

Towards an understanding of the notions of 'manner' and 'result' and their role in the construction of verb meaning

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I. MANNER/RESULT COMPLEMENTARITY

Background: Discussion of what has come to be called Manner/Result Complementarity (MRC) began with an observation which came from an extended study of the English verb lexicon and an attempt to understand what is behind this generalization.

1. "...there do not seem to be verbs in English that lexicalize both manner/means and result/direction components." Levin and Rappaport Hovav (1991: 147)

Issues for clarification in an attempt to understand the phenomenon

- i. What is behind the observation? The generalization may come about as a result of extra-grammatical factors – in which case it may be just a statistical tendency – or it may reflect something deep about the architecture of language, in particular the relationship between *roots* and *event structure representations* (whether syntactically represented or not).

Concomitantly, the term MRC can refer descriptively to an observed phenomenon or to a specific hypothesis about what gives rise to the phenomenon. In either event, we need sufficient explication of the terms of the generalization so that we may identify supporting or negating evidence.

- ii. Identifying components of the generalization
 - What is the relevant unit over which the generalization is made?
 - Is it a generalization about semantic content or structure?
- iii. Whether the generalization is about structure or semantic content of linguistic units of some size, we need an explication of "means/manner" and "result/direction" as categories in order to be able to test any hypothesis about the phenomenon.

II. AN APPROACH TO MRC

- i. RHL (2010) try to *derive* MRC. Their explication has two components:
 - **Canonical Realization Rules** - These express the ways in which roots are canonically associated with positions in event structure representations based on their ontological type. In particular, manners are event modifiers and results are arguments of a primitive predicate such as BECOME.
 - **The lexicalization constraint:** "A root can only be associated with one primitive predicate in an event schema, as either an argument or a modifier." (= RHL 2010 (12): 25)

NOTE: If roots are taken to be morpho-syntactic objects and there is a correlation between the syntactic position of a root and its interpretation, then MRC almost trivially follows (cf. Mateu and Acedo-Matellán (M&AM) 2012, 2014)

- ii. RHL take MRC to be a generalization about what is **ENCODED IN ROOTS**, the minimal non-functional elements of verb meaning, not verbs. In English, the two are not always easy to distinguish, but in testing any version of the hypothesis, it turns out to be crucial to make the distinction as the case study below will show.
- iii. Rappaport Hovav (2008, 2014), RHL (2010, 2013), attempt to articulate the semantic underpinnings of the notions manner and result:

RESULT/DIRECTION: The two classes of result verbs for which MRC seems quite apparent are:

- change of state (COS) verbs (*break, warm, cool, narrow, widen, deepen, sweeten...*),
 - directed motion (DM) verbs (*approach, arrive, descend, enter, come, go...*)
- (The two groups together are called verbs of *directed change* in L&RH 1995)

These verbs lexically encode a **SCALAR CHANGE**: change that can be characterized as change in the value of a scalar attribute in a specified direction (Hay, Kennedy and Levin 1999, Beavers 2008, McClure 1994).

MANNER: Roots encoding meaning that cannot be characterized as directed change in the value of a single scalar attribute. Many **NON-SCALAR CHANGES** (e.g., those described by verbs like *run, swim, sew, dig*) involve complex changes—that is, a combination of multiple changes — and this complexity means that there is no single, privileged scale of change. Others may involve a simple change without an inherent ordering (e.g., *roll, spin, whirl*) (RHL 2010:32)

Prototypical manner verbs are agentive, but certainly not all (e.g., *roll, spin, rock*).

- **IN THIS TALK, I WILL SUPPORT (ii) AND PRESENT A REVISED VERSION OF (i) AND (iii).**

III. CLARIFICATIONS ON THE NOTIONS OF MANNER AND RESULT

The notion of scalar vs. non-scalar change was introduced as an aspectual property of verbs and was also argued to be relevant to argument realization (Rappaport Hovav 2008); so it is needed independently. It would be nice, but it does follow from anything, that it is also relevant for MRC.

Some comments on the notion result:

- If MRC is manifested in **roots**, then the notion of result cannot be equated with **SCALAR CHANGE**, since clearly for verbs like *narrow* and *cool*, the **ROOT** does not encode change, assuming that these verbs share a root with the homophonous adjectives.

However, RH (2014) shows that the semantic basis of both classes of scalar change verbs (COS and DM) is a stative attribute, which can be multi-valued or not. For COS verbs, there is often, though not always (as in the case of *break*), an adjective which represents the stative attribute, either multi-valued (e.g. *narrow, cool*) or not (e.g., *dead*). For directed motion verbs, the stative attribute (usually expressed by a preposition) is that of being located at a point relative to a reference object. When the theme and reference object are displaced in

space, the path between them provides multiple values for the attribute. Since there is no morphological process changing prepositions to verbs, this relation is typically not apparent. There is a strikingly similar typology of lexicalized scales for COS roots and DM roots, which supports the characterization of the joint semantic property in terms of lexicalized scales.

A scalar change, then, is either a transition into a state, or a change in the value of a multi-valued state.

This is consonant with analyses which take result or COS roots to encode a SC which attributes a state to an individual, and the V to introduce the notion of change (e.g., Alexiadou, Anagnostopoulou and Schäfer 2006, Embick 2009, Kratzer 2000, a.o).

- **The revised position I take in this paper is: Result roots encode a stative property, whereas manner roots have a meaning which cannot be analyzed in terms of a basic stative property.**

Some comments on the notion manner:

Besides the notion of manner as a non-scalar change which I take to be relevant to MRC, there are two other uses of the term manner which need to be kept distinct.

- *Manner adverbial*. The verb *plunge* is probably a DM verb and also has an added component of *quickly, abruptly*, which modifies the downward motion. *Quickly, abruptly* does not on its own lexicalize a change, it just modifies a change which has to be independently specified by a root. Thus, I take it that these examples do not counter-exemplify MRC.
- There is a *relational* notion of manner (cf. M&AM 2014). Any root, whether result or manner, can in principle, be used as an event modifier, in particular, for an event type which is not prototypically associated with the root. For example, the *way* construction expresses the traversal of a (sometimes metaphorical) path in a particular manner. The V variable in the construction is often filled with a verb which does not normally select *way* + PP as complement, and it expresses the *manner* of traversal. It is usually manner (in the truth-conditional/ontological type sense) roots which fill this position best (as in 2), but a result root can sometimes do so, too, as in (3).

2. He **slammed** his way to #1

<http://news.investors.com/management-leaders-and-success/123103-394396-ivan-lendlis-grand-tennis-rise-sure-shot-he-slammed-his-way-to-no-1-thanks-to-mental-physical-preparation.htm>

3. The woman's 13-year-old, who **broke his way** out to safety, says he woke up to find his whole house on fire. (intended meaning: the child broke windows in order to reach safety) <http://abc13.com/news/toddlers-thrown-from-window-to-escape-house-fire/494489/>

In (3), the truth-conditional content/ontological type of *break* is still that of a result root, though it specifies the manner bringing about a different result.

Manner verbs are best suited for use in such constructions. This is because they specify an action which is used to bring about the change specified in the structure. Result roots demand a sufficient amount of pragmatic support, as in example (3) above¹.

IV. Comparison with MATEU AND ACEDO-MATELLÁN (2012, 2014)

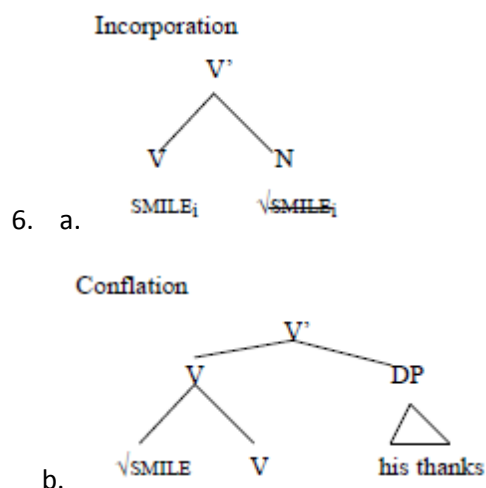
M&AM take an approach which agrees with the current position on (i) and (ii) above, but disagrees on (iii).

Roots are not inherently typed and there are no constraints on the conceptual content of roots (cf. Grimshaw 2005: 85). Roots in principle can be integrated into syntax in any way, the only constraint being the semantic/pragmatic compatibility of the skeletal semantics of the syntactic structure with the conceptual content of the root. MRC comes about because a root, as a morpho-syntactic object, can appear in only one position in a syntactic representation. Roots are *interpreted* as manner or result according to syntactic position: manner if they appear as the predicate of a SC and they are interpreted as manner if they are adjuncts of v. That is, M&AM take the notion manner **ONLY** to be a relational notion.

M&AM's argument for this approach comes from the fact that even a result root like *break* can be used in a manner construction, as in (3) above or in:

4. The hammer-head broke off.
5. The bottle broke open.

HOWEVER: as in the case of (3), (4, 5) involve the same truth-conditional content of the root *break*. In fact, M&AM implicitly recognize the difference between the conceptual notion of manner and the relational notion of manner, representing the former as in (6a) and the latter as in (5b):



¹ In other cases, we sometimes find a result root in a position which normally selects manner, but where there is a truth-conditional contribution of the construction which is incompatible with the truth-conditional content of the result root. In these cases, we find that the result meaning drops out and the verb assumes a manner meaning if it is prototypically or otherwise contextually recoverable from context.

a. I stopped talking, just watched as quietly she **cleaned** at the cut.

b. Hikiki **cleaned** at the wound on his arm where Giriri's bullet had struck him.

(Levin and Rappaport Hovav 2013)

If roots did not have a basic ontological type, we would expect them to have a much fuzzier distribution and it is not clear how the generalization of MRC – whether it is entirely accurate or not – would arise. Moreover, as research has shown, it is possible to give an articulated semantics for scalar change roots, and to show specifically what is encoded in the root and what elements need to be added contextually.

V. BEAVERS AND KOONTZ-GARBODEN (2012) (BKG)

BKG develop a battery of tests to identify truth-conditional manifestations of manner and result. Applying these tests, they claim that there are verbs which encode (entail) a manner and result.

BKG's main test case: manner of killing verbs (MKVs)

7. **Levin's (1993) murder verbs** (no means/manner)
assassinate, butcher, dispatch, eliminate, execute, immolate, kill, liquidate, massacre, murder, slaughter, slay...

8. **Levin's poison verbs** (encodes means/manner)
asphyxiate, crucify, drown, electrocute, garrotte, hang, knife, poison, shoot, smother, stab, strangle, suffocate...

BKG note Levin's (p. 232). disclaimer regarding *poison* verbs:

"[i]n principle, as means verbs, these verbs need not entail that the action they denote results in death; however, some of them do appear to have this entailment."

BKG focus on the verbs which they believe entail death:

9. **BKG's Manner-of-killing verbs (MKVs)**
crucify, drown, electrocute, guillotine, hang

BKG's CLAIM: Truth-conditionally, MKVs encode both a result (death) and a manner of bringing about the result (each verb encodes a different means of bringing about death). Nonetheless, they claim that MRC does hold in a structural sense, in that a semantic root cannot appear in two positions in event structure. It would of course be best if we could reduce this to an independently needed morphological constraint, but they explicitly distinguish between a semantic notion of root and a morphological one.

However: Not all MKVs are relevant to the hypothesis of MRC:

- *guillotine, electrocute* and *crucify* are not mono-morphemic. They therefore do not strictly negate MRC, which, as mentioned, is a hypothesis about *roots*, the minimal meaningful lexical units.

The analysis of *guillotine* is fairly straightforward. Kiparsky (1997) formulates the following interpretive rules for denominal verbs:

- Denominal causative verbs refer to generically intentional activities.
- If an action is named after a thing (in particular, an artefact), it involves a canonical use of the thing.

Thus, the complexity of a verb like *guillotine* comes from the complexity of the meaning associated with the *artefact* noun it is derived from, and from a rule of semantic interpretation accompanying a morphological derivation. Another denominal verb which appears on the face of it to negate MRC is *hand*:

10. a. I handed John the book, (# but he never got it).
- b. #I handed him the book by ordering it from Amazon.
- cf. I tossed him the ball (but he didn't catch it)
- c. #I gave him the ball (but he didn't get it).

This leaves us with the verbs *hang* and *drown*. **Here, I will focus on *drown*.**

VI. SOME METHODOLOGICAL POINTS FOR LEXICAL SEMANTIC ANALYSIS

--- It is important to distinguish between what a verb lexically encodes and what it can be used to describe. With respect to *drown*, it will turn out that the **root** does not encode a manner of killing, though the root can be integrated into a verbal structure which can **describe** a manner of killing.

--- The inferences drawn from the use of a verb in particular sentences come from many different sources, in addition to what is lexically encoded in the root, including the nature of a DP filling a particular argument position (such as its animacy), the particular mode of argument realization (i.e. the variant of an argument alternation a verb appears in), the tense or aspect that a verb appears in. With respect to *drown*, the inference of death is restricted to certain contexts and can perhaps be shown to be contextually derived.

--- *Whenever possible*, we will try to isolate an invariant component of meaning, common to a wide variety of uses of a verb (RHL 2010; LRH 2013) and attribute it to the root; many of the inferences drawn from the use of a verb based on the root in different contexts can be derived from factors such as those mentioned above. Our analysis will be **COMPOSITIONAL** to the extent possible and will avoid positing polysemy to the extent possible. With respect to *drown*, it will turn out that there IS an invariant component of meaning, which we can attribute to the root, and this component conforms to MRC.

My argument will be:

- *drown* encodes a *result* and no manner, where result is understood as specifying a stative concept, though it may have an additional layer of meaning encoding manner in the adverbial sense mentioned above.
- The result encoded in *drown* is not death, since this is not common to all uses of the root.
- Different uses of verbs based on the root give rise to additional inferences in specific contexts. Some of these can be shown to be derived from general principles, though others need to be contextually specified. I will elaborate on these, but more work needs to be done here.

VII. *DROWN* DOES NOT LEXICALIZE AN ACTION

BKG do not attempt to explicate what the manner encoded in any of these verbs is; instead they propose a battery of generalized manner tests, valid for any manner-encoding verb. Importantly, they do not distinguish between root and verb. Many of their diagnostics are aspectual, and we know independently that aspectual properties are compositionally derived from many factors.

Most of the diagnostics turn out to be diagnostics for *an action*; however, they do not systematically distinguish between whether the inference of an action of one kind or another is derived from the root or verb or from the context.

In particular, they only use *drown* transitively, with animate subjects, thus predisposing the association of the verb with intentional killing situations. (11) and (12) below illustrate two diagnostics proposed for identifying the existence of a manner component.

11. *The governor drowned the prisoner, but didn't move a muscle – rather, during the execution she just sat there, refusing to order a halt! (= BKG 39b)

(11) shows that *drown* cannot be used transitively as a lexical causative without the entity denoted by the subject engaging in some activity. However, it doesn't say anything about whether or not the root lexicalizes this activity.

12. It took me five minutes to drown/hang/crucify Jim . . .
('during/after five minutes')
AFTER: because I lacked the courage.
DURING: because this is how long it takes to kill someone by holding them under water/cutting off their air/nailing them down, hoisting them up, and waiting. (= BKG (43))

(12) is supposed to show that *drown* patterns like accomplishments and not achievements in that "it took five minutes" measures the duration of the event, not the amount of time which elapses between utterance and beginning of event. However, the google search in (13)

13. "It took him * minutes to die"

yielded many thousands of hits, including (14) in which it is clear that the interpretation is DURING not AFTER.

14. A week later on Jan. 16, Ohio executed convicted rapist and murderer [Dennis McGuire](http://www.huffingtonpost.com/2014/04/02/lethal-injection-drugs_n_4979654.html) by lethal injection with an untested combination of drugs -- the sedative midazolam and the painkiller hydromorphone. It took him 25 minutes to die.
http://www.huffingtonpost.com/2014/04/02/lethal-injection-drugs_n_4979654.html

Therefore, sentences like (12) do not show that the root encodes anything more than death.

In fact, it is easy to show that *drown* does not encode a kind of action.

15. Presumably one of [Basil] Clark's more imaginative underlings concocted the fiction that he had been buried up to his neck near the high tide point and left there for **the rising sea to drown him**. It did not rise high enough so that his I.R.A. captors dug him up and buried him closer to the low water mark where finally **the waters drowned him**. Now this was not true.
http://www.warofindependence.info/?page_id=139

Most significantly and conclusively, *drown* participates in a causative alternation, though verbs which impose semantic restrictions on the external argument do not participate in the

alternation. (Alexiadou, Anagnostopoulou and Schäfer 2006; Levin and Rappaport Hovav 1995; Reinhart 2002)

16. The boy drowned.

Without any supporting context this sentence invites the inference that there is no identifiable cause which could be expressed as the external argument (Rappaport Hovav 2014a; Schäfer 2009). Under the reasonable assumption that verb meaning is built monotonically (RHL 1998; Koontz-Garboden 2009), the appearance of the verb *drown* in an unaccusative frame is a clear indication that the verb does not restrict anything about the action of an agent, and therefore the verb does not lexicalize a manner, if this is the sense of manner we are looking at. The verb is *compatible* with an agentive context, as all causative alternation verbs are in English.

Conclusion: *drown* does not lexicalize a specified action of a participant different from the patient. The verb specifies something about the patient, and only the patient. In a given context, it is possible to infer something about what the agent did, and some of the diagnostics used above in fact seem to be testing for this.

VIII. REPHRASING THE QUESTION FOR *DROWN*

Does *drown* encode a manner of *dying*?

BKG consider examples such as:

- 17. John drowned the zombie again.
- 18. John re-drowned the zombie.

MEANS: "John caused the zombie to be dead by drowning again."

CANNOT MEAN: 'John caused the zombie to become dead again by drowning, but the last time he was killed it was with a chainsaw.' (= BKG 68)

But of course if *drown* does not encode anything about what an agent does, then this excluded interpretation is irrelevant.

HOWEVER, (17) and (18) *could* mean: John caused the zombie to be dead again by drowning, but the last time he DIED, it was by drowning, and no one killed him.

More relevant:

19. The zombie drowned again

cannot mean that the zombie was dead – caused by some other means – and this time he died by drowning (parallel to the restitutive meanings of *I opened the door again*). Therefore, if the root *drown* encodes death, it seems that it is not possible to 'detach' the manner of death from the fact of death, which is what BKG accomplish by associating two 'semantic' roots to the lower event structure position. (20) is adapted from BKG's representation for *guillotine*.

20.

[[*drown*]] =

$\lambda x \lambda e_1 [\text{dead}'(x, e_1) \wedge \exists e_2 [\text{cause}(e_1, e_2)] \wedge \forall e_3 [\text{cause}(e_3, e_1) \rightarrow \text{drowning}'(e_3)]]$

The question becomes: Does the root *drown* mean something like "die by submersion in water?" (Is it a manner of dying root?)

I will show that the element of meaning that is constant across uses of *drown* is actually the other component of meaning, having to do with submersion. If so, this element should be encoded in the root and the inference of death, if not encoded in the root, should be contextually derived or specified.

IX. The Root *DROWN* DOES NOT ENCODE DEATH

There are many examples of uses of *drown* without an inference of death; if the root encoded death, these uses would involve the removal of a lexically encoded property, incompatible with the principle of Monotonicity (RH&L 1998; Koontz-Garboden 2007, 2009). Note the example below is with an animate theme.

21. Amy reminded me from downstairs to wash Jake's hair ...I poured a cup of water over Jake's head and it promptly flushed his eyes and choked him a little. ...I filled the cup with water and told Jake I was sorry. I poured it on his head and more water filled his eyes and mouth.I doused him again, and this time he screamed, his eyes redder. ... I waited for him to calm down, which he didn't, **so I did what I had to do and drowned him again.**

<http://www.chocolatediapers.com/?m=200910>

Looking at a wider range of contexts which the root can appear in: there are many uses of *drown* which involve inanimates where dying is not relevant:

22. **X (inanimate) drowning in y;**
cake drowning in icing; poached pears drowning in sauce; lasagna drowning in oil, a city drowning in corruption; a city drowning in beer; the world drowning in images; lettuce drowning in dressing

There are also uses of *drown* involving an **animate** theme but no inference of death at all, and where the submersion is not in water:

23. **X (animate) drowning in y; y=** sorrow, grief, work, information, happiness, in madness, in gratitude, in heartache, in troubles, in bureaucracy, in red tape, in cash, in patients...
24. While the colour is gorgeous against Salma's skin tone and glossy black hair, **she is drowning in fabric.** Though the plunging neckline and curtain tie-back tassels draw the eye down, the humongous billowing sleeves make her look wider, and short.
<http://www.bohomoth.com/2013/04/26/drowning-in-angelinas-gown-someone-throw-salma-hayek-a-life-jacket/>
25. Teamed with a cut out crop top, **you'll be drowning in compliments** wherever you go. <http://www.missguided.eu/pandora-velvet-split-maxi-skirt-89436>

X. What is the argument structure of *drown*?

As the examples above indicate, *drown* is associated with two arguments: I will call them for now the *figure* and the *ambient substance*.

When the ambient substance is not expressed, especially when the figure is animate, the default interpretation is that the ambient substance is liquid, usually water. But in other cases, both arguments have to be expressed:

- 26. a. John drowned. (Inference: he drowned in water. There is a further inference that he died which we will return to.)
- b. John is drowning #(in work)
- c. The lasagna drowned, was drowning *(in cheese).
- d. The room is drowning *(in color)

Significantly, the ambient substance has two realization options in principle: in a PP or as subject; the figure concomitantly is expressed either as surface subject or as direct object.

- 27. a. The lettuce is drowning in dressing.
- b. The dressing is drowning the lettuce.
- 28. a. The light /darkness/bright color is drowning the room.
- b. The room is drowning in light/darkness/ bright color.

Unlike in these examples, for most choices of arguments, one or other of the realization options is usually pragmatically odd.

- 29. a. The music drowns/is drowning the lyrics
- b. ??The lyrics are drowning/drowns in the music.
- 30. a. The city is drowning in beer
- b. ?Beer is drowning the city.
- 31. a. He is drowning in debt = 19,500 google hits
- b. Debt is drowning him = 1 google hits

The [figure-subject, ambient substance –PP] frame seems the most common by far.

My claim is that the root *drown* shows the options of two independently established classes of locative verbs. The usual thematic structure for location verbs is (theme, location), and the two classes differ in how the location is expressed.

Location-PP verbs: Theme = subject (or underlying object); Location = PP

- 32. a. John is sitting in the livingroom.
- b. The statue is standing in the corner.
- c. The North Channel lies to the north of the Irish Sea.
- d. The city sprawls along the coastline.

Location-object verbs: Theme = subject; Location = direct object:

- 33. a. Snow covered the mountain.
- b. The fragrance suffused the room.
- c. Smoke fills the room.

Drown shows two argument realization options because the ambient substance can either be conceptualized as a location or as a theme. When the ambient substance is conceptualized as a location containing the theme (=figure), *drown* shows the argument realization pattern of the Location-PP class.

34. The poached pears (theme = figure) are drowning in sauce (ambient substance = location). (cf. The pears are sitting in the sauce.)

When the ambient substance is conceptualized as a theme covering a location, *drown* shows the argument pattern of the Location-object class.

35. Darkness (ambient substance = theme) drowned the room (location= figure). (cf. Darkness covered the room)

It seems that the Location-object pattern is appropriate when *drown* establishes a distributional relation between the theme and the spatial extent of the location. The location serves as an incremental theme (accounting for its realization as object) and measuring the degree to which the predicate holds depends on how much of the location is in contact with the ambient substance.

CONCLUSION: As with other theme-location verbs, the root *drown* specifies something about a stative spatial relation between the theme and the location.

As with other stative verbs, the use of the progressive vs. simple tense is connected to the stage/individual level distinction. In (36a) the room inherently has a color which drowns the room. In (36b), the lettuce happens to have the property of drowning in oil.

36. a. "I love the color but for me the color drowns the room.
<http://www.houzz.com/photos/dining/color-/p/64>
 b. The lettuce is drowning in oil./Oil is drowning the lettuce.

- **AS A ROOT WHICH SPECIFIES A STATIVE RELATION, DROWN IS A RESULT ROOT.**

There are two special lexical properties associated with the root *drown* mentioned so far:

- the ambient substance can be conceptualized either as the theme or as the location;
- when the ambient substance is not specified (which can only happen when conceptualized as location) it is understood by default as water.

Drown then contrasts with other theme-location verbs which only accept one of the two patterns. For example, *sprawl* accepts only the location-PP pattern (37), and *cover* accepts only the location-object pattern:

37. a. The city sprawls along the coast. (cf. Poached pears drown in sauce)
 b. *The coast sprawls the city. (cf. The sauce drowns the poached pears)
 38. a. Snow covers the mountain. (cf. The sauce drowns the poached pears)
 b. *The mountain covers in snow. (cf. The pears drown in sauce – no passive necessary – This is just pattern location-PP pattern)
 c. The mountain is covered in/with snow. (cf. The pears are drowned in sauce – passive of location-object pattern)

There is another lexical property of *drown*:

- *drown* does not only lexicalize a spatial relation between the ambient substance and the theme, but this relation must be considered somehow "overwhelming" or "overpowering." In the case of location-object *drown*, especially when the ambient substance is water, this can be understood as "completely cover or submerge". But in other cases there is usually a contextual inference of the particular sense of overwhelming is. This additional element is not necessarily understood spatially, but is a crucial element in the meaning of *drown*. I submit that this can be considered a 'manner' element in the adverbial sense.

XI. From stative to COS interpretation

Many theme-location verbs have both a stative and a dynamic interpretation. The availability of the different interpretations is dependent on the choice of arguments:

- 39. a. Snow is (slowly) covering the mountain. (ambiguous between stative and dynamic).
- b. The table cloth is covering the table. (not ambiguous).
- 40. a. John stood (up).
- b. The statue stood (*up).

The dynamic interpretation denotes the coming to be of the state. This is a productive process in English, which is not marked morphologically.

- 41. a. The tree is blossoming. (ambiguous)
- b. John understood the problem. (ambiguous)

The same is true for *drown*:

- 42. a. The city is drowning in lava. (ambiguous between state or progressive of achievement)
- b. The city drowned in lava. (event or state)
- 43. a. Lava is drowning the city. (ambiguous between state or progressive of achievement)
- b. Lava drowned the city (event or state).

For some reason, the simple past tense is heavily biased toward the change of state interpretation and this is more marked with the location-object use.

XII. Returning to *drown* as a MKV

Given the analysis so far, (44a) is an ellipsis of (44b) or (44c), and (45a) is paraphrase of (45b):

- 44. a. John drowned.
- b. John drowned in water.
- c. (water) drowned John.
- 45. a. Mary drowned John.

- b. Mary caused the water to drown John/Mary caused John to drown in water.

When used as a MKV, there is, in addition to the ambient substance and theme argument, an agent, which is not an argument of the root, but rather of *v* or voice, depending of your theory. Clearly, the verb is used in its eventive, not stative sense.

Whence the inference of death?

The worst case scenario is that there is a contextual specification for an inference of death when the theme argument of the root is animate. (46) presents some of the lexical information needed for the root *drown*, including a contextual specification of death.

46. encyclopedic specification

√*drown* ↔ be submerged (ambient substance, figure)

adverbial overlay = figure is overwhelmed by ambient substance

DEFAULT = ambient substance = water

[___ [DP+animate]] → additional inference: result of submersion: death of DP

N.B. This inference is associated with the eventive verb based on the root.

However, given examples such as (21) above, it is fairly clear that this inference of death, even in the context of an animate argument, is not lexically encoded directly in the root. I suggest that when the object is animate, then the contextually derived sense of 'overwhelming' can be understood either spatially, as in (20), or, more commonly, as an inference of death. Ironically, then, death, as an inference in the use of *drown* in certain contexts, comes from a manner-adverbial component of meaning associated with the root.

XIII. Conclusion

- The root *drown* lexically encodes what is common between all it uses: the stative relation of a theme being submerged in an ambient substance, or a substance submerging the theme.
- *Drown*, then, is not a manner root, but rather a result root.
- *Drown*, then, does not constitute a counterexample to MRC.
- The inference of death is contextually derived and an expression of a manner-adverbial component associated with the root.

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