal syntactic hierarchy. For instance, I will argue later on that for liberal speakers of Hungarian, the suffix *-Ód* lexicalizes a single terminal, whereas for conservative speakers, *-Ód* spans two terminals:

(23)

$$\acute{O}d_{liberal} \Leftarrow f_x P$$

$$\widehat{f_x}$$

(24)

$$f_y P \Rightarrow \acute{O}d_{conservative}$$

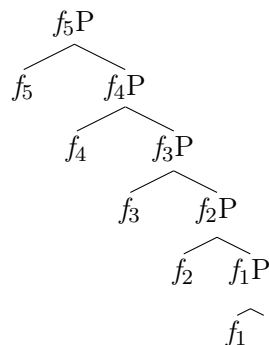
$$\widehat{f_y} \quad \widehat{f_x P}$$

$$\widehat{f_x}$$

If spell-out is cyclic, such lexical choices can affect the computation. But for spell-out to be able to give feedback to the syntax, it is paramount to do it while the computational system is still up and running.

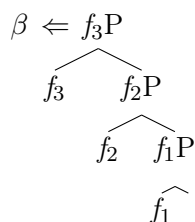
The idea that the shape of lexical items influences the derivation takes us to the notion of spell-out driven movement. On numerous occasions, it happens that even though the Lexicon has the desired lexical entries, the syntactic configuration is infelicitous, and the syntactic structure is unpronounceable as it is. As we will see later on, this can happen because phrasal spell-out is constrained by a constituency requirement: a lexical item can only pronounce a chunk of structure if it forms a constituent in the syntactic representation. For exposition, consider the following, hypothetical situation: a language has built the syntactic structure in (25).

(25)

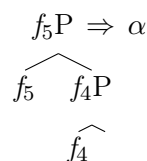


Let us further assume that in the language at issue, the structure in (25) is not lexicalized by a single morpheme but is rather put together compositionally. The relevant entries with matching subtrees are shown below, conceptual information subtracted:

(26)

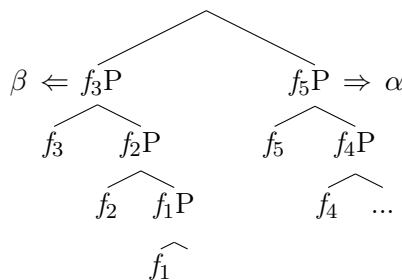


(27)



The two entries (27) and (26) should be able to join forces and arrange for a compositional spell-out for (25): β could pronounce the lower chunk $f_3 - f_2 - f_1$ in (25), while α could take care of $f_5 - f_4$. There is, however, a problem: the chunk α corresponds to in the syntactic tree (25) is not a constituent. This makes the spell-out of $f_5 - f_4$ impossible. Provided that the language has no better candidates – a synthetic morpheme that covers the entire sequence from bottom to top – the derivation is about to crash. But there is one escape route for the derivation: if the subtree $f_3 - f_2 - f_1$ moves above $f_5 - f_4$, both the left branch and the right branch will form a constituent on its own, each of which corresponds to a lexical item. This way, movement creates a configuration which can be spelled out by the available lexical entries:⁵

(28)



The requirement that phrasal spell-out must target phrasal nodes can have similar consequences. Let us hypothesize that the language has the following

⁵As a side note, it needs to be pointed out that the above example is an oversimplified illustration: as phrasal spell-out is cyclic (plus movement is thought to happen at the root), movement would have taken place a few steps before (25) is assembled, to begin with. The technical details around cyclic spell-out and the ensuing movement operations will be introduced gradually in the course of the concrete derivations.

phrasal entry with f_4 , lexicalized by α :

$$(29) \quad \begin{array}{c} f_4P \Rightarrow \alpha \\ \widehat{f_4} \end{array}$$

Let us further assume that the computation builds the structure below, and that there is a morpheme β that takes care of the constituent consisting of $f_3 - f_2 - f_1$:

$$(30) \quad \begin{array}{c} f_4P \\ \swarrow \quad \searrow \\ f_4 \quad f_3P \Rightarrow \beta \\ \quad \swarrow \quad \downarrow \quad \searrow \\ \quad f_3 \quad f_2 \quad f_1 \quad \dots \end{array}$$

At this point it would be tempting to let α spell out f_4 . But phrasal spell-out targets phrasal nodes, which means that even though α lexicalizes f_4 , the configuration in (30) is not right: the phrasal node that dominates f_4 is no match for the phrasal node that contains f_4 in the Lexicon: (29). Provided that there are no other entries to lend a helping hand, the derivation is about to crash. A last chance is to create the right configuration via movement: in (31), morpheme α will be a suitable match for f_4 , as (29) corresponds to the phrasal node that immediately dominates f_4 , thus meeting the requirement imposed by phrasal spell-out:

$$(31) \quad \begin{array}{c} \beta \leftarrow f_3P \quad f_4P \Rightarrow \alpha \\ \swarrow \quad \downarrow \quad \searrow \quad \widehat{f_4} \\ f_3 \quad f_2 \quad f_2 \quad \dots \end{array}$$

The notion of phrasal spell-out, and that it may trigger movement to create an appropriate configuration, will feature prominently in the deriving of the correct morphological forms, so this is a detail that should be borne in mind.

What we have seen now in both cases is that displacement may take place exclusively to create a syntactic configuration which can be spelled out by the existing lexical entries in the given language. This is spellout-driven movement, a phenomenon proposed by Starke (2011a,b), who also discusses how spell-out driven movement can relate to both classical and remnant movement. As all other movement types, spell-out driven movement is subject to constraints: this is something we will look at close up in the course of the concrete derivations.

As a consequence of spellout-driven movement, the lexical items in a language can influence the derivations and the shape of the resulting syntactic configurations. Since lexical items and the chunk of structure they lexicalize differ from language to language (or even from language variant to language variant), spellout-driven movement creates different syntactic configurations in the different languages (or language variants) to ensure constituents that correspond to the lexical items of the given language. This way, spellout-driven movement provides a unique opportunity to capture syntactic variation between languages (or language variants). Lexical differences and the way they affect the derivation is what will account for both speaker variation and the individual differences between different root and affix types in my analysis of the Hungarian data, as well.

To make all this work, a further assumption made in Nanosyntax is the Exhaustive Lexicalization Principle (cf. Fábregas 2007, Ramchand 2008a):

- (32) *Exhaustive Lexicalization Principle.* Each syntactic feature in a cycle must be lexicalized before the derivation can proceed to the next cycle.

This means that unexpressed features in the syntactic structure cause the derivation to crash. Exhaustive Lexicalization prevents 'impoverishment': cases when syntactic structure escapes spell-out. Notice that this does not entail that each node receives overt phonological content, but that each node is replaced by a corresponding piece of structure and related information from the Lexicon. With this, the basic principles of Nanosyntax are covered, but as we proceed to the concrete derivations, more details are to unravel.

4.1.5 Life outside Nanosyntax: a quick glance at DM

Nanosyntax has a lot in common with other frameworks, especially Distributed Morphology. Both Nanosyntax and DM belong with non-lexicalist models. They have no generative lexicon; instead, words are assembled in the syntax, an approach that became known as 'syntax all the way down'.

The two frameworks, however, diverge from each other in important aspects. Some of the differences have already come to the foreground: while Nanosyntax assumes binary branching tree structure even within mor-

phemes, DM works with feature bundles. Nanosyntax relies on phrasal spellout, whereas DM stands firm about terminal spellout. The Superset Principle along with Exhaustive Lexicalization flies in the face of DM's Subset Principle: while in DM lexical entries are underspecified, and syntactic nodes can impoverish, Nanosyntax maneuvers with overspecified lexical entries, and unexpressed features in the syntax crash the derivation.

A further difference is how DM and Nanosyntax handle syntax-morphology mismatches. DM has an assortment of post-syntactic operations, such as Fusion, Fission, Impoverishment and a number of other devices to fix the discrepancies between syntax and morphology. These operations take place in a morphology module on the PF branch, and their task is to adapt the output of syntax to the vocabulary of the lexicon. For example, sometimes we have what seem to be two distinct terminals in the syntactic representation; yet in one language or another these nodes are spelled out by a single morpheme. In such cases, DM puts Fusion into service to create one terminal out of two adjacent heads. Fission is the reverse case: sometimes what DM considers to be a bundle of features needs to be split up for phonology. Or let us take Impoverishment: its role is to remove the redundant features and nodes from the syntactic representation. In Nanosyntax, Fusion and Fission disappear: they simply fall out of the mechanism of non-terminal spell-out. Impoverishment as such is incompatible with the Nanosyntactic view, which holds that unexpressed features in the syntax lead to a crash. However, as this is not the focus of this thesis, I will refrain from offering a thorough comparison with Distributed Morphology – or with other frameworks, for that matter. The relevant point that I wish to make here is that the line of research pursued in Nanosyntax works towards a unification of syntax and morphology: a model in which morphology is devoured by syntax.

I will not provide an extensive, in-depth presentation of Nanosyntax beyond this overview of the basic principles, either; some details are to emerge on the way, though. To find out more about Nanosyntax, the reader should consult Starke (2009, 2011a): Starke (2009) outlines the rudiments of Nanosyntax, with special focus on syncretism and idioms, while Starke (2011a) is concerned with what Nanosyntax's contribution is to large-scale issues such as parameters, the architecture of grammar or cross-linguistic variation. For further descriptions of Nanosyntax along with detailed case studies couched within the nanosyntactic framework, see Caha (2009), Pantcheva (2011), De Clercq (2013) and Rocquet (2013). Also Ramchand (2008a,b), Abels and Muriungi (2008), Lundquist (2008), Taraldsen (2010) Dékány (2011) use some form of Nanosyntax, just to mention a few works. For a more detailed comparison with Distributed Morphology, the reader is referred to Caha (2009), Dékány (2011) and Pantcheva (2011). For a discussion of the morphological module of Distributed Morphology, see Halle and Marantz (1993, 1994), Embick (1998), Harley and Noyer (1999), Embick and Noyer (2001, 2007), among others.

4.2 The spell-out of gapped structures

4.2.1 Intervening material disrupts the fseq

As it has come out in the previous sections, it is not a requisite that a syntactic tree and the lexical tree that spells it out be fully identical. But, as empirical studies couched within the nanosyntactic framework disclose, a fundamental constraint on phrasal spell-out is constituency: a syntactic tree must correspond to a (sub-)constituent of the lexical tree that spells it out. A practical consequence of the constituency constraint is that if a sequence that would normally be pronounced by a single morpheme gets disrupted by the insertion of some extra material, the two disconnected parts of the sequence will be spelled out by different morphemes. Let me illustrate this with two examples.

The first case in point is from Dékány's (2011) dissertation on the Hungarian DP. A minor issue Dékány (2011: 83-90) addresses is the obligatory deletion of the article in the presence of quantifiers [ex. 101, p. 87 in Dékány (2011)]:

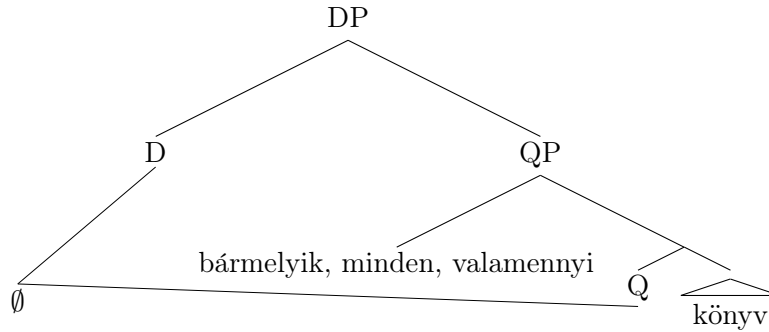
- (33) (*a) bármelyik / minden / valamennyi könyv
 the any / every / each book
 'any / every / each book'

As pointed out by Dékány, there are some well-definable circumstances under which article deletion fails to apply: namely, if the DP contains some extra material such as Dem, Poss2 or RelCl (for more information on these, cf. Dékány 2011). These are heads that are taken to be located between D and Q, and in their presence, the article surfaces in spite of the quantifier [ex. 103, p. 87]:

- (34) az én tegnap előadott minden javaslatom
 the I yesterday presented every proposal-POSS.1SG
 'every proposal of mine presented yesterday'

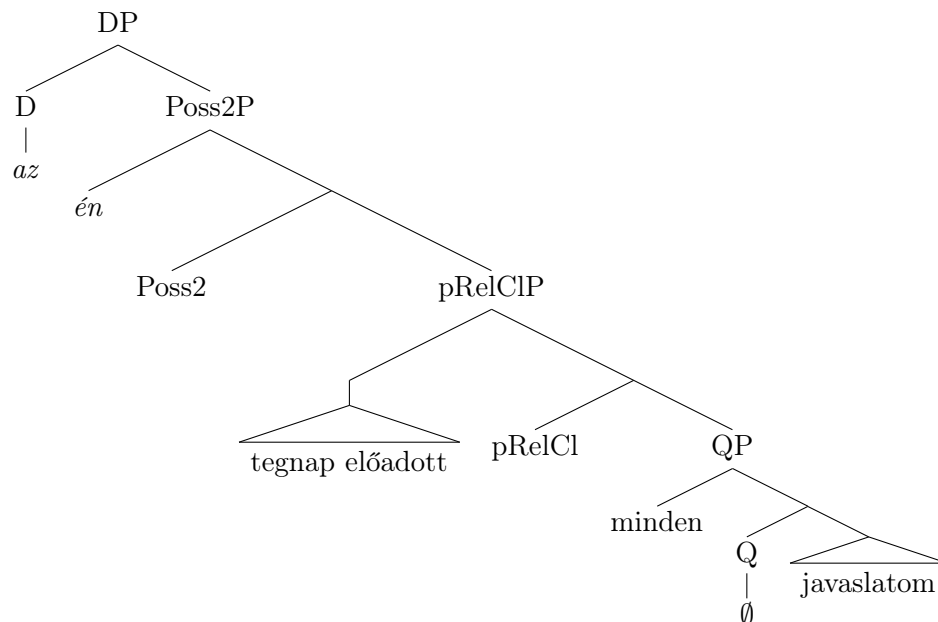
Dékány shows that these facts receive a natural explanation on the premises of Nanosyntax. For the first, if we allow a single formative to lexicalize a series of adjacent heads, in the apparent instances of article deletion the quantifier lexicalizes both Q and D [ex. 102, p.87]:

(35)



That allowed, cases in which article deletion fails to apply appear to be a consequence of intervening material that separates these heads. When D and Q are disconnected from each other by intervening material, they can only be spelled out separately. As spell-out proceeds bottom-up, the quantifier pronounces Q, and the language provides an article that can take care of D. This way, it is an article and a quantifier that will appear on the two sides of the intervening constituent(s) [ex. 104, p. 87]:

(36)



A different, but in essence similar, case in point is provided by Ronai (2012, 2013), who deals with the mysteries that surround the Romanian particle *să*. Ronai (2012) establishes in her work that neutral Romanian sentences in the subjunctive involve only one complementizer, the invariable particle *să*:

- (37) Vreau să vină Andrei.
 want-1SG.IND SĂ come-3SG.SUBJ Andrei
 'I want Andrei to come.'

However, in the presence of left-dislocated material such as focus or topic, *să* will co-occur with another complementizer, *ca*, which appears in front of the left-dislocated constituent:

- (38) Vreau ca Andrei să vină.
 want-1SG.IND CA Andrei SĂ come-3SG.SUBJ
 'I want Andrei to come.'

As pointed out by Ronai (2013), apart from adverbial clauses with a strong "purpose" semantics, *ca* cannot appear before *să* in the absence of intervening material:

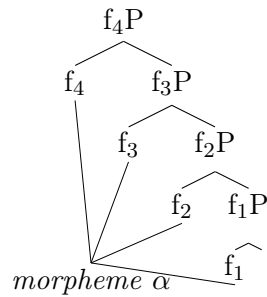
- (39) *Vreau ca să vină Andrei.
 want-1SG.IND CA SĂ come-3SG.SUBJ Andrei

To account for these facts, Ronai (2012, 2013) provides a nanosyntax-style sketch of an analysis together with a proposal that fits the mainstream. The nanosyntax-style account proceeds along the following lines: *să* lexicalizes at least two features: a "C-like" feature and an inflectional one. In the absence of intervening material, *să* can and will spell out both features. However, if some constituent intervenes between the respective nodes that host the inflectional and the "C-like" feature, it will not be possible to lexicalize the features in question by a single formative. In such cases, *ca* is used to spell out the "C-like" feature of the clause.

Both in the case of Hungarian and Romanian, the drift of the data is straightforward: there is a formative α , which has a certain function. The insertion of extra material x triggers the appearance of another formative β , which takes over some of the functions of α , with x sandwiched in between α and β . The respective accounts provided by Dékány (2011) and Ronai (2012, 2013) demonstrate that such a data set translates easily into a nanosyntactic account: if α lexicalizes a series of terminals from f_1 to f_n , but the computation assembles a tree in which x intervenes in the middle of this sequence, the constituency requirement for spell-out is not met. Consequently, α cannot spell out the structure from f_1 to f_n with x wedged in somewhere in the sequence. Therefore, another formative, β , lends a helping hand by spelling out those parts of the sequence α cannot tackle due to the presence of x .

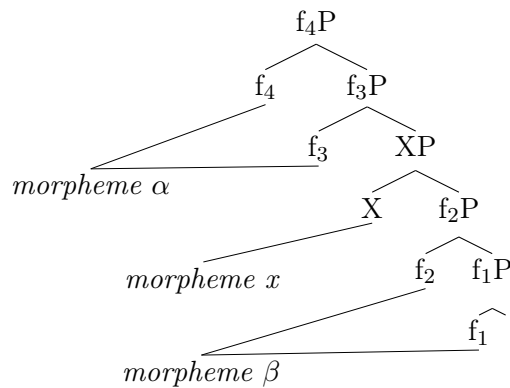
The abstract tree structures below illustrate how this phenomenon can be captured on the technical level. Consider (40) first:

(40) Lexical entry for α :



Here, the morpheme α spans the entire sequence $f_1 - f_2 - f_3 - f_4$. However, in (41) the node X is material that cannot be pronounced by α , and it disrupts the sequence $f_1 - f_2 - f_3 - f_4$ right in the middle. As spell-out starts bottom-up, everything goes well until spell-out hits the node f_2 . There, α gets stuck: it cannot expand any further, as X is blocking its way. Therefore, f_3 and f_4 need to be taken care of by a separate morpheme β :

(41) Tree assembled in the syntax and spelled out:



To summarize: one of Nanosyntax's core hypotheses is that a single formative can lexicalize a sequence of features, and this premise makes it possible to account for a broad and varied range of phenomena (e.g. Ramchand 2008a,b, Lundquist 2008, Caha 2009, Fabregas 2009, Taraldsen 2010, Pantcheva 2011, Dékány (2011) among others). At the same time, the lexicalization of a sequence of terminals is constrained by a constituency requirement. A consequence of the constituency constraint is that if a sequence which in principle

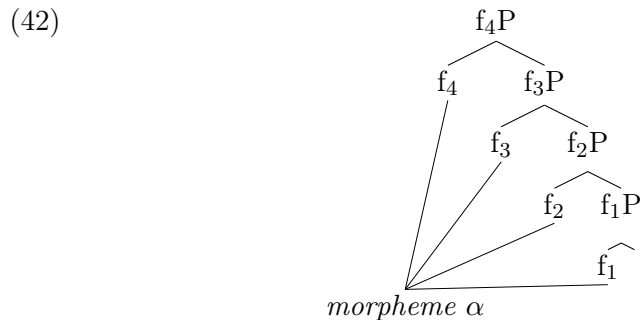
can be pronounced by a single formative gets disrupted by the insertion of some additional material, then the given formative will not be able to spell out the sequence across the intervening constituent. This way, intervening material disrupts spell-out by a single formative and gives rise to several morphemes instead of one single morpheme.

In what is to come, I develop a proposal based on the idea that not only extra constituents disrupt spell-out by a single formative, but also gaps – missing material – intervene. I begin elaborating on this concept in the next section.

4.2.2 Missing material disrupts the fseq

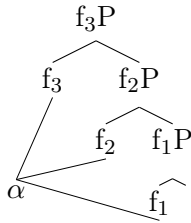
We have now seen that the insertion of additional material disrupts the spell-out of a sequence of terminals which otherwise could have been lexicalized by a single formative. In what is to come now, I would like to explore what happens in the reverse case: namely, when there is material absent from a functional sequence that could, in its original form, be pronounced by a single formative. I will propose that missing material from a sequence of terminals that is originally lexicalized by a single formative will disrupt the spell-out of a sequence the same way as intervening constituents do.

Let us first consider a lexical item α that can spell out the following structure:

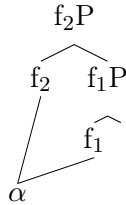


Now as the nanosyntactic proposition goes, if the syntax builds any proper "subtree" of this structure, that structure will be spelled out morpheme α , provided that there is no closer match:

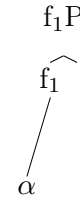
(43)



(44)

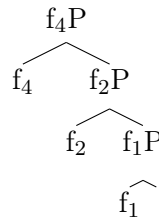


(45)



However, it is less straightforward how the derivation proceeds, if the syntax happens to build a structure with a "gap" inside the sequence – like the one below:

(46)

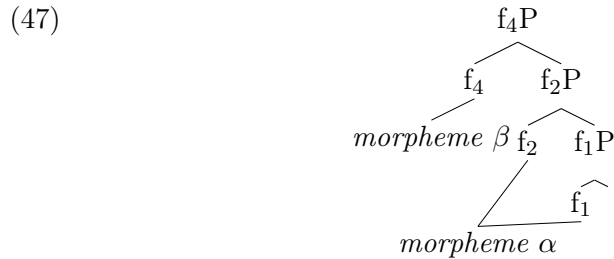


In this tree, the layer above f_2P is not f_3P , as set in the lexical entry of morpheme α in (42), but f_4P . In the beginning, this yields no problem whatsoever, and spell-out proceeds as before: the computation adds node after node, and the spell-out mechanism applies after each insertion. This way, morpheme α can pronounce the layers up to the "gap", where f_3 is missing.

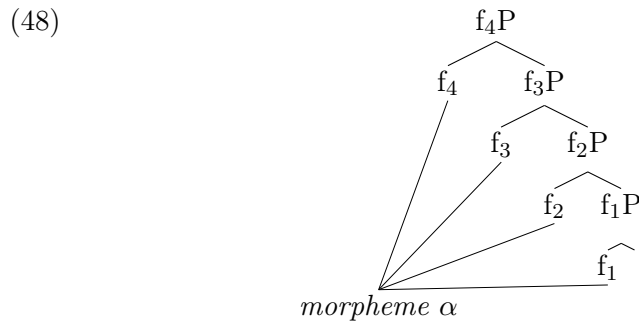
At this point, there are two theoretical possibilities. One option is that spell-out does not care about the gap, hops over it and continues with the spell-out of f_4 . The alternative is that the spell-out procedure gets disrupted by the presence of the gap. I submit that the second approach, on which the gap disrupts, offers an interesting solution to the morphology vs. syntax/semantics conflict laid out in the previous chapter. Moreover, the conjecture that both extra material and gaps disrupt spell-out receives a unified account in terms of constituency: the syntactic tree in (46) is not a constituent of the lexical tree in (42). In other words, the constituency constraint, which is supported by a body of data with regard to intervening material, leaves no room for gaps, either.

Let us follow up on what happens with the structure in (46), if the presence of a sequence-internal gap disrupts the spell-out of the functional sequence. On this scenario, morpheme α cannot be used to pronounce f_4 : it simply cannot lexicalize $f_1 - f_2 - f_4$ across the gap created by the absence of f_3 , as $f_1 - f_2 - f_4$ is not a constituent of the lexical tree $f_1 - f_2 - f_3 - f_4$ stored in

the entry of morpheme α in (42). So whatever is above the gap needs to be pronounced by another lexical item. Now, if the language has a morpheme β tailor-made to pronounce f_4 , the derivation is rescued:



This way, the tree with the gapped structure in (47) will be pronounced by more morphemes than the corresponding structure without the gap, which I repeat here for simplicity:



This gives rise to an apparent contradiction between syntax/semantics and morphology: bigger but cumulative structures can be lexicalized by fewer formatives than smaller but gapped structures.

Put in a nutshell: a consequence of the constituency requirement on phrasal spell-out is that gaps in the functional sequence disrupt spell-out by a single dedicated morpheme. Therefore, some additional formative is needed to complete the spell-out process of the given sequence. What I put forward here is that it is precisely this phenomenon – the gapping of the functional sequence – that misleadingly yields an extra suffix with half-passives, and produces an apparent contradiction between morphology and syntax/semantics.

4.3 Putting together the fseq

We will now proceed to identify that section of the functional sequence that is responsible for the differences between the T1DP, half-passive and 2DPC forms.

4.3.1 A formalization of the T1DP/2DPC opposition

Section 3.3 pointed out that 2DPC always patterns with the transitive-causative construction with respect to argument structure and verb morphology:

(49)

| <i>V-ing</i> | ARGUMENT STRUCTURE | MORPHOLOGY |
|-------------------------|--------------------|------------|
| 1. T1DP | monadic | inch* |
| 2. 2DPC | dyadic | caus* |
| 3. transitive-causative | dyadic | caus* |

As both T1DP and 2DPC involve a single participant, the division in (49) may appear counterintuitive. It is, however, improbable that the consistency with which speakers position the cutoff point should be fortuitous. And indeed, 2DPC and the transitive-causative construction may have more in common than meets the eye.

It has been demonstrated that 2DPC forms are used in contexts where the undergoer actively participates in the bringing about of the *V-ing* that affects it: we said that the sole, affected participant of the *V-ing* somehow inflicts the *V-ing* on itself. So it seems that the entity involved in the *V-ing* the 2DPC construction expresses behaves both as a causer/initiator and an affected participant, an undergoer. One possible way to make sense of the traits of the 2DP construction along with the pattern in (49) is to draw on thematic roles. It seems evident that T1DP involves a single thematic entity, typically a source or a theme/patient. With 2DPC, on the other hand, the entity involved functions both as the initiator/causer and the undergoer of the *V-ing*. Saying that one of the co-indexed DPs in 2DPC possesses an agent-like θ -role and the other DP a theme/patient-like θ -role captures the intuition that the participant in the construction inflicts the *V-ing* on itself. This means that 2DPC avails itself of the very same theta roles as the transitive-causative construction, – but involves only one entity, which performs the duties of the causer and those of the undergoer in one. If this is correct, there may well be a reason for why 2DPC avails itself of two DPs: after all, there are two thematic roles to bear. If so, then the reflexive DP is not a dummy element but a θ -role holder. This way, the difference between 2DPC and the transitive-causative construction boils down to the

identity of the causer/undergoer: in the transitive-causative construction the causer and the undergoer have disjoint reference; in 2DPC, the causer and the undergoer is one and the same entity, denoted by the causer DP and a co-indexed undergoer which materializes as a reflexive pronoun. In the transitive-causative construction, the causer acts on some distinct entity; in 2DPC, the causer acts on itself while, for comparison, in T1DP constructions there is no 'acting on' or 'inflicting upon': the single entity involved in the *V-ing* simply exhibits or undergoes the *V-ing*.

If we subscribe to this reasoning, the following pattern emerges:

- (50) a. T1DP: θ -1
 b. 2DPC: θ -1_{*i*}, θ -2_{*i*}
 c. transitive-causative: θ -1_{*i*}, θ -2_{*j*}

On this particular approach, the differences between 2DPC and the transitive-causative construction boil down to a co-indexing issue: it will be presumed that inasmuch as there is no morphological or other clues to separate 2DPC and transitive-causative constructions, the two can be treated as manifestations of one and the same thing. Therefore, the morphosyntactic account I will provide for 2DP constructions can also be directly applied to transitive-causative forms.

To sum up: I hypothesize that the difference between T1DP and 2DPC comes down to the number of θ -roles involved, and the difference between 2DPC and the transitive-causative is a matter of co-indexing. Nonetheless, I would like to note in passing that even though my choice is to resort to θ -roles to carry out the analysis, the only prerequisite that stands as crucial for the analysis is that the three structures T1DP, half-passive and 2DPC are in a containment relation. How exactly the assignment of cumulative features/structures is implemented is not of paramount importance for the analysis to work.

4.3.2 Incorporating the half-passive

It has been argued at length that the half-passive forms a transitional category between T1DP and 2DPC. I will now proceed to show how the half-passive can be incorporated into the system proposed in the previous section. Starting with thematic roles, it seems plausible that the half-passive construction is also associated with two distinct θ -roles: in any given event a half-passive describes, there is always some unpronounced but strongly implied causer involved in addition to the explicit undergoer. Also the agentivity diagnostics in section 2.4.2 testified to the presence of an invisible initiator. Therefore, I will hypothesize that both 2DPC and the half-passive boast two θ -roles, but the external argument in half-passives is invisible. This fits well with native speaker intuitions, which claim that in half-passives the causer is both there and not there.

A familiar observation about eventive passives is that the overt/covertness of the external argument correlates with the presence/absence of a preposition⁶:

(51) Mean things were said (by both of them).

As Michal Starke (p.c.) observes, this practically means that the external argument remains invisible unless it gets Case from a preposition, very much in the vein of the old notion of the Case Filter in GB. Capitalizing on this insight, I hypothesize that a DP without Case cannot surface overtly. This allows me to capture the difference between 2DPC and the half-passive: both constructions have an external θ -role, but the external argument of the half-passive remains unpronounced in the absence of Case.⁷

Provided that the lack of Case makes a DP invisible for PF, the following properties can be assigned to the half-passive:

(52) HP: $\theta-1_i, \theta-2_j, \text{Case}_{Nom}$

Compare this with the other constructions:

(53) a. T1DP: $\theta-1, \text{Case}_{Nom}$
 b. 2DPC: $\theta-1_i, \theta-2_i, \text{Case}_{Nom} \text{Case}_{Acc}$

Put together, the following scale emerges:

(54) T1DP \subset HP \subset 2DPC, where:

a. T1DP: $\theta-1, \text{Case}_{Nom}$

b. HP: $\theta-1, \theta-2, \text{Case}_{Nom}$

c. 2DPC: $\theta-1, \theta-2, \text{Case}_{Nom} \text{Case}_{Acc}$

This results in encompassing structures: 2DPC contains the half-passive, and the half-passive in turn encompasses T1DP. Provided that (54) is on the

⁶For the 'self-action' argument in favor of the presence of an invisible causer in eventive passives which lack a *by*-phrase, cf. e. g. Baker, Johnson and Roberts (1989), Kratzer (2000).

⁷A question that naturally arises at this point is why the causer cannot ever appear in half-passives, not even the form of a *by*-phrase. A probable answer is that canonical passives are bigger/higher/involve more functional structure than half-passives, and *by*-phrases for some reason only get licensed from there and upwards. An alternative is that canonical passives are a subtype of the half-passive (as they are more specific), and there is some special requirement that the subtype meets but not the cover category. However, a satisfying answer would require an inquiry into the passive to an extent that is clearly beyond the scope of the present work.

right track, the differences between the three constructions are captured by changing two variables:

- (55) a. the number of θ -roles (θ issue)
 b. the number of overtly and covertly present arguments (proposed to be a Case issue)

The manipulation of these two parameters gives a neat three-way distinction. From a theoretical perspective, the assumption that is critical for my approach is that a θ -role (bearing DP) without Case will contribute a covert (implicit, phonologically empty) but semantically (and by indirect syntactic means) detectable argument. This way, an approach that falls back on θ -roles makes a cumulative structure possible for T1DP, the half-passive and 2DPC, with the three constructions containing one another.

4.3.3 The preliminaries of the fseq

The close-up study of this facet of the verbal domain has now established a gradient scale of constructions that grow from genuine intransitive and to full-fledged transitive. The constructions under investigation are argued to be in a subset/superset relation, differing first and foremost with regard to agency and Case:

- (56) a. T1DP: θ -1, Case_{Nom}
 b. HP: θ -1_{*i*}, θ -2_{*j*}, Case_{Nom}
 c. 2DPC: θ -1_{*i*}, θ -2_{*i*}, Case_{Nom} Case_{Acc}

Correspondingly, I will assume that the relevant fragment of the functional sequence consists of the nodes K1 and θ 2. θ 2 is responsible for the introduction of a second, external/agent-like θ -role, while K1 ensures the Case which will be associated with the bearer of the internal θ -role. This provides the following, contrastive functional ingredients for the respective constructions:

(57)

| | | |
|------|----|------------|
| T1DP | | |
| HP | | θ 2 |
| 2DPC | K1 | θ 2 |

The internal θ -role is shared by all three constructions, and I assume that it enters the structure somewhere below θ 2 but above the lexical-semantic layers contributed by the root. Nonetheless, as the contribution of θ 1 is inconsequential for the analysis, I choose to disregard it in the representations to make the derivations more intelligible.

4.3.4 Multiple fseqs and the preliminaries of a gap-based analysis

Lexicalization across fseqs paves the way for a gap solution

In this section I will investigate in broad terms how a gapped functional sequence would resolve the morphology vs. syntax/semantics mismatch in the case of Hungarian half-passives. Recall that the half-passive was argued to be a problem because it is morphologically more complex than the transitive-causative/2DPC construction, which is claimed to structurally contain the half-passive:

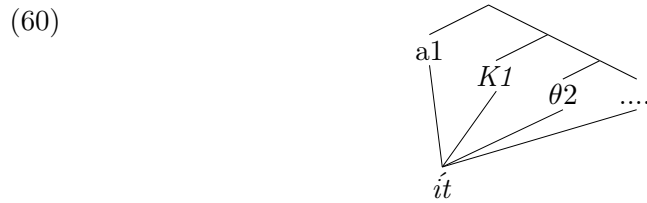
- (58) a. half-passive \subset 2DPC
 b. szak.ít.ód \subset szak.ít

What I would like to propose is that a resolution of this paradox becomes possible on condition that *K1-θ2* lexicalizes together with the lowest member of the next sequence. Let me elaborate on what this means.

It is undisputed that the functional sequence does not end with *K1*: a number of higher projections are needed to derive a full-fledged clause. The features I hold responsible for the differences between T1DP, the half-passive and 2DPC, are Accusative Case and an external θ -role. In a traditional framework, these are both functions associated with *v*, which means that the domain I examine here roughly corresponds to the *v* of mainstream approaches. According to the literature, the head just above *v* (or above the series of functional heads that correspond to *v* on the present account) is aspect. If correct, this means that the next sequence consists of heads related to aspect. I will refer to the bottommost member of this sequence as *a1*. Nevertheless, I find it necessary to underline that the exact identity of this terminal *a1* above *K1* is not just outside the domain of the dissertation, but is also immaterial for the analysis. All that matters is the indisputable fact that there is something above *K1* in the syntactic structure of a clause; my suggestion is aspect, but it is up to each and every reader to substitute aspect with whatever s/he believes to be located above *K1*. The boundary between the two functional series is marked by parallel lines:

- (59) ... - a1 || K1 - θ2 - ...

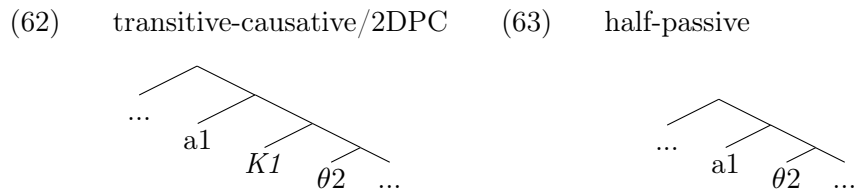
My proposition is that in Hungarian, a single formative – for instance, a causative suffix like *ít* – can span the entire sequence *a1*, *K1* and $\theta 2$ across the fseq boundary:



I will further hypothesize that in (liberal speakers') Hungarian, *a1* can also be spelled out on its own, and the formative that does the job is *Ód*:



It has already been established that *K1* is present in transitive-causative/2DPC constructions, but is missing from the half-passive:



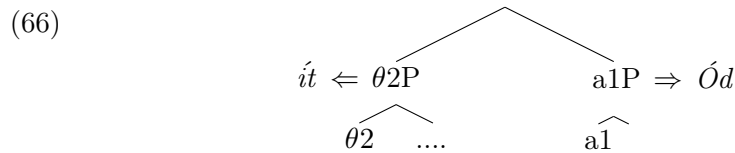
The missing layer *K1* creates a gap in the functional structure of the half-passive. Therefore, the causative suffix will be unable to spell out the sequence in (63) on its own: *a1-θ2* is no longer a constituent of *a1-K1-θ2* in the entry of the causative suffix in (60). The data further suggest that Hungarian has no morpheme designated specifically to pronounce the sequence *a1-θ2* without *K1*. This means that there is only one strategy left to spell out the sequence *a1-θ2*, and that is to go compositional. Recall that the Superset Principle allows a given morpheme to pronounce a (sub)tree in the syntax if it is identical with or is a constituent of the lexical tree associated with the morpheme in question. Thereby, *θ2* can still be pronounced by the causative suffix *ít*:



At this point, the only way to proceed is to resort to *Ód*. But this is not completely unproblematic, either. The reader will recall that phrasal spell-out targets phrasal nodes, and the phrasal node that dominates *a1* does not correspond to the phrasal entry (61), repeated here for convenience:

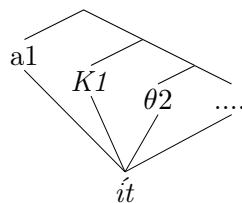


Consequently, spell-out forces movement of *θ2* (and whatever is below) above *a1*. The resulting configuration can be spelled out by the respective morphemes *-ít* and *Ód*:

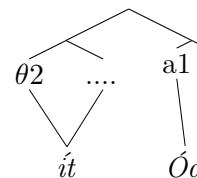


This way, even though the half-passive consists of less structure – fewer functional heads – than the transitive-causative/2DPC form, the gapped functional sequence in half-passives is associated with more morphemes than the transitive-causative/2DPC structure. Here are the two structures, placed next to each other:

(67) 2DPC/TR-caus



(68) Half-passive



While in transitive-causative/2DPC constructions, the full sequence *a1-K1- θ 2* will be spelled out by a single formative (e.g. a causative suffix like *-ít*), in half-passives the smaller, gapped structure *a1- θ 2* needs two distinct morphemes to get pronounced: the exact same formative used in the corresponding transitive-causative/2DPC structure plus *Ód*. Thereby, the gapping of the functional sequence in half-passives accounts for the observed morphology vs. syntax/semantics mismatch.

So the gist of the proposal is the following: the half-passive contains a gap in the Case/ θ sequence in contradistinction to the 2DPC/transitive-causative construction. This entails that the relevant portion of the functional sequence can be lexicalized by a single formative in 2DPC/TR-caus constructions, but not in half-passives, on account of the constituency constraint on spell-out. Therefore, an additional morpheme is needed in half-passives to implement the spell-out of the relevant portion of the functional sequence above the gap. This is what gives the illusion that the half-passive form contains more structure than the transitive-causative/2DPC form. But in reality, as the proposition goes, the half-passive is morphologically more complex exactly because it is 'smaller' with a gap, and gaps disrupt the spell-out of a functional sequence by breaking it into two or more pieces. Under such circumstances, it may be necessary with more morphemes to spell out less structure.

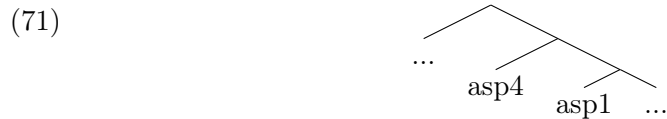
This section has only provided a brief illustration of the gap resolution; the details of the account will be fleshed out in the coming sections. But there is one more question I would like to address here:

(69) Why is it that *a1* is always present in the structure but *K1* can go missing?

The answer I would like to give to this question is the following. The functional sequence of a clause constitutes of a number of smaller fseqs, which relate to a given function in the clause. As it has already been touched upon, one such fseq may be related aspect, another to θ -role/case; yet another to tense and so on:

(70) ... || asp_n - ... - asp2 - asp1 || Case_n - ... - Case2 - Case1 || ...

The idea is that as long as the clause contains a given mini-fseq, the bottommost member of the mini-fseq at issue must be present due to semantic considerations. This is because Nanosyntax works with unary features, where additional heads are gradual restrictions on the prior. This implies that the higher heads simply do not make sense without the first head, which serves as the base line for the entire mini-fseq. Therefore, the higher layers in a mini-fseq can be absent, but the prediction is that we do not find cases in which the bottom feature is missing but the rest of the mini-fseq is there. Neither will I have gaps *within* a mini-fseq, such as (71) below:



Returning to the concrete case with the sequence $a1 - K1 - \theta2$, the features $a1$ and $K1$ were claimed to be adjacent in the big functional sequence of a clause, but the two are taken to belong to different mini-fseqs. This means that $a1$ has to be there because that is the bottommost in the (aspect)-series, whereas $K1$ is topmost in the lower, Case/ θ series. Therefore, $K1$ is free to go missing:

(72) ... - a1 || K1 - $\theta2$ - ...

L: accounting for the underivable

An important question that has not been addressed so far is this:

(73) How come conservative speakers cannot produce half-passive structures?

This question is especially pressing because, as the reader will recall, $\acute{O}d$ is present in the repertoire of conservative speakers as a fully productive anticausative suffix – it just cannot be used by conservatives to produce half-passives. So in order to derive the correct pattern, one function of $\acute{O}d$, the half-passive, has to be blocked for conservative speakers; at the same time, it needs to be ensured that conservative speakers can use $\acute{O}d$ as a productive anticausative suffix.

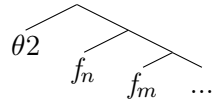
My proposition is that the gap formula, originally devised to derive the half-passive for liberal speakers, can also be used to account for conservative speakers inability to produce half-passive forms. But while it was necessary with a gap in the *functional structure of the half-passive* to derive it for liberal speakers, to account for the unavailability of the half-passive form for conservative speakers, I will posit a gap in the *lexical structure of conservative $\acute{O}d$* . The account runs as follows. That for some speakers (liberals) the $\acute{O}d$ suffix is ambiguous between an anticausative and a half-passive use is something I capture by positing that in the two constructions, $\acute{O}d$ attaches at different heights/to structures of different sizes: T1DP lacks the $\theta2$ -layer, while the half-passive has it. The layers below $\theta2$ are, for the moment, both

unknown and immaterial, so provisionally, I let the random labels f_n and f_m stand for them:

(74) Structure which $a1$ attaches to in T1DP:



(75) Structure which $a1$ attaches to in the half-passive:



Thus, there is no size difference between the anticausative and half-passive uses of liberal $\acute{O}d$: the difference between the two functions of $\acute{O}d$ comes down to a size difference between the structures $a1$ attaches to:

(76) Liberal $\acute{O}d$:

$$\text{a1P} \Rightarrow \acute{O}d_{\text{liberal}}$$

$$\widehat{\text{a1}}$$

A natural alternative could be to assume that half-passive $\acute{O}d$ structurally subsumes anticausative $\acute{O}d$, but I have not found a way to derive the overall pattern like that.

On the other hand, I do assume that there is a size difference between liberal $\acute{O}d$ and conservative $\acute{O}d$. Moreover, I put forward that conservative $\acute{O}d$ is not just 'bigger' than liberal $\acute{O}d$, but it also contains a gap. It is this particular shape that prevents conservative $\acute{O}d$ from combining with structures that contain $\theta2$, thereby blocking the half-passive use. As a consequence, conservative speakers have no way to spell out the half-passive, so they are forced to use alternative strategies, such as rephrasing of the context to avoid half-passive structures.

The technical implementation of the proposal runs like this. We have just seen that for liberal speakers, $\acute{O}d$ only lexicalizes $a1$. At the same time, I hypothesize that for conservatives speakers, $\acute{O}d$ spans both $a1$ and another terminal, which will be referred to as L :

(77) Conservative $\acute{O}d$:

$$\begin{array}{c} \text{a1P} \Rightarrow \acute{O}d_{\text{conservative}} \\ \text{a1} \quad \text{L} \end{array}$$

I take L to be located right below $\theta 2$ in the functional sequence; it will be explained straightaway why.

(78) - **a1** - $K1$ - $\theta 2$ - **L** -

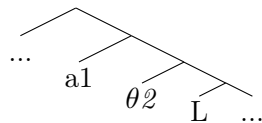
Similarly to $a1$, L is also invariably present in all the three constructions under discussion. The revised functional ingredients of the three constructions are shown in (79); the shaded cells are those that are always present, irrespective of what construction it is:

(79)

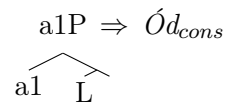
| | | | | |
|------|----|------|------------|---|
| 2DPC | a1 | $K1$ | $\theta 2$ | L |
| HP | a1 | | $\theta 2$ | L |
| T1DP | a1 | | | L |

So on the one hand, the $a1 - L$ sequence that conservative $\acute{O}d$ lexicalizes contains a gap across $K1 - \theta 2$, which means that there is no way for conservative $\acute{O}d$ to pronounce $K1$ or $\theta 2$. On the other hand, the half-passive structure involves $\theta 2$. Thereby, conservative $\acute{O}d$ is unsuited for pronouncing the relevant chunk of structure in the half-passive, as it leaves $\theta 2$ unpronounced.

(80) Half-passive structure:

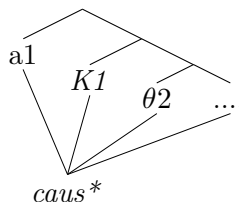


(81) Entry for conservative $\acute{O}d$:



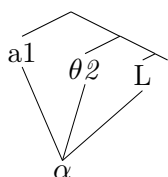
Neither can a causative suffix lend a helping hand, even though causative suffixes span over $a1 - K1 - \theta 2 - \dots$:

(82) Entry for a *caus** suffix:



The constituency requirement on spell-out makes it simply impossible to combine the entries (81) and (82) in such a way that they could spell out (80). At the same time, it can be conjectured that neither conservative nor liberal speakers have a formative in their lexicon that would lexicalize the half-passive sequence, or else the language would have a synthetic half-passive suffix:

(83) Non-existent entry for Hungarian speakers:



Thereby, conservative speakers have no compositional way to spell out the half-passive, and the possibility for a matching lexical item with a gap of the right size can also be excluded. This amounts to the half-passive being underivable for conservative speakers. The details of the analysis will be fleshed out in the course of the concrete derivations, but before that let us take a closer look at *L*.

As for the identity of *L*, an important clue is that it always has to be present. If we now go back to the parallel discussion on *a1* concerning the existence of multiple fseqs, the reader will recall that the permanent member of any given fseq is its bottommost feature. This means that *L* must be the lowest member of the sequence which contains *K1-θ2*, which in turn strongly suggests that *L* must be related to Case/ θ -role. I have, however, no obvious candidate for *L* at the moment; neither do I wish to venture into guesswork about it. Therefore, I will leave the exact identity of *L* open for now, with the presumption that it is linked to Case or θ -role (or potentially some other function traditionally associated with *v*, cf. Appendix B.3). The finalized version of the relevant portion of the functional sequence is shown in (84),

with the boundaries between each functional series marked by parallel lines:

$$(84) \quad \dots - a1 \parallel K1 - \theta2 - L \parallel \dots$$

As pointed out before, the lowest member of each functional series is constant, while the rest may go missing. For easier visualization, consider (85); recall that the shaded cells denote the functional ingredients that are present at all times and in all constructions:

$$(85) \quad \begin{array}{|c|c|c|c|} \hline a1 & K1 & \theta2 & L \\ \hline \end{array}$$

To summarize: a key ingredient of the analysis is that the *a1-L* sequence conservative *Ód* lexicalizes contains a gap across *K1-θ2*. In the absence of a single formative with the right gap-size, the only alternative is to go compositional. However, the shape of conservative *Ód* along with the constituency requirement on spell-out makes the compositional strategy unfeasible. Therefore, the half-passive will be underivable for conservative speakers. This way, the difference between conservative and liberal speakers reduces to a lexical difference: *Ód* has different shapes for the two speaker types. Provided that the analysis is on the right track, we have evidence for a bottommost, case/*θ*-role-related terminal below *θ2*.

4.4 The lexicon: preliminary entries

4.4.1 (Non-)productivity

Productivity/non-productivity is an important factor in verb morphology: there are productive, non-productive and semi-productive suffixes. When it comes to fully idiosyncratic morphology, it is simply impossible to predict what suffix a particular verbal root goes with, while with semi-productive morphology there may be tendencies identified. Bad news as it is, idiosyncrasy cannot be eliminated: idiosyncratic information simply needs to be learnt and stored by the speakers of a language. When I set out to provide a comprehensive morphosyntactic analysis of the lower verbal domain in Hungarian, it is unavoidable to deal with a number of idiosyncratic suffixes and verb-suffix combinations. For this purpose, I adopt the use of complex entries from Starke's (2006, 2010) Nanosyntax classes in Tromsø.

Idioms, such as *kick the bucket* or *get the sack*, are composed of ordinary lexical entries, but when assembled, they are associated with a non-compositional meaning. As Starke (2005, 2006, 2009, 2010) points out, this is something that can be captured on the nanosyntactic approach, as non-terminal spell-out enables a lexical entry with idiosyncratic meaning to include a syntactic subtree, also an entire VP. The implementation happens

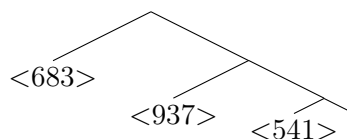
with complex entries: lexical entries which contain lexical entries. The idea is that the lexical entry of an idiom contains a syntactic subtree which makes reference to other entries, like *kick, the, bucket* or *get, the, sack*. This allows for the desired compositionality: the idiom has no phonological content specified, which allows it to inherit the phonological content of the individual entries it makes reference to. At the same time, the entry of the idiom includes an own conceptual content, which then overrides the conceptual content of the subordinate entries, in accord with the fact that kicking the bucket may have nothing to do with buckets or kicking. Here is an illustration; the individual entries are assigned a random number for easier reference, and as my concern at the moment is the relation between the lexical entries, syntactic trees are collapsed into a string in the lexical representation:

(86) Simplex entries:

- a. ENTRY <683>:
 Meaning: 'kick'
 Phonology: /kɪk/
 Syntactic structure (fictive): [a b c]
- b. ENTRY <937>:
 Phonology: /ðə/
 Syntactic structure (fictive): [p q]
- c. ENTRY <541>:
 Meaning: 'bucket'
 Phonology: /bʌkɪt/
 Syntactic structure (fictive): [k l m n]

And the complex entry that corresponds to the idiom:

- (87) ENTRY <8456>:
 Meaning: 'die'
 Syntactic structure:



Idiosyncratic morphology can be viewed as something very similar to idioms. In the case of idiosyncratic morphology, the complex entry connects a verb root and an idiosyncratic suffix. Let me give an example.

- (88) a. ENTRY <04>: \sqrt{gur} ('roll')
 Phonology: /gur/
 Syntactic structure (fictive): [*a b c*]
- b. ENTRY <30>: $-\acute{O}d_{conservative}$
 Phonology: /o:d/
 Syntactic structure: [*a1 L*]
- c. ENTRY <32>: $-Ul$
 Phonology: /ul/
 Syntactic structure: [*a1 L*]

Entry <04> is the verbal root 'roll', with the relevant phonological, conceptual and syntactic information. Entry <30> corresponds to $-\acute{O}d$, the default anticausative suffix in Hungarian. Entry <32> is another inchoative suffix. Both $-\acute{O}d$ and $-Ul$ are functional morphemes: that they serve as inchoative suffixes reads off from their syntactic structure: the features they contain. I assume that non-productive anticausative suffixes like $-Ul$ has the same structure as the productive anticausative suffix $-\acute{O}d_{conservative}$ of conservative speakers, something I will come back to later on. In addition to these entries, the Lexicon has a complex entry that connects the root \sqrt{gur} with the idiosyncratic anticausative suffix $-Ul$:

- (89) a. ENTRY <0432>:
- ```

 / \
 / \
 <04> <32>

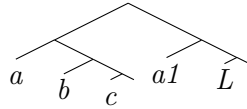
```

Notice that while the complex entry of an idiom has its own conceptual content, there is no need for that with idiosyncratic morphology: the meaning of the complex structure is put together from the meaning of its ingredients: in this case, of <04> and <32>. In some cases, however, it may be necessary to override the phonological content of the subentries, typically when the root undergoes some bizarre mutation in addition; such cases are discussed in Appendix A.2. As an entry on its own right, a complex entry is also entitled to impose its own phonology or semantics; for more on overriding, cf. Starke (2009). I will also touch upon this issue in Appendix A.2.3.

Now, let us assume that syntax builds the following structure, and the

goal is to derive the inchoative form of the root  $\sqrt{gur}$  ('roll'):

(90)

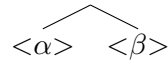
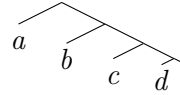
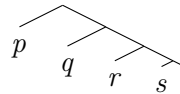


I follow Starke (2010) in assuming that idiosyncratic suffixes are stored in a private part of the Lexicon to be unavailable to the general search engine of spell-out. Entries in this garage will only be accessed when they are being specifically searched for, *i.e.* when there is an entry with a lexical tree whose terminals point to some address in the private Lexicon (in other words, when a complex entry makes reference to a private entry). Placing some lexical items into the open Lexicon and others into a private garage sounds, of course, arbitrary, but the distinction language makes between predictable, productive vs. idiosyncratic, unpredictable morphology is correspondingly arbitrary: there is no way to get away from this fact of natural language. By virtue of being an idiosyncratic suffix, *-Ul* is parked in the garage, where it cannot be accessed by syntax. Productive *-Ód*, on the other hand, is stored in the open Lexicon, and is thereby visible for the computation and the spell-out procedure. Spell-out is bottom-up, so at the bottom node, *L*, the spell-out mechanism will pick productive *Ód*: at this point, idiosyncratic *-Ul* is invisible for the computation. The same happens a node higher: for the moment, *a1 - L* is also pronounced as *Ód*. At the next step, the spell-out procedure reaches the top node. For this constituent, there is a tailor-made entry: <0432>, which combines the desired root with the idiosyncratic suffix *-Ul*. Consequently, spell-out overrides the previous spell-out results, and replaces it with the wanted form *gur-Ul*. For other roots, such as *tép*, there is no need for override:

- (91) a. ENTRY <03>:  $\sqrt{tép}$  ('tear')  
 Phonology: /te:p/  
 Syntactic structure: [ a b c ]

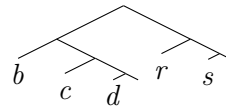
Here, there is no complex entry associated with <03>, so spell-out goes for the default option: *-Ód*.

Before concluding the discussion on the encoding of idiosyncrasy, another remark is in order. Nanosyntax holds that lexical items can contain syntactic phrases. This implies that a subordinate entry – an entry that is being referred to by a complex entry – may itself store an entire tree structure. By the Superset Principle, not just the entire lexical tree in the subordinate entry, but also any subconstituent of it can spell out a given syntactic representation, as long as the two match each other. Here are three entries:

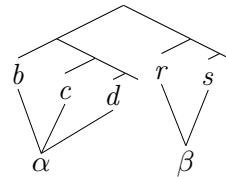
(92) a.  $\langle\alpha\beta\rangle$ :b.  $\langle\alpha\rangle$ :c.  $\langle\beta\rangle$ :

If the syntax has assembled the tree structure in (93), the complex entry  $\langle\alpha\beta\rangle$  still fits the description by the Superset Principle:

(93)



(94)



We will see more of how complex entries work in the course of the derivations: for now, what we should take with us is that idiosyncratic morphology is stored in a private place in the Lexicon, and is only accessed by complex entries which connect the idiosyncratic suffixes with the compatible roots.

#### 4.4.2 Variation

On the nanosyntactic approach, variation is reduced to the lexicon. What this means is that in different languages or language varieties, lexical items have different shapes. A certain functional sequence is lexicalized by formative  $f1$  in one language or language variety; in another language or language variety, maybe two or three distinct formatives lexicalize the different chunks of the very same sequence. As only constituents can be spelled out, the shape of the different lexical items triggers different spellout-driven movements in the different languages or language varieties.

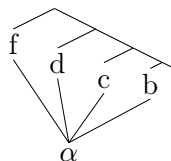
This setup implies that different speaker types will have different lexical

entries. In the context of the present work, this means that I will have to provide both a liberal and conservative lexicon. In the course of the derivations we will see how the different lexicons result in different syntactic trees, spellouts and grammaticality judgements for the two speaker types. Here, I will rough out the preliminary lexicons of liberal and conservative speakers for the main verb and suffix types; we will see in the course of the derivations that minor changes will be necessary once the details emerge.

### Liberal speakers

The section provides liberal speakers' preliminary lexical entries for a representative sample of roots, *caus\** and *inch\** suffixes. Thus far, I have only used trees to graphically represent the lexical structures associated with the entries under discussion. However, the derivation will make reference to a high number of entries, and a more convenient way to designate the syntactic structures associated with the entries is in a table format. Let us assume that an entry contains the following tree structure:

(95) <356>



The tree structure representation can easily be translated into a table. The top row shows the abstract functional sequence, and the row with entry <356> shows the terminals  $\alpha$  lexicalizes:

(96)

| abstract fseq | g | f | e | d | c | b | a |
|---------------|---|---|---|---|---|---|---|
| 356. $\alpha$ |   | f |   | d | c | b |   |

The reason why this simplification can be carried out is because there are no moved constituents in the lexical trees associated with the different lexical items (or at least there is no need for moved constituents in the derivations which will be presented here). This means that an enumeration of the terminals a lexical tree consists of is sufficient to reconstruct the full lexical tree in view of the universal functional sequence. In what follows, I will use the tree structures and the table format interchangeably, depending on what is most efficient in a given context.

Before providing the preliminary lexical entries, I would like to point out that thus far, I have only discussed functional projections that correspond to Case/ $\theta$ -roles or (possibly) aspect, but it is clear that at the bottom there

are layers with lexico-semantic information that are associated with the root. For expository purposes, I will include the top two (or, where it will be necessary, a few more) of the root layers in the analysis:  $\sqrt{n}$  and  $\sqrt{n-1}$ , whatever these may be. I will further assume that under normal circumstances, the root layers are spelled out by the root itself.

Finally, two practical remarks: for the first, each entry will be assigned a random number for easier reference. Second, non-productive or semi-productive morphology will be marked by shading. These are entries which are not visible for the syntax, and can only be accessed by the complex lexical entries.

|                                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
|-----------------------------------|----|----|------------|---|------------|--------------|
| 01. $\sqrt{fagy}$ ('freeze')      | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 02. $\sqrt{teker}$ ('coil')       | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 04. $\sqrt{gur}$ ('roll')         |    |    |            |   | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| (97) 20. $-tAt$                   | a1 | K1 | $\theta 2$ | L |            |              |
| 21. $-Aszt$                       | a1 | K1 | $\theta 2$ | L |            |              |
| 22. $-ít$                         | a1 | K1 | $\theta 2$ | L |            |              |
| 30. $-Ód$                         | a1 |    |            |   |            |              |
| 31. $-Ed$                         | a1 |    |            | L |            |              |
| 32. $-Ul$                         | a1 |    |            | L |            |              |

There are two points in fact which are worth mentioning with regard to this table. First, the table shows that roots can be of different sizes: those with explicit transitive-causative morphology are short, while those without transitive-causative marking go all the way up to  $a1$ , with or without gaps. This is not necessarily, but an improved version of this setup can help eliminate phonologically null causative and inchoative suffixes. For the second, I would like to draw the attention to  $Ód$ , as this is the entry that will distinguish liberal speakers from conservatives at least at this preliminary stage: for liberal speakers,  $Ód$  is smaller than ordinary anticausative suffixes and constitutes of only  $a1$ .

Idiosyncratic morphology needs to be associated with the appropriate roots. As mentioned earlier, in the nanosyntactic framework this is implemented by means of complex entries, which connect a given root with the fitting idiosyncratic suffix. Here are some complex entries for an illustration; all the details will come in the derivations:



As complex entries are there to encode idiosyncratic information, those roots which combine with productive suffixes, such as *-Ód* or causative *-tAt*, do not need complex entries<sup>8</sup>.

### Conservative speakers

In their preliminary lexical entries, liberal and conservative speakers differ at one point: with regard to *Ód*. For conservative speakers, *Ód* functions as an ordinary, albeit productive, anticausative suffix. Additional differences will emerge between conservative and liberal entries, mostly as a result of *Ód* having distinct structures in the two language variants.

(100)

|                                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
|-----------------------------------|----|----|------------|---|------------|--------------|
| 01. $\sqrt{fagy}$ ('freeze')      | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 02. $\sqrt{teker}$ ('coil')       | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 04. $\sqrt{gur}$ ('roll')         |    |    |            |   | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 20. <i>-tAt</i>                   | a1 | K1 | $\theta 2$ | L |            |              |
| 21. <i>-Aszt</i>                  | a1 | K1 | $\theta 2$ | L |            |              |
| 22. <i>-ít</i>                    | a1 | K1 | $\theta 2$ | L |            |              |
| 30. <i>-Ód</i>                    | a1 |    |            | L |            |              |
| 31. <i>-Ed</i>                    | a1 |    |            | L |            |              |
| 32. <i>-Ul</i>                    | a1 |    |            | L |            |              |

The idioms that combine unproductive and/or semi-productive morphology with the roots that need it are the same as for liberal speakers.

<sup>8</sup>As recent uses of *-Ód* has received little attention so far, there is no single suffix in the literature that would be unanimously recognized as productive with the exception of causative *-tAt*. There have been attempts to identify tendencies or minor subclasses within which a given suffix, such as causative *-ít* or anticausative *-Od*, may be productive, but as far as I can tell, there are no congruent results, and counterexamples keep popping up. However, it is not impossible that some of these suffixes can be shown to be semi-productive by virtue of productively following, say, a certain adjectivizing suffix which in turn may combine with certain root types. Regularities of that type, if they turned out to be real, could be captured by complex entries. For more on these suffixes, the reader is referred to Kiefer and Ladányi (2000:202-206) and Komlósy (2000:280-281), among others.



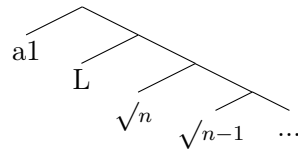


# Chapter 5

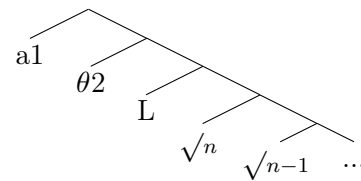
## Derivations

Before we embark on the derivations, let me recapitulate what the progressively growing structures which were assigned to the T1DP, the half-passive and the 2DPC construction look like:

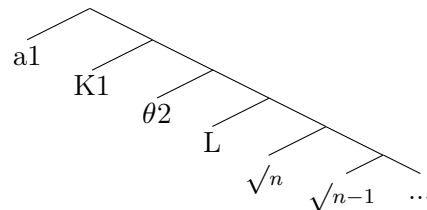
(1) T1DP



(2) half-passive



(3) 2DPC



The derivations will demonstrate how the respective structures get associated with the relevant lexical entries to derive the morphological diversity which characterizes this domain.

## 5.1 The causative alternation

### 5.1.1 *fagy* ('freeze')-type verbs

The first morphological class to be addressed is the causative alternation. Roots that participate in the causative alternation remain bare in T1DP constructions but bear overt causative morphology in 2DPC. Liberal speakers have a half-passive form as well, whereas conservative speakers cannot produce half-passive forms.

|              | T1DP | HP         | 2DPC    |
|--------------|------|------------|---------|
| (4) liberal  | R    | R-caus*-ÓD | R-caus* |
| conservative | R    | –          | R-caus* |

The behavior of this verb type will be illustrated by  $\sqrt{fagy}$  ('freeze'). This verb has the following paradigm:

|              |                          | T1DP | HP           | 2DPC      |
|--------------|--------------------------|------|--------------|-----------|
| (5) liberal  | $\sqrt{fagy}$ ('freeze') | fagy | fagy-Aszt-Ód | fagy-Aszt |
| conservative | $\sqrt{fagy}$ ('freeze') | fagy | –            | fagy-Aszt |

The nanosyntactic approach offers an elegant way to eliminate zero suffixes for the bare anticausative form by allowing the unmarked T1DP/anticausative form to stretch not only over the root but also across *L* and *a1*. The causative suffix *-Aszt* is responsible for the sequence *a1* - *K1* -  $\theta$  - *L*, and for liberal speakers, *Ód* takes care of *a1*. So for **LIBERAL SPEAKERS**, the simple lexical entries look like this:

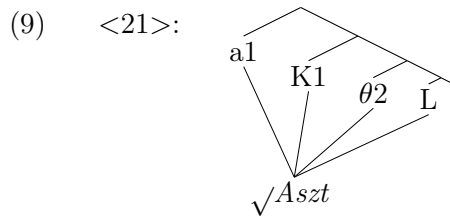
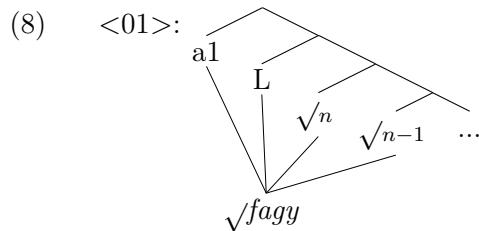
|                                  |    |    |            |   |            |              |
|----------------------------------|----|----|------------|---|------------|--------------|
|                                  | a1 | K1 | $\theta$ 2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| (6) 01. $\sqrt{fagy}$ ('freeze') | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 21. <i>-Aszt</i>                 | a1 | K1 | $\theta$ 2 | L |            |              |
| 30. <i>-Ód</i>                   | a1 |    |            |   |            |              |

The shaded lines mark suffixes that are non-productive or semi-productive, and are hence invisible for the syntax. Recall that these entries are made accessible for the syntax by complex entries, which combine a given root with the idiosyncratic causative suffix that matches it. The complex entry <0121> combines the entries <01> and <21>:

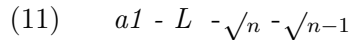


For productive suffixes, such as  $\langle 30 \rangle$ , there is no need for complex lexical entries: inasmuch as the lexicon does not specify some idiosyncratic root-suffix combination, the syntax assembles the relevant structures compositionally, by utilizing the productive suffixes that are available to the computation.

To help the visualizing of the simple three entries at issue, the lexical trees included in the respective entries are shown below:

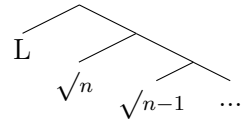


With the toolkit in hand, let us now step through the derivation for liberal speakers' **T1DP** construction. First recall that T1DP consists of the following functional layers:



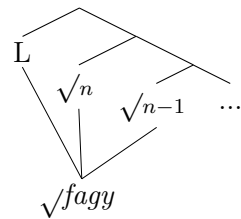
Syntax begins building the relevant structure, first the lexical layers, and then the relevant functional layers. The first functional layer relevant for the T1DP derivation is  $L$ :

(12)



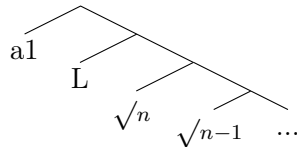
Recall that in Nanosyntax, each insertion is followed by a search for matching entries in the lexicon. With the T1DP form of verbs like *fagy* ('freeze'), the task is easy: all the spell-out procedure needs to consult is  $\langle 01 \rangle$ , the entry of  $\sqrt{fagy}$ . Recall that even though entry  $\langle 01 \rangle$  is not a perfect match for the syntactic tree (12) at this point, the Superset Principle allows  $\langle 01 \rangle$  to spell out the structure in (12):

(13)



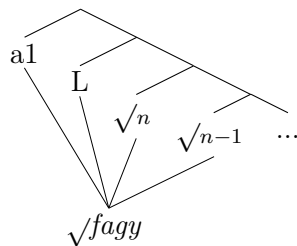
As the goal is to assemble the T1DP form, at this point the derivation continues with the lowest member of the next functional series: *a1*.

(14)



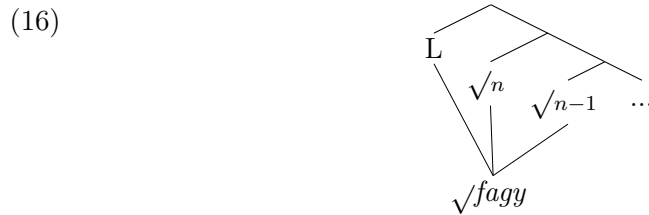
At this point the entry  $\langle 01 \rangle$  turns out to be not just the best, but in fact a perfect match:

(15)

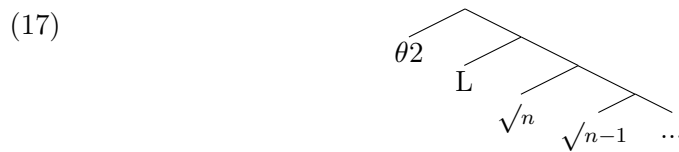


With this, the relevant portion of the derivation is completed, and this entire subtree is thus spelled out as *fagy*.

Let us now turn to the derivation of the **2DPC** form for  $\sqrt{fagy}$ , which spells out as *fagy-Aszt*. The opening steps of the derivation proceed as before, with  $\langle 01 \rangle$  pronouncing the sequence up to L:



As this time we aim for the 2DPC form, the derivation continues with  $\theta 2$ :

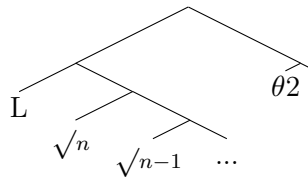


This structure can no longer be pronounced by  $\langle 01 \rangle$ , as the entry lacks  $\theta 2$ . There is, however, a complex entry at our disposal, which connects  $\langle 01 \rangle$  with  $\langle 21 \rangle$ .  $\langle 21 \rangle$  is the entry for the idiosyncratic causative suffix *-Aszt* and, propitiously for the derivation, it contains  $\theta 2$ :



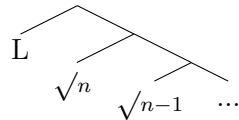
There is, however, a problem. Phrasal spell-out means that it is not the terminals, but the phrasal constituents that get replaced by a corresponding lexical tree. But in the syntactic structure (17), the phrasal node dominating  $\theta 2$  has no equivalent in the Lexicon. Therefore, a crash is imminent. This is where spellout-driven movement comes to the aid of the derivation. Provided that movement happens at the root of the tree, it is the constituent dominated by L that moves above  $\theta 2$ :

(19)



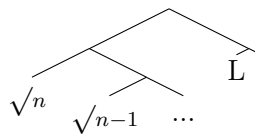
But the resulting configuration is still unpronounceable: the phrasal node that dominates  $\theta 2$  corresponds to no constituent in  $\langle 21 \rangle$  or in any other accessible entry in the Lexicon. As a last resort, the computation backtracks and attempts movement a notch lower. So first,  $\theta 2$  is removed from the original structure (17):

(20)



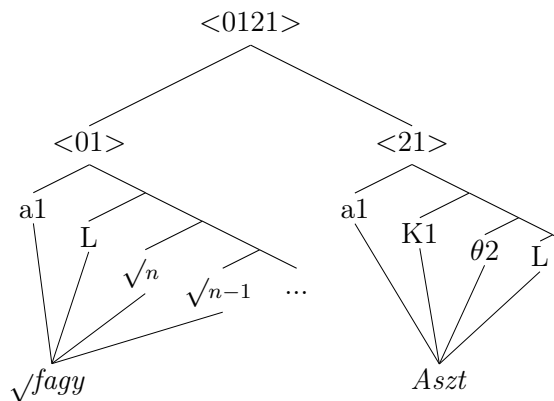
The first time the computation assembled this structure, it opted for no movement. Therefore, as a rescue strategy, it attempts displacement this time: the root constituent moves to the top.

(21)

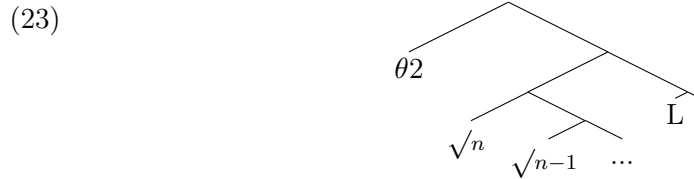


This structure can be spelled out by the complex entry  $\langle 0121 \rangle$ . For expository purposes, the fully expanded tree for  $\langle 0121 \rangle$ , with the subentries substituted, is shown below:

(22)

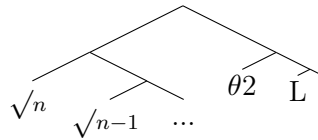


By the Superset Principle, the syntactic tree is allowed to be a subconstituent of the lexical tree. Therefore, the left branch can be taken care of by <01>, while L can be spelled out by <21>. The derivation moves on, and the previously removed  $\theta 2$  is inserted again:

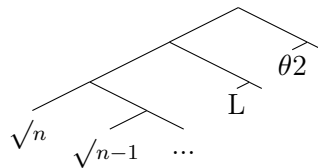


Again,  $\theta 2$  is unpronounceable as it is, so the computation resorts to movement. There are two movement possibilities: one option is successive cyclic movement of the previously displaced root constituent; the other choice is to snowball whatever is below  $\theta 2$  to the top. The two alternatives are shown below:

(24) Successive cyclic movement:



(25) Roll-up movement:



The calculus I will use throughout the derivations is Michal Starke's (2011b) movement hierarchy for spellout-driven movement. According to this calculus, not moving is best. However, if not moving would result in a crashing derivation, successive cyclic movement becomes an option. If successive cyclic movement should fail to save the derivation, roll-up movement can apply. If all of these rescue methods fall through, the computation is allowed to backtrack and attempt movement in the set order: successive cyclic movement first, and if that breaks down, snowballing.

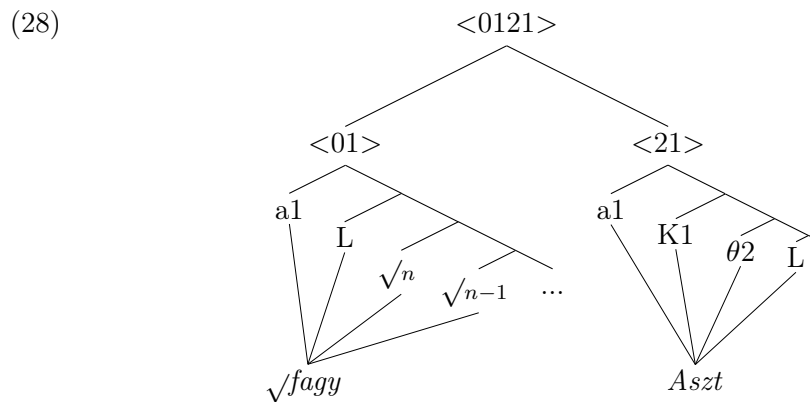


(26) non-mvt > successive cyclic mvt > roll-up mvt > backtrack

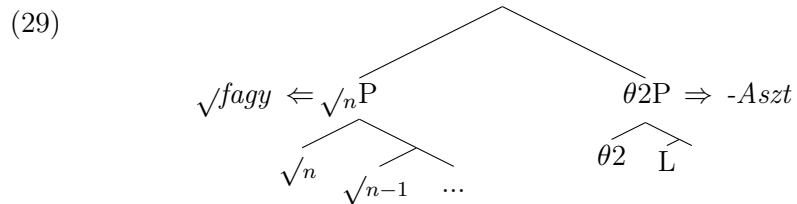
Accordingly, as non-movement would result in a crash with the structure in (23), the computation opts for successive cyclic movement in the first round:



This structure is a good match for the complex entry <0121> with the embedded entries <01> and <21>. For exposition, the fully expanded complex entry is repeated below:

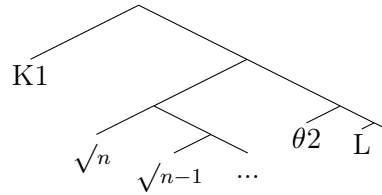


This time, the phrasal node that immediately dominates  $\theta 2$  is a subconstituent of <21>. Likewise,  $\sqrt{n}P$  is a subconstituent of <01>. Consequently, (27) can be pronounced as *fagy-Aszt*:



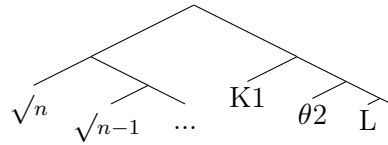
The derivation moves on, and *K1* enters the structure:

(30)



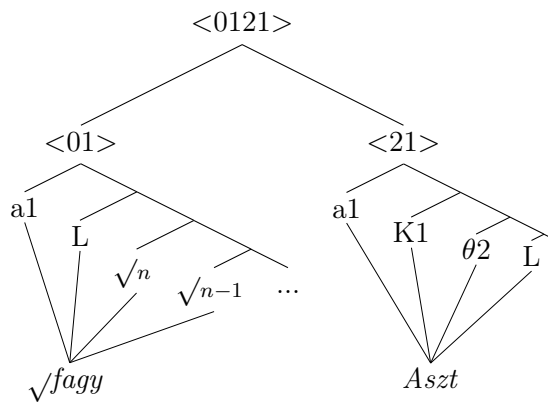
At the top of the tree, *K1* is unpronounceable. To escape a crash, spellout-driven movement kicks in again. According to the movement calculus, the first choice is successive cyclic movement, so the previously displaced root constituent moves one notch up:

(31)



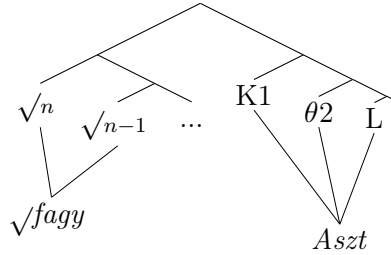
One more time, the complex entry <0121> matches the structure. For easier visualization, I provide the fully expanded entry again:

(32)



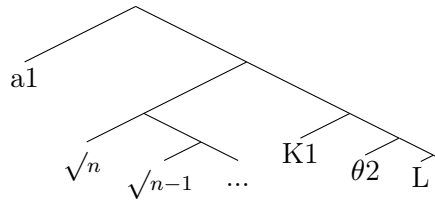
Although the complex entry is still slightly oversized, the constituency requirement is met, and the structure in (31) can be pronounced:

(33)



With this, the  $\theta$ /Case sequence is completed. The derivation moves on to the next functional sequence, the lowest member of which is  $a1$ :

(34)



Recall that liberal speakers have a lexical entry that corresponds to  $a1$ :  $\acute{O}d$ .

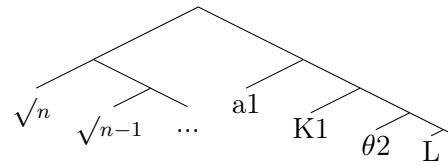
(35)

&lt;30&gt;

 $a1P \Rightarrow \acute{O}d$  $\widehat{a1}$ 

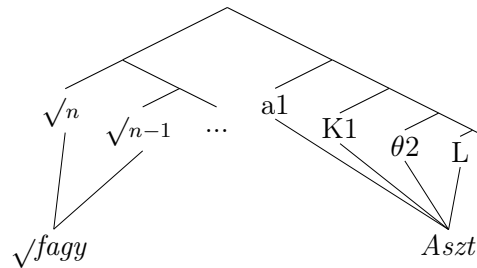
At the same time,  $\acute{O}d$  cannot be put into action with  $a1$  sitting at the top of the tree: phrasal spell-out takes a phrasal constituent from the Lexicon to substitute for a phrasal constituent in the syntax. So if a crash is to be avoided, movement is a requisite. In compliance with the movement calculus, the computation gives a go at successive cyclic movement:

(36)



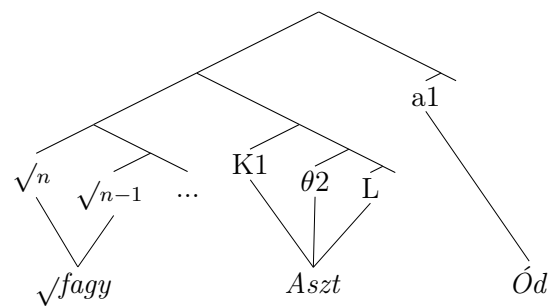
The ensuing structure is a match for the complex entry <0121>. Therefore, with this concluding step, the derivation of the relevant chunk of the 2DPC form for a bare anticausative/marked transitive-causative verb is accomplished, and the 2DPC/transitive-causative form will get pronounced as *fagy-Aszt*. This is the correct result.

(37)



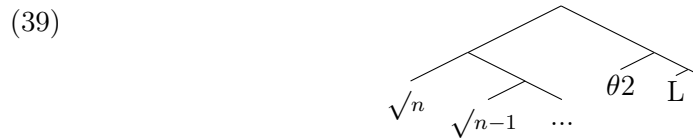
Notice that roll-up movement would have resulted in a pronounceable structure, too:

(38)

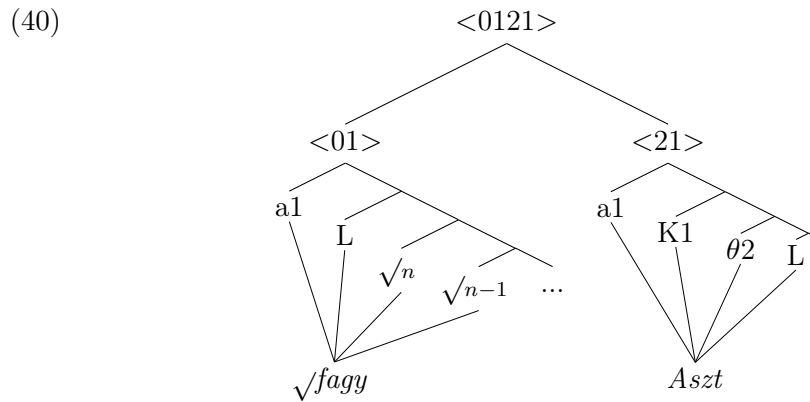


The roll-up structure would have spelled out as *fagy-Aszt-Ód*, which is incorrect. This is, however, not surprising: the strategy the computation uses, not just in this specific case but across the board, is that if it can choose between introducing a new formative to assist spell-out or to expand the morpheme that it has already begun to use, it goes for the latter option. This intuition is consistently captured by Starke's movement hierarchy for spellout-driven movement.

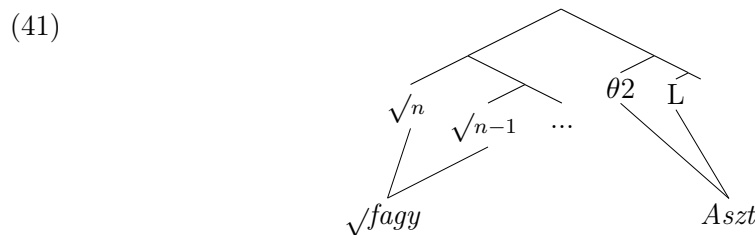
Let us now turn to the **half-passive** to see how the gap proposal comes to grips with this construction. Up to  $\theta 2$ , the construction of the half-passive structure proceeds in an identical fashion with the 2DPC/transitive-causative construction. At that point, the following structure has been assembled:



This structure is a proper subtree of  $\langle 0121 \rangle$  on both branches, and there is no better match available. The fully expanded  $\langle 0121 \rangle$  is repeated below:

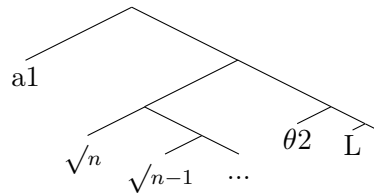


So at this stage, the structure will be spelled out as *fagy-Aszt*:



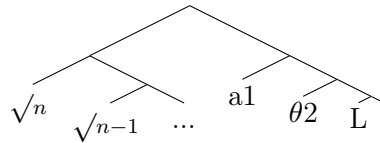
The derivation presses on. Since half-passives lack K1, the next terminal to be introduced is the lowest member of the next functional series: *a1*.

(42)



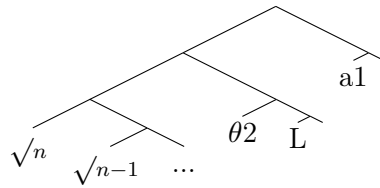
At the top of the tree, *a1* is unpronounceable. Successive cyclic movement is of no assistance, as there is no lexical item that could spell out *a1-θ2-L*:

(43)



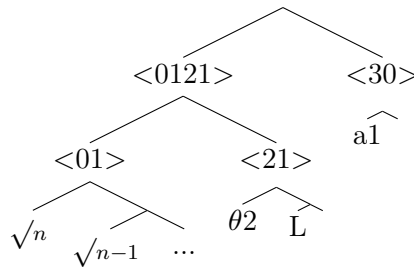
However, if the rest of the tree in (42) snowballs above *a1*, a pronounceable structure is derived:

(44)



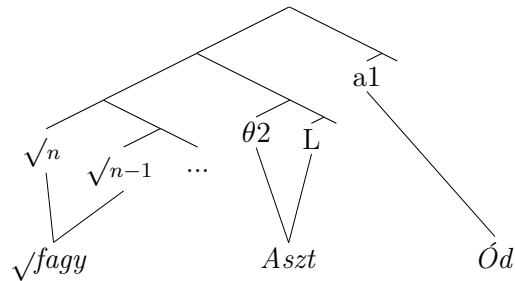
In the resulting structure, the phrasal constituent dominating *a1* can be spelled out by <30>, while the rest of the tree can be taken care of by the complex entry <0121>. The tree structure below shows which entries correspond to which of the constituents:

(45)



Thereby, the correct half-passive form *fagy-Aszt-Ód* is obtained:

(46)



With this, we have now derived for liberal speakers the T1DP, half-passive and 2DPC forms of verbs that participate in the causative alternation. As for **CONSERVATIVE SPEAKERS**, their lexical entries for causative pairs look very similar, with one notable difference: for these speakers, the syntactic structure  $-\acute{O}d$  lexicalizes also subsumes L:

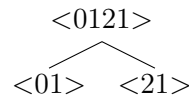
(47)

|                              |    |    |            |   |            |              |
|------------------------------|----|----|------------|---|------------|--------------|
|                              | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 01. $\sqrt{fagy}$ ('freeze') | a1 |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 21. $-Aszt$                  | a1 | K1 | $\theta 2$ | L |            |              |
| 30. $-\acute{O}d$            | a1 |    |            | L |            |              |

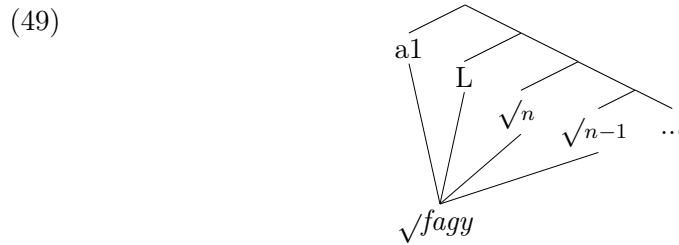
This move makes  $-\acute{O}d$  behave on a par with ordinary *inch\** suffixes, and thus prevents  $-\acute{O}d$  from pronouncing half-passive structures. Since  $-\acute{O}d$ , just like any other anticausative suffix, subsumes L, it will be impossible to insert it above  $\theta 2$ . At the same time,  $-\acute{O}d$  is productive also for conservative speakers, which means that it can productively derive anticausative forms.

As regards the complex entries of conservative speakers, these are no different from the complex entries of liberal speakers: they simply specify what kind of idiosyncratic morphology a given root will combine with. Thus,  $\langle 0121 \rangle$  remains unchanged:

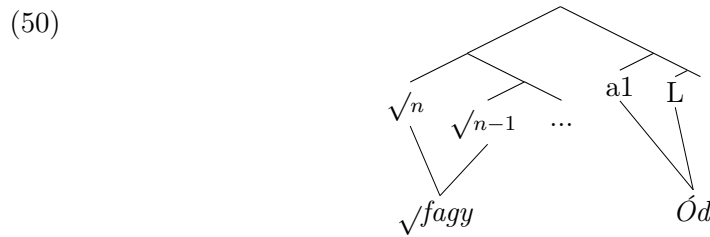
(48)



The derivations themselves run as described below. The derivation of the **T1DP** form is the exact same for liberal and conservative speakers; accordingly, the resulting structure looks the same, too:

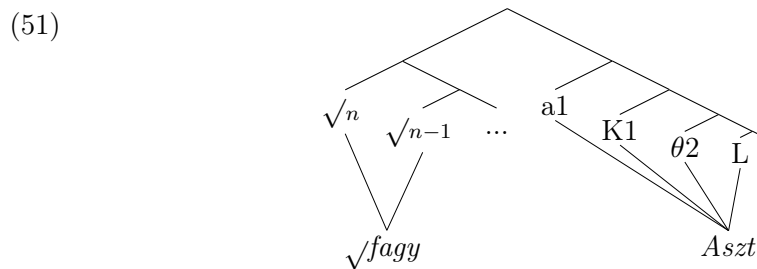


There is, however, one extra possibility with conservative speakers that needs to be paid attention to. For conservative speakers, *-Ód* has the same structure as all other, non-productive or semi-productive, anticausative suffixes: *a1 - L*. Being a productive suffix, *-Ód* is also visible for syntax. This means that *-Ód* could, in principle, be a candidate for spelling out the sequence *a1 - L*:



This takes us back to discussion about why syntax prefers the morpheme which started the spelling out of a given string to carry on as long as it can, instead of introducing a new morpheme. One more time, Starke's calculus for spellout-driven movement derives the correct result: not moving is best; thereby, a combination of *Ód* and *fagy* loses to one big *fagy*.

The derivation of **2DPC/TR-caus** is fully identical for liberal and conservative speakers, with the same end product for the relevant portion of the derivation:



The reader may also notice that in principle, the productive causative suffix *-tAt* could compete with idiosyncratic *-Aszt* to spell out the sequence



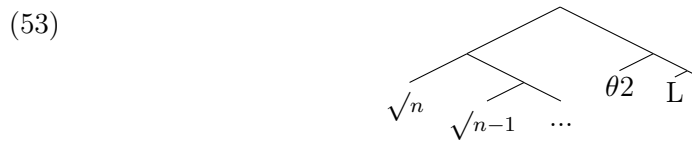
*a1-K1-θ2-L*:

(52)

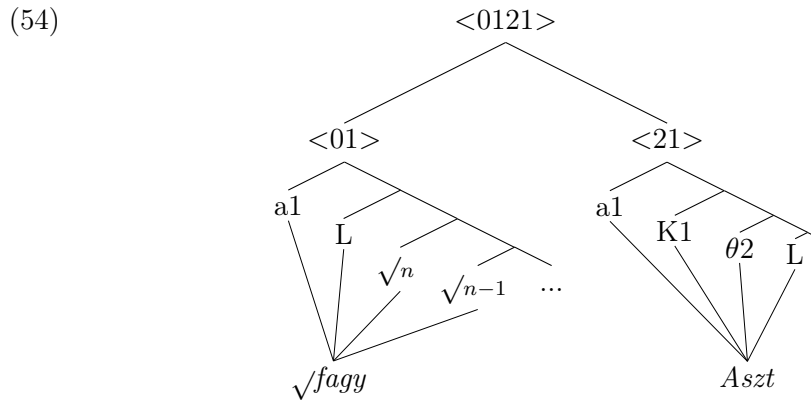
|                   |    |    |    |   |                |                  |
|-------------------|----|----|----|---|----------------|------------------|
|                   | a1 | K1 | θ2 | L | √ <sub>n</sub> | √ <sub>n-1</sub> |
| 20. - <i>tAt</i>  | a1 | K1 | θ2 | L |                |                  |
| 21. - <i>Aszt</i> | a1 | K1 | θ2 | L |                |                  |

However, this possibility never turns into a real problem, as the use of *-tAt* will be blocked by the relevant complex entry, in this particular case <0121>, which connects the root <01> with the idiosyncratic suffix <21>.

All that is left now is the **half-passive**. This is the most interesting case, where liberal and conservative speakers clearly differ: conservative speakers simply cannot derive half-passive forms. Let us look now at the derivation step by step. Up to the insertion of *θ2* and the subsequent rescue operations, the building of the half-passive structure proceeds in an identical fashion with the 2DPC/transitive-causative construction. At that point, the following structure has been assembled:

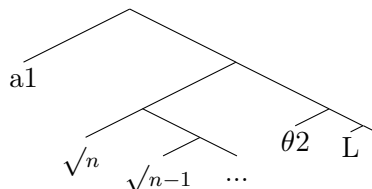


This structure is again a proper subtree of <0121> on both branches, so the structure can be spelled out as *fagy-Aszt*. The fully substituted lexical tree is shown below:



As half-passives lack K1, the Case/*θ* sequence is completed, and the derivation continues with *a1*:

(55)



At this point the derivation runs into an unsolvable problem. For the first, conservative speakers have no entry that can spell out *a1* in itself: for them, even *Ód* spans *a1 - L*, so it will be simply too big to be able to attach above *θ2*. The only other combination *a1* occurs in is with *K1*. But *K1* is absent from half-passives, and the shape of the entry <21> with *K1* in the middle makes it unusable when it comes to pronouncing the sequence *a1-θ2-L*. The last hope is to turn *a1* into a constituent with *L* in the syntactic tree; this is, however, made impossible by the standard restrictions on the nature of movement. Thereby, for conservative speakers the half-passive structure will be unpronounceable, and there is simply no way to rescue the derivation.

With this, we have now reviewed in detail how the T1DP and 2DPC forms of verbs that participate in the causative alternation can be derived for both liberal and conservative speakers. It has also been demonstrated how the half-passive is derived for liberal speakers, and how the shape of the lexical items for conservative speakers makes it impossible for these speakers to pronounce a half-passive structure. We have further seen that for verbs which are bare in their anticausative/T1DP form, the root spans the entire sequence *a1 - L - √n - √n-1*, which made a zero anticausative suffix unnecessary for these verbs.

## 5.2 The anticausative alternation

For those verbs that participate in the anticausative alternation, the 2DPC/transitive-causative form is bare, and the T1DP/anticausative form is marked. The upper row in the table below presents the forms liberal speakers use; the lower row illustrates the language use of liberal speakers:

|              | T1DP    | HP   | 2DPC |
|--------------|---------|------|------|
| (56) liberal | R-inch* | R-ÓD | R    |
| conservative | R-inch* | –    | R    |

### 5.2.1 $\sqrt{teker}$ ('coil')-type verbs

The anticausative alternation has two main variants in Hungarian. A number of verbs, which will be represented by *teker* ('coil, wind'), combine with unpredictable, non-productive or semi-productive anticausative morphology:

|      |              |                         |          |          |       |
|------|--------------|-------------------------|----------|----------|-------|
|      |              | T1DP                    | HP       | 2DPC     |       |
| (57) | liberal      | $\sqrt{teker}$ ('coil') | teker-ED | teker-ÓD | teker |
|      | conservative | $\sqrt{teker}$ ('coil') | teker-ED | –        | teker |

It is reasonable to assume that for verbs which participate in the anticausative alternation, the unmarked 2DPC/transitive-causative form stretches from the bottom and all the way to *a1*, including the Case/ $\theta$ -layers *K1- $\theta$ 2-L*:

|      |                    |    |            |            |            |              |              |
|------|--------------------|----|------------|------------|------------|--------------|--------------|
|      | a1                 | K1 | $\theta$ 2 | L          | $\sqrt{n}$ | $\sqrt{n-1}$ |              |
| (58) | 02. $\sqrt{teker}$ | a1 | K1         | $\theta$ 2 | L          | $\sqrt{n}$   | $\sqrt{n-1}$ |

For liberal speakers, *Ód* lexicalizes only *a1*; so the entries for **LIBERAL SPEAKERS** are set up as follows:

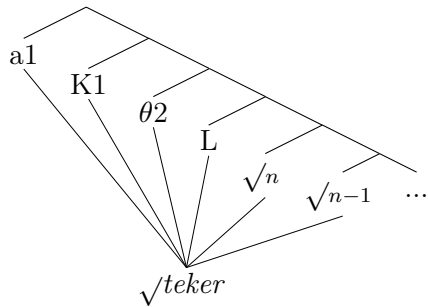
|      |                    |    |            |            |            |              |              |
|------|--------------------|----|------------|------------|------------|--------------|--------------|
|      | a1                 | K1 | $\theta$ 2 | L          | $\sqrt{n}$ | $\sqrt{n-1}$ |              |
| (59) | 02. $\sqrt{teker}$ | a1 | K1         | $\theta$ 2 | L          | $\sqrt{n}$   | $\sqrt{n-1}$ |
|      | 30. <i>Ód</i>      | a1 |            |            |            |              |              |
|      | 31. <i>Ed</i>      | a1 |            | L          |            |              |              |

The table also contains the idiosyncratic anticausative suffix *-Ed*. This is because *teker* combines with this particular suffix to form a T1DP/anticausative construction. To encode this arbitrary choice of the language, the lexicon has a complex entry which connects the root and suffix in question:

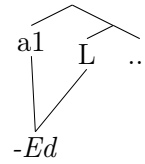


The visual representation of the simplex entries is this:

(61) &lt;02&gt;

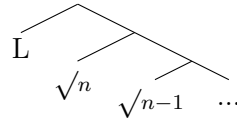


(62) &lt;31&gt;



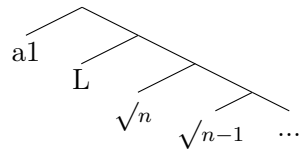
Let us now turn to the derivations themselves. As usual, we begin with the **T1DP** form, which in this particular case happens to be *teker-Ed*. For the initial steps of the derivation, it is sufficient to resort to <02> to spell out the structure under construction. The syntactic tree will always be a sub-constituent of the lexical tree for *teker*, so the constituency requirement on spell-out is fulfilled:

(63)



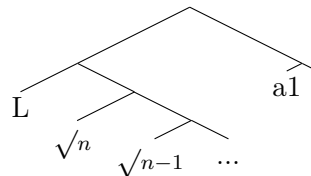
At this point it is still <02> that seems to be the best candidate to spell out the structure. But when *a1* enters the structure, something goes wrong:

(64)

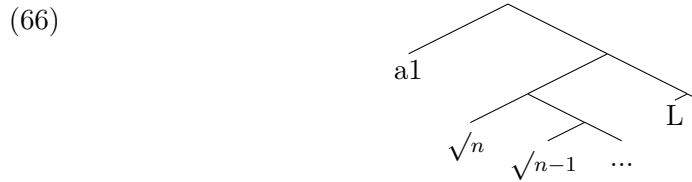


Here, <02> cannot handle the situation any longer on its own. According to the movement calculus, at this point the computation should try to move everything above *a1*:

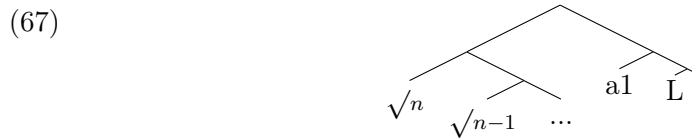
(65)



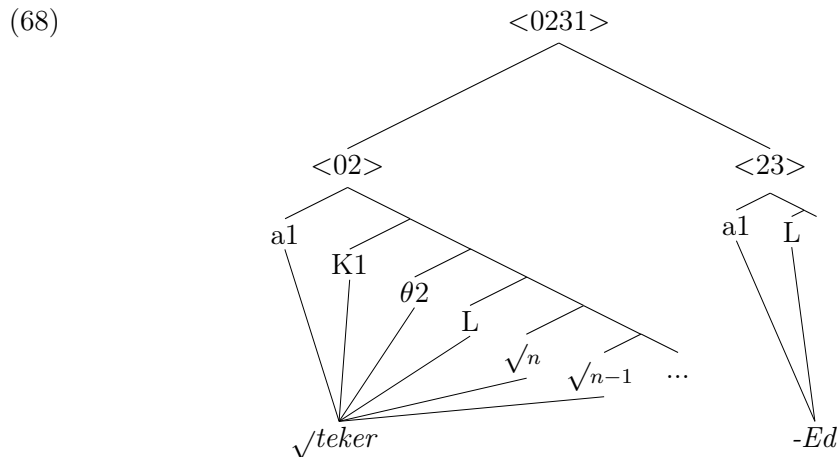
This, however, gives an incorrect result: the right branch with *a1* corresponds to the entry of productive liberal *Ód*, so the structure should spell out as *teker-Ód*. But the correct T1DP form uses the idiosyncratic anticausative suffix *-Ed*, which corresponds to *a1 - L*. So what in fact seems to happen here is that the computation backtracks from (64), performs movement, and inserts *a1* again:



From here on the derivation proceeds according to the movement calculus, and moves the previously displaced root constituent successive cyclically to the top:



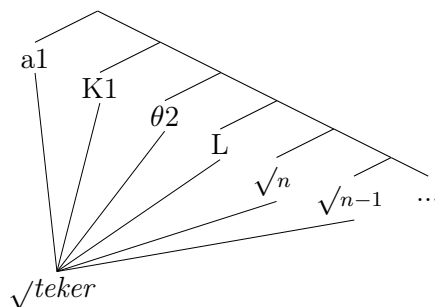
This structure is a match for the lexically determined complex entry <0231>, yielding the correct T1DP/anticausative form *teker-Ed*. The fully substituted lexical tree is shown below:



As regards the blunder with the movement calculus, I take it to suggest that even though it should be possible for liberal *teker*-verbs to span the entire sequence from the bottom and all the way up to *a1*, this is not what they do. Rather, the liberal entries for *teker*-type verbs seem to be broken into two, and similarly to equipollent roots like  $\sqrt{gur}$  (cf. 5.3.1), they only lexicalize the root layers. This is going to give the correct results, with the root constituent moving upwards as a first choice, way before the need for backtracking arises. I will say more about this in 5.4.2, and Appendix B will provide some data that corroborate the necessity of splitting some big entries into two. But in order to keep the derivations simple, in the main text I will content myself with big entries for *teker*.

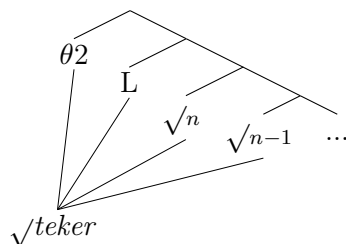
With the provisional big entry for *teker*, the derivation of the **2DPC** construction is straightforward: no movement is needed, as  $\langle 02 \rangle$  is not just a good match all the way, but also ends up as a perfect match for the fully developed 2DPC structure:

(69)



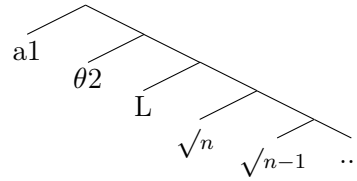
The **half-passive** presents no special challenges, either. Up to  $\theta2$ ,  $\langle 02 \rangle$  tackles the spellout procedure single-handed:

(70)



As half-passives lack *K1*, the derivation continues with *a1*:

(71)

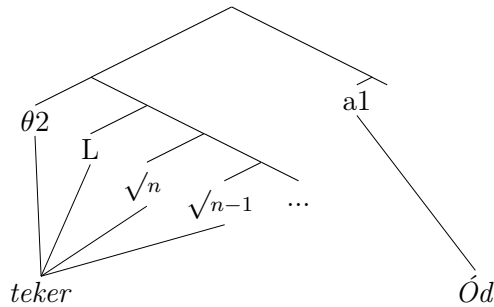


There is no lexical tree that would match this structure, and even though liberal *Ód* corresponds to *a1*, phrasal spell-out cannot tackle it at the top of the tree: the phrasal node that immediately dominates *a1* corresponds in no way to the entry of *Ód*:

(72) <30>       $a1P \Rightarrow \widehat{Ód}$   
                   $\widehat{a1}$

Therefore, movement applies: everything below *a1* gets driven above *a1*. The ensuing structure can be pronounced without difficulties: <30> spells out the constituent on the right branch, while <02> takes care of the rest of the structure:

(73)



The entries that **CONSERVATIVE SPEAKERS** have for *teker*-type verbs differ from their liberal counterparts only with regard to *-Ód*. As any other anticausative suffix, conservative *Ód* spans *a1-L*:

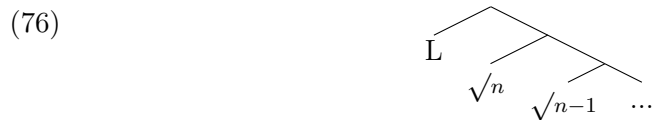
(74)

|                   |    |    |    |   |    |      |
|-------------------|----|----|----|---|----|------|
|                   | a1 | K1 | θ2 | L | √n | √n-1 |
| 02. <i>√teker</i> | a1 | K1 | θ2 | L | √n | √n-1 |
| 30. <i>Ód</i>     | a1 |    |    | L |    |      |
| 31. <i>Ed</i>     | a1 |    |    | L |    |      |

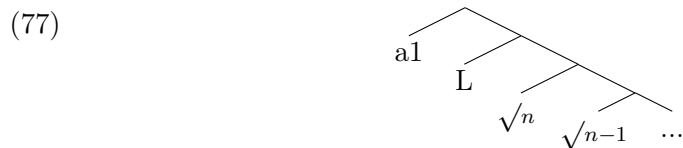
The complex entry remains the same:



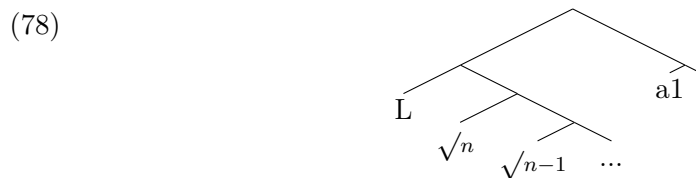
Incidentally, the assumption that for conservative speakers *Ód* lexicalizes the same amount of structure as idiosyncratic anticausatives suffixes sidesteps the problem that arose for liberal speakers with the movement calculus. As *Ód* and idiosyncratic *-Ed* are of the same size, *Ód* will never be a better match than *-Ed*. To the contrary, the two being equal, the computation will prefer the idiosyncratic suffix as specified by the relevant complex entry. Let me show the relevant detail:



On the insertion of *L*,  $\langle 02 \rangle$  is still spanning the entire structure. Subsequently, *a1* enters the structure:



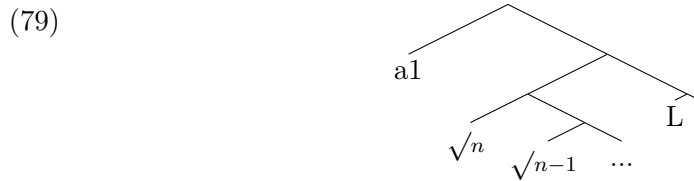
The computation attempts movement:



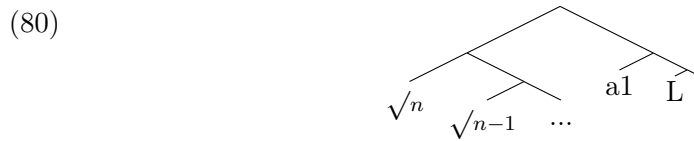
It is here that that the movement calculus makes a wrong prediction for liberal speakers: *Ód* should be able to spell out *a1*, but it does not. For conservative speakers, this problem never arises: they have no matching lexical



entry that could take care of *a1*. Therefore, the computation is allowed to backtrack, re-attempt movement and re-insert *a1*. The resulting structure is the following:



This structure is still unpronounceable. Therefore, as the movement calculus dictates, the previously displaced constituent  $\sqrt{n} - \sqrt{n-1}$  moves successively cyclically to the top:



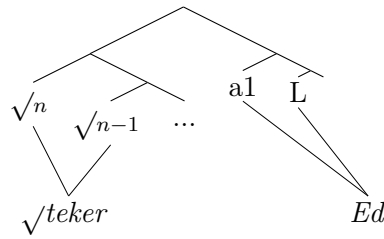
In the resulting configuration, both idiosyncratic *-Ed* and the productive *Ód* of conservative speakers match *a1 - L*:

(81)

|        |    |    |    |   |    |      |
|--------|----|----|----|---|----|------|
|        | a1 | K1 | θ2 | L | √n | √n-1 |
| 30. Ód | a1 |    |    | L |    |      |
| 31. Ed | a1 |    |    | L |    |      |

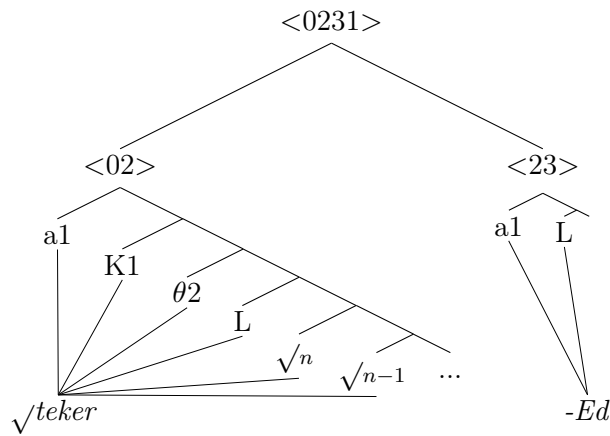
Spell-out is bottom up, so in (80) it begins with *L*. At this point, the idiosyncratic entry <31> is invisible for the computation, so it settles on <30>: productive *Ód*. The same happens a node higher. However, when spell-out hits the top node, it comes across a complex entry that connects the root constituent  $\sqrt{n} - \sqrt{n-1}$  with the idiosyncratic entry <31>. Therefore, the spell-out procedure overrides <30>, and replaces the entire tree with the corresponding subconstituents of the complex entry <0231>. Thus, (80) will be spelled out as *teker-Ed*, which is the correct result:

(82)



The fully substituted lexical tree for <0231> is shown below:

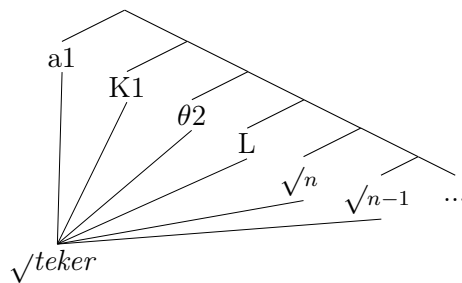
(83)



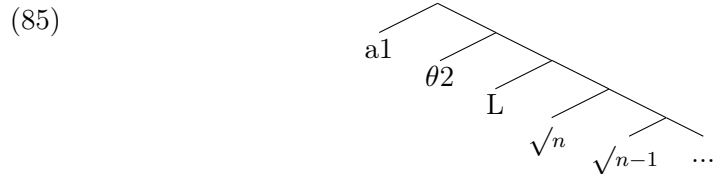
Since for conservative speakers, the derivation of the T1DP form of *teker* complies with the movement calculus, nothing stands in the way for conservative *teker* to rightfully lexicalize everything from the bottom and up to *a1*. So it may actually be the case that *teker*-type verbs are grown big for conservative speakers, but are sliced into two for liberal speakers.

As regards the **2DPC**/transitive-causative form of *teker*, it corresponds directly to conservative <02>:

(84)



And finally, the **half-passive** will be underivable, as expected. After the insertion of *a1*, the derivation crashes, as any effort to pronounce the structure breaks down:



### 5.2.2 $\sqrt{tép}$ ('tear')-type verbs

Roots like  $\sqrt{tép}$  ('tear, rip') constitute a subclass of verbs that participate in the anticausative alternation. What makes them worth receiving some extra attention is that these roots combine with productive *-Ód*, instead of selecting for idiosyncratic anticausative morphology:

(86)

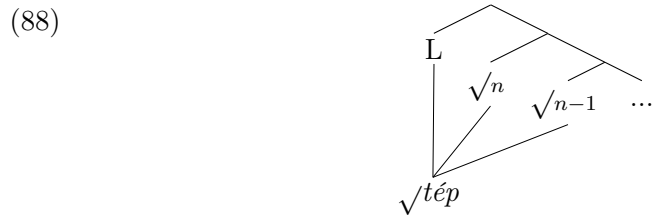
|              |                       | T1DP   | HP     | 2DPC |
|--------------|-----------------------|--------|--------|------|
| liberal      | $\sqrt{tép}$ ('tear') | tép-Ód | tép-Ód | tép  |
| conservative | $\sqrt{tép}$ ('tear') | tép-Ód | –      | tép  |

This means that for these verbs it is unnecessary to specify in a complex lexical entry what anticausative suffix the root combines with. In the absence of a complex entry that would make an idiosyncratic suffix visible for the syntax, *-Ód* is the only suitable candidate such roots can and will combine with. The lexical entries for **LIBERAL SPEAKERS** are stated below:

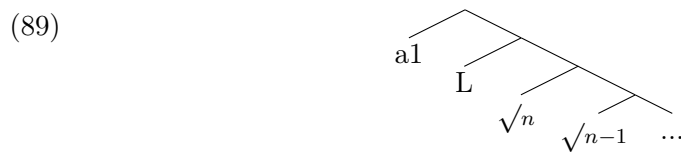
(87)

|                  |    |    |    |   |    |      |
|------------------|----|----|----|---|----|------|
|                  | a1 | K1 | θ2 | L | √n | √n-1 |
| 03. $\sqrt{tép}$ | a1 | K1 | θ2 | L | √n | √n-1 |
| 30. <i>Ód</i>    | a1 |    |    |   |    |      |

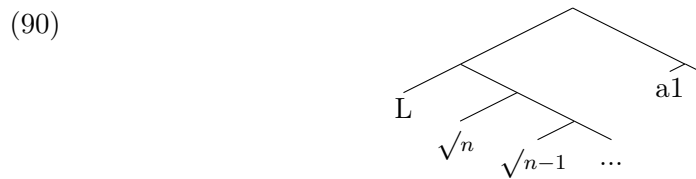
Let us now briefly compare these derivations to the  $\sqrt{teker}$  ('coil')-type derivations. As for the **T1DP** derivation, up to L <03> can be used to spell out the structure:



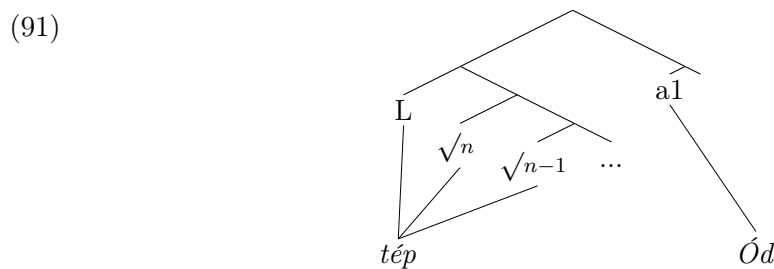
As T1DP needs no more layers from the case/ $\theta$  sequence, the derivation jumps to the next series:



There is no single lexical entry that would correspond to this structure. Consequently, the computation tries spellout-driven movement:

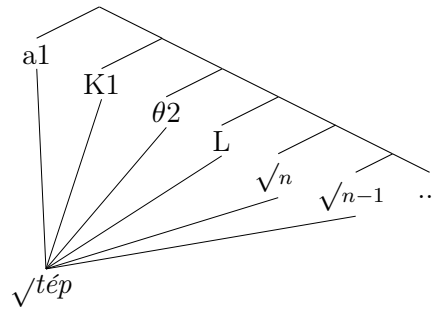


In the ensuing structure,  $\acute{O}d$  can lend a helping hand to  $\langle 03 \rangle$ :



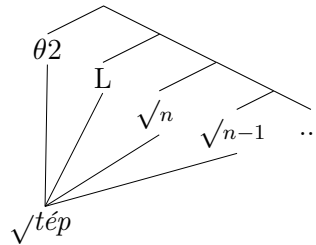
With this, the correct T1DP form  $tép\text{-}\acute{O}d$  is derived. As for the other constructions, the entry of  $\sqrt{tép}$ :  $\langle 03 \rangle$  is a perfect match for the **2DPC** form:

(92)



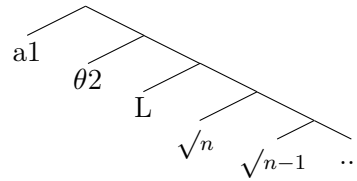
The **half-passive** resorts to <03> all the way up to  $\theta_2$ :

(93)

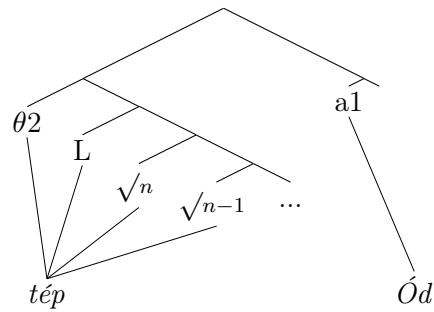


When *a1* enters the structure, spellout-driven movement is forced:

(94)



(95)



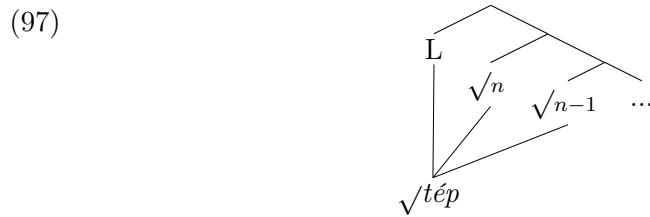
This yields the expected half-passive form *tép-Ód*.

As usual, the lexical entries for **CONSERVATIVE SPEAKERS** only differ with regard to the size of *-Ód*:

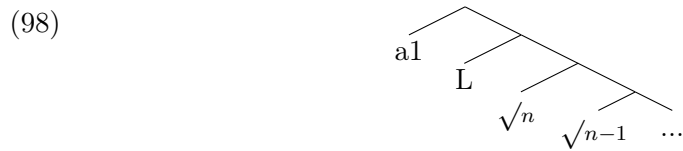
(96)

|                  |    |    |    |   |            |              |
|------------------|----|----|----|---|------------|--------------|
|                  | a1 | K1 | θ2 | L | √ <i>n</i> | √ <i>n-1</i> |
| 03. √ <i>tép</i> | a1 | K1 | θ2 | L | √ <i>n</i> | √ <i>n-1</i> |
| 30. <i>Ód</i>    | a1 |    |    | L |            |              |

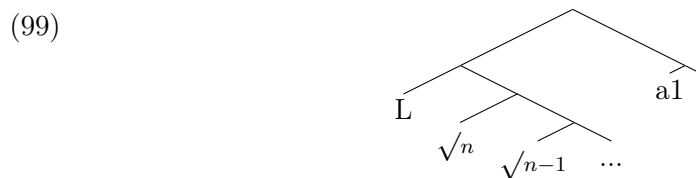
This modification, however, makes the **T1DP** derivation slightly different for conservative speakers. But just as before, up to *L*, <03> tackles spell-out on its own:



After the insertion of *a1*, spell-out efforts break down:



To avoid a crash, the computation falls back on movement, but the resulting structure is still unpronounceable: there is no lexical item that would correspond to *a1* in the conservative Lexicon.



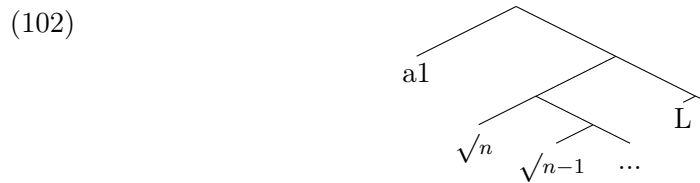
As a last resort, the derivation backtracks from the original structure (98), and *a1* is removed:



One more time, the computation gives a chance to movement:



This structure can be handled by <03> and conservative *Ód*. Next, *a1* gets inserted again:

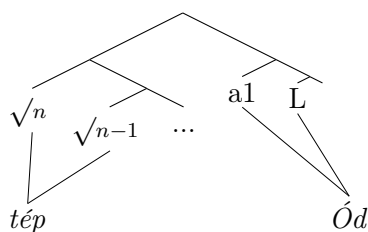


The ensuing structure is again unpronounceable. The computation attempts successive cyclic movement, as repair strategy number one:



The resulting configuration can be spelled out by <03> and an anticausative suffix. As there is no complex entry that would specify what anticausative suffix <03> should combine with, the only visible suffix for syntax is productive *Ód*:

(104)



As regards the remaining constructions, **2DPC** will be a perfect match in this case, too; and finally, the **half-passive** will be underivable, as there is no way to eliminate *K1* but preserve  $\theta 2$ , and at the same time keep the structure pronounceable.

### 5.3 The equipollent alternation

Verbs that participate in the equipollent alternation are marked by overt morphology on both sides of the alternation: the 2DPC/transitive-causative form bears explicit causative morphology, and the T1DP/inchoative form is equipped with an overt anticausative suffix:

(105)

|              | T1DP    | HP         | 2DPC    |
|--------------|---------|------------|---------|
| liberal      | R-inch* | R-caus*-ÓD | R-caus* |
| conservative | R-inch* | –          | R-caus* |

There are several variants of the equipollent alternation in Hungarian. These will now be inspected and derived one by one.

#### 5.3.1 $\sqrt{gur}$ ('roll')-type verbs

The first main subclass of the equipollent alternation is constituted by  $\sqrt{gur}$  ('roll')-type verbs. The paradigm of  $\sqrt{gur}$  ('roll') looks like this:

(106)

|              |                       | T1DP   | HP        | 2DPC   |
|--------------|-----------------------|--------|-----------|--------|
| liberal      | $\sqrt{gur}$ ('roll') | gur-Ul | gur-ít-Ód | gur-ít |
| conservative | $\sqrt{gur}$ ('roll') | gur-Ul | –         | gur-ít |

I propose that the root  $\sqrt{gur}$  ('roll') lexicalizes only the root constituent  $\sqrt{n} - \sqrt{n-1}$ , the causative suffix *-ít* is responsible for the sequence *a1 - K1 -  $\theta 2$  - L*, and the non-productive or semi-productive anticausative suffix *-Ul*

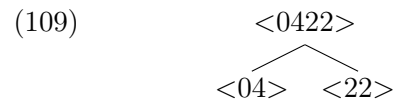
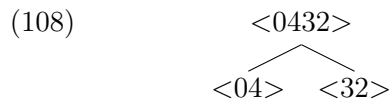


pronounces  $a1 - L$ . So for **LIBERAL SPEAKERS**, the simple entries look like this:

(107)

|                   |    |    |            |   |            |              |
|-------------------|----|----|------------|---|------------|--------------|
|                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 04. $\sqrt{gur}$  |    |    |            |   | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 22. $-i\acute{t}$ | a1 | K1 | $\theta 2$ | L |            |              |
| 30. $-\acute{O}d$ | a1 |    |            |   |            |              |
| 32. $-Ul$         | a1 |    |            | L |            |              |

An equipollent root is associated with two complex entries, as both the idiosyncratic [root+causative suffix] and [root+anticausative suffix] combinations need to be provided, unless one of these is a productive suffix:



The liberal speaker derivations for  $\sqrt{gur}$  run as described below. For the **T1DP construction**, the spellout procedure is straightforward up to the top of the root constituent: all the spell-out procedure needs to consult is <04>, the entry of  $\sqrt{gur}$ , which will make a perfect match for the syntactic structure at this point:



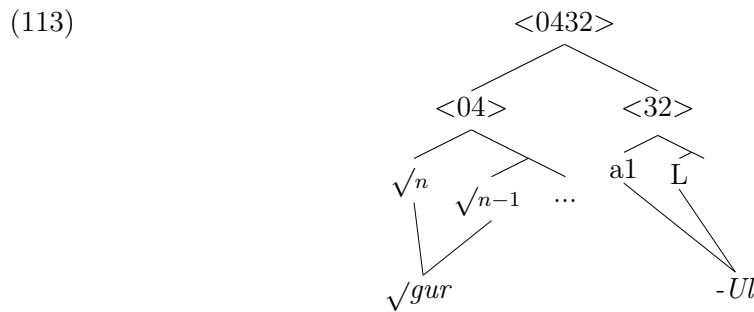
The derivation proceeds, and the next node to be inserted is L, the lowest node in the next series:



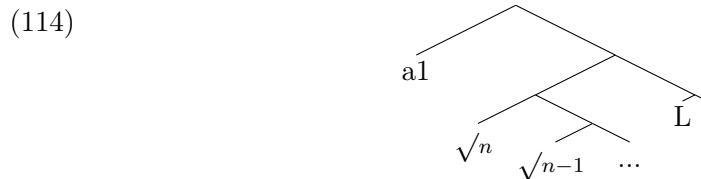
There is, however, no matching entry, so the structure cannot be spelled out as it is. In order to create a configuration that can be spelled out, movement applies, and the root constituent dislocates:



The resulting structure is pronounceable: both branches correspond to constituents of the complex entry <0432>, the fully expanded entry of which is shown below:



Recall that by the Superset Principle, the subentries in a complex entry can also "shrink". This way, <0432> can spell out the structure in (112). But we are not done yet. The derivation continues, and as a T1DP structure is being constructed, the next terminal that enters the structure is *a1*, the bottommost member of the next series:

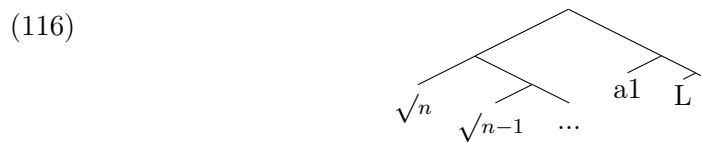


Again, this structure is unpronounceable in its present form. While the entry of *Ód* consists of *a1*, and the rest of the structure matches the complex entry <0432>, phrasal spell-out cannot tackle *a1* as it is dangling at the top of the tree. Recall that this is because the phrasal node in the entry of *Ód* does not fit the phrasal node above *a1*. Compare (114) with the entry of *Ód*:

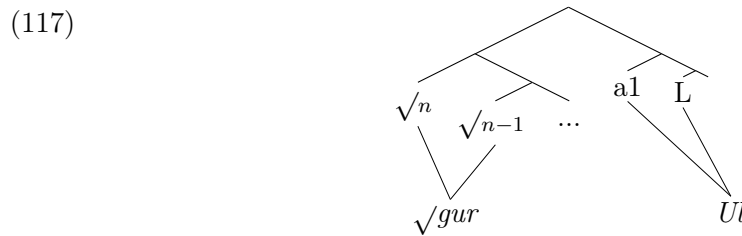
$$(115) \quad \langle 30 \rangle \quad a1P \Rightarrow \acute{O}d$$

$$\widehat{a1}$$

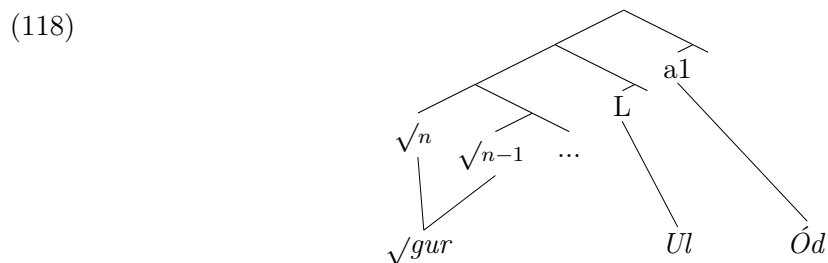
As a consequence, the derivation resorts to movement. As usual, the first choice is successive cyclic movement: the previously displaced root constituent successive cyclically moves above  $a1$ :



This move results in a structure that is now a perfect match for  $\langle 0432 \rangle$ , and the desired form  $gur-Ul$  is derived:



Notice that the movement calculus, according to which successive cyclic movement is preferred to roll-up movement, made the right prediction this time as well: if snowballing would have been chosen instead of successive cyclic movement to rescue (114), the resulting structure would have, incorrectly, spelled out as  $gur-Ul-\acute{O}d$ :



The initial steps of the **2DP-construction** are straightforward: up to the top of the root constituent, the structure can be unproblematically spelled out by <04>:



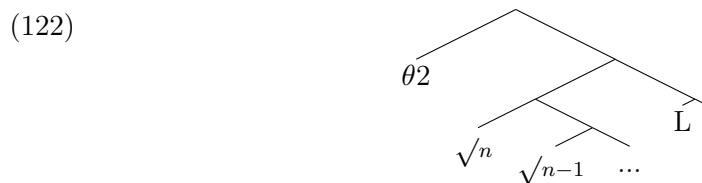
With this, we reach the Case/ $\theta$  series. The next node to be inserted is  $L$ :



This configuration is not pronounceable: the entry <04> does not correspond to this sequence any longer, and  $L$  in itself is unsuited for phrasal spell-out, even though the rest of the structure could be tackled by <04>. The derivation attempts displacement:

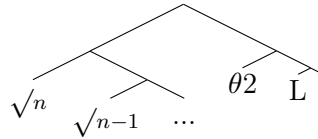


In the resulting configuration, two complex entries compete to spell out this structure: <0422> and <0432>. As <0432> involves less superfluous material, it is this entry that wins for the moment, spelling out (121) as *gur-Ul*. But the derivation does not stop here, and in the next step  $\theta 2$  is introduced into the structure:



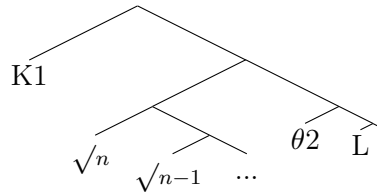
The ensuing structure does not fit with any of the entries, but if the previously moved root constituent continues on its way upwards, <0422> can take care of the structure:

(123)



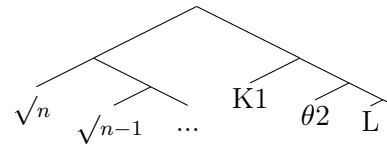
Next, *K1* is inserted:

(124)



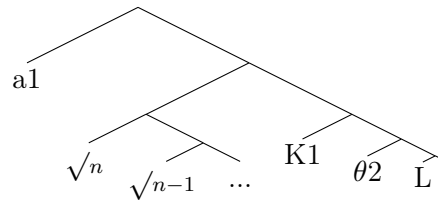
At first this set-up looks problematic, too, but pressing on with successive cyclic movement solves the problem:

(125)



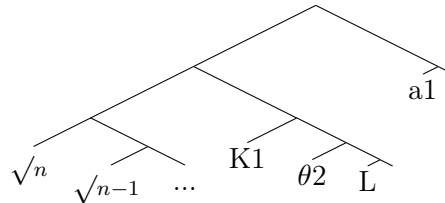
Also in this case, the only entry that can handle the structure is <0422>. Now we are reaching the concluding steps, and *a1* gets introduced into the structure:

(126)



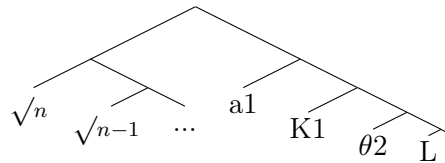
At this point it may seem enticing to put liberal  $\acute{O}d$  to use to spell out  $a1$  after snowballing the rest of the structure above  $a1$ :

(127)



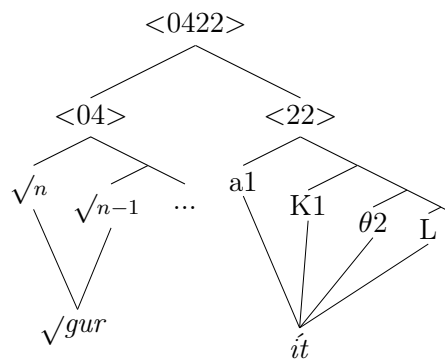
However, the movement calculus imposes that successive cyclic movement be attempted before snowballing from the structure in (126):

(128)



The structure that emerges after successive cyclic movement turns out to be a perfect match for the entry  $\langle 0422 \rangle$ :

(129)

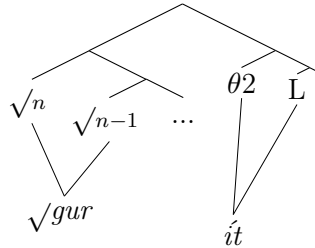


This way, the desired 2DPC form  $gur-\acute{i}t$  is derived, and the movement hierarchy forestalled the unwanted  $gur-\acute{i}t-\acute{O}d$  form that we would have got by snowballing.

The derivation for the **half-passive** proceeds in an identical fashion up to the insertion of  $\theta2$  and the subsequent movement of the root sequence. The matching entry is  $\langle 0422 \rangle$ : the displaced constituent will be spelled out

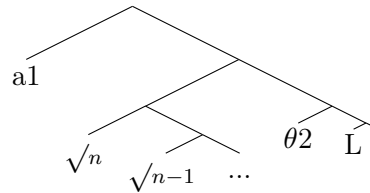
by  $\sqrt{gur}$ , while the terminals  $\theta 2 - L$  are taken care of by the causative suffix  $\acute{i}t$ :

(130)



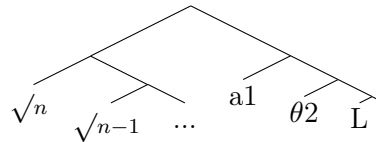
It is first at this point that the derivation of the half-passive takes a different path: instead of  $K1$ ,  $a1$  gets inserted into the structure:

(131)



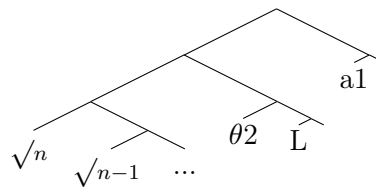
So that  $a1$  could be spelled out, syntax resorts to movement. The first choice, successive cyclic movement, fails: there is simply no way to spell out the right branch of the resulting tree with the lexical entries of the speakers. The futile attempt with successive cyclic movement looks like this:

(132)



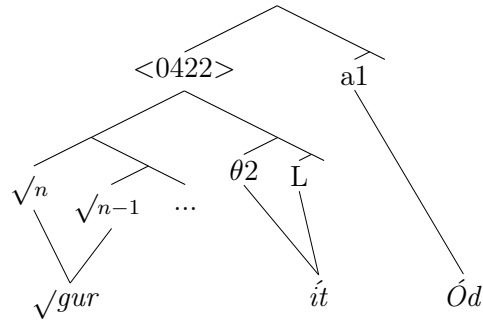
Consequently, the derivation goes for roll-up movement:

(133)



In the ensuing structure, phrasal spell-out employs *Ód* to take on *a1*, and the rest of the structure is fixed by <0422>:

(134)



With this, we have now derived the T1DP, half-passive and 2DPC forms of prototypical equipollent verbs for liberal speakers.

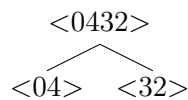
For **CONSERVATIVE SPEAKERS**, the system works the exact same way for T1DP and 2DPC forms; the only notable difference is the size of *Ód*:

(135)

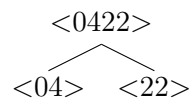
|          |    |    |    |   |    |      |
|----------|----|----|----|---|----|------|
|          | a1 | K1 | θ2 | L | √n | √n-1 |
| 04. √gur |    |    |    |   | √n | √n-1 |
| 22. -í   | a1 | K1 | θ2 | L |    |      |
| 30. -Ód  | a1 |    |    | L |    |      |
| 32. -Ul  | a1 |    |    | L |    |      |

The complex entries remains unchanged:

(136)

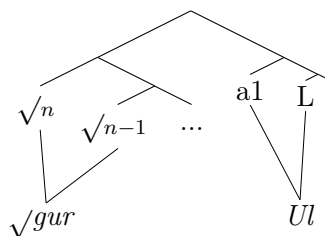


(137)



The derivation of the T1DP forms is the exact same for liberal and conservative speakers; accordingly, the resulting structure looks the same, too:

(138)

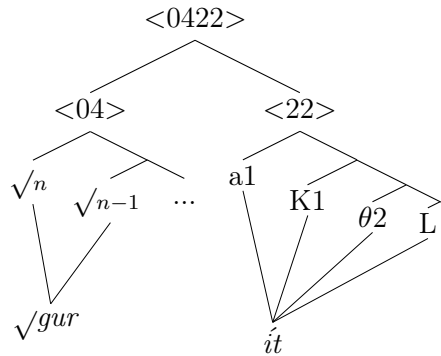




As it was touched upon earlier, for conservative speakers,  $-Ód$  has the same structure as all other, non-productive or semi-productive, anticausative suffixes:  $a1 - L$ . Being a productive suffix,  $-Ód$  is also visible for syntax. This means that  $-Ód$  could, in principle, compete with  $-Ul$  to spell out the sequence  $a1 - L$ . Nevertheless, this possibility never turns into a real problem, as inference with  $-Ód$  is preempted by the complex entry  $\langle 0432 \rangle$ : the moment the structure grows as big as in (138), the complex entry kicks in and overrides whatever items the spell-out procedure had chosen previously.

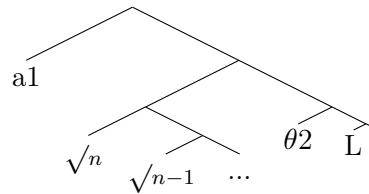
The derivation of the **2DPC**/transitive-causative form runs the exact same way for liberal and conservative speakers, resulting in the desired form  $gur-ít$  for conservative speakers as well:

(139)



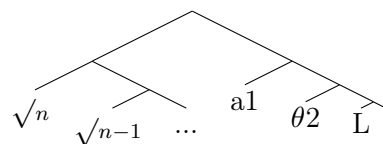
And finally, **half-passive** brings no surprises, either. On the insertion of  $a1$ , the derivation gets stranded, as there is no way to create a configuration in which  $a1$  could be pronounced with the conservative entries:

(140)

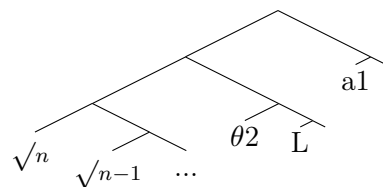


The unsuccessful rescue operations for the half-passive are shown below:

(141) A failed attempt with successive cyclic movement:



(142) A failed attempt with roll-up movement:



Notice that not even backtracking would have helped: as *Ód* obligatorily contains *L* for these speakers, there is simply no way to pronounce *θ2* without *K1* with the conservative entries:

|                           |    |    |    |   |    |      |
|---------------------------|----|----|----|---|----|------|
|                           | a1 | K1 | θ2 | L | √n | √n-1 |
| 04. √ <i>gur</i> ('roll') |    |    |    |   | √n | √n-1 |
| 22. - <i>ít</i>           | a1 | K1 | θ2 | L |    |      |
| 30. - <i>Ód</i>           | a1 |    |    | L |    |      |

### 5.3.2 √*fejl* ('develop')-type verbs

A special subtype of equipollent verbs is constituted by roots that combine with *-Ód* to form anticausatives. As discussed in chapter 3.2.3, these forms are especially interesting because they highlight the size difference between anticausative and half-passive verbs:

- (144) a. anticausative: √ + *Ód*  
 b. half-passive: √ + *caus\** + *Ód*

The roots that belong to this category are the following: √*fejl* ('develop'), √*bonyol* ('complicate'), √*agg* ('worry') and √*tájékoz* ('inform'). The paradigm for liberal and conservative speakers looks like this:

|       |              |                           |         |              |
|-------|--------------|---------------------------|---------|--------------|
|       |              | T1DP                      | HP      | 2DPC         |
| (145) | liberal      | $\sqrt{fejl}$ ('develop') | fejl-ÓD | fejl-Aszt-ÓD |
|       | conservative | $\sqrt{fejl}$ ('develop') | fejl-ÓD | –            |
|       |              |                           |         | fejl-Aszt    |

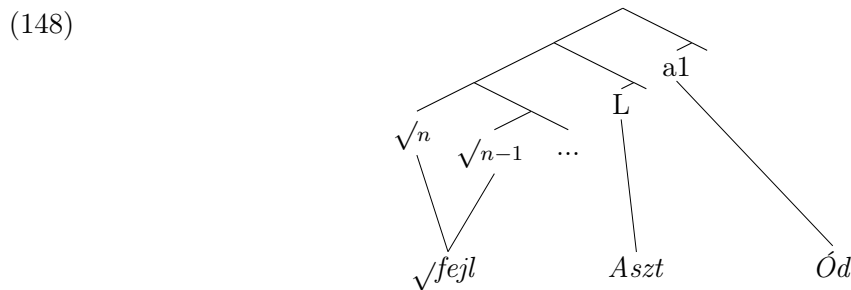
Let us begin with **LIBERAL SPEAKERS**. As a first pass, we can assume the same kind of entries for these verbs as for  $\sqrt{gur}$  ('roll')-type equipollent verbs:

|       |                   |    |            |            |            |              |
|-------|-------------------|----|------------|------------|------------|--------------|
|       | a1                | K1 | $\theta 2$ | L          | $\sqrt{n}$ | $\sqrt{n-1}$ |
| (146) | 05. $\sqrt{fejl}$ |    |            |            | $\sqrt{n}$ | $\sqrt{n-1}$ |
|       | 21. -Aszt         | a1 | K1         | $\theta 2$ | L          |              |
|       | 30. -Ód           | a1 |            |            |            |              |

With these entries, 2DPC/transitive-causative and half-passive forms can be derived without any complications. All we need is to specify by means of a complex entry that of all causative suffixes, it is with *-Aszt* the root  $\sqrt{fejl}$  combines with:



The derivation of the T1DP/anticausative form, however, constitutes a challenge. On the basis of the current entries, the prediction is that for the T1DP structure, *L* will be pronounced by *-Aszt*, while *-Ód* spells out *a1*. But instead of the correct form *fejl-Ód*, this setup predicts that the T1DP form for *fejl* should be pronounced as *fejl-Aszt-Ód*:

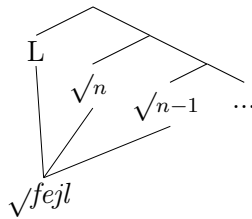


However, hypothesizing that roots like  $\sqrt{fejl}$  are bigger than ordinary equipollent roots by encompassing *L* directly accounts for the unusual pattern displayed by  $\sqrt{fejl}$ -verbs:

(149) Revised entry for  $\sqrt{fejl}$ :

|                   |    |    |            |   |            |              |
|-------------------|----|----|------------|---|------------|--------------|
|                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 05. $\sqrt{fejl}$ |    |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |

(150)

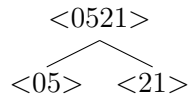


For easier access, I repeat all the relevant entries needed for the liberal derivations, with the original  $\sqrt{fejl}$  replaced with the adapted form:

(151)

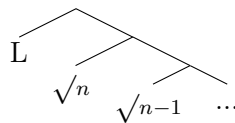
|                   |    |    |            |   |            |              |
|-------------------|----|----|------------|---|------------|--------------|
|                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 05. $\sqrt{fejl}$ |    |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 21. -Aszt         | a1 | K1 | $\theta 2$ | L |            |              |
| 30. -Ód           | a1 |    |            |   |            |              |

(152)



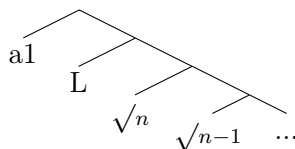
With these entries,  $\langle 05 \rangle$  can spell out the entire sequence up to and including  $L$ :

(153)



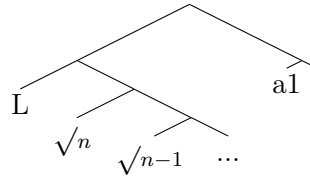
Subsequently,  $a1$  is inserted:

(154)



From here on, <05> cannot handle the structure on its own. To create configuration that can be handled by phrasal spell-out, displacement is necessary. The first attempt turns out to be an optimal move:

(155)

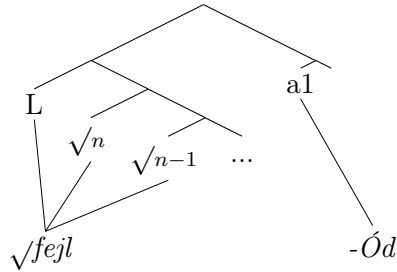


The entry <05> is now a perfect match for the left branch, and *Ód* can attend to the phrasal constituent that directly contains *a1*:

(156) <30>       $a1P \Rightarrow \acute{O}d$   
                   $\widehat{a1}$

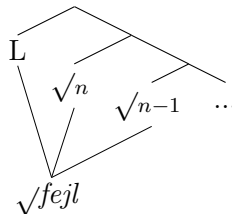
Thereby, the correct T1DP form *fejl-Ód* is derived:

(157)

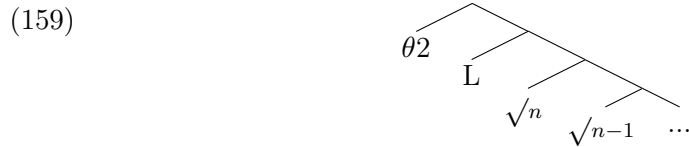


The **2DPC** derivation starts in an identical fashion: <05> tackles the spell-out procedure up to *L* single-handed.

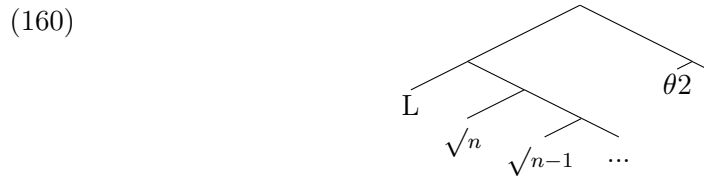
(158)



Next,  $\theta 2$  enters the derivation:



Here, the derivation faces a problem: how to spell out  $\theta 2$ . At this point movement cannot help, either:



The last resort is backtracking: in the first step,  $\theta 2$  gets undone:

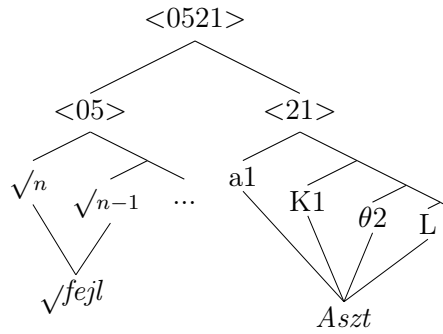


Previously, when the derivation was at this level, the computation went for the simplest option: to not move. Therefore, this time movement is given a try:



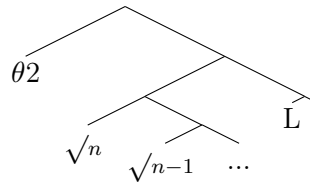
This structure can be spelled out by the complex entry <0521>. The fully expanded structure for the entry is shown below:

(163)



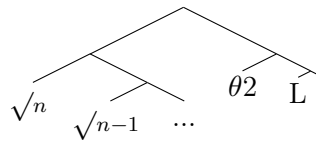
Subsequently,  $\theta2$  gets inserted again:

(164)



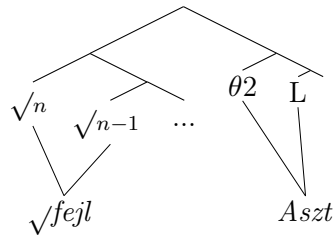
The ensuing structure is unpronounceable, too, but this time successive cyclic movement straightens out the problem:

(165)

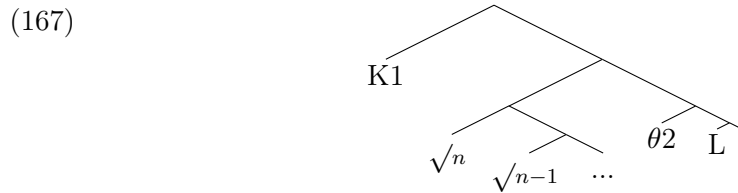


The complex entry <0521> is still a good match:

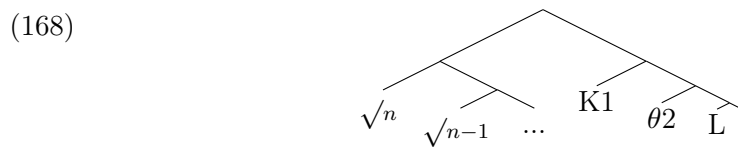
(166)



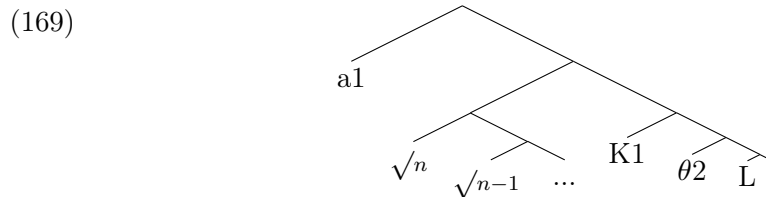
The derivation continues with *K1*:



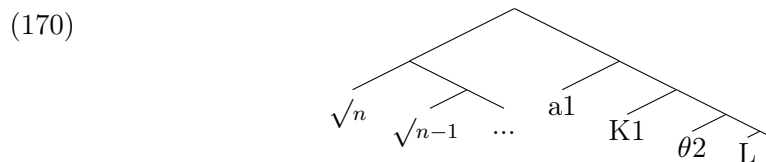
Again, spellout-driven movement is a requisite: the first choice, according to the movement hierarchy, is successive cyclic movement:



The complex entry <0521> remains a fitting match, and *a1* enters the structure:



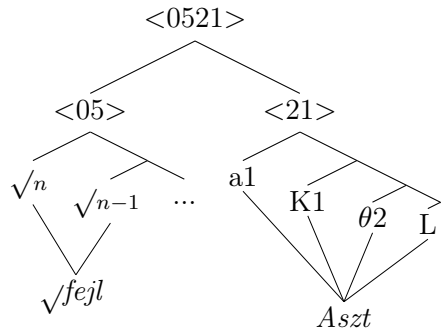
To turn *a1* into a phrasal constituent, the computation resorts to movement. As usual, the first choice is successive cyclic movement:



The resulting structure matches the complex entry <0521>, with the fully expanded structure below:



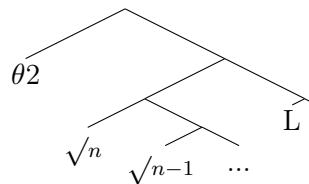
(171)



Thus, the correct 2DPC/transitive causative form *fejl-Aszt* is derived.

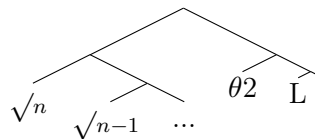
Finally, here is the derivation of **half-passive** *fejl-Aszt-Ód*. Similarly to the 2DPC derivation, after the insertion of  $\theta 2$ , the derivation can only be rescued if the computation backtracks. Subsequently, successive cyclic movement applies, and  $\theta 2$  is inserted again (cf. from (159) to (164)):

(172)



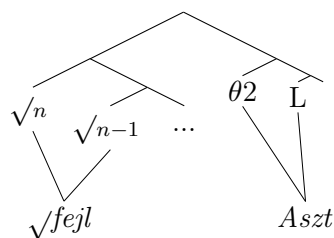
Analogously to the 2DPC derivation, successive cyclic movement takes place to create a pronounceable configuration:

(173)



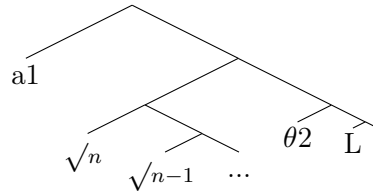
As we have seen before, this structure is taken care of by the complex entry <0521>:

(174)



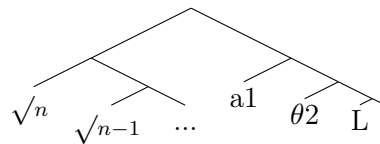
For the half-passive, this is the end of the  $\theta$ /Case sequence. Next,  $a1$  enters the derivation:

(175)



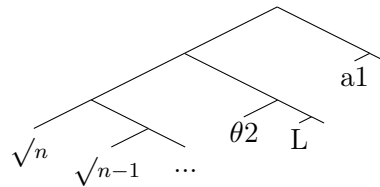
To turn  $a1$  into a phrasal constituent that can be handled by phrasal spell-out, it is necessary with displacement. In the absence of a corresponding entry for the right branch, successive cyclic movement fails:

(176)



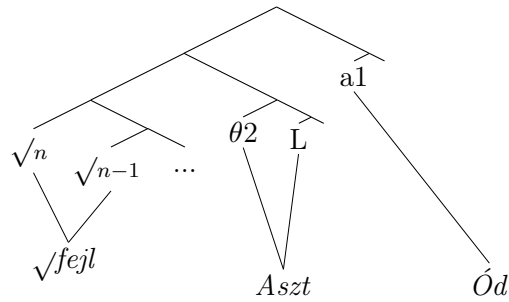
The next move is to try roll-up movement on (175). This yields the following structure:

(177)



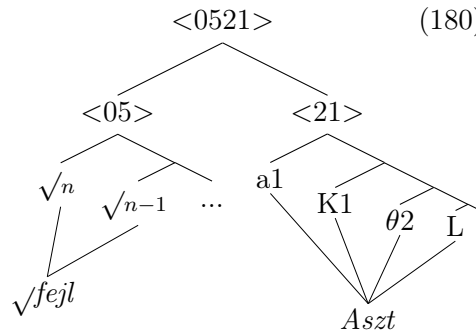
With this,  $\theta2$  and  $a1$  end up on different branches, so the gap between them that caused the trouble disappears. Consequently, spell-out becomes possible: if the complex entry <0521> and  $\acute{O}d$  join forces, they can handle this structure without difficulty:

(178)

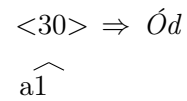


As a reminder, here is the fully expanded entry for <0521>, and also the entry for *Ód*:

(179)



(180)



This way, the T1DP, half-passive and 2DPC forms are derived for liberal  $\sqrt{fejl}$  ('develop').

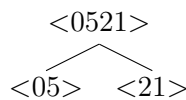
For **CONSERVATIVE SPEAKERS**,  $\sqrt{fejl}$ -like roots behave precisely like ordinary equipollent roots:

(181)

|                   |    |    |    |   |    |      |
|-------------------|----|----|----|---|----|------|
|                   | a1 | K1 | θ2 | L | √n | √n-1 |
| 05. $\sqrt{fejl}$ |    |    |    |   | √n | √n-1 |
| 21. -Aszt         | a1 | K1 | θ2 | L |    |      |
| 30. -Ód           | a1 |    |    | L |    |      |

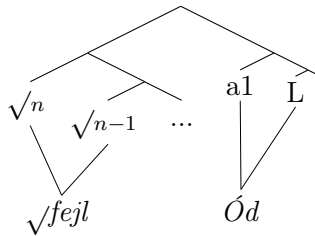
There is only one idiosyncratic combination that needs to be encoded in the lexicon, namely that  $\sqrt{fejl}$  combines with the causative suffix *-Aszt*:

(182)



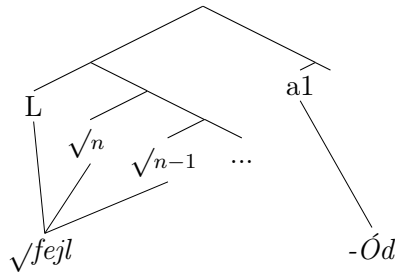
The derivation of the **T1DP** form for conservative  $\sqrt{fejl}$  looks exactly like the ordinary equipollent derivation with  $\sqrt{gur}$ -type roots (cf. 5.3.1). The derivation is straightforward, so I only show the end product:

(183)



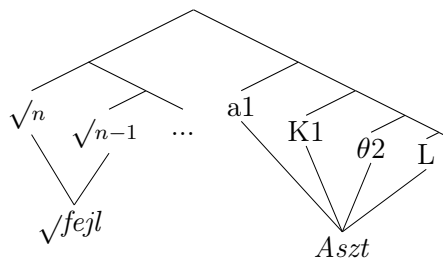
Notice that the emerging T1DP structure for conservative speakers differs from its liberal counterpart:

(184)



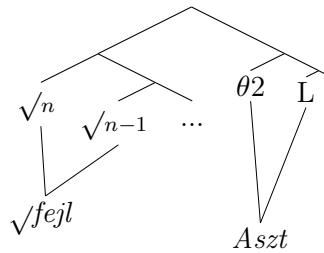
The **2DPC** derivation of  $\sqrt{fejl}$  is much simpler for conservative speakers than for liberals: it runs precisely like the 2DPC derivation of ordinary equipollent roots (again, see 5.3.1). The relevant portion of the final 2DPC/transitive-causative structure for conservative  $\sqrt{fejl}$  looks identical with the liberal variant:

(185)



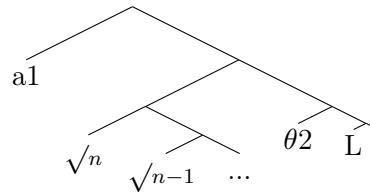
As regards the **half-passive** form, as expected, this will be underivable for conservative speakers. Up to  $\theta2$ , the derivation is analogous to the 2DPC derivation:

(186)



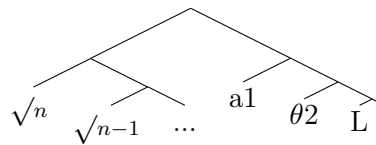
An unsolvable problem arises first when *a1* is added to the structure:

(187)

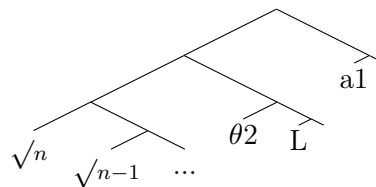


As there is no formative in the lexical array of conservative speakers which could pronounce *a1* in itself, and no configuration of *a1* and (an)other terminal(s) can be created that would be pronounceable, the half-passive structure cannot be spelled out by conservative speakers. The failed attempts to rescue the derivation by means of successive cyclic and roll-up movement are shown below, respectively:

(188)



(189)



### 5.3.3 $\sqrt{faxol}$ ('fax')-type verbs

There are two morphological subclasses,  $\sqrt{faxol}$  ('fax')-type and  $\sqrt{\text{összesít}}$  ('total')-type verbs, for which it is not straightforward which morphological alternation they belong to. For both types, the T1DP/anticausative form subsumes the 2DPC/transitive-causative form, which makes them similar to verbs which participate in the anticausative alternation. At the same time, neither the anticausative nor the transitive-causative form is bare for these two types, which makes them analogous to verbs which participate in the equipollent alternation. Naturally, the real issue is not categorization, but rather how the morphological paradigm for these two types of the tougher kind can be derived. Nevertheless, the emerging derivations indicate that these types have most in common with the equipollent derivations; therefore, I will present them under the equipollent heading.

In my interpretation of the facts, roots which pattern with  $\sqrt{faxol}$  ('fax') differ from other roots in that they are complex, bi-morphemic roots: they consist of a lower level, non-verbal root and a verbalizing suffix, which transforms the low-level root into a full-fledged, verb(al stem). The verbalizing suffix is needed with words loaned from other languages, as these enter Hungarian as underspecified roots, which can subsequently be turned into verbal stems or verbs (and possibly into nouns or adjectives):

- (190) a.  $\sqrt{\text{lízing}}$   
 b.  $\text{lízing-el}$  ('lease')  
 c.  $\text{lízinges}$  ('leased')  
 d.  $\text{lízing}$  ('leasing')
- (191) a.  $\sqrt{\text{adapt}}$   
 b.  $\text{adapt-ál}$  (verbal root 'adapt')  
 c.  $\text{adaptív}$  ('adaptive')  
 d.  $\text{adaptáció}$  ('adaptation')
- (192) a.  $\sqrt{\text{szinkron}}$   
 b.  $\text{szinkron-izál}$  ('synchronize')  
 c.  $\text{szinkrón}$  ('synchronic')  
 d.  $\text{szinkron}$  ('dubbing')

Although some of these roots look identical with the derived noun (e.g. (190-d), (192-d); also  $\text{lájk}$  ('like') and  $\text{ímél}$  ('e-mail')) the fact that the root may not always be able to stand on its own or correspond to a specific noun indicates that it is probably more correct to call these roots. Roots that lack a direct nominal counterpart include for instance  $\text{szken}$  ('scan') or  $\text{print}$

('print').<sup>1</sup>

There is also a number roots, often with corresponding nominal forms, which, at least to contemporary Hungarian ears, do not sound like borrowings or loanwords, but which still need a verbalizing suffix to transform into a verb(al root):

- (193) a.  $\sqrt{\text{hegy}}$   
 b. *hegy-ez* ('make pointed')  
 c. *hegyes* ('pointed, sharp')  
 d. *hegy* ('point', e.g. of a pencil)

Such verbs embrace *körvonal-az* ('outline'), *váz-ol* ('sketch') or *korlát-oz* ('restrict'), and Komlósy's (2000:277) examples *összecukr-oz* ('spatter with sugar'), *összevaj-az* ('smudge with butter') etc. belong here, too.

The Hungarian verbalizing suffixes are the following: *-Oz*, *-Ol*, *-ál*, *-izál*.<sup>2</sup> According to the literature, some of these suffixes are more productive than others: for instance, as Ladányi and Kiefer (2000:194-196) remarks, the use of *-Ol* seems to be more restricted than the use of *-Oz*. This is an issue I need not go into here; we have already seen how such differences can be captured on this account. Notwithstanding, for expository purposes, I will assume that *-Oz* is a productive and *-Ol* is an idiosyncratic verbalizing suffix.

This is the abstract pattern displayed by verbs that require a verbalizing suffix: *v\** stands for the verbalizing suffix.

|               |         |         |      |
|---------------|---------|---------|------|
|               | T1DP    | HP      | 2DPC |
| (194) liberal | R-v*-ÓD | R-v*-ÓD | R-v* |
| conservative  | R-v*-ÓD | –       | R-v* |

For a concrete example, consider the paradigm of  $\sqrt{\text{faxol}}$  ('fax'):

|               |                               |           |           |        |
|---------------|-------------------------------|-----------|-----------|--------|
|               |                               | T1DP      | HP        | 2DPC   |
| (195) liberal | $\sqrt{\text{faxol}}$ ('fax') | fax-Ol-ÓD | fax-Ol-ÓD | fax-Ol |
| conservative  | $\sqrt{\text{faxol}}$ ('fax') | fax-Ol-ÓD | –         | fax-Ol |

<sup>1</sup>For more on these roots, consult Kiefer and Komlósy (2011:202). To find out more about the verbalizing suffixes *-Oz*, *-Ol* or *-(iz)ál*, the reader is referred to Kiefer and Ladányi (2000:194-197 and 207).

<sup>2</sup>It has been suggested in the literature that these suffixes differ from each other regarding what their input is, e.g. nouns, verbs or adjectives. Although I have not dug deep enough into these data, my understanding of the facts is that all of these suffixes combine with underspecified roots that can possibly serve as an input to noun, verb and adjective formation: cf. (190), (191), (192) or (193). Nonetheless, there may be differences with regard to productivity or what kind of roots these suffixes attach to.

To a certain degree, the functions of verbalizing suffixes seem to overlap with the functions of causative suffixes. Nevertheless, there is a suggestive asymmetry between verbalizing suffixes and causative suffixes with regard to how they relate to the anticausative suffix in T1DP constructions. On the verbalizing suffixes, *Ód* is always cumulative:

(196) *Ód* stacks on the verbalizing suffix

- a. fax - ol  
 $\sqrt{\text{fax}} - \text{OL}$   
 'fax<sub>caus</sub>'
- b. fax - ol - ód  
 $\sqrt{\text{fax}} - \text{OL} - \text{ÓD}_{inch}$   
 'fax<sub>inch</sub>'

The example below demonstrates that the verbalizing suffix cannot alternate with *Ód* (cf. (196-a)):

(197) \*fax - ód  
 $\sqrt{\text{fax}} - \text{ÓD}_{inch}$   
 Intended: 'fax<sub>inch</sub>'

As for causative suffixes, with a certain root type, *Ód* can stack on a causative suffix in the T1DP form (cf. 5.3.4). But normally, the anticausative suffix leaves no room for a causative suffix in a T1DP construction:

(198) Idiosyncratic inchoative suffix scares off the causative suffix:

- a. gur - ít  
 $\sqrt{\text{roll}} - \text{CAUS}$   
 'roll<sub>caus</sub>'
- b. gur - ul  
 $\sqrt{\text{roll}} - \text{INCH}$   
 'roll<sub>inch</sub>'

Recall that the stacked form *gur-ít-ód* is ungrammatical for conservative speakers, and has only a half-passive reading for liberal speakers.

The same goes for the anticausative use of *-Ód*: *bonyol-ít-ód* has a half-passive meaning for liberal speakers, and is non-existent for conservative speakers. The grammatical T1DP form is shown in (199-b):



(199) Anticausative *-Ód* scares off the causative suffix:

a. bonyol - *ít*  
 $\sqrt{\text{complicate}}$  - CAUS  
 'complicate<sub>caus</sub>'

b. bonyol - *ód*  
 $\sqrt{\text{complicate}}$  -  $\text{ÓD}_{inch}$   
 'grow complicated'

So on comparing verbalizing and causative suffixes, the following generalization emerges: in the T1DP construction, the anticausative suffix may either alternate with or stack on a causative suffix, but it only stacks on and never alternates with verbalizing suffixes. The rest of this section concentrates on the behavior of verbalizing suffixes; to causative suffixes I will come back in section 5.3.4.

To account for the behavior of verbalizing suffixes, recall that the entries for causative suffixes were taken to lexicalize the sequence *a1 - K1 -  $\theta$ 2 - L*, and roots go up to the top of the root constituent  $\sqrt{n}$ , or in some cases to *L* (cf. liberal *fejl* ('develop')) or even to *a1*:

|                               | a1 | K1 | $\theta$ 2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
|-------------------------------|----|----|------------|---|------------|--------------|
| 03. $\sqrt{tép}$ ('tear')     | a1 | K1 | $\theta$ 2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 05. $\sqrt{fejl}$ ('develop') |    |    |            | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 04. $\sqrt{gur}$ ('roll')     |    |    |            |   | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 2x. suffix <sub>caus</sub>    | a1 | K1 | $\theta$ 2 | L |            |              |

The observation that the anticausative suffix is always cumulative on verbalizing suffixes, while proper causative and inchoative suffixes typically alternate with each other, suggests that verbalizing suffixes start out lower than ordinary causative and inchoative suffixes, and lexicalize some of the higher root layers, which are typically spelled out by the root itself. Therefore, I will hypothesize that verbalizing suffixes lexicalize some of the root layers denoted as  $\sqrt{n}$ :

|                | a1 | K1 | $\theta$ 2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
|----------------|----|----|------------|---|------------|--------------|
| 11. <i>-Oz</i> |    |    |            |   | $\sqrt{n}$ |              |
| 12. <i>-Ol</i> |    |    |            |   | $\sqrt{n}$ |              |

It seems plausible that verbalizing suffixes need to start lower precisely because underspecified, low-level roots like *fax* ('fax') or *hely* ('place') do not reach up to the top root layer(s)  $\sqrt{n}$  but consist only of the lower layers,

which encode for instance lexical semantic information:

|       |                             |    |            |   |            |              |     |
|-------|-----------------------------|----|------------|---|------------|--------------|-----|
|       | a1                          | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ | ... |
| (202) | 06. $\sqrt{fax}$ ('fax')    |    |            |   |            | $\sqrt{n-1}$ | ... |
|       | 07. $\sqrt{hely}$ ('place') |    |            |   |            | $\sqrt{n-1}$ | ... |

This setup accounts for why verbalizing suffixes are needed in the first place: they turn "small" roots into full-fledged roots.<sup>3</sup>

Transitive-causative verbs with a verbalizing suffix bear no overt causative marking apart from the verbalizing suffix. This means that the causative layer  $a1 - K1 - \theta 2 - L$  should be pronounced by a phonologically null element; however, the framework I use allows the verbalizing suffix to span the entire sequence  $a1 - K1 - \theta 2 - L - \sqrt{n}$ . As the letter option involves fewer primitives, I will go for this version. The revised entries for 'small roots' and verbalizing suffixes look like this:

|       |                             |    |            |            |            |              |
|-------|-----------------------------|----|------------|------------|------------|--------------|
|       | a1                          | K1 | $\theta 2$ | L          | $\sqrt{n}$ | $\sqrt{n-1}$ |
| (203) | 06. $\sqrt{fax}$ ('fax')    |    |            |            |            | $\sqrt{n-1}$ |
|       | 07. $\sqrt{hely}$ ('place') |    |            |            |            | $\sqrt{n-1}$ |
|       | 11. $-Oz$ ('twist')         | a1 | K1         | $\theta 2$ | L          | $\sqrt{n}$   |
|       | 12. $-Ol$ ('twist')         | a1 | K1         | $\theta 2$ | L          | $\sqrt{n}$   |

<sup>3</sup>An interesting issue that could be taken up is whether the verbalizing suffix  $-iz\acute{a}l$  can be composite of the verbalizing suffix  $-\acute{a}l$  and a hypothetical formative  $-iz$ . This idea would be worth pursuing if data were found which spoke in favor of different size for low-level roots like  $\sqrt{\text{adapt}}$  and  $\sqrt{\text{szinkron}}$ . In terms of the present account, that could mean the following :

|     |                          |    |            |   |            |              |              |
|-----|--------------------------|----|------------|---|------------|--------------|--------------|
|     | a1                       | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ | $\sqrt{n-m}$ |
| (i) | $\sqrt{\text{adapt}}$    |    |            |   |            | $\sqrt{n-1}$ | $\sqrt{n-m}$ |
|     | $\sqrt{\text{szinkron}}$ |    |            |   |            |              | $\sqrt{n-m}$ |
|     | $-\acute{a}l$            |    |            |   | $\sqrt{n}$ |              |              |
|     | $-iz$                    |    |            |   |            | $\sqrt{n-1}$ |              |

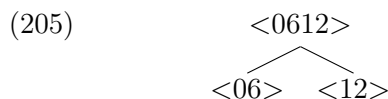
Provided that roots like  $\sqrt{\text{adapt}}$  can be shown to involve more structure than roots like  $\sqrt{\text{szinkron}}$ , the suffix  $-\acute{a}l$  could lexicalize a higher portion of the root sequence, while  $-iz$  would correspond to a lower chunk  $\sqrt{n-1}$ , for which  $\sqrt{\text{szinkron}}$ -like roots are still not big enough. This would allow the verbalizing suffix  $-\acute{a}l$  to combine with some roots on its own, while making a compositional account of  $-iz\acute{a}l$  possible. The point at which roots could choose to grow into an adjective or noun instead of a verb would in all likelihood be somewhere before  $\sqrt{n-1}$ . However, as in this work I am only scratching the surface of the behavior of verbalizing suffixes, this train of thought remains mere speculation for now.

The only lexical item we need for the derivations in addition to these entries is *Ód*. For **LIBERAL SPEAKERS**:

(204)

|               |    |    |    |   |            |              |
|---------------|----|----|----|---|------------|--------------|
|               | a1 | K1 | θ2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 30. <i>Ód</i> | a1 |    |    |   |            |              |

Although I do not have an adequate overview of the data concerning the productivity of these verbalizing suffixes, for expository purposes I will assume, in line with Kiefer and Ladányi (2000), that *-Ol* is idiosyncratic and *-Oz* is productive. This means that there is no need for a complex entry for *-Oz*, while the Lexicon prescribes that the root  $\sqrt{fax}$  must be turned into a full-fledged verb(al root) by *-Ol*:



As the derivation of  $\sqrt{fax}$  with an idiosyncratic verbalizing suffix is slightly more taxing than the derivation for  $\sqrt{hely}$  with the putatively productive *-Oz*, I pick  $\sqrt{fax}$  to demonstrate how the derivations work for low-level roots.

The **T1DP** derivation goes as follows. The lower layers are spelled out by  $\langle 06 \rangle$ , the underspecified root  $\sqrt{fax}$ :

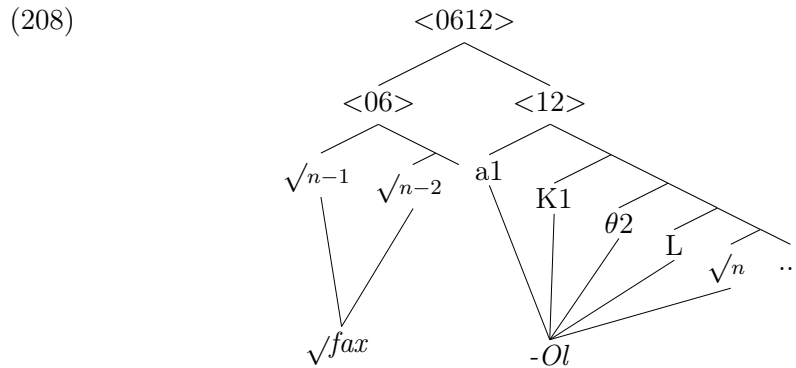


Subsequently,  $\sqrt{n}$  gets inserted. The resulting structure is unpronounceable, but can be rescued by moving  $\sqrt{n-1}\sqrt{n-2}$  above  $\sqrt{n}$ :

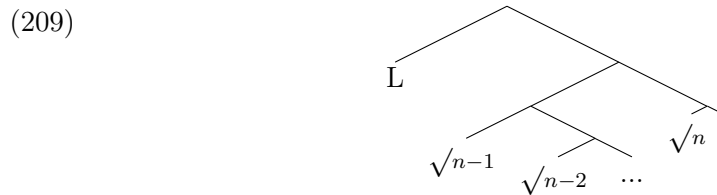


Spell-out is bottom-up, so what gets spelled out first is the phrasal node containing  $\sqrt{n}$ . At this point, the computation only sees the putative productive

verbalizing suffix <11>, so  $\sqrt{n}P$  spells out as *-Oz*. The spell-out mechanism moves on to the mother node. At this moment, spell-out realizes that there is a tailor-made complex entry that matches this structure: <0612>. This entry will override the spell-out of the assumedly productive verbalizing suffix <11>, and the entire structure will be pronounced as *fax-Ol*. The fully expanded entry of <0612> is this:



The feature *L* enters the structure:



As the language has a number of causative suffixes, all of which start from *L*, a causative suffixes could in principle step in and spell out *L*. Consider, for instance, the productive causative suffix *-tAt*:

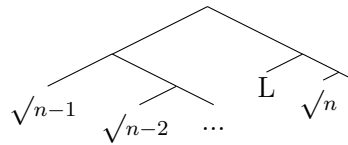
(210)

|                 |           |           |           |          |            |              |
|-----------------|-----------|-----------|-----------|----------|------------|--------------|
|                 | <i>a1</i> | <i>K1</i> | <i>θ2</i> | <i>L</i> | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 20. <i>-tAt</i> | <i>a1</i> | <i>K1</i> | <i>θ2</i> | <i>L</i> |            |              |

Nevertheless, phrasal spell-out cannot handle *L* dangling at the top of the tree: thus, the structure cannot be spelled out as it. Therefore, the computation resorts to movement. Snowballing would allow productive *-tAt* to pronounce *L*, but roll-up movement is only the second option: recall that the

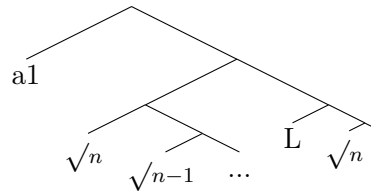
movement calculus prefers successive cyclic movement to snowballing. And successive cyclic movement yields a pronounceable structure, which can be tackled by the complex entry <0612>:

(211)



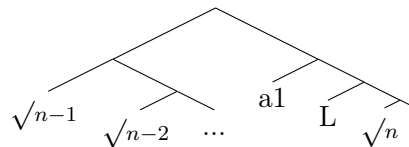
Finally, *a1* is inserted:

(212)



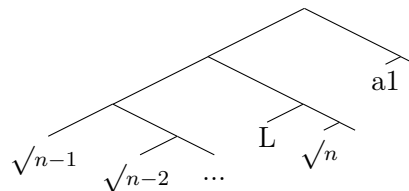
The resulting configuration can no longer be handled by the complex entry <0612> alone. Even successive cyclic movement fails to help:

(213)



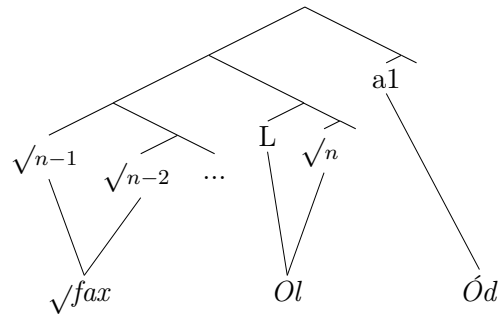
At this point snowballing from the original structure (212) becomes an option:

(214)



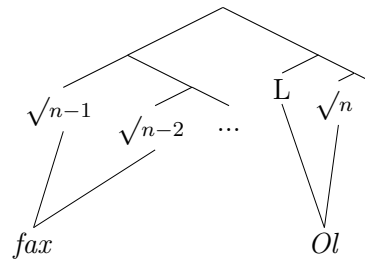
With this structure, *-Ód* can lend a helping hand, and the spell-out procedure will be successful. The correct T1DP form *fax-Ol-Ód* is derived:

(215)



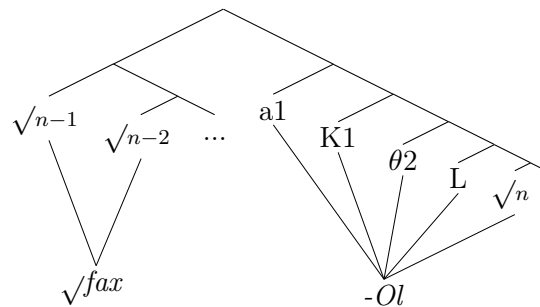
For the **2DPC** form, the beginning of the derivation is identical to that of the T1DP form up to  $L$ . Initially, the relevant entry is  $\langle 06 \rangle$ , but after the insertion of  $\sqrt{n}$ , the complex entry  $\langle 0612 \rangle$  takes over:

(216)



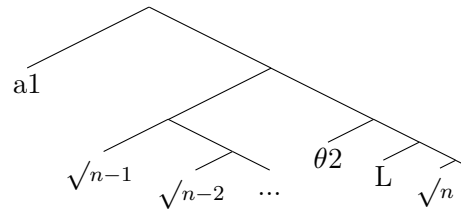
From here on,  $-Ol$  will monopolize on everything that gets inserted after the necessary movement operations:

(217)



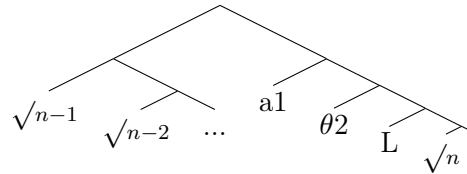
The derivation of the **half-passive** proceeds in the exact same fashion up to  $\theta2$ . Then  $a1$  enters the structure:

(218)



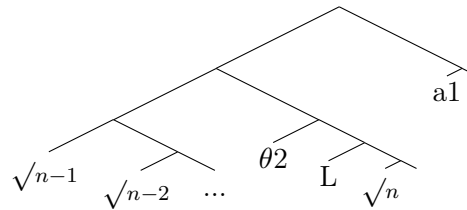
As *a1* is unsuited for phrasal spell-out at the top of the tree, the computation applies successive cyclic movement, with no success:

(219)



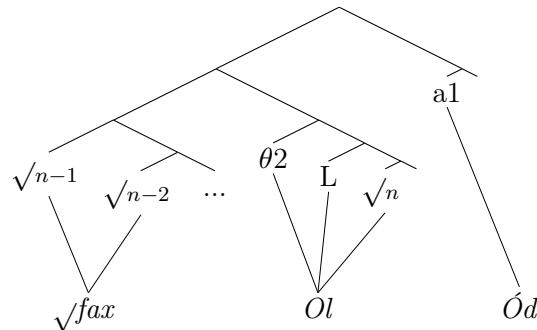
As a last resort, snowballing is attempted from the original structure (218):

(220)



The resulting structure will be spelled out via a collaboration of the complex entry <0612> and liberal *Ód*:

(221)



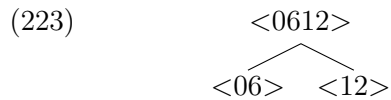
This derives the half-passive form *fax-Ol-Ód*.

For **CONSERVATIVE SPEAKERS**, the simple entries are the following, with the usual change about the size of  $\acute{O}d$ :

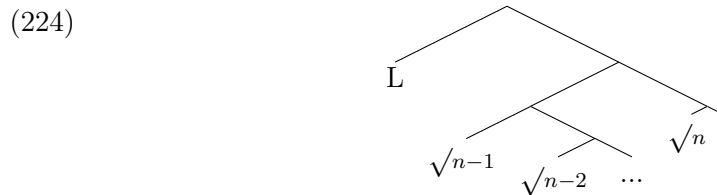
(222)

|                             |    |    |            |   |            |              |              |
|-----------------------------|----|----|------------|---|------------|--------------|--------------|
|                             | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ | $\sqrt{n-2}$ |
| 06. $\sqrt{fax}$ ('fax')    |    |    |            |   |            | $\sqrt{n-1}$ | $\sqrt{n-2}$ |
| 07. $\sqrt{hely}$ ('place') |    |    |            |   |            | $\sqrt{n-1}$ | $\sqrt{n-2}$ |
| 11. $-Oz$                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ |              |              |
| 12. $-Ol$                   | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ |              |              |
| 30. $\acute{O}d$            | a1 |    |            | L |            |              |              |

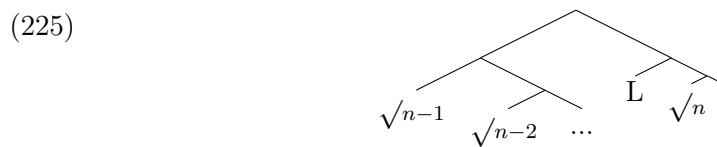
The applicable complex entry is unchanged:



The derivation of the conservative **T1DP** form will be slightly different from that of the liberal T1DP, due to to difference in the size of  $\acute{O}d$ . The derivation becomes interesting first after the insertion of  $L$ :



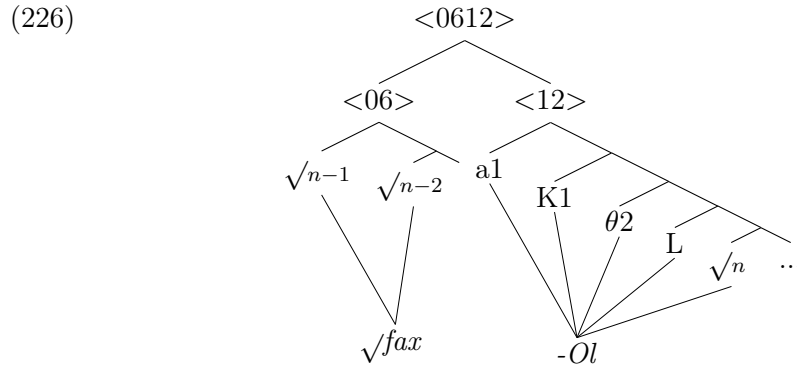
In this configuration,  $L$  cannot be handled by phrasal spell-out. Since the structure is unpronounceable as it is, the first choice as always is successive cyclic movement:



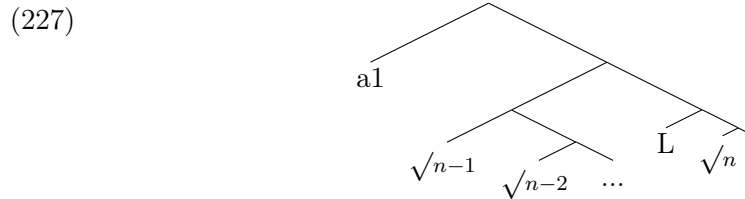
As for all the  $fax$ -type derivations with an idiosyncratic verbalizing suffix, first  $\sqrt{n}P$ , and in this particular derivation the next phrasal node  $LP$  are



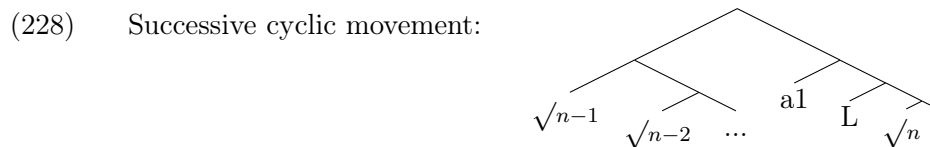
spelled out by the assumedly productive verbalizing suffix in <11>. However, when the spell-out procedure hits the mother node in the tree, the tailor-made entry <0612> is discovered, and the complex entry overrides <11>. The fully expanded entry <0612> is repeated below:



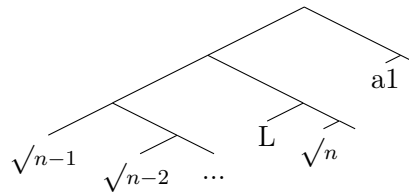
After this, *a1* is inserted:



Subsequent to the insertion of *a1*, the derivation faces trouble. There is no legitimate movement series that could make *a1* pronounceable: both successive cyclic movement and snowballing fail, as *a1* remains unpronounceable on both scenarios with the conservative entries:

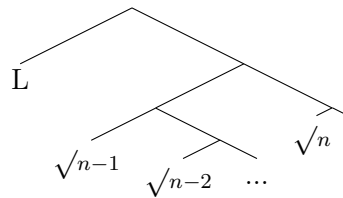


(229) Snowballing:



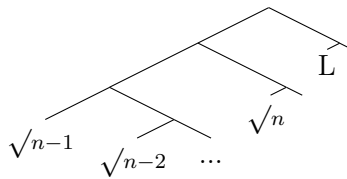
As a last resort, the derivation backtracks from the pre-movement structure in (227). The node  $a1$  gets undone, and the previously moved  $\sqrt{n-1} - \sqrt{n-2}$  shifts back one notch:

(230)



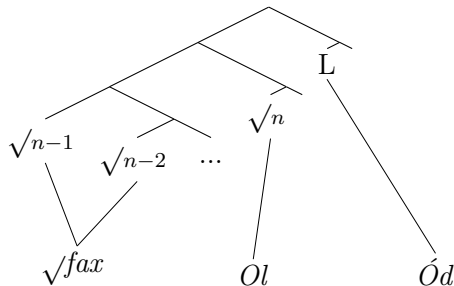
As last time the computation tried successive cyclic movement of  $\sqrt{n-1} - \sqrt{n-2}$ , and that did not work out, the derivation can now attempt snowballing from the same structure (230):

(231)



The resulting configuration is pronounceable:

(232)

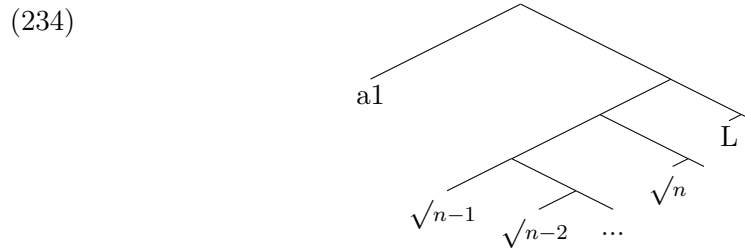


Notice that the productive causative suffix  $-tAt$  competes with  $-Ód$  to spell out  $L$ , but it loses due to all the junk it contains:

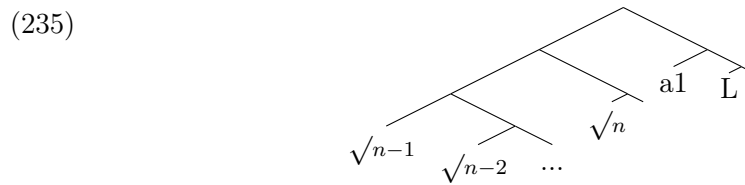
(233)

|          |    |    |            |   |            |              |
|----------|----|----|------------|---|------------|--------------|
|          | a1 | K1 | $\theta 2$ | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 20. -tAt | a1 | K1 | $\theta 2$ | L |            |              |
| 30. -Ód  | a1 |    |            | L |            |              |

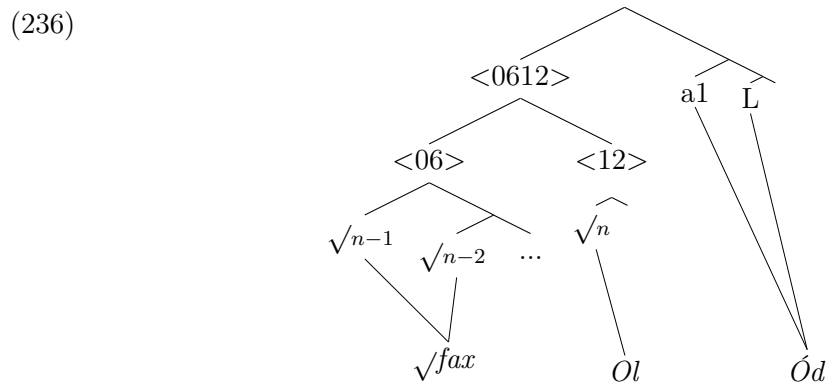
Next, *a1* enters the derivation:



Phrasal spell-out cannot handle the newly inserted *a1*, so as rescue operation number one, successive cyclic movement applies:

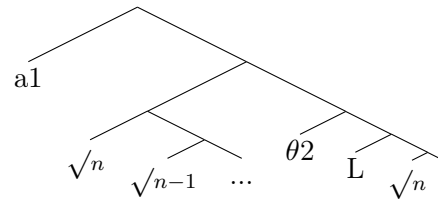


With this, the correct T1DP structure *fax-Ol-Ód* is derived for conservative speakers, too:

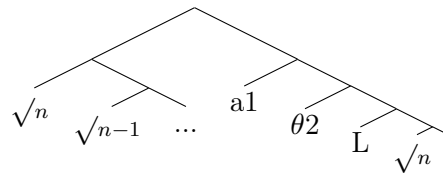


The derivation of conservative and liberal **2DPC** *fax-Ol* is completely identical; therefore, the steps will not be repeated here. And finally, the non-existing **half-passive** will be underivable, because neither <12> nor <30> can be shaped in such a way that the sequence *a1-θ2-L* would be pronounceable, regardless of what displacement strategy one attempts to apply:

(237) The crashing structure:

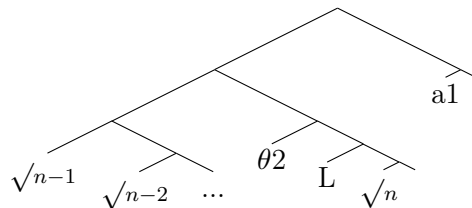


(238) Successive cyclic movement fails:



(239) Roll-up movement fails:

(240)



Not even backtracking offers a way out, so the derivation ends in a crash.

We have now seen that the derivations for *fax-Ol*-type verbs have turned out to pattern with ordinary equipollent derivations with one main difference:

*fax-Ol*-type roots lexicalize only the lower portion of the root sequence, and the top layers of the root, represented by  $\sqrt{n}$ , are invariably spelled out by a verbalizing suffix, a morpheme which also takes care of the causative sequence *a1 - K1 - θ2 - L* in the present system.

### 5.3.4 $\sqrt{\text{összesít}}$ ('total')-type verbs

Verbs like *összesít* are unique in the sense that they seem to involve causative morphology as low as T1DP. The T1DP form consists of the root, a causative suffix and *-Ód*:

- (241)    *összes - ít*        - *ód*  
           total - CAUS - ÓD  
           'total<sub>inch</sub>'

The fact that T1DP comprises of a causative suffix and *-Ód* makes the T1DP and half-passive forms of these verbs surface identical. Although there may be more, I am aware of only a handful of verbs like this:  $\sqrt{\text{összesít}}$  ('total'), *behelyettesít* ('substitute, insert'), *kiegyenlít* ('even out, settle (a bill), discharge (debt)') with the suffix *ít*; *szerk-eszt* ('edit') with the suffix *-Aszt* may belong here, too. The roots of these verbs cannot directly combine with *-Ód* or some other anticausative suffix:

- (242)    a. \**összes - ód*  
           total - ÓD  
           Intended: 'total<sub>inch</sub>'
- b. \**összes - ül/ed*  
           total - UL/ED  
           Intended: 'total<sub>inch</sub>'

Here is a handful of examples with the T1DP use of these verbs:

- (243)    Az eredmények automatikusan *összes - ít*        - *ód* - nek.  
           the results        automatically total - CAUS - ÓD - PRES.3PL  
           'The results get totaled automatically.'
- (244)    Until the end of the 1960s, the cause for infertility was found more often in women than in men, but since then ... [*Az 1960-as évek végéig a meddőség okát gyakrabban találták meg a nőkben, mint a férfiakban, mára ez ...*].
- a. az arány *kiegyenl - ít*        - *ód* - ött.  
           the rate  $\sqrt{\text{equal}}$  - CAUS - ÓD - PAST.3SG out  
           'this rate evened out.'

- (245) On printing the circular, the content of the field ... from the database. [*A körlevél nyomtatásakor a mező tartalma ... az adatbázisból.*]
- a. automatikusan behelyettes - *ít* - *ód* - *ik*  
 automatically insert - CAUS - *ÓD* - PRES.3SG  
 'will get automatically inserted'

For roots like *összes-ít-Ód*, the overall paradigm looks like this, provided that the forms under discussion are truly T1DP:

|               | T1DP               | HP                 | 2DPC    |
|---------------|--------------------|--------------------|---------|
| (246) liberal | R-caus*- <i>ÓD</i> | R-caus*- <i>ÓD</i> | R-caus* |
| conservative  | R-caus*- <i>ÓD</i> | –                  | R-caus* |

And here is the concrete paradigm for *összes-ít-Ód*:

|                                          | T1DP                | HP                  | 2DPC             |
|------------------------------------------|---------------------|---------------------|------------------|
| (247) $\sqrt{\text{összesít}}$ ('total') | <i>összes-ít-Ód</i> | <i>összes-ít-Ód</i> | <i>összes-ít</i> |
| $\sqrt{\text{összesít}}$ ('total')       | <i>összes-ít-Ód</i> | –                   | <i>összes-ít</i> |

This pattern raises no problems for **LIBERAL SPEAKERS**. The 2DPC and half-passive derivations for *összesítőd* are comparable to the corresponding derivations for equipollent pairs for the 2DPC and the half-passive. The assembling of the T1DP form is slightly different from the classic equipollent T1DP derivation, but it is still straightforward. The lexical entries for liberal speakers will be the following, with the usual causative *ít*-suffix and liberal *Ód*:

|                                            |    |    |            |   |            |              |
|--------------------------------------------|----|----|------------|---|------------|--------------|
|                                            | a1 | K1 | $\theta$ 2 | L | $\sqrt{n}$ | $\sqrt{n-1}$ |
| (248) 08. $\sqrt{\text{összes}}$ ('total') |    |    |            |   | $\sqrt{n}$ | $\sqrt{n-1}$ |
| 22. <i>ít</i>                              | a1 | K1 | $\theta$ 2 | L |            |              |
| 30. <i>Ód</i>                              | a1 |    |            |   |            |              |

<0822> is a complex entry, which connects the root *összes* with the transitive-causative suffix *ít*:

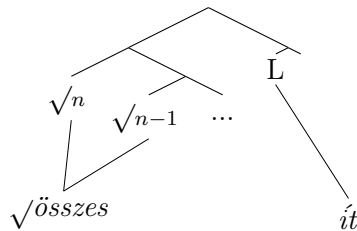
- (249)
- ```

  <0822>
   /  \
  <08> <22>

```

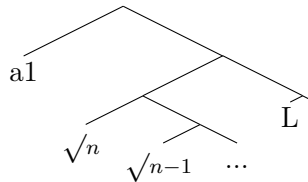
Moving on to the actual derivations for *összes-ít-őd*, these are the main steps in the piecing together of the **T1DP** form. Initially, <08> is sufficient to handle the root sequence. After the insertion of L, spellout-driven movement takes place, the complex entry <0822> kicks in, and the structure will be pronounced as *összes-ít*:

(250)

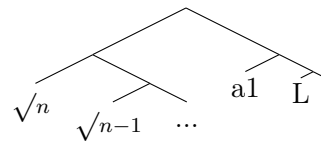


Next, *a1* is introduced into the structure:

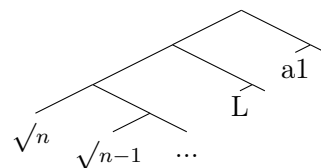
(251)



Movement is forced by phrasal spell-out. Successive cyclic movement yields a configuration that is unpronounceable for liberal speakers with *összes*-type verbs:

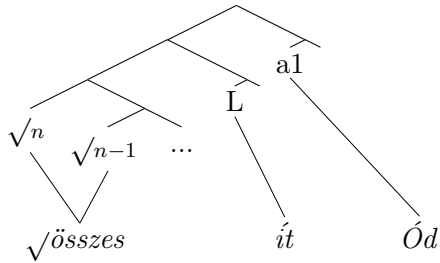


This is because there is no lexically determined, idiosyncratic anticausative suffix associated with the root *√összes* that could spell out the constituent *a1-L*, and productive, liberal *őd* corresponds to a phrasal constituent that consists exclusively of *a1*. As a second attempt, roll-up movement gets a chance:



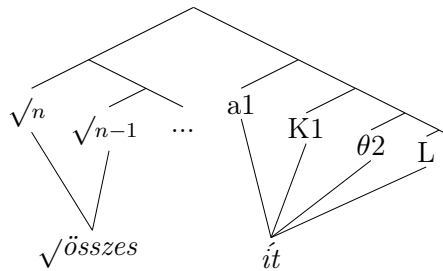
This structure can be spelled out by the complex entry <0822> and *Ód*, deriving the correct T1DP form *összes-ít-ód*:

(252)



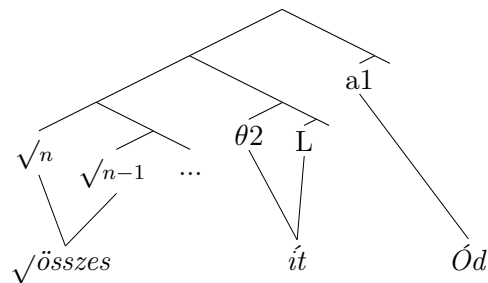
As for the **2DP** construction, there have already been shown derivations cut of the same cloth (cf. 5.3.1). As prescribed by <0822>, the entries <08> and <22> join forces to spell out the evolving structure:

(253)



Also the **half-passive** gets assembled as any \sqrt{gur} -type verb (again, see 5.3.1 for details). The end product of the derivation is the following structure, with the expected spell-out:

(254)



Now that it has been demonstrated how it can happen that in some cases *Ód* stacks on the causative suffix in the T1DP form, it is due with a comparison

with *fax-ol*-type verbs. Recall that an argument for *Ol*-suffixes to be treated as verbalizing suffixes rather than causative suffixes was that *Ol*-suffixes never alternate with inchoative suffixes but rather allow *Ód* to stack on them (cf. 5.3.3):

(255) Anticausative -*Ód* stacks on the verbalizing suffix

- a. fax - ol
 $\sqrt{\text{fax}} - \text{OL}$
 'fax_{caus}'
- b. fax - ol - ód
 $\sqrt{\text{fax}} - \text{OL} - \acute{\text{O}}\text{D}_{\text{inch}}$
 'fax_{inch}'

The existence of verbs like *összes* shows that anticausative suffixes, or to be precise *Ód*, not necessarily chase away the causative suffix but can also stack on it:

- (256) a. *összes - ít
 total - CAUS
 'total_{caus}'
- b. összes - ít - ód
 total - CAUS - ÓD
 'total_{inch}'

So as pointed out in the previous section, *Ód* may either alternate with or stack on a causative suffix, but it only stacks on and never alternates with verbalizing suffixes like *Ol*. In view of the hypothesized structures, this comes in fact as no surprise. On the account I present here, two possible causes of stacking in T1DP have emerged: elongated verbalizing suffixes or vertically challenged roots.

As it was argued in the previous section, the reason why verbalizing suffixes induce stacking is because they reach lower than other suffixes, and this way they help out small roots that only reach up to $\sqrt{n-1}$. So verbalizing suffixes take responsibility for a region that under ordinary circumstances is lexicalized by a normal-sized root: \sqrt{n} .

(257)

| | | | | | | |
|---------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| ordinary suffix _{caus} | a1 | K1 | $\theta 2$ | L | | |
| verbalizing suffix | a1 | K1 | $\theta 2$ | L | \sqrt{n} | |

Recall that the relevant chunk of the syntactic structure for T1DP is this:

(258)

| | | | | | | |
|---------------------|----|----|------------|---|------------|--------------|
| functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP sequence | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

As anticausative suffixes start at *L* at the lowest, it is impossible to leave a verbalizing suffix out of the play when pronouncing a T1DP structure:

(259)

| | | | | | | |
|----------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| anticausative suffix | a1 | | | L | | |
| liberal <i>Ód</i> | a1 | | | | | |

The other instance of stacking involves a causative suffix and *Ód*. For liberal speakers, this type of stacking takes place when roots are too short, and there is a piece of structure that is covered neither by the root nor the suffix *Ód*:

(260)

| | | | | | | |
|-------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| gur/összes root | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| liberal <i>Ód</i> | a1 | | | | | |

In a T1DP construction, a combination of this root type and *Ód* leaves *L* unlexicalized:

(261)

| | | | | | | |
|---------------------|----|----|------------|---|------------|--------------|
| functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP sequence | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

In such cases, a causative suffix steps in to take care of that piece of structure that otherwise would be left unlexicalized:

(262)

| | | | | | | |
|---------------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| $\sqrt{gur}/\sqrt{összes}$ -type root | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| liberal <i>Ód</i> | a1 | | | | | |
| causative suffix | a1 | K1 | $\theta 2$ | L | | |

Notice that \sqrt{gur} -type roots and $\sqrt{összes}$ -type roots are of the same size, but stacking of the causative and anticausative suffix in T1DP only occurs with $\sqrt{összes}$ -type roots. This because \sqrt{gur} -type roots are associated with a lexically determined anticausative suffix, which are taken to span the sequence

$a1 - L$; thereby, there is no need for a rescue operation by some causative suffix to tackle L . $\sqrt{Összes}$ -type roots, on the other hand, are not connected to a lexically determined anticausative suffix, so by default they combine with $Ód$, which for liberal speakers only lexicalizes $a1$. That means that without the causative suffix lending a helping hand, L would remain unlexicalized in the T1DP structure, thus bringing about a crash:

| | | | | | | |
|--|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| (263) idiosyncratic inch^* suffix | a1 | | | L | | |
| liberal $Ód$ | a1 | | | | | |

The reason why the causative suffix does not contribute causative content to összes -type T1DP constructions is because in these structures it lexicalizes merely L , which on the present account is found in T1DP constructions as well as in the half-passive and the 2DPC/transitive-causative construction, and which is thereby neutral with regard to causational content.

Finally, notice that roots which were assumed to grow higher than \sqrt{n} will never need to resort to a causative suffix precisely because they reach up to L or higher, and if necessary, from then on $Ód$ can take over to spell out $a1$:

| | | | | | | |
|---------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| (264) 03. $\sqrt{tép}$ ('tear') | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 05. \sqrt{fejl} ('develop') | | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| liberal $Ód$ | a1 | | | | | |

| | | | | | | |
|---------------------------|----|----|------------|---|------------|--------------|
| (265) functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP sequence | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

While the behavior of összes -type verbs falls out from the lexical entries of liberal speakers, the same reasoning breaks down with **CONSERVATIVE SPEAKERS**. Consider the pattern one more time:

| | | | |
|---------------|---------------|---------------|---------|
| | T1DP | HP | 2DPC |
| (266) liberal | R-caus*- $ÓD$ | R-caus*- $ÓD$ | R-caus* |
| conservative | R-caus*- $ÓD$ | – | R-caus* |

The reason why the liberal analysis fails to carry over to conservative speakers lies with the core of the distinction between liberal and conservative speakers: the size of *Ód*. Recall that for conservative speakers, *Ód* has the same size as any ordinary, idiosyncratic inchoative suffix: *a1 - L*:

(267)

| | | | | | | |
|----------------------------|----|----|----|---|----------------|------------------|
| | a1 | K1 | θ2 | L | √ _n | √ _{n-1} |
| idiosyncratic inch* suffix | a1 | | | L | | |
| conservative <i>Ód</i> | a1 | | | L | | |

Thereby, there is no need for a causative suffix to lexicalize *L*: *Ód* can handle it on its own. This makes the incorrect prediction that the T1DP form of √*összes*-type roots is non-existing form *összes-Ód*. As a consequence, the conservative language variant needs a radically different account for the pattern displayed by *összes*-type verbs. There are several possibilities to consider, which I will briefly outline in turn.

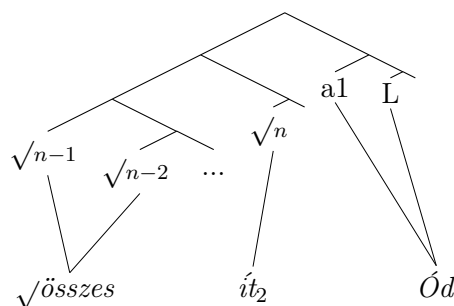
Considering the data, it is not unthinkable that besides the ordinary causative suffix *-ít*, conservative speakers have an additional, verbalizing type that goes below causative suffixes and lexicalizes the top layers of the root, analogously to the verbalizing suffixes in 5.3.3. The table below shows the customary causative suffix <22> and this hypothesized, frozen, verbalizing *ít*₂:

(268)

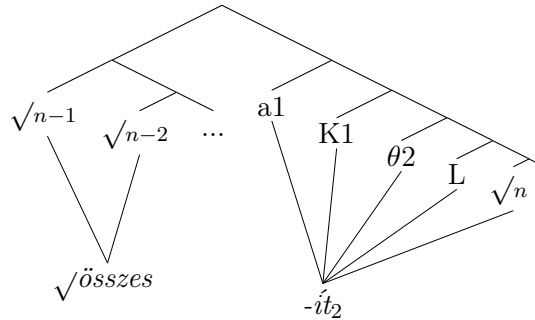
| | | | | | | |
|-----------------------------|----|----|----|---|----------------|------------------|
| | a1 | K1 | θ2 | L | √ _n | √ _{n-1} |
| 22. <i>-ít</i> | a1 | K1 | θ2 | L | | |
| 29. <i>-ít</i> ₂ | a1 | K1 | θ2 | L | √ _n | |

Similarly to *fax*-type roots, *összes*-type roots would be undersized, reaching only up to √_{n-1}. This would yield the desired pattern for both T1DP and 2DPC:

(269) T1DP for conservative √*összes* with *ít*₂:



(270) 2DPC for conservative $\sqrt{\text{összes}}$ with $\acute{i}t_2$:

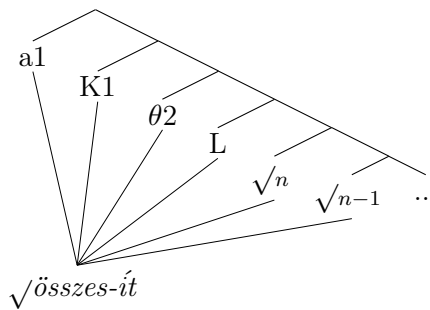


The half-passive, as usual, would be underivable for conservative speakers.

As for roots that go up to \sqrt{n} or higher, nothing would change: these would continue to combine with causative $\acute{i}t$ or whichever causative suffix they are associated with. Notice that on this approach, if there turned out to be $\sqrt{\acute{o}sszes}$ -type roots that combined with suffixes other than $\acute{i}t$, frozen verbalizing entries like $\acute{i}t_2$ should also be set up for those suffixes.

A similar solution is to assume that in these verbs, the root and the causative suffix have fused, so they are not compositionally derived:

(271) fused entry for $\acute{o}sszes\text{-}\acute{i}t$



This seems very much like an arbitrary solution, but as we will see, there are some verbs in Hungarian that cannot be analyzed compositionally any longer. For instance, one of the labile verbs in Hungarian has what looks like an inchoative suffix both in the T1DP and 2DPC/transitive-causative form; another labile verb, with the same meaning, is endowed with what seems to be a causative suffix both in the T1DP and 2DPC/transitive-causative form. In these particular cases, I do not think the endings can be compositional.

The third alternative is to tamper with the entry of $\acute{i}t$ in such a way that $\acute{i}t$ becomes capable of reaching lower optionally, only when it is necessary. This would preserve one single causative suffix $\acute{i}t$ instead of two polysemous

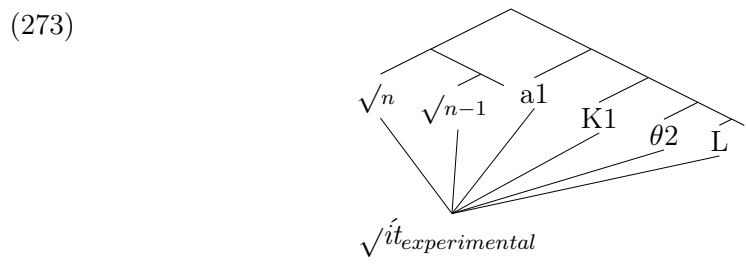
suffixes with similar functions. So the objective is that with small roots like $\sqrt{\text{összes}}$, the suffix $-\acute{i}t$ would go all the way down to the top layers of the root sequence that $\sqrt{\text{összes}}$ is too short for, but with other root types, $-\acute{i}t$ would only take responsibility for the layers from L and onwards:

(272)

| | | | | | | | |
|-----------------------------------|----|----|------------|---|--------------|----------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ | $\sqrt{n-m}$ |
| \sqrt{gur} -type root | | | | | \sqrt{n} | $\sqrt{n-1}$ | $\sqrt{n-m}$ |
| $\sqrt{\text{összes}}$ -type root | | | | | | | $\sqrt{n-m}$ |
| experimental $-\acute{i}t$ | a1 | K1 | $\theta 2$ | L | (\sqrt{n}) | $(\sqrt{n-1})$ | |

Nevertheless, this is not an easy goal to achieve, because the constituency requirement on phrasal spell-out gives the effect that trees shrink from the top, and the bottom layer always remains. So extending $-\acute{i}t$ downwards in such a way that the lowest terminals are optional is not compatible with the system without extra maneuvering.

A conceivable, but highly technical implementation is this: the tree structure in the entry of conservative $-\acute{i}t$ looks like a post-movement syntactic tree. See below:



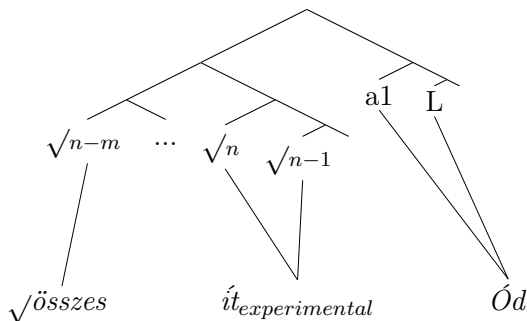
What this buys us is the following. In the classic cases when $-\acute{i}t$ is to spell out the sequence $a1 - K1 - \theta 2 - L$, the Superset Principle allows the matching mechanism to ignore the top layer with $\sqrt{n} - \sqrt{n-1}$ constituent: :



At the same time, in the provisional entry (273), \sqrt{n} and $\sqrt{n-1}$ form a constituent. The spell-out requirement imposes that the syntactic structure

must be a constituent of the lexical tree that lexicalizes. But with the post-movement entry (273), this leaves a loophole: the experimental entry $-ít$ is allowed to spell out $\sqrt{n} - \sqrt{n-1}$. This is the opportunity *összes*-type verbs would grab in T1DP:

(275)



This way, the T1DP of *összes*-type roots would be spelled out by a short root, a subconstituent of the revised entry of $-ít$ as shown in (273), and conservative *Ód*. And finally, the derivation of the 2DPC form for $\sqrt{összes}$ -type roots would avail itself of the entire entry in (273), after a series of movements of dubious status.

This way it may be possible to both have our cake and eat it: that is, to have a single post-movement entry for $-ít$, which reaches down to $\sqrt{n-1}$ with short roots like $\sqrt{összes}$, but not with others. However, the ensuing losses on such an approach may be more significant than the gains. For the first, allowing the lexical entries to store lexical trees with a post-movement structure is a drastic liberation, with far-reaching, and potentially undesired consequences both empirically and conceptually. For the second, the concrete derivations, which I will not replicate here, have some weak points: for instance, subextraction from the left branch is required; neither is the choice between the different derivational paths always straightforward. So even though the original idea is appealing, there is a decent chance that the promoting of this solution opens a Pandora's box that should rather be kept closed. Therefore, this solution will be placed on the back shelf in the thesis.

Last, but not least, it may be worth testing if the stacked forms with $\sqrt{összes}$ -type roots are genuine T1DP constructions for conservative speakers. As it will be touched upon in 5.6, it is not impossible that conservative speakers have a lower-level half-passive, which both seems to and is predicted to pattern with the half-passive morphologically, combining a causative suffix and *Ód*. This could potentially fit with these verbs.

I have now outlined a number of possible approaches to $\sqrt{összes}$ -type roots in the language variant of conservative speakers, but further investigation is necessary so that it should become possible to ascertain what the best solution is.

5.4 The labile alternation

5.4.1 $\sqrt{\text{leereszt}}$ ('deflate')-type verbs

Verbs which participate in the labile alternation are unmarked both in their T1DP/anticausative and 2DPC/transitive-causative form:

(276)

| | T1DP | HP | 2DPC |
|--------------|------|------|------|
| liberal | R | R-ÓD | R |
| conservative | R | – | R |

There are three verbs that apparently belong here in Hungarian: *leereszt* ('deflate'), *leenged* ('deflate') and *tör* ('break'). Each of these verbs is special in its own way. The root $\sqrt{\text{tör}}$ belongs to different conjugational classes in its T1DP and 2DPC forms; this I will come back to later on. The verbs *leereszt* and *leenged*, which happen to mean the same thing, are morphologically bizarre. The *-eszt* ending in *leereszt* has the appearance of the causative suffix *-Aszt*, whereas the *-ed* ending in *leenged* is indistinguishable from the anticausative suffix *-Ad*. Nevertheless, the T1DP and 2DPC forms for the respective verbs look identical, which suggests that at least in contemporary Hungarian, it is unjustified to analyze these forms as bi-morphemic. For an illustration, here is the concrete paradigm for *leereszt*:

(277)

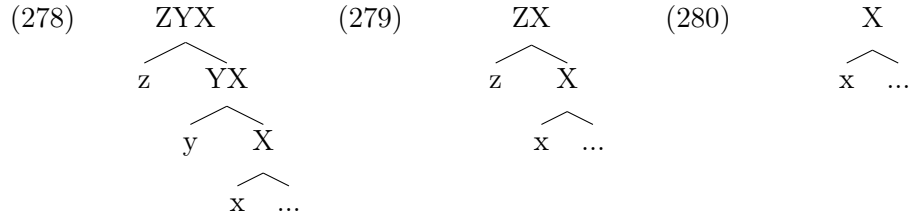
| | | T1DP | HP | 2DPC |
|--------------|--------------------------------------|----------|-------------|----------|
| liberal | $\sqrt{\text{leereszt}}$ ('deflate') | leereszt | leereszt-Ód | leereszt |
| conservative | $\sqrt{\text{leereszt}}$ ('deflate') | leereszt | – | leereszt |

In Hungarian, the pattern displayed by the labile pairs is an apparent *ABA violation, as the T1DP and 2DPC forms are syncretic across the half-passive.

In standard cumulative structures, the *ABA pattern is underivable (cf. the discussion in 4.1.3). However, gap structures can give rise to a quasi-*ABA.; it will be demonstrated how right away. But, as we will see, in Hungarian not even the gap solution can handle the three apparent instances of labile verbs, which substantiates that this is a case of spurious syncretism. This is not particularly surprising, if all the weirdness around the apparent labile forms is taken into account, and correlates well with the fact that there are only three, bizarre verbs of this kind in the entire language, while the anticausative, equipollent and classic causative alternations count innumerable members.

But let me first lay out how gap structures can give rise to a quasi-*ABA,

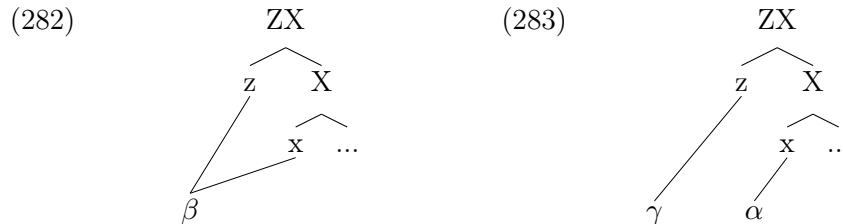
before I move on to show why this solution is inapplicable to Hungarian labile verbs. Consider the following three structures:



The terminals of ZYX subsume the terminals in ZX , but ZX is not a subtree of ZYX : it has a gap in the middle. Let us further assume that the language has the following lexical item:



Inasmuch as the language has no separate entries for the phrasal nodes X and YX , α can pronounce the subtrees ZYX , YX and X . However, the gapped structure ZX in (279) cannot be tackled by α , as ZX is simply not a constituent of ZYX , and therefore the gap disrupts spell-out. There are two theoretical possibilities to pronounce ZX . The first one is that the language has a morpheme β that lexicalizes $z-x$ across the gap. Notice that in this case β will be a better match for X , too. In the absence of such a morpheme, α can spell out x , while another formative γ takes care of z :



Spellout-driven movement taken into account, ZX will either be pronounced as β or $\alpha\gamma$. So morphological realization of the three structures (278), (279), (280) is the following:

(284)

| | | | |
|--|----------|-----------------|-----------|
| | X | ZX | ZYX |
| alternative (A): $\alpha\{x,y,z\}, \beta\{x,z\}$ | β | β | α |
| alternative (B): $\alpha\{x,y,z\}, \gamma\{z\}$ | α | $\alpha+\gamma$ | $\alpha.$ |

So on alternative (B), gapped structures give rise to what looks like an *ABA violation. As ZX is a subset but not a subtree of ZYX, the spell-out procedure cannot use the same lexical item to spell them out; at the same time, in the absence of a more specific entry, nothing prevents X to be spelled out by the same formative as ZYX.

This is how a quasi-ABA* pattern can arise with gapped structures. Such a setup would also provide an easy solution to the *ABA pattern with the three Hungarian labile verbs, but in this particular case there is extra twist to the story: it is not only the medium sized construction, the half-passive, that has a gapped structure, but also the lowest level construction, T1DP:

(285)

| | | | | | | |
|---------------------|----|----|------------|---|------------|--------------|
| functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| HP | a1 | | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

This means that as long as there are no morphemes designated specifically to bridge the gaps, T1DP and HP will come out as identical. That the T1DP form is bare indicates that the root actually bridges the gap between *L* and *a1*, which in turn implies that *leereszt*-type roots have the same shape as *fagy*-type verbs, *i.e.* verbs that participate in the causative alternation:

(286)

| | | | | | | |
|-----------------------------------|----|----|------------|---|------------|--------------|
| functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 01. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

With this settled, the only fact that remains to be captured is the syncretism between T1DP and 2DPC/TR-caus. However, with the T1DP structure I have just assigned to *leereszt*-type verbs, there is no principled way to make T1DP and 2DPC syncretic, which means that in this particular case the analysis falls back on a zero suffix to derive the 2DPC. The existence of such a zero suffix and its application to *leereszt*-type verbs is not without empirical corroboration. There are two verbal conjugation types in Hungarian, and it is common practice that a root that belongs to the *ik*-conjugation in its T1DP form shifts to the \emptyset -conjugation when equipped with a causative suffix:

- (287) a. változ - *ik*
change - PRES.3SG
'change_{INTR}'
- b. változ - tat - \emptyset
change - CAUS - PRES.3SG
'change_{TR}'
- (288) a. kop - *ik*
abrade - PRES.3SG
'wear away_{INTR}, erode_{INTR}'
- b. kop - tat - \emptyset
kop - CAUS - PRES.3SG
'abrade_{TR}, erode_{TR}'
- (289) a. ér - *ik*
ripen - PRES.3SG
'ripen_{INTR}'
- b. ér - lel - \emptyset
ripen - CAUS - PRES.3SG
'cause to ripen'
- (290) a. híz - *ik*
fatten - PRES.3SG
'put on weight, fatten_{INTR}'
- b. híz - lal - \emptyset
fatten - CAUS - PRES.3SG
'cause to gain weight, fatten_{TR}'

The labile root $\sqrt{tör}$ goes across the same change: the intransitive form belongs to the *ik*-conjugation, but the transitive form falls under the \emptyset -conjugation:

- (291) a. tör - *ik*
break - PRES.3SG
'break_{INTR}'
- b. tör - \emptyset_{caus} - \emptyset
break - CAUS - PRES.3SG
'break_{TR}'

On the assumption that the root $\sqrt{t\ddot{o}r}$ combines with a zero causative suffix to form the 2DPC/TR-causative, the conjugational shift from *ik* to \emptyset is no longer a mystery. As for $\sqrt{leereszt}$ and $\sqrt{leenged}$, like many other roots, they belong to the \emptyset conjugation already in their T1DP form, so their behavior is beside the point: they simply do not show a distinction $\sqrt{t\ddot{o}r}$ shows.

That *leereszt*-type verbs lexicalize a gap in their T1DP form and combine with a causative suffix in their 2DPC/TR-causative form amounts to saying that what look like labile verbs in Hungarian in fact participate in the causative alternation: they behave exactly like *fagy*-type verbs (cf. 5.1.1, the only difference being that *leereszt*-type verbs combine with zero causative morphology. Accordingly, what we see with the three Hungarian (pseudo-)labile verbs is a case of accidental homonymy.

At the same time, it needs to be emphasized that genuine labile alternations are fully possible in other languages: on my account, what at the end of the day makes an authentic labile alternation impossible in Hungarian is that the mini-fseq for θ /Case lexicalizes together with the lowest member of the next higher sequence: *a1*, creating a gap configuration for T1DP. This is something I take to be a special characteristic of the Hungarian language, which of course may be possible in some, but certainly not in all languages. In a language that differs from Hungarian in this respect, nothing stands in the way for analyzing the labile alternation as a case of systematic syncretism, which derives by simply shrinking the same entry from 2DPC/transitive-causative to T1DP/anticausative:

| | | | | | | |
|---------------------|----|----|------------|---|------------|--------------|
| functional sequence | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 2DPC/TR-causative | | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| HP | | | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP/inchoative | | | | L | \sqrt{n} | $\sqrt{n-1}$ |

This clarified, let us turn to the concrete derivations. Here is the assumed structure of a pseudo-labile verb:

| | | | | | | |
|-----------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

Additionally, we need another entry that adds pure structure to <09> without contributing phonological content to it:

| | | |
|-------|--------|--|
| (294) | <2909> | |
|-------|--------|--|

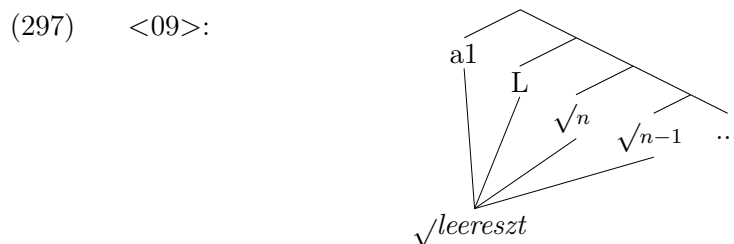
<2909> is some sort of complex entry, in which extra structure gets associated with a certain lexical item: <09> in this particular case. Although entries like <2909> seem to have some hacking flavor, all they do is reduce a double stipulation to a single stipulation. Some mechanism to bring together idiosyncratic suffix-root combinations is necessary for any theory, – simply because it is impossible to derive idiosyncratic morphology in predictable ways. The classic way to fix such cases involves two steps: first, the establishing of a zero inchoative or causative suffix and second, specifying somehow that a root \sqrt{R} combines with this zero suffix. An entry like <2909> is a notational variant of this method, but it does this double job at one go by appending phonogyless structure to a given lexical item without stipulating the existence of a null morpheme.

Lastly, *Ód* is needed for the half-passive form. So for **LIBERAL SPEAKERS**, the relevant entries are these:

| | | | | | | |
|-------|-----------------------------------|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| (295) | 09. $\sqrt{leereszt}$ ('deflate') | a1 | | L | \sqrt{n} | $\sqrt{n-1}$ |
| | 30. <i>-Ód</i> | a1 | | | | |

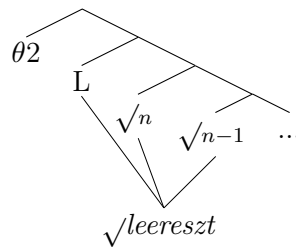


With these entries, the **T1DP**/anticausative form is straightforward: the structure built in the syntax will directly correspond to <09>:



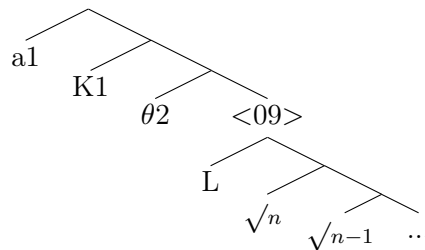
The **2DPC** derivation begins to diverge from the T1DP derivation only on the insertion of $\theta 2$. Up to *L*, <09> can handle the structure on its own:

(298)



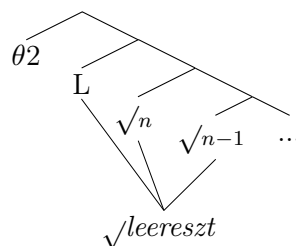
At this point, the complex entry <2909> takes over. Consider the fully expanded lexical entry of <2909>:

(299) <2909>



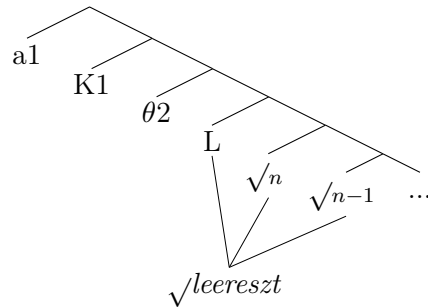
This entry is a suitable match for (298) even without movement: (298) corresponds to a subtree of <2909>. This means that up to L , the layers in (298) will be spelled out as *leereszt* due to entry <09>, which is now a subentry in the complex entry <2909>. The remaining node $\theta 2$ is also included in the big entry <2909>, and it is exactly where it should be: just above L . Therefore, <2909> will stand for the spell-out of $\theta 2$ as well. However, as <2909> contains no phonological information, no phonology will be associated with $\theta 2$. This is no problem, though: recall that spell-out means associating/replacing a syntactic tree with a corresponding lexical tree and, in case there is any, the related semantic and phonological information.

(300)



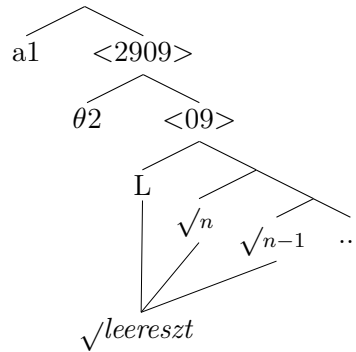
The same happens on the introduction of $K1$ and $a1$: the complex entry <2909> assumes control of the entire structure, but it is only the lower layers that will have a phonological realization:

(301)



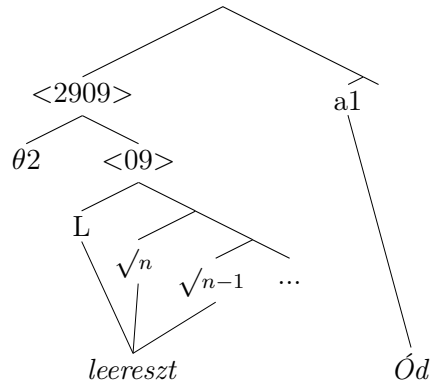
The **half-passive** derivation is identical with the 2DPC derivation up to the insertion of $\theta 2$. After $\theta 2$, $a1$ enters the scene:

(302)



So that $a1$ may get spelled out, the rest of the tree is moved above $a1$. Consequently, $\acute{O}d$ can take care of $a1$, while $\langle 2909 \rangle$ remains in charge for the rest of structure:

(303)



The entries for **CONSERVATIVE SPEAKERS** only diverge from the liberal entries with regard to the size of *-Ód*:

(304)

| | | | | | | |
|-----------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 30. <i>-Ód</i> | a1 | | | L | | |



For conservative speakers, the **T1DP** and **2DPC** derivations are completely unaltered; and as usual, the **half-passive** turns out to be underivable for these speakers: there is simply no way to spell out *L* and *a1* across $\theta 2$.

This way, the correct forms for T1DP, 2DPC and the existence/non-existence of HP are derived for both liberal and conservative speakers. Furthermore, in this section it was shown that what appear to be labile verbs defy a principled account in terms of lability in Hungarian: it was argued that what gives the illusion of a labile alternation is that roots that belong to the causative alternation combine with zero causative morphology.

5.4.2 A note on zero morphemes

It was demonstrated in the course of the derivations that Nanosyntax has the potential to eliminate zero suffixes by allowing the root to lexicalize the functional domain of the 'zero' suffix. This yielded a more elegant account for several root types: for instance, roots that participate in the causative alternation were taken to subsume the layers that are normally spelled out by an anticausative suffix, whereas roots that belong to the anticausative alternation were assumed to embrace the causative layers. The table below shows first the most ordinary type of root: an equipollent root, then a causative alternation verb, *fagy*, and an anticausative alternation verb, *tép*. As a visual reinforcement, the anticausative and causative suffixes are also provided:

| | | | | | | |
|------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04. \sqrt{gur} ('roll') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 01. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| anticausative suffix | a1 | | | L | | |
| 03. $\sqrt{tép}$ ('tear') | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| causative suffix | a1 | K1 | $\theta 2$ | L | | |

Nevertheless, we saw in connection with pseudo-labile verbs like *leereszt* that even though Nanosyntax provides the tools to eliminate zero morphology and does a nice job with that, a close-up study of the Hungarian data, at least at my present level of understanding, did not make it possible to completely dispense with zero morphology. At least with *leereszt*-type verbs, it was necessary with complex entries that added phonologyless structure to the root:

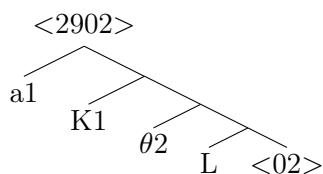


As the reader may recall, it happened on a single occasion in the course of the derivations that the movement calculus backfired: in the case of liberal *teker* (cf. 5.2.1). As it was pointed out there, the problem does not arise if *teker*-type roots are broken into two. Having seen the pseudo-labile verbs, we are eventually in the position to be more precise about *teker*-like entries: my proposition is that the root for these verbs goes only up to *caus*, and there is a complex entry that can attach phonologyless structure to the root, just as in the case of *leereszt*-type verbs. This way, liberal *teker*-verbs turn out to be a mixture of equipollent and pseudo-labile verbs:

(308) Entry for liberal *teker* ('coil, wind'):

| | | | | | | |
|-----------------------------------|----|----|------------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 02. \sqrt{teker} ('coil, wind') | | | | | \sqrt{n} | $\sqrt{n-1}$ |

(309) Complex entry for liberal *teker* ('coil, wind'):



With these entries, the liberal derivation for *teker*-type verbs will run in full conformity with the movement calculus, while deriving the correct morphological forms for T1DP as well as for HP and 2DPC.

5.5 Revised lexical entries

The preliminary entries anticipated the lexical structures for the representatives of the four main alternation types. But in the course of the derivations different varieties of the four main classes have also been investigated, and the step by step implementation of the derivations necessitated some minor changes in the entries of the lexical items which were selected to typify their kind. Therefore, I will now provide a complete list of the simplex entries which have been considered in the course of the derivations. I will also reiterate the full morphological pattern for both liberal and conservatives speakers to reinforce the data pattern that has been derived.

5.5.1 Liberal speakers

For liberal speakers, the full morphological pattern for regular forms looks like this:

(310) Morphological pattern for liberal speakers:

| | | T1DP | HP | 2DPC |
|----------|-------------------------------|------------|------------|---------|
| (i) | √ <i>fagy</i> ('freeze') | R | R-caus-ÓD | R-caus* |
| (ii/a) | √ <i>teker</i> ('coil') | R-inch* | R-ÓD | R |
| (ii/b) | √ <i>tép</i> ('tear') | R-ÓD | R-ÓD | R |
| (iii/a) | √ <i>gur</i> ('roll') | R-inch* | R-caus*-ÓD | R-caus* |
| (iii/b) | √ <i>fejl</i> ('develop') | R-ÓD | R-caus*-ÓD | R-caus* |
| (iii/c) | √ <i>faxol</i> ('fax') | R-v*-ÓD | R-v*-ÓD | R-v* |
| (iii/d) | √ <i>összesít</i> ('total') | R-caus*-ÓD | R-caus*-ÓD | R-caus* |
| (iv)→(i) | √ <i>leereszt</i> ('deflate') | R | R-ÓD | R |

The liberal lexical entries for the representatives of each verb and suffix type are listed in the following table:

(311) Lexical entries for liberal speakers:

| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
|-----------------------------------|----|----|------------|---|------------|--------------|
| 01. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 02. \sqrt{teker} ('coil') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 03. $\sqrt{tép}$ ('tear') | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04. \sqrt{gur} ('roll') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 05. \sqrt{fejl} ('develop') | | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 06. \sqrt{fax} ('fax') | | | | | | $\sqrt{n-1}$ |
| 08. $\sqrt{összes}$ ('total') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 12. <i>-Ol</i> | a1 | K1 | $\theta 2$ | L | \sqrt{n} | |
| 20. <i>-tAt</i> | a1 | K1 | $\theta 2$ | L | | |
| 21. <i>-Aszt</i> | a1 | K1 | $\theta 2$ | L | | |
| 22. <i>-ít</i> | a1 | K1 | $\theta 2$ | L | | |
| 30. <i>-Ód</i> | a1 | | | | | |
| 31. <i>-Ed</i> | a1 | | | L | | |
| 32. <i>-Ul</i> | a1 | | | L | | |

The table shows that roots vary significantly in size: the smallest roots do not even span the entire root sequence, whereas the biggest roots lexicalize everything from the very bottom through the entire Case/ θ -sequence and up to *a1*. Some of the roots lexicalize gaps, similarly to non-productive anticausative suffixes. Of the suffixes, it is verbalizing suffixes like *-Ol* that reach deepest, right into the root domain. Regarding liberal *Ód*, it was, as the proposition goes, the lack of *L* that made *Ód* special, allowing for the creation of half-passive structures for this speaker type.

It was also necessary with a number of complex lexical entries, which I do not reiterate here: these have access to the non-productive or semi-productive suffixes marked by shading in the table, and combine them with the corresponding roots. The arbitrary nature of such entries followed from the idiosyncratic nature of non-productive and semi-productive morphology; any account would need to stipulate the rules of application for idiosyncratic morphology. Those roots that do not have such an idiosyncratic combination specified, automatically made use of the productive (*ie.* non-shaded) suffixes *-Ód* and *-tAt*.

5.5.2 Conservative speakers

Conservative speakers live their lives without the half-passive:

(312) Morphological pattern for conservative speakers:

| | | T1DP | HP | 2DPC |
|----------|-------------------------------|------------|----|---------|
| (i) | \sqrt{fagy} ('freeze') | R | – | R-caus* |
| (ii/a) | \sqrt{teker} ('coil') | R-inch* | – | R |
| (ii/b) | $\sqrt{tép}$ ('tear') | R-ÓD | – | R |
| (iii/a) | \sqrt{gur} ('roll') | R-inch* | – | R-caus* |
| (iii/b) | \sqrt{fejl} ('develop') | R-ÓD | – | R-caus* |
| (iii/c) | \sqrt{faxol} ('fax') | R-v*-ÓD | – | R-v* |
| (iii/d) | $\sqrt{összesít}$ ('total') | R-caus*-ÓD | – | R-caus* |
| (iv)→(i) | $\sqrt{leereszt}$ ('deflate') | R | – | R |

(313) Lexical entries for conservative speakers:

| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
|-----------------------------------|----|----|------------|---|------------|--------------|
| 01. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 02. \sqrt{teker} ('coil') | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 03. $\sqrt{tép}$ ('tear') | a1 | K1 | θ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04. \sqrt{gur} ('roll') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 05. \sqrt{fejl} ('develop') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 06. \sqrt{fax} ('fax') | | | | | | $\sqrt{n-1}$ |
| 08. $\sqrt{összes}$ ('total') | | | | | ? | $\sqrt{n-1}$ |
| 09. $\sqrt{leereszt}$ ('deflate') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 12. <i>-Ol</i> | a1 | K1 | $\theta 2$ | L | \sqrt{n} | |
| 20. <i>-tAt</i> | a1 | K1 | $\theta 2$ | L | | |
| 21. <i>-Aszt</i> | a1 | K1 | $\theta 2$ | L | | |
| 22. <i>-ít</i> | a1 | K1 | $\theta 2$ | L | | |
| 30. <i>-Ód</i> | a1 | | | L | | |
| 31. <i>-Ed</i> | a1 | | | L | | |
| 32. <i>-Ul</i> | a1 | | | L | | |

The main difference between conservative and liberal speakers boils down to the size of *-Ód*. As emphasized throughout, for conservative speakers, *-Ód* is bigger: it obligatorily subsumes L. This is what was taken to prevent the

formation of half-passives for these speakers. A few roots turned out to be different for liberal conservative speakers: <02> and <05>, in particular. As for *összes*-type roots, I have not settled on a specific analysis, but left a few alternatives open; hence the question mark in the table.

All in all, the differences between liberal and conservative speakers are minor in the Lexicon. Nonetheless, the small discrepancies in the Lexicon give rise to different derivational paths, different end products at the end of the derivations, and culminate in the existence or non-existence of the half-passive construction.

5.6 Potential clues for more variation

I have explicitly argued for at least two types of productive *Ód*-verbs: the anticausative and the half-passive. Besides, the possibility for the proper passive use in eastern dialects was also raised. But there may well be further productive uses of *Ód* that I have not covered here. And indeed, some minor facts I have come across in the course of my work may function as indicators that point towards a more fine-grained decomposition of *Ód*-verbs. For the first, there are some speakers who claim to feel a difference between the two half-passive forms *billeg-At-ód* ('get wobbled') and *billeg-tAt-Ód* ('get wobbled') in terms of pure instrumental/human intervention:

- (314) a. billeg - et - ód
 sway - CAUS - ÓD
 'get wobbled/tilted'
- b. billeg - tet - ód
 sway - CAUS - ÓD
 'get wobbled/tilted'

A consistent difference between these two forms would establish at least one extra use of *Ód*, the pure instrumental. On the present approach, this would imply decomposition into further syntactic layers.

Another piece of data that points in a similar direction concerns de-adjectival verbs: these verbs have a proper inchoative version with a classic anticausative suffix; cf. (315-a). But surprisingly, some (possibly all) conservative speakers accept the half-passive looking (315-b), which combines the causative suffix and *-Ód*.

- (315) a. zsírtalan - od
 greaseless - INCH
 'become greaseless, get degreased'

- b. zsírtalan - ít - ód
greaseless - CAUS - ÓD
'become greaseless, get degreased'

There is, nevertheless, a difference between liberal speakers and conservative speakers: while for liberal speakers the *Ód*-form of the de-adjectival verb is compatible with human intervention, for the conservative speaker tested on this issue human intervention was ruled out. Here is an illustration:

- (316) Az üzemi konyhákban a munkafelületek azonnal ...
In factory kitchens the work spaces immediately.
- a. zsírtalan - od - nak
greaseless - INCH - 3PL
'get degreased'
- b. zsírtalan - ít - ód - nak
greaseless - CAUS - ÓD - 3PL
'get degreased'

In (316-a), it is most likely that the work space is made of some grease-repellent substance or a material that instantly absorbs grease. With (316-b), the conservative speaker with whom I discussed these contexts can only visualize the situation with a non-human instrument, like some machine that automatically wipes over the greasy surface. This again suggests that there may be an *Ód*-construction with some pure instrumental interpretation.

The opposition illustrated by (316) is first and foremost available with certain de-adjectival verbs; for more on these verbs, the reader is referred to Komlósy (2000:280-281). I have also come across a handful of non-deadjectival verbs that show a similar contrast: *megjelen-ít-ód* ('get projected'), *PRT.vál-aszt-ód* ('gets selected/separated/secreted'), *ill-eszt-ód* ('gets fitted to something'). These verbs are all bare in T1DP:

- (317) a. megjelen
√appear
'appear (e.g. on a screen)'
- b. megjelen - ít - ód
√appear - CAUS - ÓD
'made appear, get projected (on a screen)'

Moreover, it is not unconceivable that what I took to be the T1DP form of $\sqrt{\text{összes-ít}}$ -type roots (cf. 5.3.4.) in the conservative language variant is in fact a lower-level half-passive. If so, then for conservative speakers *összes-ít*-type verbs may lack a T1DP form entirely.

And finally, I have also registered a speaker who seems to belong to the

centre-party: this speaker claims to accept more than a hard-core conservative, but less than a radical liberal. This particular speaker was not exposed to proper testing, though, but commented voluntarily and cursorily on some of my examples in a conference presentation. Provided that this speaker falls in between indeed, and other speakers who confirm these intuitions can be unearthed, further evidence would be accumulated in favor of a more fine-grained decomposition of *Ód*-verbs. These are all empirical issues, which I will not pursue any further in this piece of work.

Chapter 6

Conclusions

6.1 Summary

This thesis has provided an in-depth study of two overlooked constructions in Hungarian: **the 2DPC and the half-passive**. While anticausativization in Hungarian derives monadic forms (T1DP), speakers of Hungarian resort to a reflexive construction (2DPC) to describe situations in which the source or affected undergoer plays an active role in inflicting the *V-ing* on itself. Thus, the 2DPC has a single semantic argument realized in the form of two syntactic arguments. The mirror image of 2DPC is the half-passive, which was shown to involve two semantic arguments, of which the initiator cannot ever surface overtly. The contribution of the unexpressed causer is downplayed by the speaker almost to the point of an unprompted happening, although there are syntactic, morphological and semantic clues that indicate its implicit presence. Speakers of Hungarian are divided about the use of the half-passive: the construction is only used by 'liberal' speakers of Hungarian, but not by 'conservative' speakers.

(1) T1DP:

- a. lebeg
float - PRES.3SG
'floats'

(2) Half-passive:

- a. lebeg - tet - őd - ik
float - CAUS - ÓD - PRES.3SG
'get floated'

- (3) 2DPC:
- a. lebeg - tet - i magát
float - CAUS - PRES.3SG.DEF itself.ACC
'floats itself'

In chapter 4, it was proposed that the distinction between the T1DP, half-passive and 2DPC constructions comes down to **Case/θ-roles**:

- (4) T1DP \subset HP \subset 2DPC, where:
- a. T1DP: θ -1, Case_{Nom}
b. HP: θ -1, θ -2, Case_{Nom}
c. 2DPC: θ -1, θ -2, Case_{Nom} Case_{Acc}

The progressively growing, encompassing structures, which we had seen evidence for in chapter 3, can be constructed along these lines.

(5)

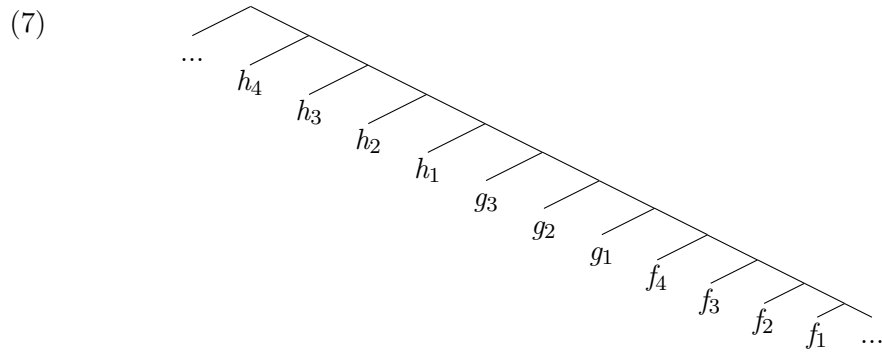
| | | | | | | |
|------|----|----|------------|---|------------|--------------|
| 2DPC | a1 | K1 | θ 2 | L | \sqrt{n} | $\sqrt{n-1}$ |
| HP | a1 | | θ 2 | L | \sqrt{n} | $\sqrt{n-1}$ |
| T1DP | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |

As pointed out in chapter 3, the analysis faces two major challenges beyond morphological variation. The first of these is the observation that the half-passive form (as in (6-a)) consistently subsumes the 2DPC/transitive-causative form (cf. (6-b)) morphologically, which creates a mismatch between morphology and syntax/ semantics: it takes more morphemes to spell out the construction with less structure than the one with more structure:

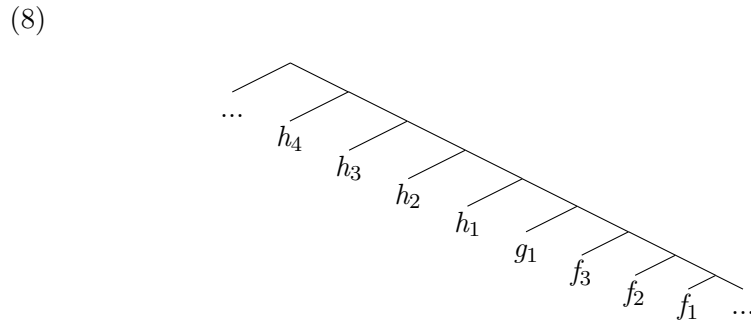
- (6) a. szak - **ít** - *ód*
rip - CAUS - ÓD
'get ripped'
- b. szak - **ít**
rip - CAUS
'rip_{TR-caus}'

The other potential stumbling block is conservative speakers' inability to produce half-passive forms. What makes it extra challenging to block the half-passive use of the suffix *Ód* for conservative speakers is that they apply *Ód* as a fully productive, elsewhere suffix in anticausative formation. The resolution for both problems was offered in terms of **gapped structures**. Nanosyntax assumes a fine-grained universal hierarchy of syntactic features in a set order. Related features constitute zones (denoted by *f*, *g* and *h* in

the tree below), depending on what aspect of the clause they contribute to. By way of illustration, one such mini-fseq was taken to relate to Case/ θ -role and another one to aspect.



As features are unary and cumulative, if some feature is not needed for a given construction, it goes missing, and the functional sequence continues with the next series. This is how gaps arise:



As for the morphology vs. syntax/semantics mismatch, I proposed that the half-passive construction contains a gap in comparison to the absolute functional sequence:

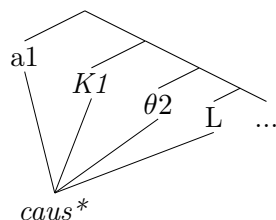
(9)

| | | | | | | |
|---------------|----|----|------------|---|------------|--------------|
| abstract fseq | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 2DPC | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| HP | a1 | - | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |

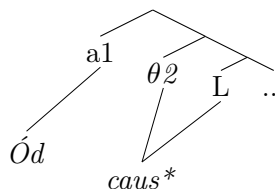
This in itself is nothing special. However, coupling gaps with a rather innocent assumption about non-terminal spell-out opens up an interesting possibility. Phrasal spell-out is taken to be constrained by constituency: a syntactic (sub)tree must be a constituent of the lexical tree that spells it

out. And this is where the twist comes: if the gap in half-passives is in the middle of a sequence that under normal conditions is lexicalized by a single lexical item, spell-out will be disrupted by the gap. As the language has not developed a lexical item specifically to bridge the gap between *a1* and $\theta 2$, the only way to spell out the half-passive is to go compositional: the causative suffix or a big root can pronounce whatever is below the gap, and liberal $\acute{O}d$, which corresponds to *a1*, will finish the job upstairs. This way, it takes more suffixes to spell-out the smaller but gapped structure of the half-passive than the bigger but cumulative structure of 2DPC/TR-caus:

(10) 2DPC/TR-caus



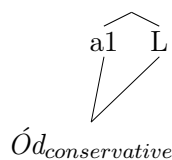
(11) Half-passive



Therefore, on the present account, it is only illusory that the half-passive involves more structure (by virtue of being morphologically more complex) than the 2DPC/transitive-causative form. As the proposition goes, the case is rather the reverse: half-passives look 'bigger' precisely because they are 'smaller' due to the presence of a gap in the middle: the compositional spell-out of half-passives coerced by the gap requires more formatives than the non-compositional spell-out for 2DPC/transitive-causative forms.

The non-existence of the half-passive in the conservative language variety was captured by positing a gap in the lexical structure associated with conservative $\acute{O}d$:

(12)



The half-passive obligatorily contains $\theta 2$. Therefore, the gap inside conservative $\acute{O}d$ is too big: it excludes $\theta 2$ from the entry. This way, the shape of conservative $\acute{O}d$, with an oversized gap in the middle, foils all attempts to pronounce a half-passive structure with this particular lexical item. And, similarly to liberal speakers, conservative speakers have not developed a lexical item that would bridge the gap between *a1* and $\theta 2$. As a result, the half-passive will be unpronounceable for conservative speakers.

The nanosyntactic toolkit coupled with the gap-solution allowed me to derive the entire morphological pattern for the three constructions T1DP, half-passive and 2DPC/transitive-causative for both language varieties, with morphological variation accommodated. The tamed zoo of Hungarian (in)-transitivity constructions is reiterated below:

(13)

| | T1DP | half-passive | 2DPC/TR-caus |
|--|------------|--------------|--------------|
| | R | R-caus-ÓD | R-caus* |
| | R-inch* | R-ÓD | R |
| | R-ÓD | R-ÓD | R |
| | R-inch* | R-caus*-ÓD | R-caus* |
| | R-ÓD | R-caus*-ÓD | R-caus* |
| | R-v*-ÓD | R-v*-ÓD | R-v* |
| | R-caus*-ÓD | R-caus*-ÓD | R-caus* |
| | R | R-ÓD | R |
| | R | – | R-caus* |
| | R-inch* | – | R |
| | R-ÓD | – | R |
| | R-inch* | – | R-caus* |
| | R-ÓD | – | R-caus* |
| | R-v*-ÓD | – | R-v* |
| | R-caus*-ÓD | – | R-caus* |
| | R | – | R |

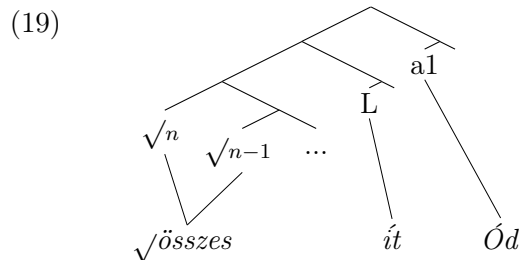
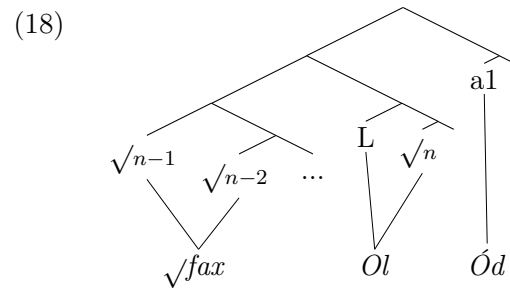
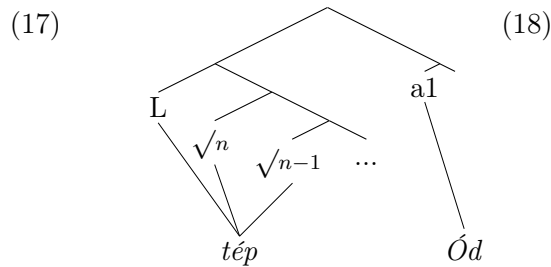
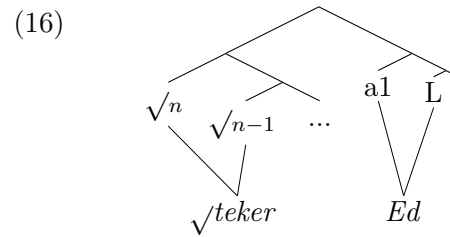
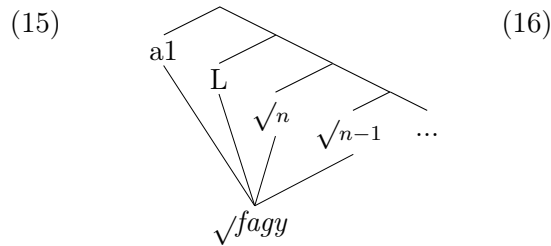
The result is a **comprehensive morphosyntactic account** down to minute details for that slice of the verbal domain I investigated in this thesis.

Incidentally, the analysis is also a demonstration of how variation can be traced back to the Lexicon. Even *within* a language variety, roots were argued to differ from each other with regard to size, and we saw that also suffixes of a certain type can be associated with different chunks of structure. To illustrate the point, I reiterate some of the roots that has been discussed:

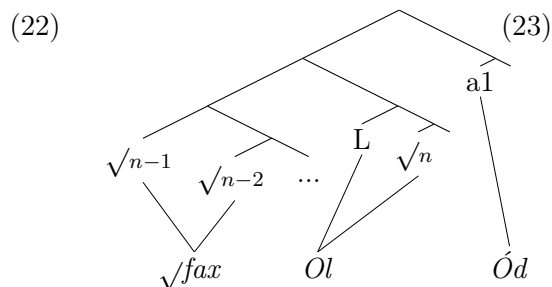
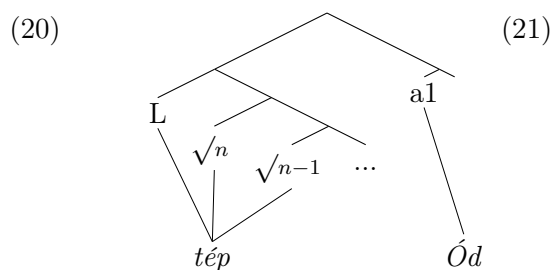
(14) Some liberal roots:

| | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
|-----------------------------------|----|----|------------|---|------------|--------------|
| 03. $\sqrt{t\acute{e}p}$ ('tear') | a1 | K1 | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| 01. \sqrt{fagy} ('freeze') | a1 | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 05. \sqrt{fejl} ('develop') | | | | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04. \sqrt{gur} ('roll') | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 06. \sqrt{fax} ('fax') | | | | | | $\sqrt{n-1}$ |

The differences between the lexical entries of the respective roots or suffixes lead to different derivations, syntactic configurations and spell-out patterns for different verbs, generating the familiar contradistinction with regard to the anticausative, causative, equipollent or labile patterns. So on the present account, it is the shape of the lexical items that gives rise to **variation with regard to morphological realization**: the different morphological classes correspond to different root types. The liberal T1DP structures below demonstrate how the size of the root and/or the suffix affects a derivation and determines the shape of the ensuing end product within one language variety, even though the syntax works from the same set of terminals in each case:



The same reasoning extends to **different language varieties**: the shape of a lexical item can be different for different groups of speakers. This is what gives rise to different speakers types. Compare the T1DP forms for $\sqrt{tép}$ and \sqrt{fax} in liberal and conservative language use:



Although the lexical differences between language varieties may be minor, the consequences can be all the more significant. Beyond giving rise to different derivational paths and different structural configurations at the end of the derivations, the small discrepancies between the liberal and conservative Lexicon culminated in a prominent contrast between the two language varieties concerning the existence or non-existence of the half-passive construction. This way, my thesis is also an illustration of how variation within and across languages or language varieties **can be traced back to the Lexicon** in a non-lexicalist framework with a universally set functional sequence.

6.2 The contributions of the thesis

The main empirical contribution of this thesis is the unearthing of two overlooked constructions in Hungarian: the 2DPC and the half-passive. These constructions spice up the verbal domain with their hybrid characteristics, and much of the work was spent to pinpoint the data and establish the relevant generalizations. At the end of the day, an (in)transitivity scale emerged, and constructions with varying degrees of (in)transitivity were brought under a unified analysis on the premises of progressively growing syntactic structures. Putting the relevant slice of the functional sequence under the microscope, I demonstrated how a complex morphosyntactic pattern can be

derived with remarkable accuracy. With this, I also displayed the extent to which morphology can be pursued in the syntax, in which a structural approach to morpheme structure was instrumental. Phrasal spell-out along with a gap-based approach gave me the tools to capture morphological diversity, speaker variation and a puzzling morphology vs. syntax/mismatch. But most of all, this thesis is pioneer work in providing a comprehensive and data-oriented account of intricate morphosyntactic patterns with unusual detail and precision.

Appendix A

Morphological subtypes: a mini-catalog

A.1 Regular forms

Hungarian displays each of the four main morphological strategies to form inchoative/causative pairs. The anticausative strategy was argued to be productive in present-day Hungarian, but the language abounds in causative and equipollent pairs, too. It was even possible to unearth three apparent instances of the labile alternation, although these were argued to be fake in Hungarian. It was further shown that the four basic types divide into a number of subtypes with respect to morphological behavior. Each subtype was epitomized by a randomly selected root which stood for the rest of the subclass. Here I will list some more examples for each subtype. I attempt in no way to provide a comprehensive list of the inchoative/causative pairs of the language, the point is merely to show that the 'prototypes' are not solitary examples but stand for an assortment of roots of the same kind.

A.1.1 The causative alternation

The first type of alternation that was derived is the causative. Verbs which participate in the causative alternation have a bare T1DP/inchoative form, while the 2DPC/TR-causative form bears overt causative morphology. This class was represented by \sqrt{fagy} ('freeze'). Further examples include:

- (1) $\emptyset \sim -Aszt$
 - a. $f\ddot{u}gg \sim f\ddot{u}gg-eszt$ ('hang')
 - b. $befagy \sim befagy-aszt$ ('freeze')
 - c. $fogy \sim fogy-aszt$ ('diminish')

The 2DPC/TR-causative form can be marked by a causative suffix other than *-Aszt*. The causative suffixes *-t* and *-At* are relatively common, too:

- (2) $\emptyset \sim -t$
- a. csökken \sim csökken-t ('decrease')
 - b. meghökken \sim meghökken-t ('appall')
 - c. robban \sim robban-t ('detonate')
- (3) $\emptyset \sim -At$
- (4) a. leég \sim leég-et ('burn down')
- b. lehull \sim lehull-at ('drop')
 - c. foly \sim foly-at ('flow around, spill and spread')

There are a few examples with $-lAl$ as well:

- (5) $\emptyset \sim -lAl$
- a. híz \sim híz-lal ('fatten')
 - b. ér \sim ér-lel ('ripen')

I have also come across an example in which the bare form alternates with an *ít*-causative:

- (6) a. hajl \sim hajl-ít ('bend')

The suffix which is considered to be the productive causative marker in Hungarian is $-tAt$. It typically combines with transitive or unergative verbs, but also with a handful of change of state verbs with an external cause, cf. Bene (2009:57):

- (7) $\emptyset \sim -tAt$
- a. megváltoz \sim megváltoz-tat ('change')
 - b. pattog \sim pattogtat ('bounce')
 - c. elkop \sim elkop-tat ('abrade')

A.1.2 The anticausative alternation

The next type is the anticausative alternation. Those roots which belong here have an unmarked causative form, but the inchoative form is morphologically marked. The first subtype consisted of \sqrt{teker} ('coil')-type verbs, which combine with idiosyncratic anticausative morphology. Of such verbs I have only come across a few:

- (8) $-Ul \sim \emptyset$
- a. bezár-ul \sim bezár ('close')
 - b. kitár-ul \sim kitár ('open (up/wide)')

And another verb with the same suffix as \sqrt{teker} :

- (9) $-od/ed/öd \sim \emptyset$

- a. csavar-od \sim csavar ('twist, twirl')

However, anticausative roots which combine with *-Ód* are innumerable – recall that anticausative *Ód*-suffixation is a productive process and the default strategy in Hungarian to produce inchoative forms from transitive verbs which lack a lexically specified inchoative counterpart. The root $\sqrt{tép}$ ('tear') was selected to represent this open class of roots, and here are some more examples:

- (10) **-Ód** \sim \emptyset
- gyűr-őd \sim gyűr ('crease, crinkle'),
 - kicsap-ód \sim kicsap ('precipitate')
 - elcsesz-őd \sim elcsesz ('spoil, ruin, crap sg up')

Roots with verbalizing suffixes (cf. 5.3.3) combine with *-Ód*, too, to derive the T1DP/anticausative form. Previously it has been pointed out that roots that need verbalizing suffixes share some characteristics with both the causative and the equipollent alternation, and to a large extent it hinges on the analysis which alternation they will end up more similar to. However, as *-Ód* does not alternate with the verbalizing suffixes but rather stacks on them, for purposes of description, verbs like \sqrt{faxol} ('fax') can be lumped together with $\sqrt{tép}$ -type verbs:

- (11) **-Ód** \sim \emptyset
- emailez-őd \sim emailez ('e-mail')
 - hegyez-őd \sim hegyez ('sharpen')
 - besároz-ód \sim besároz ('get/make muddy')

A.1.3 The equipollent alternation

Equipollent roots bear overt morphological marking both in their T1DP/inchoative and 2DPC/TR-causative forms. The root which was picked to exemplify the prototype of the equipollent alternation is \sqrt{gur} ('roll').

Probably the most common morphology with the equipollent alternation is the *-Ul* \sim *-ít* alternation: a random selection of these pairs is listed below:

- (12) **-ul/ül** \sim **-ít**
- görb-ül \sim görb-ít ('bend')
 - görd-ül \sim görd-ít ('roll')
 - szép-ül \sim szép-ít ('grow/make more beautiful')

Although the number of the pairs participating in this particular alternation is high, *-Ul* and *-ít* do not always go hand in hand. There are also examples in which *-Od* alternates with *-ít*:

- (13) **-od/öd ~ -ít**
- savany-od ~ savany-ít ('turn/make sour')
 - dombor-od ~ dombor-ít ('bulge')
 - gomboly-od ~ gomboly-ít ('roll up')

Another, rather frequent, alternation is *-Ad ~ -Aszt*:

- (14) **-ed/ad ~ -eszt/aszt**
- olv-ad ~ olv-aszt ('melt')
 - pukk-ad ~ pukk-aszt ('burst')
 - fonny-ad ~ fonny-aszt ('parch')

And finally, there is also a few cases with *-Ad* alternating with *-ít*:

- (15) **-ed/ad ~ -ít**
- szár-ad ~ szár-ít ('dry')
 - szak-ad ~ szak-ít ('rip')

A special subtype of the equipollent alternation was constituted by \sqrt{fejl} ('develop')-type verbs. With \sqrt{fejl} -type roots, it is productive *-Ód* that alternates with one of the causative suffixes:

- (16) **-Ód ~ caus***
- bonyol-ód ~ bonyol-ít ('grow/make complicated')
 - agg-ód ~ agg-aszt ('worry')

And finally, there is a handful of $\sqrt{összes-ít}$ ('total')-type verbs:

- (17) **-ít-Ód ~ -ít**
- behelyettes-ít-ód ~ behelyettes-ít ('substitute')
 - kiegyenl-ít-ód ~ kiegyenl-ít ('even out, settle (a bill), discharge (debt)')

A.1.4 The labile alternation

All the labile (or, on my account, pseudo-labile) pairs I know of have been mentioned before:

- (18) $\emptyset \sim \emptyset$
- leenged ~ leenged ('deflate')
 - leereszt ~ leereszt ('deflate')
 - tör ~ tör ('break')

A.1.5 Summary

Table (19) lists the most common causative suffixes (uppermost row) and inchoative suffixes (the first column) of Hungarian. The tick placed at the juncture of a given inchoative and causative suffix indicates that there exist roots that combine with the respective suffixes to form a causative/inchoative pair. Accordingly, all the roots that are bare in the transitive-causative (abbreviated with \emptyset in the top row) participate in the anticausative alternation, whereas the roots with a bare inchoative form (marked by \emptyset in the column that enumerates the inchoative suffixes) belong to the causative alternation. At the juncture of the two zeros, we find the labile alternation.

(19) inchoative/causative endings

| | \emptyset | $-it$ | $-Aszt$ | $-t$ | $-At$ | $-tAt$ | $-lAl$ |
|-------------|-------------|-------|---------|------|-------|--------|--------|
| \emptyset | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| $-Ul$ | ✓ | ✓ | | | ✓ | | |
| $-Ad$ | | ✓ | ✓ | | | | |
| $-Od$ | ✓ | ✓ | | | | | |
| $-Ód$ | ✓ | ✓ | ✓ | | | ✓ | |

A.2 Irregular forms

There are further, more irregular forms. What at a first glance may still look relatively regular is the class of \sqrt{tesz} ('do, put')-type verbs:

| | | T1DP | HP | 2DPC |
|------|---------------------------|--------|--------|------|
| (20) | \sqrt{tesz} ('do, put') | A-v-ÓD | – | A-sz |
| | \sqrt{tesz} ('do, put') | A-v-ÓD | A-v-ÓD | A-sz |

There are six other verbs that reproduce the pattern in (20); these are *hisz* ('believe'), *visz* ('take'), *vesz* ('buy'), *esz* ('eat') and *isz* ('drink'). The future form of the copula, *lesz* ('will be(come)'), shares the 2DPC/TR-caus form with these but lacks the rest. However, as Péter Rebrus (p.c.) points out to me, these verbs are exceptional not only as a subclass but also compared to each other. They behave differently for instance with respect to past tense, imperative and participle formation. For point of illustration, the "sz" of the 2DPC form gets substituted by "d", "t" or "v" in past tense; the examples below demonstrate some of the possibilities:

(21) a. \sqrt{alsz} ($\sqrt{\text{sleep.PRES}}$) \rightarrow \sqrt{alud} ($\sqrt{\text{sleep.PAST}}$)

- b. $\sqrt{\text{esz}} (\sqrt{\text{eat.PRES}}) \rightarrow \sqrt{\text{ev}} (\sqrt{\text{eat.PAST}})$
 c. $\sqrt{\text{vesz}} (\sqrt{\text{buy.PRES}}) \rightarrow \sqrt{\text{vett}} (\sqrt{\text{buy.PAST}})$

So even if it is in principle possible to come up with an account for the forms in (20), as I have not immersed myself into the overall morphosyntactic behavior of these verbs, I am reluctant to provide an analysis of the T1DP, half-passive and 2DPC forms at issue.

The remaining alternations are even more bizarre. There are some patterns to be noticed, but they are all bordering on the suppletive:

- (22) a. *gyull-ad* ~ *gyújt* ('catch/put on fire')
 b. *full-ad* ~ *fojt* ('choke, suffocate')
- (23) a. *es* ~ *ejt* ('drop')
 b. *gyúl* ~ *gyújt* ('collect')
- (24) a. *dől* ~ *dönt* ('lean')
- (25) a. *öm(ö)l* ~ *önt* ('pour')
 b. *szétbom(o)l* ~ *szétbont* ('disintegrate')
 c. *elrom(o)l* ~ *elront* ('addle, break down')
- (26) a. *megtel* – *megett* ('fill')
- (27) a. *hül* ~ *hűt* ('cool')
 b. *nyíl* ~ *nyit* ('open')

The roots are suppletive throughout: they are different for the inchoative and for the transitive-causative form. As for the alternation in (22), the inchoative form is equipped with easily identifiable anticausative morphology: the suffix *-Ad*, one of the most common non-productive anticausative suffixes. The overall pattern for the transitive-causative form is that it ends either in *-jt*, *-nt* or *-t*. Nevertheless, it is not entirely clear to me if the causative forms should in fact be segmented, with the endings analyzed as independent causative suffixes (for instance, the causative suffix *-t* actually appears with non-suppletive pairs, cf. Appendix A.1.1). The two analytical possibilities are shown in (28) and (29). Concerning the abbreviations: (22)-type verbs belong to type 1, and the rest of the suppletive verbs to type 2; A and B stand for the suppletive roots:

| | | T1DP | mepa | 2DPC/TR-caus |
|------|--------|--------------------------------|---------|--------------|
| (28) | type-1 | <i>gyullad/gyújt</i> ('light') | A-inch* | B-ÓD B |
| | type-2 | <i>es/ejt</i> ('drop') | A | B-ÓD B |

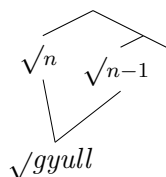
| | | | | |
|------|--------|--------------------------------|---------|--------------|
| | | T1DP | mepa | 2DPC/TR-caus |
| (29) | type-1 | <i>gyullad/gyújt</i> ('light') | A-inch* | B-ÓD B-caus* |
| | type-2 | <i>es/ejt</i> ('drop') | A | B-ÓD B-caus* |

I have not made enough research on these forms to be able to promote one alternative over the other. But the transitive-causative forms seem to me suppletive to such an extent that I will tentatively go for a full suppletive analysis for the causative forms. A provisional account runs along the following lines; here, I simply adopt Michal Starke's (2005, 2006) analysis of suppletion in English past and perfect participles.

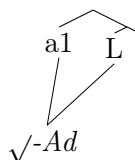
A.2.1 Type-1 verbs

These are the proposed lexical entries for the *gyullad/gyújt* pair:

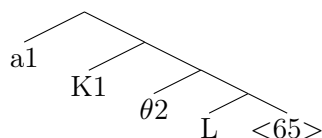
- (30) ENTRY <65>
Phonology: / ʃul:/
Syntactic structure:



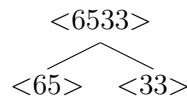
- (31) ENTRY <33>
Phonology: / ad/
Syntactic structure:



- (32) ENTRY <5665>
Phonology: / ʃu:jt/
Syntactic structure:

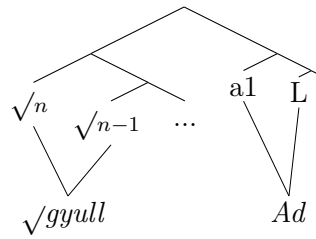


- (33) ENTRY <5633>
Syntactic structure:



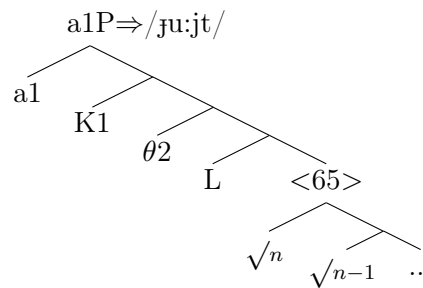
<33> is the usual entry of the idiosyncratic anticausative suffix *-Ad*, which was also used in the main text. <65> is the entry for the root \sqrt{gyull} , with lexico-semantic information encoded by the root layers, and with the pronunciation / ʃu:jt/. The complex entry <5633> specifies that the root \sqrt{gyull} combines with <33> to form an inchoative, which will be derived compositionally:

(34)



The complex entry <5665> inherits the structure and all the lexico-semantic information associated with <65>, so the root itself is the same in the inchoative form and in the transitive-causative form. However, <5665> imposes its own phonology, which means that /ʃu:jt/ will override whatever phonology its subentry is associated with:

(35) <5665>

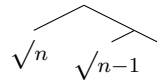


This way, the T1DP form will be compositional, whereas the 2DPC/TR-causative form is opaque. The half-passive derives in the usual compositional way from the 2DPC/TR-caus form for liberal speakers, and it will unpronounceable for conservative speakers.

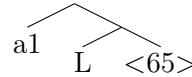
A.2.2 Type-2 verbs

Provided that for the rest of the verbs both the inchoative and the transitive-causative forms are opaque, the derivations for both forms will look like the transitive-causative derivation for \sqrt{gyull} . This means that there is a shared root that is associated with the relevant lexico-semantic information, and this root functions as a subtree for one complex entry with inchoative functional layers, and for another complex entry with causative functional layers. Both complex entries impose their own phonology. So for instance the root in the inchoative form *es* ('drop_{inch}') is identical with the root in the causative form *ejt* ('drop_{TR-caus}'), but it is not regular, cumulative inchoative or causative morphology the root is associated with, which results in opaque inchoative and transitive-causative forms for these verbs.

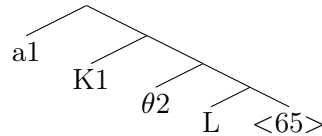
- (36) ENTRY <66>
Syntactic structure:



- (37) ENTRY <5566>
Phonology: / ej /
Syntactic structure:



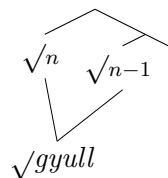
- (38) ENTRY <5666>
Phonology: / ejt /
Syntactic structure:



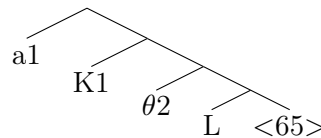
A.2.3 A note on overriding and inheriting

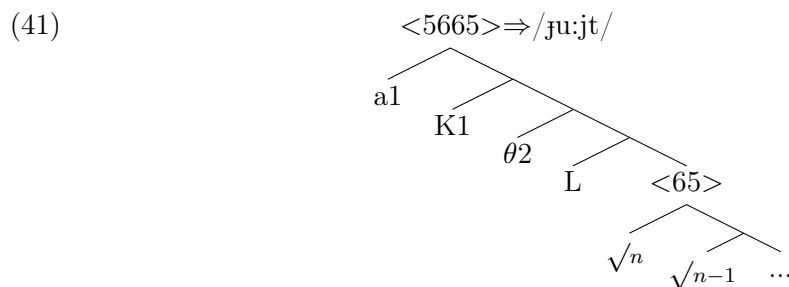
An issue that may need some clarification is when a complex entry inherits and when it overrides the phonology of its subentry or subentries. By the logic of Nanosyntax, as long as the complex entry *contains* phonological information, that will override whatever phonology the subentries have. This is because it is the entire structure the complex entry corresponds to that is associated with the phonology in the complex entry. This is exactly what happened with the suppletive forms:

- (39) ENTRY <65>
Phonology: / ju:l /
Syntactic structure:



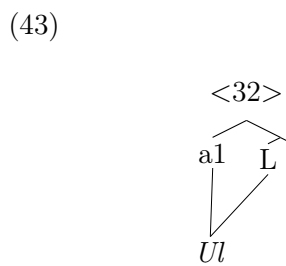
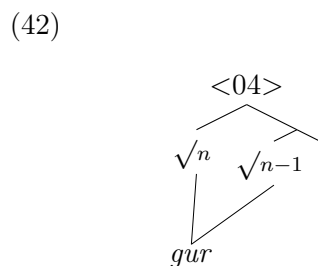
- (40) ENTRY <5665>
Phonology: / ju:jt /
Syntactic structure:



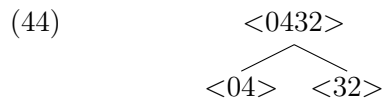


It happens, however, that the complex entry simply *lacks* phonological information. Therefore, there is nothing that would override the phonology of the subentries. Consequently, the structure that corresponds to the subentry will be spelled out as specified in the subentry, and if there are extra syntactic layers that are not covered by a subentry with phonology, they will simply be left without phonology. Thereby, it looks as if the complex entry 'inherited' the phonology of its subentry or subentries.

We have seen two such scenarios in this thesis. A relatively common case is that of a complex entry which combines an idiosyncratic suffix with a non-suppletive root. Such complex entries impose no phonological information: all they do is specify that a certain root combines with a certain kind of idiosyncratic suffix, thus securing that the correct non-predictable root/suffix combinations get produced:

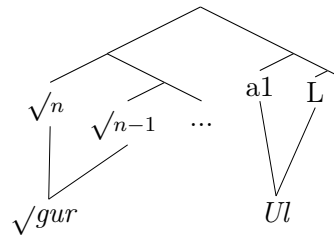


The relevant complex entry is <0432>, which lacks phonological information:



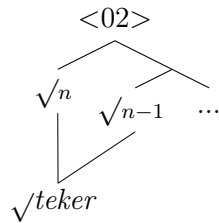
The result is entirely compositional, also phonologically:

(45)

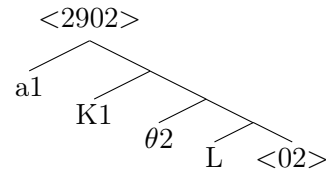


The other case in which the complex entry 'inherits' the phonology of its subentry is with roots like *leereszt* ('deflate') or *teker* ('coil'). These roots were argued to span only the root sequence, but they bear no overt causative morphology. We have seen that one way to account for this pattern is to postulate a zero suffix, which would then combine with the root by means of a complex entry just like above. But assuming that instead of a null suffix, the root combines with phonologyless causative structure is a more elegant way to account for the same set of facts (cf. 5.4.1, 5.4.2):

(46)

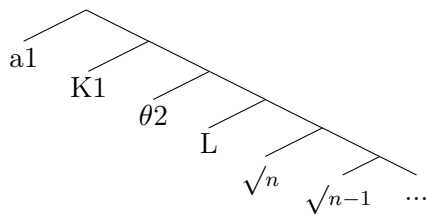


(47)

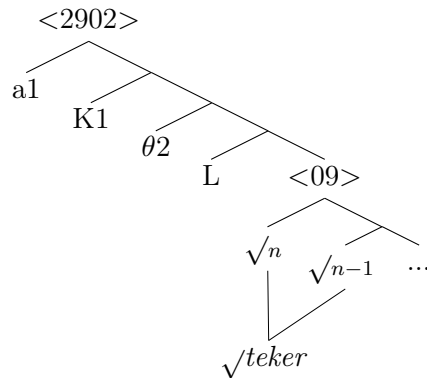


This means that once the structure in (48) is built, the complex entry $\langle 2902 \rangle$ will spell out the entire structure. As there is no phonological information associated with the complex entry, the upper layers will lack a phonological manifestation, while the phonology of root sequence remains unaffected, cf. (49):

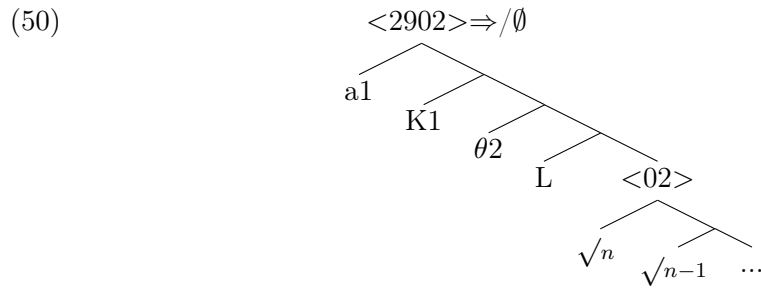
(48)



(49)



Notice that if the complex entry $\langle 2902 \rangle$ did not lack phonology but were associated with zero phonology instead, the entire structure in (48) would spell out as zero, irrespective of the phonology of the subentry:



To summarize: as long as a complex entry has its own phonology, the phonology of the complex entry overrides the phonology of the subentries. However, if the complex entry lacks phonological information completely, there is nothing that would replace the phonology of the subentries, which will then be preserved for spell-out. Notice that this is no stipulation: the difference simply falls out of the operation of the system.

Appendix B

RAT-speakers: a possible extension

B.1 A clue for further decomposition

This section presents data which I find intriguing enough to insert into an appendix, but which I would like to treat with much caution for reasons I will give at the end of the discussion. The data are based on judgements three of my informants supplied me with, and provide an interesting clue about the possibility for further decomposition. It was mentioned earlier that the verb *billeg* ('wobble, seesaw, sway')¹ is exceptional in the sense that it can combine with two different causative suffixes: *-At* and *-tAt*^{2,3}. The three speakers at issue stand out from the rest by opting for the root form *billeg* in some T1DP contexts, but resorting to the causative form plus an empty reflexive pronoun in other T1DP contexts. Other speakers choose the root form in both context types.

For simplicity, the *Reflexive pronoun+AT* suffix combination used by the three speakers under discussion will be labelled as the RAT-form, and the three speakers who use RAT-forms in certain inchoative contexts will be referred to as RAT-speakers. Here is one of the contexts in which all my informants, including the RAT-speakers, resorted to the root form *billeg*:

- (1) During storms, that chair on the deck ... so that there is no way I would sit in it! [*Viharban az a szék a fedélzeten úgy ..., hogy semmi*

¹For a discussion on interference with *billeg* ('preen'), see Appendix C.1.

²The literature treats these suffixes as causative suffixes, although opinions vary about what the difference really is between the two. In some works they are considered to be allomorphs of each other, while others claim that the basic difference between the two is whether they are causative or factitive. For the different standpoints, cf. e.g. Komlósy 2000, Rebrus 2000, Bene 2011.

³Recall that the uppercase vowels designate harmonizing vowels. In the case of *billeg*, the suffixes will always surface as *-et* and *-tet*, as the stem only contains front vowels.

pénzért bele nem ülnék.]

- a. billeg - \emptyset
wobble - PRES3SG
'wobbles'
- b. billeg - **et** - i magát
wobble - AT - PRES3SG.DEF itself.ACC
'wobbles'
- c. billeg - **tet** - i magát
wobble - TAT - PRES3SG.DEF itself.ACC
'wobbles'

However, in contexts like the ones below, RAT-speakers settled on the RAT-form:

- (2) These modern rocking chairs are so state-of-the-art, – this one here, for instance, has such a shape that it ... automatically even when no one is sitting in it and it is disconnected from electricity! [*Ezek a modern hintaszékek annyira ki vannak találva, – ez itt például automatikusan ... még akkor is, ha nem is ül benne senki, és az áramforrásról is le van kapcsolva!*]

- a. billeg - \emptyset
wobble - PRES3SG
'wobbles'
- b. billeg - **et** - i magát
wobble - AT - PRES3SG.DEF itself.ACC
'wobbles'
- c. billeg - **tet** - i magát
wobble - TAT - PRES3SG.DEF itself.ACC
'wobbles'

The rocking event appears to be triggered in both contexts – but in different ways. In (2), the cause of the rocking is inherent to the chair, whereas in (1), the chair comes into motion as a result of some external cause. Arguably, with intrinsic *V-ing* in (2), the cause is structurally encoded, while with the happenstance *V-ing* in (1), it seems plausible that there is no causation encoded in the event structure; rather, the causation comes from the outer context/situation. A casual way to put it would be to say that in contexts like (1), sentence/proposition 1 causes sentence/proposition 2. As for the intrinsic *V-ing* in (2), if causation is indeed encoded in the event structure, the *V-ing* may come across as internally caused because the construction has

one single semantic argument, which causation will be associated with.

If on the right track, this distinction would split what has thus far been treated as the T1DP construction into happenstance eventualities as in (1) and eventualities like (2), which I will label as intrinsic. Arguably, the two constructions could also be incorporated into the containment scale, where intrinsic *V-ing* would subsume happenstance *V-ing* by virtue of the structurally encoded causation component. The revised scale would look like this:

- (3) ... \subset happenstance \subset intrinsic \subset half-passive \subset 2DPC/TR-caus ...

B.2 A note on extra- and intra-speaker variation

The RAT-data make some interesting points in addition to the happenstance/intrinsic contrast. Another notable fact is that in the face of variation, the attested pattern is remarkably regular. Example (4) below shows some of the theoretical possibilities for *ABA violating language variants. All of these are non-existing:

(4)

| | happenstance | intrinsic | 2DPC |
|--------------|--------------|-----------|------|
| unattested-1 | AT | TAT | AT |
| unattested-2 | TAT | AT | TAT |
| unattested-3 | AT | ✓ | AT |
| unattested-4 | TAT | ✓ | TAT |
| etc. | ... | ... | ... |

The attested pattern is shown in (5):

(5)

| | happenstance | intrinsic | 2DPC |
|----------------|--------------|-----------|------|
| speaker type A | ✓ | ✓ | AT |
| speaker type B | ✓ | ✓ | TAT |
| RAT-speakers | ✓ | AT | TAT |

This result not only corroborates the *ABA theorem, but also backs up a containment based approach to these categories.

Variation with *billeg* can be found not only among speakers, but even within speakers. But variation seems to adjust to the rules of the game even with intra-speaker variation. I had three informants (two RAT-speakers and a third informant) who gave different judgements on the same set of contexts on different occasions. What was interesting to see, though, was that within

one testing round, they remained consistent with their judgements. Here are the results from two testing rounds:

| occasion-1 | | happenstance | intrinsic | 2DPC |
|-------------------|-----------|--------------|-----------|------|
| (6) | speaker-1 | ✓ | ✓ | TAT |
| | speaker-2 | ✓ | ✓ | TAT |
| | speaker-3 | ✓ | ✓ | TAT |

| occasion-2 | | happenstance | intrinsic | 2DPC |
|-------------------|-----------|--------------|-----------|------|
| (7) | speaker-1 | ✓ | AT | TAT |
| | speaker-2 | ✓ | AT | TAT |
| | speaker-3 | ✓ | ✓ | AT |

True enough, on later occasions, when the contexts or test sentences became increasingly convoluted, the same speakers struggled to remain consistent or stick with one language variant; so with more advanced forms it became clear that I was pushing the boundaries of the judgement-collecting method. However, as long as the complexity of the test forms was kept low, and involved only a comparison of happenstance, intrinsic and 2DPC constructions, the intuitions of these speakers remained strong and their judgements consistent within each testing round.

B.3 Revisions from a RAT perspective

I will now sketch how the putative distinction for happenstance and intrinsic *V-ing* can potentially be incorporated into the analysis developed for T1DP, half-passive and 2DPC forms. A natural assumption is that what distinguishes happenstance *V-ing* from intrinsic, half-passive or 2DPC *V-ing* is the absence or presence of syntactically encoded causation, which I will connect with a syntactic node *caus*. I take *caus* to be located relatively low, either right above *L*, or below *L* in another functional sequence that is still higher than the root sequence that terminates with \sqrt{n} :

| | | | | | | | | | |
|-----|---------------|----|----|------------|-------------|---|-------|------------|--------------|
| (8) | Alternative-1 | a1 | K1 | $\theta 2$ | caus | L | (...) | \sqrt{n} | $\sqrt{n-1}$ |
|-----|---------------|----|----|------------|-------------|---|-------|------------|--------------|

| | | | | | | | | | |
|-----|---------------|----|----|------------|---|-------------|-------|------------|--------------|
| (9) | Alternative-2 | a1 | K1 | $\theta 2$ | L | caus | (...) | \sqrt{n} | $\sqrt{n-1}$ |
|-----|---------------|----|----|------------|---|-------------|-------|------------|--------------|

On the first scenario, the mini-fseq that ranges from *L* to *K1* would very much correspond to the functions of *v* in traditional mainstream theory, introducing causation, adding an external θ role and fixing Accusative Case

for the internal argument. This alternative requires fewer modifications in the analysis, too.

On **Alternative-1**, the four constructions would consist of the following terminals in the following order:

(10)

| | | | | | | | |
|---------------|----|-----------|------------|------|---|------------|--------------|
| abstract fseq | a1 | <i>K1</i> | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 2DPC | a1 | <i>K1</i> | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| HP | a1 | | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| intrinsic | a1 | | | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| happenance | a1 | | | | L | \sqrt{n} | $\sqrt{n-1}$ |

Apart from this, some modifications are necessary to make the lexical items fit with the different constructions. In the first place, all the causative suffixes would expand to include *caus*:

(11)

| | | | | | | |
|---------------|----|-----------|------------|---|------------|--------------|
| original fseq | a1 | <i>K1</i> | $\theta 2$ | L | \sqrt{n} | $\sqrt{n-1}$ |
| caus* | a1 | <i>K1</i> | $\theta 2$ | L | | |

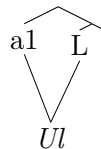
(12)

| | | | | | | | |
|--------------|----|-----------|------------|------|---|------------|--------------|
| revised fseq | a1 | <i>K1</i> | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| caus* | a1 | <i>K1</i> | $\theta 2$ | caus | L | | |

The adjustments that should be made to all idiosyncratic inchoative suffixes in both language variants along with the entry of conservative *Ód* are less straightforward. The original entries for these suffixed were assumed to be the following; for exposition, I pick the anticausative suffix *-Ul* to represent the idiosyncratic inchoative suffixes of the language:

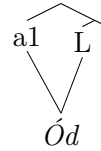
(13) Original entry for idiosyncratic *-Ul*:

a. <32>



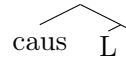
(14) Original entry for conservative *-Ód*:

a. $\langle 30_{cons} \rangle$



However, to make analysis cover the happenstance/intrinsic distinction, one would, for the first, need to assume an idiosyncratic, phonologyless entry like the one below:

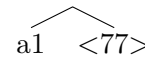
(15) $\langle 77 \rangle$



As this entry is idiosyncratic, it would be stored in the private Lexicon and would only be accessed by a complex entry that points to $\langle 77 \rangle$. One would further need to hypothesize that idiosyncratic inchoative suffixes and conservative *Ód* have complex entries, which combine *a1* with the phonologyless structure $\langle 77 \rangle$, and additionally impose their own phonology. The revamped suffixes will be marked with an indexical RAT so that they could be distinguished from the original entries in the main text.

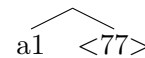
(16) Revised structure for idiosyncratic *-Ul*:

a. ENTRY $\langle 32_{RAT} \rangle$
 Phonology: /ul/
 Syntactic structure:



(17) Revised structure for conservative *Ód*:

a. ENTRY $\langle 30_{RAT} \rangle$
 Phonology: /o:d/
 Syntactic structure:



The fully expanded lexical trees would look like this:

(18) Fully expanded structure for idiosyncratic *-Ul*:



(19) Fully expanded structure for conservative *Ód*:



What the new entries would attain is that conservative *Ód* and all the idiosyncratic inchoative suffixes of the language would either spell out the sequence *a1 - caus - L* or *a1 - L*. What makes it possible to skip *caus* in structures like (18-a) and (19-a) is the Superset Principle, which allows a lexical tree to be a supertree of the syntactic tree that is to be spelled out. To put it differently: it is enough if the syntactic tree that is to be spelled out is only a subconstituent of the lexical tree that is going to pronounce it. And the only way to ignore lexical structure and remain with a constituent is by taking away the top. Applied to the present case, this is what it means: the subentry $\langle 77 \rangle$ has its own lexical tree, which consists of *caus - L*:



From this it follows that, by the Superset Principle, $\langle 77 \rangle$ can spell out the following constituents in a syntactic tree: *L* or *caus - L*. That $\langle 77 \rangle$ is a subordinate entry in the complex entries of idiosyncratic inchoative suffixes or conservative *Ód* does not deprive it from the possibility to spell out a subconstituent of its own lexical tree; we have seen numerous examples for such 'shrinking' within a subordinate entry in the course of the derivations. Without this, it would be hard to capture the syncretism between happenstance and intrinsic forms.

Let us now concentrate on **CONSERVATIVE SPEAKERS** first. This is

what their revised entries would look like; notice that anticausative suffixes, conservative *Ód* included, are now complex entries:

(21) Simplex entries:

| | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
|---|----|----|------------|------|---|------------|--------------|
| 01 _{RAT} . \sqrt{fagy} ('freeze') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 02 _{RAT} . \sqrt{teker} ('coil') | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 03 _{RAT} . $\sqrt{tép}$ ('tear') | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04 _{RAT} . \sqrt{gur} ('roll') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 05 _{RAT} . \sqrt{fejl} ('develop') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 06 _{RAT} . \sqrt{fax} ('fax') | | | | | | | $\sqrt{n-1}$ |
| 08 _{RAT} . $\sqrt{összes}$ ('total') | | | | | | ? | $\sqrt{n-1}$ |
| 09 _{RAT} . $\sqrt{leereszt}$ ('deflate') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 12 _{RAT} . <i>-Ol</i> | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | |
| 20 _{RAT} . <i>-tAt</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 21 _{RAT} . <i>-Aszt</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 22 _{RAT} . <i>-ít</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 77. | | | | caus | L | | |

Here are some of the relevant complex entries. As usual, <30> is productive and can be accessed freely by the computation, whereas the non-productive/semi-productive entries <31_{RAT}> and <32_{RAT}> are stored in the private part of the Lexicon, and will only be visible for the computation if another entry makes reference to them:

(22) $\langle 30_{RAT} \rangle \Rightarrow \acute{O}d$
 \swarrow
 a1 $\langle 77 \rangle$

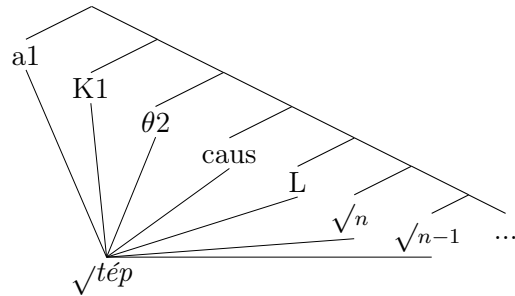
(23) $\langle 31_{RAT} \rangle \Rightarrow -Ed$ (24) $\langle 32_{RAT} \rangle \Rightarrow Ul$
 \swarrow \swarrow
 a1 $\langle 77 \rangle$ a1 $\langle 77 \rangle$

Due to the putative nature of the happenstance/intrinsic distinction, I will not provide all the derivations. Rather, I will step the reader through one of the more complicated derivations to illustrate how the complex entries would derive the correct results.

Verbs like *tép* ('tear, rip') participate in the anticausative alternation,

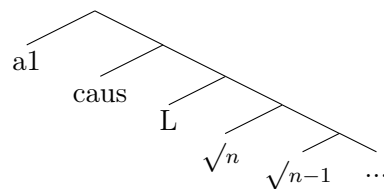
which means that they go all the way up to *a1*. On Alternative-1, the lexical entry of *tép* has *caus* wedged in between $\theta 2$ and *L*:

(25) $\langle 03_{RAT} \rangle$:



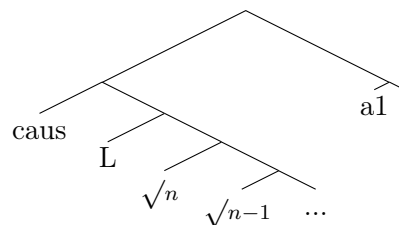
This way, the **2DPC** structure is a perfect match for the revised entry of *tép*. The exciting cases, however, are those of the happenstance and intrinsic forms, both of which spell out as *tép-Ód*. The **intrinsic** construction consists of the following layers:

(26)



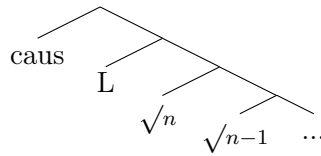
Up to *caus*, $\langle 03_{RAT} \rangle$ can pronounce the structure. But on the insertion of *a1*, there is no matching lexical entry. Movement will not help, either: conservative speakers have no lexical item that would correspond to *a1*:

(27)



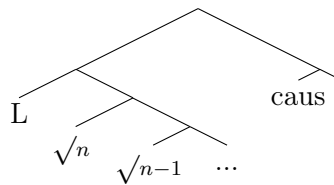
To avoid a crash, the computation backtracks from the original structure (26) by removing *a1*:

(28)



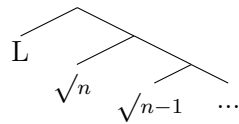
Last time the computation opted for non-movement in this structure; therefore, this time it gives a try to movement:

(29)



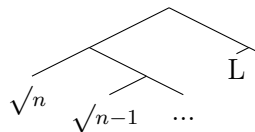
This structure is still unpronounceable; therefore, the computation goes one step further: it backtracks to (30):

(30)

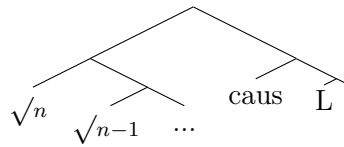


As dictated by the movement calculus, in the original derivation the computation preferred non-movement. Therefore, this time it will attempt movement:

(31)

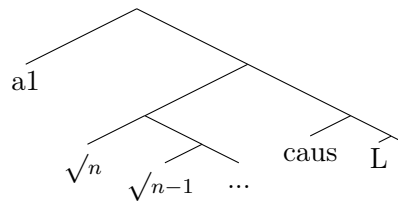


This configuration can be tackled by a combination of $\langle 03_{RAT} \rangle$ and a productive suffix that starts with L : $\langle 20_{RAT} \rangle$. Subsequently, the derivation re-inserts *caus*, and successive cyclic movement is necessary to avoid a crash. In the ensuing structure, spell-out is again ensured by teamwork between $\langle 03_{RAT} \rangle$ and $\langle 20_{RAT} \rangle$:



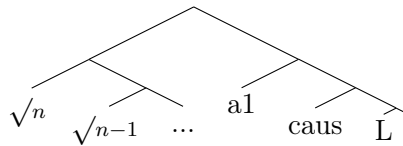
Finally, *a1* is re-introduced into the derivation.

(32)



Again, without movement the derivation would break down. The first choice is successive cyclic movement:

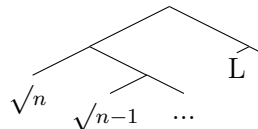
(33)



Now, the right branch is a perfect match for the productive anticausative suffix *Ód*. At this point there is no other productive entry that would fit, either. This way, the intrinsic structure spells out as it should: *tép-Ód*.

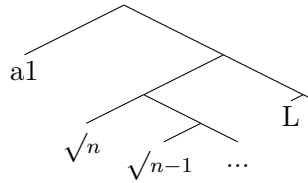
The **happenstance** derivation is easier: in the absence of *caus*, the computation needs to resort to backtracking on fewer occasions. After inserting *a1*, and then backtracking and moving as a last resort, the following structure emerges:

(34)



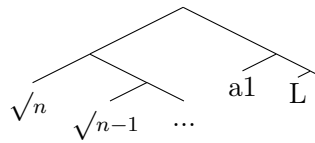
The entries that pronounce the structure at this point are $\langle 03_{RAT} \rangle$ and $\langle 20_{RAT} \rangle$ here, too. Next, *a1* is re-inserted:

(35)



To rescue the derivation, the root constituent is successive cyclically moved:

(36)



The resulting happenstance structure will spell out as *tép-Ód*: the root takes care of the left branch, while the only candidate for the right branch is the productive anticausative suffix *Ód*:

(37) Fully expanded structure for conservative $\acute{O}d_{RAT}$:

By the Superset Principle, the subordinate entry $\langle 77 \rangle$ shrinks, allowing the complex entry $\langle 30_{RAT} \rangle$ with the phonological form *Ód* to match the sequence *a1 - L*. As regards the **half-passive**, it will be blocked in the usual way; the modifying of the conservative entries has no effect on that.

There is, however, one root type that needs to be altered for conservative speakers: *fagy*-type roots, which originally participate in the causative alternation, must be reduced to the root sequence, or else the happenstance form will incorrectly be spelled out as *fagy-Ód* instead of the bare form *fagy*. This simply means that the derivation for *fagy*-type verbs will run as the equipollent derivations, except that *fagy*-type verbs combine with zero anticausative morphology. As the pseudo-labile verbs *leereszt*, *leenged* and *tör* were argued to be a subtype of *fagy*-type verbs, the changes pertain to them, too. The modified entries for *fagy*-type and *leereszt*-type verbs were shown already in (21), but I repeat them below:

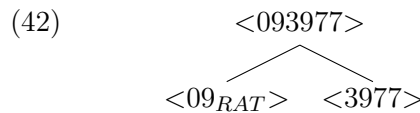
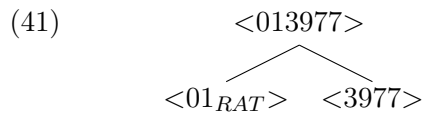
(38)

| | a1 | K1 | θ 2 | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
|--|----|----|------------|------|---|------------|--------------|
| $01_{RAT} \cdot \sqrt{fagy}$ ('freeze') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| $09_{RAT} \cdot \sqrt{leereszt}$ ('deflate') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |

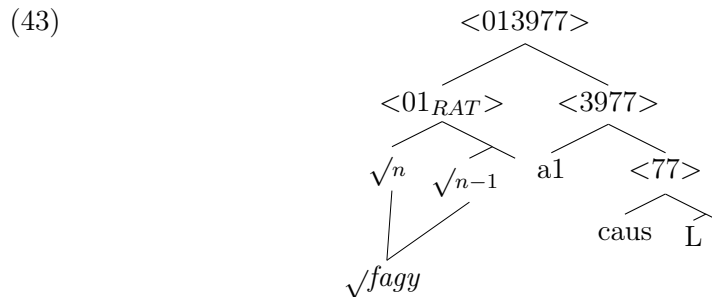
These roots would combine with phonologyless functional structure to derive the happenstance and intrinsic forms. In practice, this means that there would be a phonologyless complex entry $\langle 3977 \rangle$. This entry would connect $a1$ with $\langle 77 \rangle$, analogously to other idiosyncratic anticausative suffixes and conservative *Ód*:



Furthermore, there would be another complex entry that relates $\langle 3977 \rangle$ to a suitable root:

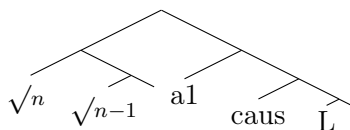


The fully expanded tree for the complex entry $\langle 013977 \rangle$ is shown below:

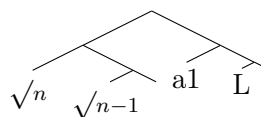


By the Superset Principle, the entry <013977> will licitly spell out as *fagy* both the intrinsic structure in (44) and the happenstance structure in (45):

(44)



(45)

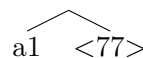


The 2DPC structure would be derived without difficulties: as in the original analysis, the root combines with the prescribed causative suffix, <21_{RAT}> in the case of <01_{RAT}>. And regarding the half-passive, it will still be unpronounceable with the revised conservative entries.

As for **LIBERAL SPEAKERS**, for them *Ód* would continue to lexicalize *a1* alone, but the idiosyncratic inchoative suffixes would be assigned the same shape as the revised conservative entries:

(46) Revised structure for idiosyncratic *-Ul*:

- a. ENTRY <32_{RAT}>
 Phonology: /ul/
 Syntactic structure:



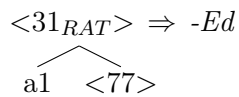
Also, the modification of *fagy*-type and *leereszt*-type roots carries over to liberal speakers. Concerning *teker*-type entries, for liberal speakers they were short from before. Beyond this, *fejl*-type roots would be extended to include *caus*, as would be all other roots at least as big as *L*. These modifications would derive the correct results for liberal speakers, too. Here are the revised entries for liberal speakers:

(47) Simplex entries:

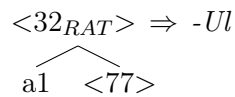
| | | | | | | | |
|---|----|----|------------|------|---|------------|--------------|
| | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 01 _{RAT} . \sqrt{fagy} ('freeze') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 02 _{RAT} . \sqrt{teker} ('coil') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 03 _{RAT} . $\sqrt{tép}$ ('tear') | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 04 _{RAT} . \sqrt{gur} ('roll') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 05 _{RAT} . \sqrt{fejl} ('develop') | | | | caus | L | \sqrt{n} | $\sqrt{n-1}$ |
| 06 _{RAT} . \sqrt{fax} ('fax') | | | | | | | $\sqrt{n-1}$ |
| 08 _{RAT} . $\sqrt{összes}$ ('total') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 09 _{RAT} . $\sqrt{leereszt}$ ('deflate') | | | | | | \sqrt{n} | $\sqrt{n-1}$ |
| 12 _{RAT} . - <i>Ol</i> | a1 | K1 | $\theta 2$ | caus | L | \sqrt{n} | |
| 20 _{RAT} . - <i>tAt</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 21 _{RAT} . - <i>Aszt</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 22 _{RAT} . - <i>ít</i> | a1 | K1 | $\theta 2$ | caus | L | | |
| 30. - <i>Ód</i> | a1 | | | | | | |
| 77. | | | | caus | L | | |

Here are some of the relevant complex entries for liberal speakers:

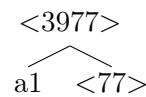
(48)



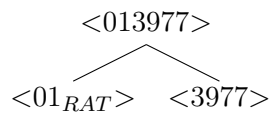
(49)



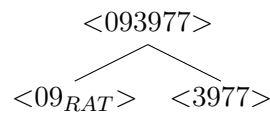
(50)



(51)



(52)



As the derivations are unproblematic, there is no need to flesh them out here.

Finally, let us briefly consider **Alternative-2**. In case it turned out that *caus* is located below L, the happenstance construction would involve two separate gaps:

(53)

| | | | | | | | |
|---------------|----|-----------|------------|---|------|------------|--------------|
| abstract fseq | a1 | <i>K1</i> | $\theta 2$ | L | caus | \sqrt{n} | $\sqrt{n-1}$ |
| 2DPC | a1 | <i>K1</i> | $\theta 2$ | L | caus | \sqrt{n} | $\sqrt{n-1}$ |
| HP | a1 | | $\theta 2$ | L | caus | \sqrt{n} | $\sqrt{n-1}$ |
| intrinsic | a1 | | | L | caus | \sqrt{n} | $\sqrt{n-1}$ |
| happenstance | a1 | | | L | | \sqrt{n} | $\sqrt{n-1}$ |

On this scenario, the original inchoative suffixes and conservative *Ód* can be kept. At the same time, it would be necessary on the one hand to reduce all roots to the root constituent (as we did with the *fagy*-type on Alternative-1) and, on the other hand, to make more extensive use of null suffixes. However, in the absence of immediate evidence for Alternative-2, this option will not be considered here in detail.

We have now seen that a putative distinction between happenstance and intrinsic *V-ing* may be incorporated in the analysis at the cost of a moderate revamping of the lexical entries. But as the RAT-data at this point are not solid enough to be built on, I refrain from lobbying for these changes in this thesis.

B.4 Red flags for the RAT generalization

As remarked at the outset, there are a number of factors which serve as a warning to treat this particular slice of data with *billeg* ('wobble, tilt, rock, seesaw') with caution. The first red flag concerns the number of informants. *Billeg*-forms were tested with 18-20 speakers, and the majority of these speakers used syncretic forms to describe happenstance and intrinsic *V-ing*. This means that there were only a few speakers, three in number, who resorted to the RAT-form *billeg-AT + DP_{refl}* to express intrinsic *V-ing*.

Another point of concern is that, as it was mentioned previously, those two of the three RAT-speakers who were available for repeated testing turned out to oscillate between two language variants. True enough, these speakers were surprisingly consistent with their judgements within the individual testing rounds; but for all I know at the moment, there may not exist any 'pure' RAT-speakers. That my RAT-speakers alternate between two language variants also made the investigation quite challenging when at the later stages I was trying specifically to find out more about the RAT-variant. For these RAT-oriented tests, the speakers had to be primed to 'tune in on' the RAT-variant.

An additional question is if I succeeded in eliminating interference from *billeg* ('preen') (cf. Appendix C.1) completely. Sometimes I got the RAT-pattern with seesawing birds but not with tilting tables or rocking chairs from a speaker under testing; on other occasions or with slightly modified contexts, the pattern could get reversed, with RAT-forms for tables and

chairs but not for birds; and at other times or for the other RAT-speaker, both birds, tables and chairs could test positive for RAT. This inconsistency might have also ensued from the contexts growing increasingly far-fetched and convoluted in order to eliminate interfering factors. More than once I felt that I was truly pushing the boundaries of the judgement-collecting method with the RAT-forms.

And finally, the observation that RAT-forms can at all be used to express intrinsic *V-ing* raises an interesting issue. As a rule, motion verbs in a T1DP context are monadic in Hungarian:

- (54) These modern rocking chairs are so state-of-the-art, – some even ... automatically even when no one is sitting in them! [*Ezek a modern hintaszékek annyira ki vannak találva, – van olyan is, amelyik automatikusan ... még akkor is, ha nem is ül benne senki.*]
- a. ráz - kód - ik
shake - INCH - PRES3SG
'shake'
- b. dülöngél - ∅
sway - PRES3SG
'sway'
- c. rezeg - ∅
vibrate - PRES3SG
'vibrate'

But in contrast with the monadic verbs in (54), the RAT-form involves a reflexive DP. Thereby, RAT-forms utilize two arguments – a DP and a co-indexed reflexive pronoun – to describe an essentially monadic event:

- (55) These modern rocking chairs are so state-of-the-art, – some even ... automatically even when no one is sitting in them! [*Ezek a modern hintaszékek annyira ki vannak találva, – van olyan is, amelyik automatikusan ... még akkor is, ha nem is ül benne senki.*]
- a. %billeg - et - i magát
seesaw - AT - PRES3SG.DEF itself.ACC
'seesaw'

That a situation with a single (non-agentive) semantic argument can be described with the help of a reflexive form is by no means a novelty: a large number of languages, such as Spanish or Polish, use reflexivization as a means for anticausative formation. The question is rather why it is only with this particular verb and speaker type that Hungarian resorts to reflexivization (at such a low level, *ie.* below 2DPC). To this question I have no answer ready at the moment. Nonetheless, I find it worth mentioning that

if RAT-speakers exist indeed, then *-At* is the only 'causative' suffix that can derive an inchoative in Hungarian⁴. This is an interesting coincidence, and it would be an intriguing undertaking to attempt to link the two 'specialities' of RAT-forms in a single account; maybe something along the lines that as the 'causative' suffix shrinks down to the size of an inchoative, it somehow preserves the empty 'shell' of the argument that has been discharged: a DP that, because it has 'lost' its content, will always be co-referent with the surviving argument.

So on the whole, it can be concluded that while the results are intriguing enough to be presented in an appendix, the uncertainties around the *billeg*-data speak for keeping these findings backstage until further research is conducted which can either confirm or disconfirm the preliminary findings on RAT-speakers.

⁴The reader may recall that the causative suffix *-ít* appears in the T1DP construction with *összes-ít-Ód*-type verbs. But *-ít* needs to combine with *Ód* to form a full T1DP-level form, whereas *-At* in *billeg-At* gets by without *Ód* – it picks up the reflexive pronoun instead.

Appendix C

Data details on *billeg*

C.1 Filtering out *billeget* ('preen')

There is a verb that looks very similar to *billeg*, and if it does not get factored out, it can interfere with *billeg* and mess up the results. This verb is *billeget*, and it refers to delicate, flaunting motions which typically involve different body parts moving separately and graciously. While *billeg* describes wobbling, seesawing or swaying that normally makes the entire body move back and forth or up and down in one chunk, *billeget* may not involve swaying at all. The examples below illustrate the use of *billeget*, and were all culled from the internet. In the first set of examples, *billeget* describes rhythmic, dancing-like movement:

- (1) a. A család legifjabb tagjának is a vérében van már a
the family youngest member too the blood.in is already the
tánc, ahogy a fiatalok mellett a ritmusra **billeget** -
dance the.way the youngsters next.to the rhythm.to billeget -
i magát.
PRES.3SG oneself.ACC
'Even the youngest member of the family has dancing in his
blood, you can tell it from the way he's **rocking** to the beat of
the music along with the youths.'
- b. Kezdet után 10 perc után már táncol a tömeg, aki
beginning after 10 minute after already dances the crowd, who
nem, az is **billeget - i magát,** énekli a
not, that too billeget - PRES.3SG oneself.ACC, sings the
dalszövegeket.
lyrics
'Just ten minutes after the start of the event the crowd is already
dancing, even those, who don't, **rock themselves** and sing the

lyrics.’

The meaning of *billeget* also subsumes preening in front of the mirror:

- (2) Ophelia joghurtot majszol, a tükör előtt, és épp a sminkjét akarja megigazítani, amikor Macbeth öltönyben, véres kézzel belép.
Ophelia snacks on some yoghurt, in the mirror, and is just about to fix her make up when Macbeth enters in his suit, with bloody hands.
- a. billeget - i magát
billeget - PRES.3SG herself.ACC
'preens'
- (3) a ruhákban. Mint minden kislány.
.... in the dresses. As any little girl would. '
- a. Billeget - te magát
billeget - PAST.3SG herself.ACC
'She was preening'

The verb *billeget* is also commonly used for seductive behavior with alluring, flamboyant movement:

- (4) a. Mikor egy csaj magassarkúban billegeti magát az utcán [...]
'When a chick is flaunting herself in high-heels'
- b. Míg egy páva a potenciális nőstény előtt billegeti magát [...]
'While a peacock is flaunting himself to the potential female'

It can also be used metaphorically to describe the behavior of people who wish to be noticed but the way they do it revolts others:

- (5) Miért lehet szerinted csak annak magántulajdona, aki az állampárt vezérkarában **billegette magát** [...]?
Why do you think that only those can have property who were **flaunting themselves** in the leadership of the party?

And finally, *billeget* can also refer to the delicate motion of birds the way they flaunt without actually seesawing. In (6), the mulleins are dry and speakers therefore expect the birds to flaunt on them rather than swaying with them:

- (6) A tavalyi ökörfarkkórók szárazon meredő csonkjain
the last.year.from mulleins dryly rising stumps.on
rozsdás-csuk-pár billegette magát.
whinchat-couple flaunted themselves.acc
'A whinchat-couple flaunted on the dryly rising stumps of last year's

mulleins.'

These examples illustrate that even though *billeget* is a close relative of *billeg*, it describes a different type of movement: while *billeg* refers to chunky wobbling, seesawing or swaying, *billeget* designates gracious, flaunting motion without connoting swaying.

As regards form, it seems like a trivial statement that *billeg* and *billeget* differ in form as well. This is true, even though the facts are more subtle than that in reality: *billeget* and one of the TR-causative forms of *billeg* come out identical:

| | underlying causative | phonological realization |
|-------------------|-------------------------|---|
| (7) <i>billeg</i> | billeg-At or billeg-tAt | [<i>billeg-et</i>] or [<i>billeg-tet</i>] |
| <i>billeget</i> | billeget-tAt | [<i>billeget-tet</i>] |

The table shows that one of the two possible TR-causative forms of *billeg* ('wobble, seesaw, sway') has the same surface form as *billeget* ('flaunt, preen'). However, as the homonymy arises between a TR-causative form of one verb and the non-causative form of another verb, the two paradigms differ from each other at each level. Consequently, with a sufficiently specified context, the ambiguity disappears.

We find another case of ambiguity with RAT-speakers, who use the form *billeg-At* in intrinsic contexts to describe wobbling or seesawing. This means that here it is two semantically non-causative verbs that are homonymous with each other. But again, a fully specified context helps to eliminate the ambiguity. And once more, there is a clear contrast between the TR-causative forms of the two verbs: while causative morphology on *billeget* ('flaunt, preen') is cumulative, in the case of *billeg-At* ('wobble, seesaw'), -At gets replaced by -tAt in causative contexts:

| | intrinsic | 2DPC/TR-caus |
|-----------------------|--------------------|----------------------|
| (8) RAT <i>billeg</i> | %billeg- <i>et</i> | %billeg- <i>tet</i> |
| <i>billeget</i> | billeget | billeget- <i>tet</i> |

So even though at first sight they look very similar and may even surface as homophonous, *billeg* and *billeget* are different verbs with distinct meanings and morphological paradigms. Making this point is of importance because the behavior of *billeg* is central to the putative happenstance/intrinsic distinction in Appendix B, and if *billeg* and *billeget* are not kept separated, *billeget* can easily tamper with the paradigm of *billeg*.

C.2 Contexts with *billeg* ('wobble, seesaw')

As it was pointed out earlier, what makes *billeg* unique is that it can combine with two different causative suffixes. This allows *billeg* to mark distinctions that other verbs cannot mark. Consequently, *billeg* has made a twofold contribution to the data. For the first, it was with this verb that the three RAT-speakers instigated the putative distinction between happenstance and intrinsic constructions (cf. Appendix B). Second, the lack of differentiation between 2DPC and transitive-causative *billeg* was taken to support the conjecture that 2DPC and TR-causative are manifestations of the same construction. This section enumerates those contexts with *billeg* ('wobble, seesaw, sway') that were used to elicit judgements from speakers on T1DP, 2DPC and transitive-causative constructions. The T1DP constructions used in this section are in fact intrinsic¹; nonetheless, as the data were examined with a focus on the contrast between T1DP, 2DPC and transitive-causative forms, the putative happenstance/intrinsic distinction will be kept in the background. The testing was conducted for both wobbling tables and seesawing birds to reinforce the results; both context series are replicated below.

C.2.1 The wobbling table

The first context was used to test speakers on the T1DP/2DPC forms of *billeg*. To force the T1DP reading in (9), the table is constructed in such a way that it shakes automatically at regular intervals:

- (9) One of the funniest pieces of furniture in the ghost castle at the amusement park is a huge dining table. Advanced technology was used in the course of its production so that the table automatically at regular intervals. Of course when it happens, everyone who has taken a seat by the table gets scared out of their wits. [*A vidámparkban a kísértetkastély egyik legviccesebb berendezése egy hatalmas étkezőasztal. Ezt a legmodernebb technikával alakították ki úgy, hogy az asztal bizonyos időközönként automatikusan Ilyenkor persze mindenki frászt kap, aki leült az asztalhoz.*]:

- a. *billeg* - ∅
 wobble - PRES3SG
 'wobbles'

¹Notice that if the presumed happenstance/intrinsic distinction is real, it is only the happenstance construction that is a real T1DP construction: the intrinsic construction can involve a reflexive form in RAT-speakers' language variety (with *billeg*). But this is something I will not get caught up in here. There is anyway a contrast between the 2DPC construction which involves two arguments with a thematic role each, and the intrinsic RAT construction with a dummy reflexive.

- b. billeg - **et** - i magát
wobble - AT - PRES3SG.DEF itself.ACC
'wobbles'
- c. billeg - **tet** - i magát
wobble - TAT - PRES3SG.DEF itself.ACC
'wobbles'

With this context, most speakers used the intransitive form; the three RAT-speakers went for the RAT-form *billeg-At + DP_{refl}*. None of my informants opted for the other reflexive form *billeg-tAt*:

(10)

| number | T1DP |
|--------|------|
| 16 | ✓ |
| 3 | At |

The table also shows the number of speakers for each speaker variant: 16 with the bare form, three with the RAT-form.

The 2DPC context below is an extension of the previous situation, but here the animated table induces the shaking itself:

- (11) Now it has it so that this table in the ghost castle is animate. All the same, it cannot do anything against the automatic shaking that takes place every third minute, as this is just programmed into the table. But often the table thinks it is way too boring with the predictable shakes, because those visitors who have been in the chamber for a bit longer will not get surprised by the next shake. So every now and then, just for the fun of it, the table gathers all its strength and ... in a frenzy so that the glasses and plates that had been placed on it all fall off. As a rule, the result is a terrible upheaval, and the table has a good laugh at the scene. [*Namost ez az asztal "él", és ezek ellen a hárompercenként ismétlődő rázkódások ellen nem tehet semmit, ezek egyszerűen bele vannak programozva. De az asztal sokszor elég unalmasnak tartja ám ezt a rendszeresen ismétlődő rázkódást, hiszen azok, akik kicsit tovább tartózkodnak a teremben, már nem lepődnek meg a következő ilyen automatikus rezgésnél. Úgyhogy ez az asztal időnként, ha szórakozni akar - teljesen a saját szakállára - összeszedi minden erejét, és olyan örültül ..., hogy a poharak és tányérok leesnek róla a földre. Ilyenkor persze mindig nagy felfordulás van, az asztal meg jót nevet a cirkuszon.*]:

- a. billeg - ∅
wobble - PRES3SG
'wobbles'

- b. billeg - **et** - i magát
wobble - AT - PRES3SG.DEF itself.ACC
'wobbles'
- c. billeg - **tet** - i magát
wobble - TAT - PRES3SG.DEF itself.ACC
'wobbles'

On being presented with the 2DPC situation in (11), speakers consistently opt for a form that differs from the one used in the previous context:

(12)

| | number | T1DP | 2DPC |
|----------|--------|------|------|
| type A | 3 | √ | At |
| type B | 13 | √ | tAt |
| type RAT | 3 | At | tAt |

The last context in the table series contrasts 2DPC and TR-causative constructions. Imagine the following situation:

- (13) One of the most annoying pieces of furniture in the ghost castle at the amusement park is a huge dining table. Advanced technology was used in the course of its production so that the table wobbles automatically at regular intervals. Of course when it happens, everyone who has taken a seat by the table gets scared out of their wits. Some people get so upset that they grab the table and it wildly in anger. [[...] *Néhányan úgy felhúzzák maguk, hogy dühükben megragadják az asztalt és vadul*]
- a. billeg - ik
wobble - PRES3PL
'wobble'
- b. billeg - **et** - ik
wobble - AT - PRES3PL.DEF
'wobble'
- c. billeg - **tet** - ik
wobble - TAT - PRES3PL.DEF
'wobble'

Here, speakers opt for either of the causative forms. However, none of my informants used different forms for the 2DPC and the TR-causative construction. A juxtaposition of the judgements on T1DP, 2DPC and transitive-causative constructions yields the following pattern:

| | number | T1DP | 2DPC | TR-caus |
|-------------|--------|------|------|---------|
| (14) type A | 3 | ✓ | At | At |
| type B | 13 | ✓ | tAt | tAt |
| type RAT | 3 | At | tAt | tAt |

C.2.2 The seesawing bird

These results were backed up by the control contexts about seesawing birds.² To rule out the *billeget*-reading in 2DPC contexts, I ended up with a context in which the bird is in a cast after some injury. This is something that probably feels quite far-fetched, but it excludes the possibility of *billeget*-type motion: in the cast, the bird is unable to preen and move its body parts separately and graciously. To highlight the contrast between T1DP and 2DPC swaying, the context combines both types: the bird sways inherently because of a defect of the central nerve system, while it makes an all-out effort to sway back and forth to reach the food dispenser. The environment of the first slot calls for inherent *V-ing*, whereas the second slot is situated in the backdrop of 2DPC *V-ing*:

- (15) After a serious accident, the parrot is put into a cast from the top of its head down to its ankles, so that it cannot move any of its body parts separately. But it was not only its bones that got damaged, but also its nerve system. This resulted in the parrot losing its sense of balance. So now it is sitting on the bar of the cage, stiff in the cast, and occasionally, when it gets dizzy and unsteady from the nerve system injury, it wobbles a bit. Now it is so that from the cast, the parrot cannot bend over the food dispenser, so after a while it gets ravenous. Finally, it decides to sway back and forth until it gains momentum to reach the food dispenser. It is not easy to accomplish this plan, as the cast makes it hard for the parrot to set itself into motion. But the parrot, ing unsteadily because of the nerve system injury, pulls itself together, focuses on the dispenser, and back and forth with an all-out effort until it manages to pick a pumpkinseed from the food dispenser. [*A papagáj egy súlyos baleset után a feje búbjától a bokájáig gipszbe van téve úgy, hogy bokától fölfelé egyetlen végtagját sem tudja külön-külön mozdítani. A baleset miatt azonban nemcsak a csontjai, de az idegrendszere is sérült, ami miatt gyakorlatilag elvesztette az egyensúlyérzékét. Így aztán a gipsz miatt csak ül mereven a kalitka rúdján, és időnként,*

²My informants did not necessarily have the same intuitions about seesawing birds and wobbling tables. Nevertheless, the overall pattern turned out to match (14) to the hilt.

ha megszédül az idegrendszeri sérülés miatt, dülöngél egy kicsit. Viszont a gipsz miatt nem tud odahajolni az etetőhöz, úgyhogy egy idő után nagyon megéhezik. Ekkor úgy dönt, hogy megpróbálja lengésbe hozni magát, remélve, hogy sikerül olyan mértékig kilengenie, hogy elérje az etetőt. Ezt nem könnyű kiviteleznie, mert a gipsz miatt nagyon nehéz mozgásba lendülnie, de összeszedi minden erejét, és miközben az idegrendszeri sérülése miatt bizonytalanul ide-oda ... , rákoncentrál az etetőre, és céltudatosan előre-hátra ..., amíg végül sikerül egy tökmagot kikapnia az etetőből.]

- a. billeg - \emptyset
 sway/seesaw - PRES3SG
 'sway(s)/seesaw(s)'
- b. billeg - **et** - i magát
 sway/seesaw - AT - PRES3SG.DEF itself.ACC
 'sway(s)/seesaw(s)'
- c. billeg - **tet** - i magát
 sway/seesaw - TAT - PRES3SG.DEF itself.ACC
 'sway(s)/seesaw(s)'

The causative context that ties in with the T1DP/2DPC contexts runs like this:

- (16) A bird is in cast from the top of its head down to its ankles, so that it cannot move any of its body parts separately. It is sitting on the bar in the cage, but from there it cannot reach the food dispenser. The 4-year-old owner of the parrot feels sorry for its pet, so in order to help it to some food, it grabs the parrot by the neck and poor thing to and fro, pressing its beak into the dispenser again and again. [*Egy madár gipszbe van téve tetőtől talpig, olyannyira, hogy egyetlen végtagját sem tudja külön-külön mozdítani. A kalitkában ül a rúdon, viszont innen nem éri el a madáretetőbe kitett magokat. Négyéves kis gazdája nagyon sajnálja, és hogy élelemhez segítse, megragadja a nyakánál fogva, és jó vadul előre-hátra szerencsétlen madarat, újra és újra belenyomva a csőrét az etetőbe.]*

- a. billeg - i
 sway/seesaw- PRES3SG.DEF
 'sways/seesaws'
- b. billeg - **et** - i
 sway/seesaw - AT - PRES3SG.DEF
 'sways/seesaws'

- c. *billeg* - **tet** - i
 sway/seesaw - TAT - PRES3SG.DEF
 'sways/seesaws'

The overall results with the bird contexts are shown in (17):

(17)

| | number | T1DP | 2DPC | TR-caus |
|----------|--------|------|------|---------|
| type A | 5 | ✓ | At | At |
| type B | 12 | ✓ | tAt | tAt |
| type RAT | 3 | At | tAt | tAt |

These data confirm that the morphology and syntax of 2DPC and transitive-causative constructions consistently co-vary, even when speakers have the necessary morphological tools – two causative suffixes – to differentiate between the two constructions.

C.2.3 A note on methodology and unruly data

I would like bring to a conclusion this data section on *billeg* with a note on methodology. The judgements with *billeg* were often delicate: several factors had to be controlled for to avoid undesirable interference. Imprecise contexts resulted in unclear speaker judgements, and in a number of cases the contexts had to be refined and checked with speakers several times before a pattern began to emerge. Let me provide one case in point: a speaker who was completely inconsistent in his/her judgements. Repeated testing with alternative and revised contexts disclosed that this person uses two different verb paradigms to describe swaying with broad, sweeping motion and swaying with fine, precise movements. I find it plausible that the stumbling block for this speaker was that in the original 2DPC examples, the effort component was played up by portraying it in terms of forceful, spectacular movements to make it more obvious that the participant is inflicting the *V-ing* on itself. This may have made the informant directly associate it with "rough movement" swaying. At the same time, transitive-causative contexts sometimes involved powerful movement, while on other occasions I left the forceful component out from the context, as I did not recognize its importance until repeated testing with slightly modified contexts made me wary of this caveat. The ultimate contexts, which centered on this difference and were devised specifically for this speaker, led to consistent judgements which conform to the rest of the results:

| | T1DP | 2DPC | TR-caus |
|----------------------|------|------|---------|
| (18) little/fine mvt | √ | At | At |
| excessive/rough mvt | √ | tAt | tAt |

This way, the mess transformed into a regular and neat system, showing that it pays off to search for a pattern no matter how unnerving the data may seem.

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