

Poetic Inversions in Longfellow's *Evangeline*¹: An Uttering Theory Analysis

Introduction

Recent work (in particular, Richards 2010, 2013 and work cited therein) has brought to light evidence of syntactic movement for reasons of prosody in natural language. This paper explores whether the same theoretical assumptions can be used to analyze syntactic inversions in poetry that occur in order to meet the requirements of the meter. Much like how poets use their knowledge of phonological similarity to create imperfect, but acceptable, rhymes (Steriade 2003), I assume that poets use their knowledge of available syntactic structures and prosody to create sentences which, while they might be considered marked or even not fully grammatical to speakers, are nonetheless interpretable and fit the chosen meter.

One piece of evidence that syntax is sensitive to prosodic concerns comes from recent work on pronoun postposing in Irish. In their paper, Bennett et al. (2013) show that unstressed object pronouns in Irish are moved rightward from the position where a full DP would appear. Their explanation for this is that the prosodically weak pronouns are moved rightward to avoid being in a phrase-initial position that would require a stressed item. This shows that movement can occur to put a metrically weak item in an appropriate prosodic position.

Richards (2010, 2013) says that it is not only post-syntactic movement that is sensitive to prosody, but that the syntax is also aware of the metrical boundaries and prosodic structure of the language. He explains some variation in word order across languages as arising from a desire to ensure that heads which select for or Agree with each other are not separated by prosodic boundaries. According to his analysis, languages can either move or Rotate heads or flatten prosodic

¹ I am grateful to Donca Steriade and Norvin Richards for comments on this work. All errors are my own.

boundaries to achieve this. Among other examples, he mentions that Basque *wh*-word placement shows that the syntax could be aware of prosodic boundaries. Instead of moving to C or remaining in situ, Basque *wh*-words appear pre-verbally as a compromise in order to derive the best prosodic structure. Basque lexically accented words (including *wh*-words) are obligatorily followed by a $\text{min}\phi$ boundary, which prevents them from moving all the way to C because there is no way to mark the $\text{min}\phi$ boundary, which is characterized by a low tone on the following lexical item, at the end of an utterance in that language.

These Irish and Basque examples suggest that natural language syntax (or post-syntax) is capable of arranging lexical items to appear in prosodically appropriate positions, while maintaining semantic interpretability. This paper uses the approach put forward in Richards (2013) to analyze the syntactic inversions which occur in a metered poem written in modern American English.

The goal of this paper is to show that syntactic inversions in poetry are not merely due to a poet's knowledge of earlier stages of the language in question, and that it is possible to analyze the inversions as arising from a post-syntactic level being aware of the metrical structure of the line. In my analysis, possible word orders are generated by the syntax, and then fed to a post-syntactic level which has access to both the syntactic structures and lexically specific information about stress. Here, the grammar decides which copies of these lexical items to spell out in order to best match the meter of the poem. Because the syntax provides the input to this level, completely ungrammatical or uninterpretable word orders will not be generated, but movements that are not available in spoken language, or are highly marked, are available in poetry. The marked structures which appear in poetry are violations of the principles introduced in Uttering Theory that heads which select for each other or are in Agree relations be prosodically contiguous. These principles, however, may be

violated in order to produce an output that matches the strict metrical requirements of a poem.

In this paper, I introduce my corpus in §1, and then discuss the types of inversions I have identified in it. Section 2 briefly reviews previous recent generative approaches to poetic inversions. Section 3 explains the natural language evidence for prosodically-driven syntactic movement. Section 4 introduces Uttering Theory and §5 applies it to poetic inversions. Section 6 is a conclusion.

1. The Corpus

My poetic corpus consists of the prologue and first two sections of part I of Henry Wadsworth Longfellow's 1847 poem *Evangeline: A Tale of Acadie*, yielding 267 lines of poetry. It is written in dactylic hexameter, which means that each line consists of six feet. These feet may either be dactyls, with one strong and two weak syllables: (-uu), or a spondee with two syllables, of which the first is strong: (-U). The line-final foot is obligatorily a spondee, and the penultimate foot is obligatorily a dactyl. The first line of the poem is below as an example of the meter. Here, each of the first five feet is a dactyl, and only the final one is a spondee.

(1) This is the forest primeval. The murmuring pines and the hemlocks, (Ev. 1)
(- u u)(- u u)(- u u) (- u u) (- u u) (- U)

Fabb & Halle (2008:173) and Golston & Riad (2000:130) each offer an analysis of this meter (as it is used in Greek and Latin) and the reasons for these requirements, which are not the focus of the present paper. Summarized briefly, Fabb & Halle derive the pattern of a line-final spondee and penultimate dactylic foot by saying that the rightmost syllable does not project to Gridline 0. This leaves the penultimate syllable, in a strong position one, alone and ungrouped at this level. They require binary grouping however, and this strong syllable must be grouped with a left parenthesis foot boundary. Under their analysis, the left boundary of a foot is projected only following two light syllables, which derives the line-final dactyl-spondee pattern.

Golston & Riad develop an Optimality Theory analysis of Classical Greek meter that accounts for both rhythm and line length variations. For dactylic hexameter (2000:130), in Greek, where the dactyls or spondees are defined in terms of heavy and light syllables rather than stressed and unstressed, this meter involves a stress clash in every verse foot. This is the common feature that allows near-free choice between these two foot types in a line. Golston & Riad (:133) also derive the fact that the fifth foot is obligatorily dactylic, and the final foot must be a spondee. The final spondee is the result of a requirement in all stichic meter that the final metrical position be heavy. Then, because (referencing Allen (1973:107)) “metrical preferences are felt more keenly toward the end of the line than toward the beginning” (Golston & Riad, 2000:133), the penultimate foot is (-uu) in order to avoid the gratuitous violations of *CLASH that would result from having a sequence of four heavy syllables in a row. This analysis is designed to explain the use of the meter in the quantitative system for which it was designed. Its use in an English qualitative stress system cannot be explained naturally in these terms, but these rules will derive the patterns of strong and weak syllables in dactylic hexameter in English as well.

There is no rhyming in the poem, which means that any syntactic inversions that occur do so solely to fit the meter, and not to create a better rhyme, although this does occur in other, rhyming poems. (As noted in Youmans (1983:76), among others.)

1.1 Types of Inversion in Evangeline

I have grouped the syntactic inversions that appear in *Evangeline* into six categories, with one additional catch-all category. In determining which constructions should count as marked, I have relied on the principle of Contiguity from Richards (2010, 2013). This assumes that a sentence should have no prosodic boundaries intervening between subject and verb or between verb and object. I

consider the default or base placement of prepositional phrases and adverbs to be at the very end of the sentence, following a direct object, so as not to come between the core SVO elements. Sentence or phrase initial placement of prepositional phrases and adverbs also meets this requirement, but I consider this word order the result of topicalization, and therefore slightly more marked than phrase final positioning. I have also noted occurrences of nouns followed by adjectives, objects which precede a verb, and subjects which follow a verb. I have followed the same standards in identifying inversions in Longfellow's prose work, which I introduce in §1.2. I briefly outline these inversions below, with the displaced or otherwise marked phrase in italics. All examples of inversions from my poetic corpus appear in the appendix.

1.1.1 Noun/Adjective Inversions

These are examples where the ordering of the noun and an adjective has been reversed such that the adjective follows the noun. An example of this is in the first line of the poem, presented in (2) with the relevant words in italics. All line numbers appear in parentheses to the right of the line as a reference.

(2) This is the *forest primeval*. The murmuring pines and the hemlocks, (Ev. 1)
(- u u)(- u u)(- u u)(- u u) (- u u)(- U)

There are 11 examples of this in my corpus.

1.1.2 Subject/Verb Contiguity Violations

In these examples, a constituent, generally an adverb or PP, is placed between the subject and the verb. I assume it would appear following the verb in an unmarked sentence. These are the least marked of the three types of adverb and PP inversion that I identify.

(3) Bees, *with prophetic instinct of want*, had hoarded their honey (Ev. 155)
(- u u)(- U)(- u u) (- U)(- u u) (- U)

In some cases, such as in the example in (3), it is also possible to interpret the intervening constituent as embedded within the subject DP, so that the structure would be as in (4a) and not (4b):

- (4) a. [_{DP} Bees [_{PP} with prophetic instinct of want]][_{VP} had hoarded [_{DP} their honey]]
 b. [_{DP} Bees][_{PP} with prophetic instinct of want][_{VP} had hoarded [_{DP} their honey]]

If one interprets the structure of (3) to be that of (4a), then there is no contiguity violation and the line would not contain any poetic inversions. If, however, one interprets the structure as that of (4b), then this line does contain a subject/verb contiguity violation which a theory of poetic syntax should be able to account for. In ambiguous cases such as this, in both the poetic and prose corpora, I have consistently counted them as inversions, assuming that even if both corpora end up larger than they might otherwise, they should maintain similar proportions to each other for the sake of comparison. Additionally, erring on the side of over-counting, rather than under-counting, examples of inversions will ensure that my approach is able to handle them.

There are 17 examples of this type in my corpus.

1.1.3 Verb/Object Contiguity Violations

Similar to above, in these examples, an adverb or PP is placed between the verb and the object, which is a more marked adjunct placement in English than between the subject and verb is.

- (5) Take *from the shelf overhead* thy pipe and the box of tobacco; (Ev. 225)
 (- u u) (- u u)(- U) (- u u)(- u u)(- U)

There are eight such examples in my corpus.

1.1.4 Topicalization

In this third category of adjunct placement, the adverb or PP is moved to a position above the subject, in a way that resembles topicalization.

- (6) *Down the hillside hounding*, they glided away o'er the meadow. (Ev. 135)
 (- U) (- U) (- u u)(- u u)(- u u) (- U)

There are 24 examples of this in my corpus.

Comparing the above three types of inversions involving adjuncts to their natural language counterparts, I assume a scale of markedness with (7a) being the least marked, (7b-c) being perhaps somewhat marked or associated with a particular information structure, but are still reasonably common, and (7d) being ungrammatical in English:

- (7) a. I shut the door quickly.
- b. Quickly, I shut the door.
- c. I quickly shut the door.
- d. *I shut quickly the door.

This scale of markedness corresponds to the numbers of times each marked adjunct placement is attested in my corpus. There are 24 examples of the type in (7b), 17 examples of the type shown in (7c), and only eight of the type shown in (7d). This suggests that the principles governing the placement of adjuncts in natural language are also at play in poetic language.

1.1.5 Locative Inversions

Following earlier literature, (e.g. Rizzi & Shlonsky (2006)) I call this category locative inversions because it includes examples of the canonical locative inversion type where a PP is fronted over a verb, which is then followed by the subject. This category also includes the fronting of an adjective over a substantive verb, or an adjunct or indirect object over an intransitive verb. I separate this from topicalization because it is coupled with an inversion of the verb and subject, giving the sentence a V2-like word order.

(8) *Solemnly down the street* came the parish priest, and the children (Ev. 43)
 (- u u)(- U) (- u u) (- U) (- u u)(- U)

(9) *Black* were her eyes as the berry that grows on the thorn by the wayside, (Ev. 66)
 (- u u)(- u u)(- u u)(- u u) (- u u)(- U)

There are 48 lines containing locative inversion sentences in my corpus, of which four contain two examples in the line, making a total of 52 examples of this structure.

1.1.6 Verb-Final

Verb-final word orders also occur in this corpus, although infrequently. One of these examples has an SOV order and the other has an OSV order, with what could be a coordinate structure constraint violation of “fragments of song and carols of Christmas”. The other interpretation of the line in (11) is as a topicalized object and deletion under identity of the subject and verb from the clause following the conjunction.

(10) And *the retreating sun the sign of the Scorpion enters*. (Ev. 149)
 (- u u)(- U) (- U)(- u u)(- u u)(- U)

(11) **Fragments of song** *the old man sang*, and carols of Christmas, (Ev. 207)
 (- u u)(- U) (- U) (- U) (- u u)(- U)

The above two examples are the only ones that appear in this corpus.

1.1.7 Miscellaneous

There are also four lines with syntactic phenomena that do not appear elsewhere. I will briefly introduce each.

(12) *Knew not* which beat the louder, his heart or the knocker of iron; (Ev. 110)
 (- U) (- u u)(- u u) (- u u)(- u u)(-U)

The example in (12) has a verb raised over negation, or a lack of do-support.

(13) *Strongly* have built them and well; and, breaking the glebe round about them (Ev. 261)
 (- u u)(- u u)(- U) (- u u)(- u u)(- U)

The example in (13) shows what could be either a coordinate structure constraint violation, or deletion under identity, similar to example (11). If the underlying structure is “have built them strongly and well” with a coordinate structure constraint violation, then this example would be good

evidence that the poet was not relying merely on his knowledge of more archaic forms of the language, but was adapting the syntax to fit the required meter based on a knowledge of available syntactic movements. However, if it is from an underlying “strongly have built them and well ~~have built them~~”, with deletion, then it does not provide empirical evidence for one approach over the other.

The final two examples are not particularly marked structures, but they are worth considering as part of the range of inversions in this corpus. In (14) is an example where an adjunct intervenes between a verb and its CP complement:

- (14) Benedict knew *by the hob-nailed shoes* it was Basil the blacksmith, (Ev. 220)
(- u u)(- u u)(- U) (- u u) (- u u)(- U)

In (15) is an example of a sentential subject.

- (15) *What their design may be* is unknown; but all are commanded (Ev. 239)
(- u u)(- U) (- u u)(- U)(- u u)(- U)

1.2 Marked syntactic structures in Longfellow's prose

To create a baseline comparison for the syntactic structures I have flagged as marked in Longfellow's poem *Evangeline*, I have compared them to an equal length of his prose. Longfellow published a prose collection called *Outre-Mer* in 1835, the first three chapters of which yielded 97 sentences, comparable to the 96 sentences found in the first two sections of *Evangeline* I use as a poetic corpus here.

Nearly all of the structures I have identified as marked in his poetry also appear in Longfellow's prose, however, as the table below shows, they are much less frequent² in prose than in poetry.

² Additionally, there are 29 examples of topicalization in the prose corpus versus 24 in the poetic.

(16)

	Prose	Poetry
Locative inversions:	5	52
N>Adj inversions:	2	11
Subj-Verb contiguity:	5	17
Verb-Obj contiguity:	3	8
Verb final:	0	2
Other:	7	4

The 'other' category for poetry includes the examples introduced above in §1.1.7, though those four examples are different from the ones in the prose category, which mainly consists of adverbial phrases intervening between a modal verb and a non-finite verb.

This shows that the strategies Longfellow used to match his syntax to the meter to form his poetry were also available to him in prose, though they would likely be associated with particular information structures and would only be employed to communicate these. In poetry, however, these movements would be used to fit the syntax to the meter, and would not necessarily carry the same information structural semantics.

2. Previous Approaches to Poetic Syntax

Two previous attempts at analyzing inversions in poetic syntax which are written using modern frameworks approach the problem from two different angles. Fitzgerald (2007) uses Optimality Theory and assumes inversions are the result of a sort of post-syntactic “shuffling” for the sake of the meter. Using OT syntax, she ranks constraints against different word orders, allowing, for example, an adjective to follow a noun, but disallowing a determiner to do the same. The problem with this approach is that it requires a number of ad hoc constraints to discriminate between every possible word order. Her corpus is limited to DP-internal inversions, which keeps the constraint set limited, but expanding this analysis to other poetic inversions would create an unwieldy constraint

set. Additionally, this analysis makes no attempt to explain why certain word orders are more marked than others, or, to the extent that it does try to explain this, it is not encoded into the analysis. There is no mechanism in it to explain why, for example, a constraint against an adjective following a noun should be ranked below a constraint against a determiner following a noun.

Thoms (2010) takes a solidly syntactic approach and assumes that syntactic constituents are allowed to move pre-SpellOut, leaving an “address” behind that is visible for interpretability at LF. The first half of Thoms (2010) presents a thorough catalogue of the types of poetic inversions which are attested in English poetry and compares them to analogous, albeit marked, syntactic structures which occur in natural language. However, his analysis does not draw on these observations in order to constrain the grammar, and instead seems to allow anything to move anywhere. While this approach can capture the range of inversions attested in poetry, it does not explain what limits the grammar of an individual poet – what makes Shakespeare's inversions different from those of a modern free verse poet.

By favoring too strongly either a strictly phonological or strictly syntactic approach, neither analysis is able to explain all and only the inversions which are attested in poetry. Poetic inversions should not be thought of as purely post-syntactic and phonological because the V-final examples and the locative inversions are can be captured by a simpler analysis if they are thought of as made in the syntax rather than at PF. Because these inversions parallel either earlier stages of the language (in the case of V-final sentences) or marked structures which appear in the modern language (in the case of locative inversions), assuming they are made with access to the syntax provides a motivation for the attestation of these particular structures, rather than a different reordering of the words. Using an analysis which makes reference to syntax can explain why, for example “green were the leaves” is an

acceptable inversion of “the leaves were green”, but “were the leaves green” is not (except as a question). Similarly, making reference to syntax allows us to generate verb-final sentences in English, but not verb-initial, because the former allows us to maintain object-verb contiguity, while the latter does not.

However, I think that the earlier assumptions that poetic grammar is the result of a cooperation between available syntactic structures and the meter is not entirely accurate either. The existence of adverbial phrases intervening between the verb and its direct object (§1.1.3) suggest that poetic syntax is not strictly limited to structures which occur in the spoken language, or even limited to archaic syntactic structures, but is able to create inversions which do not otherwise occur. Despite this, there must still be some limit on what movements can occur for metrical reasons, as the poem never descends into word salad.

The “syntactic filter” explanation for syntactic inversions in poetry assumes that any inversion for the sake of the meter or rhyme is fed through a syntactic filter. Allowable inversions then, are structures for which there is some syntax that could derive them. The shortcomings of this commonly assumed approach are two-fold, as I see it. On the one hand, this dismisses poetic syntax as something not worth analyzing. It places the onus on this syntactic filter – that is, the poet's knowledge of obscure and arcane syntactic structures, and the reader's knowledge of how to interpret them – rather than considering the possibility that syntactic inversions could be a part of Universal Grammar. The other unappealing aspect of this approach is that it involves a constant flipping between the syntax and the phonology. A poet, then, presumably constructs a line of poetry in standard language expressing the ideas he or she wishes to convey, and then must check the meter and shuffle words around, while considering whether any of these shufflings could be created by

some possible syntax of some stage of the language.

If instead, we consider that syntax is able to move constituents in order to satisfy metrical requirements, which there is evidence for in natural language, then syntactic inversions become something that can be analyzed. If we assume that some level of the syntax is aware of the number of syllables, and which of these bear stress, the grammar can employ the same set of restricted movements to generate the stricter meters of poetic verse as it does to create less strictly prosodically governed utterances in natural language.

3. Evidence for phonologically-driven syntactic movement

In this section, I provide evidence that natural language is able to perform syntactic movements in order to create a better sentence prosody. I also provide evidence that the syntax is able to 'see' the prosodic properties of words in the trees at a syntactic level, rather than assuming all phonologically-driven movement is done post-syntactically.

3.1 Basque Wh-word placement

As mentioned above, the placement of Basque *wh*-words can be explained in Richards' (2010, 2013) *Uttering* framework by making a few observations about the prosodic structures of the language. Richards (2010:160) contrasts Basque *wh*-questions with those of Japanese. Both languages have sentence-final complementizers and are verb-final. Japanese, Richards argues, leaves *wh*-words in situ, and uses pitch, by emphasizing the *wh*-word and flattening the intervening material, to create a level of representation at which there are no intervening phrase boundaries between the *wh*-word and C. In Basque, however, *wh*-words are moved to be immediately pre-verbal, but still separated from C.

According to Richards, Basque DPs do not map either their right or left edges to a Minor

Phrase boundary. However, lexically accented words in Basque must always be *followed* by a $\text{min}\phi$ boundary:

- (17) a. [$\text{min}\phi$] b. [$\text{min}\phi$] [$\text{min}\phi$] (Richards 2010:160)
 a'. lagunen dirua b'. lagúnen dirua
 friend-GEN.SG money friend-GEN.PL money
 'the friend's money' 'the friends' money'

Basque also requires a $\text{min}\phi$ boundary right before the verb, marked, Richards notes, such that “the first syllable of the verb must have the low tone which signals the beginning of a new Minor Phrase” (2010:161). Because Basque marks the right edge of a $\text{min}\phi$, but is head-final, it would not be possible for Basque to use pitch to create a level of representation in which the *wh*-word and C had no intervening phrase boundaries: the pre-verbal $\text{min}\phi$ right edge boundary would always be in the way. Similarly, because Basque *wh*-words are lexically accented, their associated $\text{min}\phi$ boundary would also intervene. Richards (2010:162) points out that the evidence does not require that this boundary be available to the syntax – it could be post-syntactic.

If *wh*-words in Basque were to remain in situ, there would be two $\text{min}\phi$ boundaries intervening between the *wh*-word and C. There would be the boundary associated with the right edge of a lexically accented word and the pre-verbal boundary. To minimize this, instead the *wh*-word appears immediately pre-verbally, through “altruistic” scrambling (Arregi (2002) via Richards (2010:164)) of the intervening material. This leaves only one $\text{min}\phi$ boundary between the *wh*-word and C, which is the best that Basque prosody and syntax can offer. (It is possible for material to appear after C, but this position is associated with radical pitch compression and would be unsuitable for a *wh*-word (Richards:163, summarizing Elordieta (1997)).)

- (18) a. Jon **señek** ikusi rau? (Ondarroa Basque, Arregi 2002)
 J-ABS who-ERG see-PRF AUX.PR
 'Who saw Jon?'

- b. ***Señek** Jon ikusi rau?
 who-ERG J-ABS see-PRF AUX.PR

In *wh*-phrases, phonological material appearing between the *wh*-word and the verb is scrambled out of the way in order to reduce the number of boundaries separating the *wh*-word from C. In (17a), *Jon* is scrambled to a sentence-initial position.

This account suggests that the syntax could be able to access information about the lexical stress of words and that “altruistic” scrambling movement is able to occur in order to create as perfect a prosody as is possible.

3.2 Irish weak pronouns

The evidence from Irish weak pronoun placement provides direct evidence that the grammar is able to access prosodic information about lexical items and move them in order to create a better sentence prosody, though this is analyzed as post-syntactic movement, as opposed to the examples Richards (2010, 2013) investigates. Irish typically shows VSO word order. In their paper, Bennett, Elfner, McCloskey (2013) (henceforth BEM) give the following example to show basic word order with a full DP object:

- (19) Fuair sé nuachtáin Meiriceánach óna dheartháir an lá cheana. (BEM (1))
 Got he newspaper American from-his brother the other-day
 'He got an American newspaper from his brother the other day!'

When the object is changed to a pronoun, it ends up at the end of the sentence:

- (20) Fuair sé __ óna dheartháir an lá cheana é.
 Got he from-his brother the other-day it
 'He got it from his brother the other day.'

In fact, the pronoun can appear in multiple places in a sentence, but must be moved rightward to a position following an XP:

- (21) [V DP Pron XP YP ZP] (=BEM (6))
-

The reason for this movement, and for the availability of multiple landing sites, is that the left edge of phonological phrases in Irish is a prosodically strong position. (BEM:19) The subject pronoun is able to lean on the verb as the weaker position of that phonological phrase, but the object is left as the first constituent of a new phrase. If the object is a full DP, it is prosodically strong enough to fill this position, but if it is a weak pronoun, it cannot be in this prosodically strong position and must move rightward to an available weak position following another XP.

This movement, despite the multiple landing sites, does not create any information structural changes in the interpretation of the sentence (BEM:5-6), and seems to be post-syntactic in nature, or occurs after SpellOut of each XP phase.

Poetic inversions are parallel to the Irish example in that they are not subject to the same information structural requirements that typically accompany topicalization, locative inversions, and other kinds of movement, and in some cases, like the displacement of prepositional phrases, they can appear post-syntactic, or post-SpellOut in nature.

4. Uttering Theory

Uttering Theory proposes that word order is determined in the syntax by competing Contiguity requirements, that is, that two elements in a Probe-Goal relation must be contiguous at some prosodic level, and constraints on prosodic structure. The syntax has access to enough of the prosodic structure of the language and the lexical items in an utterance to arrange them accordingly, but the syntax is short-sighted and will allow movements that only serve the immediate needs of particular syntactic relations.

The principles Richards (2013, a-f) introduces as governing movement in this approach are presented below, with an example of it in natural language. I begin with the principles that drive

movement. The first of these is Affix Support, defined in (22).

(22) **Affix Support:** (Richards 2013:117)

For any affix A, there must be an ordering statement ordering A with some element M containing a metrical boundary, such that M is in the direction of affixation of A.

This is used to capture the difference between languages which have been described as having EPP versus not. The EPP then, can be explained as a requirement that T does not project a metrical boundary of its own, and must be preceded (in the case of English and French) by something that does. This is what causes expletive insertion and movement of the subject to Spec,TP in languages with the EPP, as in (23), where T must have metrical support to its left:

(23) There arrived a man. [English]
Il est arrivé un homme. [French]

Similarly, Oltra-Massuet & Arregi (2005), among others, have noted that in Catalan, Italian, and Spanish, the vowel before the Tense morpheme receives stress. Their analysis is that in these languages, T is preceded by a foot boundary.

(24) a. cantá-**ba** -is [Spanish]
sing -IMPIND -2PL
'You (pl) sang!' (imperfect indicative)

b. canta-ré -**Ø** -is
sing -FUT -PRES -2PL
'You (pl) will sing!'

c. canta-rí -**a** -is
sing -FUT -PAST -2PL
'You (pl) would sing!' (conditional)

Viewing this phenomenon as a way to satisfy Affix Support, we see a parallel between English and French which move a lexeme to Spec,TP to provide metrical structure for T, and Catalan, Italian, and Spanish, which provide a stressed vowel in the stem of the verb in order to support a Tense affix.

The next principle, Rotation, may be applied immediately after any head is Merged to create an ordering statement. Following Fox & Pesetsky (2004), Richards assumes that the ordering statement $\langle C, H \rangle$ orders the last terminal node contained in C before the first terminal node contained in H.

(25) **Rotation:** (Richards 2013:24)³

Given a head, H, and its complement, C:

- a. Delete all existing ordering statements which make reference to H.
- b. Add an ordering statement $\langle C, H \rangle$.

In addition to being a way of satisfying Affix Support, that is, heads which are affixes can rotate in order to get metrical support from something in their complement, there is additional evidence suggesting that head-finality and head-initiality are associated with different prosodic cues. Christophe *et al.* (2003) explore prosodic structure as key to syntactic acquisition, based on earlier observations that 'within phonological phrases, prominence systematically falls on the right for head-initial languages such as English, French or Greek, and on the left for head-final languages such as Turkish, Japanese or Bengali.' (Christophe *et al.* :212)

I introduce the restrictions on movement below. Probe-Goal Contiguity, which holds between any two items which are in a Probe-Goal relationship, either by selection or Agreement, is defined as below in (26). On when it holds, Richards (2013:84) notes, "Probe-Goal Contiguity will be enforced at the point in the derivation at which Agree takes place. We will see that it is crucially not an output condition on final representations, as Contiguity relations will often be broken after being created."

(26) **Probe-Goal Contiguity:** (Richards 2013:84)

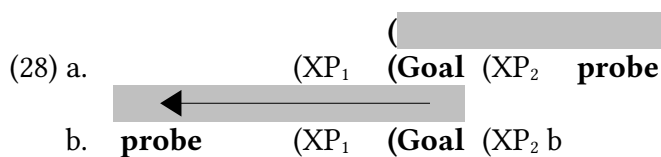
Given a Probe α and a Goal β , create a level of P-phrasing on which α and β are not separated by any P-phrase boundaries.

3 Although Richards defines Rotation as an ordering statement between a head and its complement, he also uses it to describe the movement of adverbs. I take it to hold between a head and its sister, whether that is a direct object or an X' level.

There are two strategies in natural language to satisfying Probe-Goal Contiguity: creating a level of prosodic representation at which the intervening boundary does not appear, or movement. Richards (2013b:1) provides the following instructions for creating a Contiguity Domain as the first of these two available strategies:

- (27) Recipe for creating Contiguity Domains:
- (i) Take the minimal string containing both the Probe and the Goal.
 - (ii) Project onto the next level of P-phrasing either:
 - a. the boundary projected by the Goal, or:
 - b. any boundaries other than the boundary projected by the Goal.

This can be illustrated with an example Richards (2013b:1) provides for Japanese, which maps the left edges of XPs onto P-phrase boundaries. In the examples in (28), the grey bars represent the output of (26.i). In (28a), it is possible to create a domain in which the Goal and probe are prosodically contiguous by applying (27.ii.a). In the case in (28b), projecting neither the boundary associated with the Goal nor any other boundary will create a domain in which the Probe and Goal are contiguous. In this case, movement must apply.



This drives the difference between languages showing *wh*-movement to ensure that C and the *wh*-word are contiguous, versus *wh*-in situ languages, which flatten intonational phrases between C and a *wh*-word to make them prosodically contiguous.

The constraint on rotation below was created to explain the lack of *wh*-in situ languages which are verb initial. This is explained by saying that Rotation of C is no longer an option (requiring *wh*-words to always move to C to satisfy Contiguity) after SpellOut if C and T are in a Contiguity

relation. This is formalized as in (29):

(29) **Adjacency Freezing:** (Richards 2013:152)

If a syntactic object α is in a Contiguity relation triggered by a relation it has initiated (as a selector or a Probe) which requires it to remain adjacent to some other object, α will not undergo displacement operations that are driven by α .

The looser restrictions on the placement of adverbs are captured by Hippocratic Altruism.

That is, they are freer to move out of the way if they disrupt other Contiguity relations, because they do not participate in Contiguity relations themselves.

(30) **Hippocratic Altruism:** (Richards 2013:131)

No operation can affect α if the only effect of the operation on α is to alter α 's position in a way which might disrupt a Contiguity relation in which α participates.

Richards (2013c:20) demonstrates this with the following examples. In (31), he starts with a derivation which has joined a temporal adverb, *now*, to TP:

(31) [TP **now** John is eating the chocolate]

If an interrogative CP is Merged, triggering movement from T to C, we get (32):

(32) [CP is [TP **now** John ~~is~~ eating the chocolate]]

The adverb *now* is free to Rotate out of the way, preserving the relation between T and the subject:

(33) [CP is [TP ~~now~~ John ~~is~~ eating the chocolate **now**]]

However, Rotation is not available as an option to save a Quotative Inversion example, in (34).

(34) *"Hi," has **John** said.

Here, *John* cannot Rotate out of the way because *John* is in Contiguity relations which would be affected by its movement.

Two additional constraints on movement guide the grammar in making choices when there are multiple possibilities and multiple Contiguity relations to consider. Generally, the grammar is

ruthless in prioritizing new requirements over old, but it is possible that the grammar may repair them, if possible. An example follows the definition of Mitigated Ruthlessness.

(35) **Mitigated Ruthlessness:** (Richards 2013:172)

After Merging a new head which is subject to the set of requirements R, the grammar only considers the set R when making choices about the operations that are to satisfy R (including the choices of which operations to perform, which elements should undergo them, and where the landing sites of movement operations should be). Once these choices are made, the grammar will also seek to preserve existing Contiguity relations from the effects of the operations that satisfy R, by applying legal operations to potential obstacles to those Contiguity relations.
("prioritizing satisfying new requirements over maintaining old Contiguity relations—but if you can do both, do both")

An example of a possible repair is a parallel to the adverb derivation in (31)-(33). In the sentences in (36), one could view (36c) as the output of Rotation applying to (36b) in order to restore the broken Contiguity relation between the subject and T in (36a).

- (36) a. Today John is cooking.
b. *Is today John cooking?
c. Is John cooking today?

The other guiding principle in cases of multiple options or requirements is Multitasking.

(37) **Multitasking** (Richards 2013d:2)

Given a head H which could in principle trigger movement of a number of different phrases $P_1...P_n$, if there is a pair of phrases P_x, P_y such that the conditions on H and P_x satisfied by movement of P_x are a superset of the conditions on H and P_y satisfied by movement of P_y , then movement of P_x is to be preferred to movement of P_y .
("prefer operations that satisfy as many requirements as possible")

This derives the fact that languages with V2 word orders tend not to allow *wh*-in situ.

(Richards 2013e) If we assume that V2 is the result of a C requiring Affix Support, then Multitasking explains why such languages always move *wh*-words to Spec,CP. In *wh*-phrases, Multitasking means that both Affix Support (for C) and Probe-Goal Contiguity (for C and the *wh*-word) can be satisfied at once.

5. Uttering Poetry

The principles of syntactic movement described in §4 above work to put a limit on what kinds of inversions are allowed in poetry. That is, a verb and its direct object DP may rotate, as may a noun and an adjective. Whole adverbial phrases or prepositional phrases may freely occur between, but not in the middle of, other constituents. Elements may be topicalized with the same freedom that governs topicalization in non-poetic language.

The syntax generates every possible word order for a given set of words in a sentence by moving copies to various positions through internal Merge. Then, in a post-syntactic level which has more access to the phonology, it is decided which copies to pronounce in order to best match the sentence to the metrical line. This approach prevents predicting a syntax which would reverse word order to avoid, for example, a clash or lapse in natural spoken language. Instead we see that in such cases in English, among other languages, either the clash is tolerated or stress is retracted to avoid the clash, as in (38).

(38)

		x				x	
	x	x			x	x	
x	x	x			x	x	x
thirtéen	girls		→	thirteen	gírls		

We do not see languages where one would say “thirtéen balóons” but “gírls thirtéen” (except perhaps for some examples in compounding in Chinese (Duanmu, 1997) and Sanskrit (Insler, 1998)). However, this is precisely the kind of inversion which frequently occurs in poetic language. In order to capture this difference between poetic syntax and natural language syntax, we must prioritize mapping a sentence onto a metered line of poetry over maintaining an unmarked word order.

5.1 Syntactic derivations

In this section, I demonstrate how the syntactic principles introduced in §4 from Richards

(2010, 2013) work to move copies of syntactic material to positions where they will be able to be interpreted by the semantics, giving as many word order options as possible to the phonology to match the sentence to the meter. Because the focus of this paper is on word order, certain syntactic details that do not affect this have been glossed over, such as using VP-internal subjects instead of generating them in *vP*.

The sections have been named for the type of poetic inversion which characterizes the line. The derivations demonstrate that each example has the potential to contain more poetic inversions, but they do not surface because they do not help the line to fit the meter.

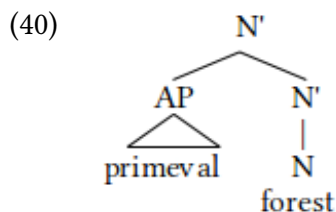
5.1.1 Noun > Adjective word order

In this example, the first sentence which makes up part of the first line of the poem, we see that the syntax generates an unmarked word order, as well as a few marked ones, including the option for a noun>adjective word order and a locative inversion, though only one of these marked options is used to fit the meter in the final Spelled-Out version of the sentence, as I show in §5.2.

The derivation begins with the Workspace in (39):

(39) this, is, the, primeval, forest

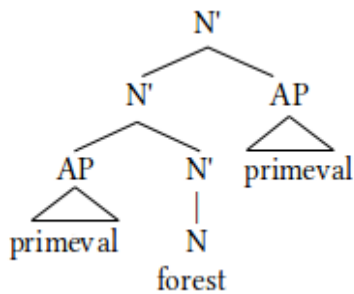
From there, it Merges the noun forest with the adjective primeval, in the usual English ordering of the adjective preceding the noun.



Now, because it would not disrupt any Contiguity relations, the adjective and noun are allowed to Rotate, and do so. Following this, a copy of the adjective appears both before and after the noun,

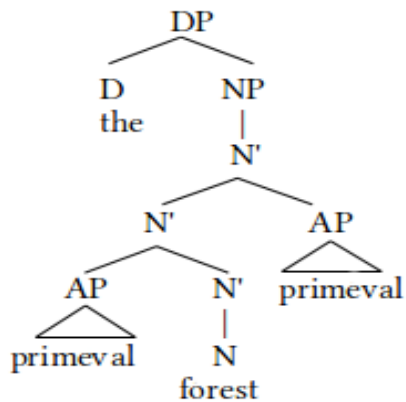
though only one will be pronounced.

(41)



Moving up the tree, the determiner is Merged to the NP:

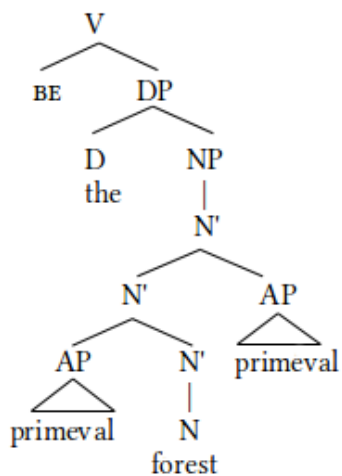
(42)



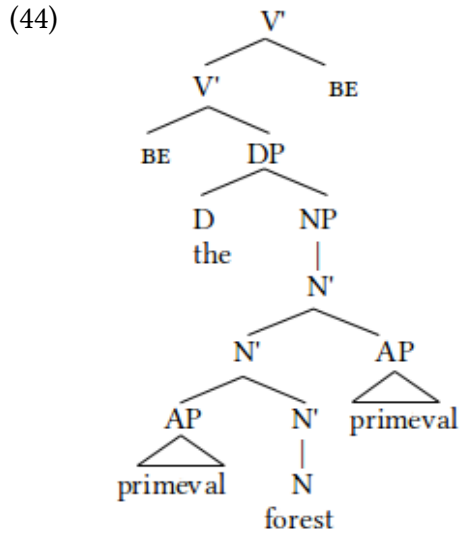
The determiner is not able to Rotate because Adjacency Freezing (29) requires that it not be displaced from the item it has selected for.

The VP then Merges to the DP:

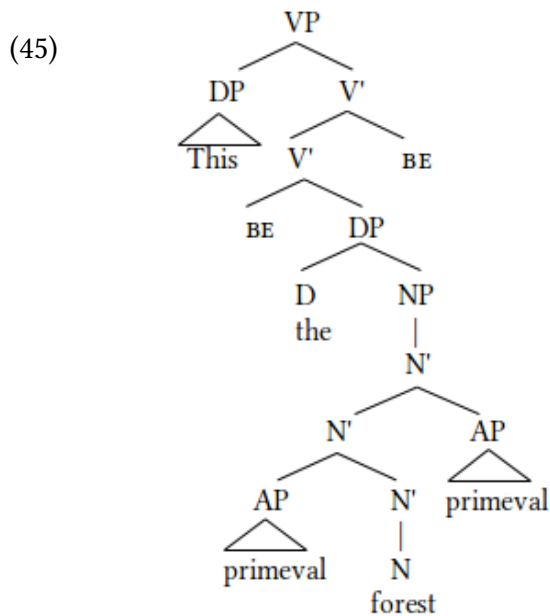
(43)



Here, as with the adjective, Rotation is possible so it applies. Rotation of the verb in the VP does not have an impact on the final word order, as the verb will, in this case, move to T before SpellOut. However, introducing the option of a head-final VP now leaves open the possibility of a head-final TP later without violating the FOFC⁴ (Biberauer, Holmberg, & Roberts (2007)).



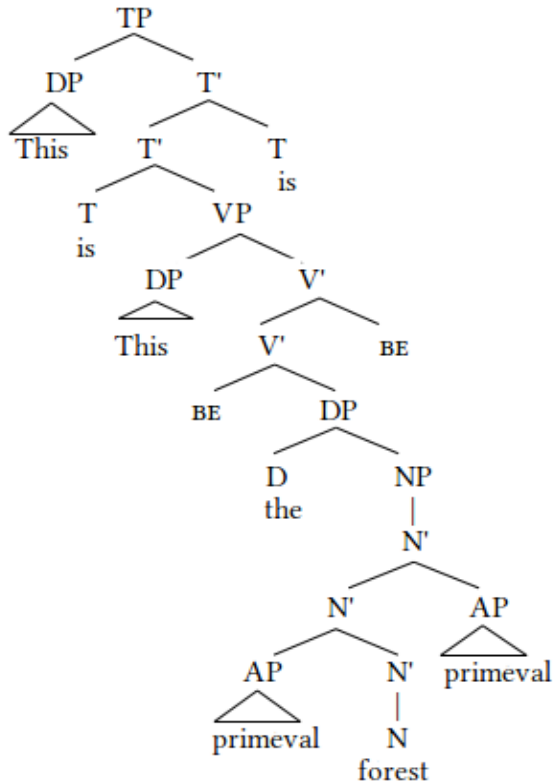
Next, the subject is Merged:



⁴ Richards (p.c.) suggests that a SpellOut boundary at DP may explain why the verb is able to Rotate relative to its DP complement despite the fact that V selects for D here, and we might otherwise expect it to be frozen.

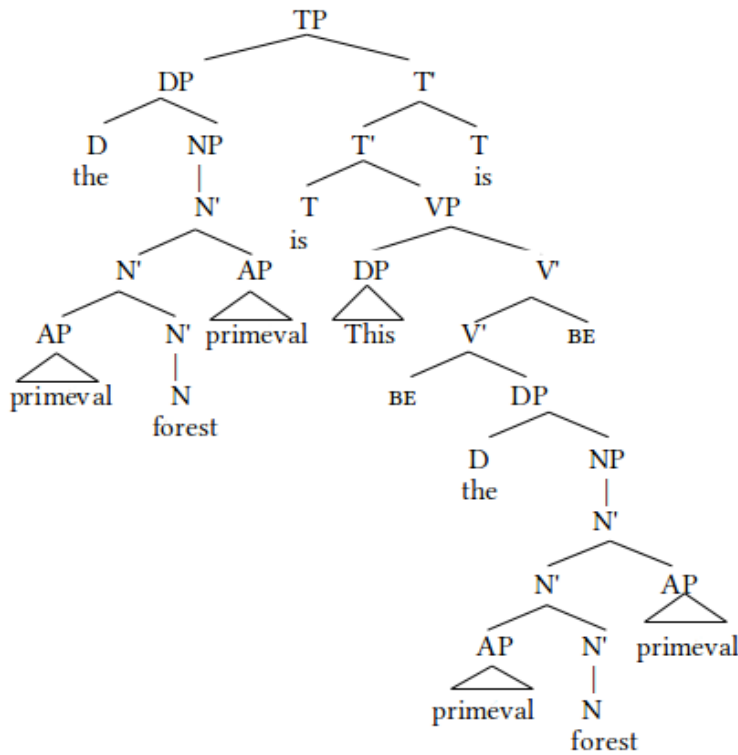
Here too we are unable to perform Rotation, so the next step is to add the TP and finish the derivation through Internal Merge.

(46)



In (46), *This* has been moved into Spec,TP, and the verb has moved to T, which has also Rotated to give the option of a SOV word order. However, another option would be to create a locative inversion sentence here, and the syntax also generates that as a possibility:

(47)



The trees in (46) and (47) are what will be fed to the phonology, which will decide which copies to pronounce and how to fit the sentence to the meter. In the following sections, I walk through two more sample derivations, which I will then analyze in the phonology.

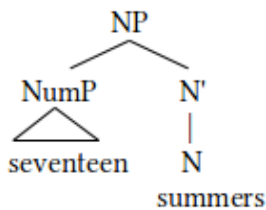
5.1.2 Locative Inversion

The next example is the 65th line of *Evangeline*, which contains a locative inversion and a right-dislocated doubled subject. The line appears in (48) for reference:

(48) Fair was she to behold, that maiden of seventeen summers. (Evangeline, 65)

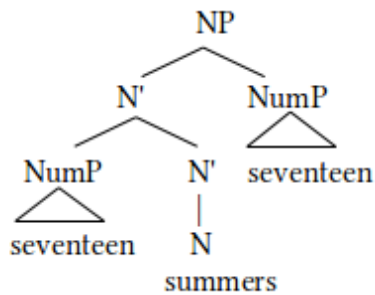
For this derivation, I begin by constructing what will become the right-dislocated subject:

(49)



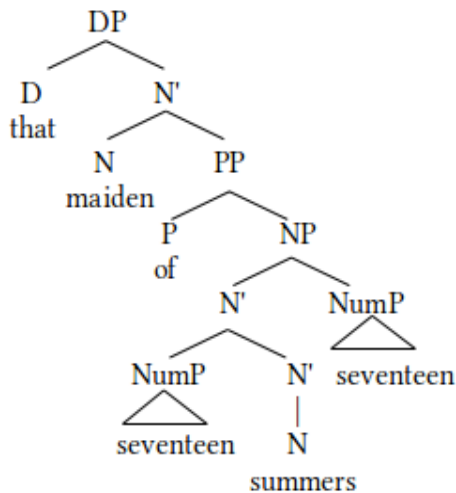
This is able to undergo Rotation, and does:

(50)



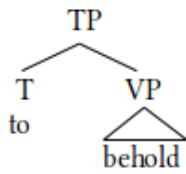
The next three steps consist only of Merging new items from the Workspace to the existing structure and none are able to Rotate, so I present them here as one step:

(51)



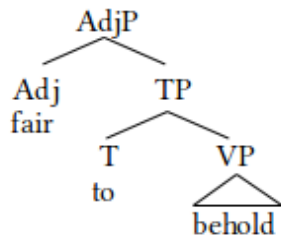
Next, I walk through the derivation of the main clause. Although this sentence is passive, I do not derive the subject as originating as the object of the verb. Because the object ends up simply as an unpronounced trace, it will not affect the final word order and I abstract away from such details in this derivation, instead representing the VP as containing only the verb. Similarly, an account more concerned with the details of the syntax might derive the right-dislocated, doubled subject as part of a 'big DP', similar to what is used by some to derive clitic doubling. However, this paper is only concerned with the syntax which affects the final word order, and remains deliberately agnostic on these points.

(52)



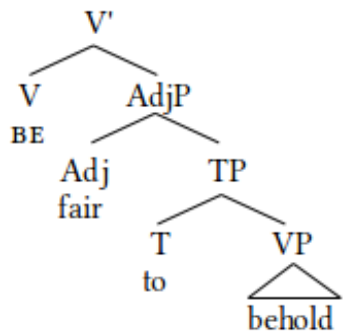
In (52) 'to' and 'behold' are unable to Rotate, so the next item is Merged.

(53)



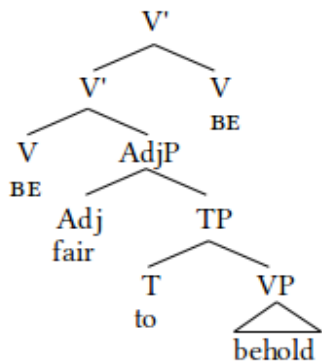
The verb is Merged next:

(54)



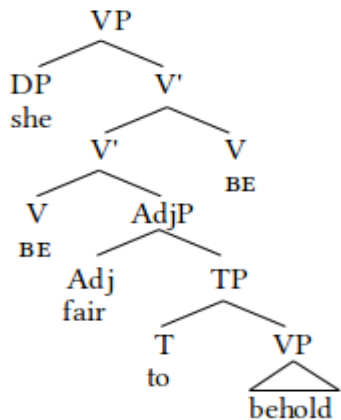
As in the example in (44), it can Rotate to leave open the possibility of a head-final TP.

(55)



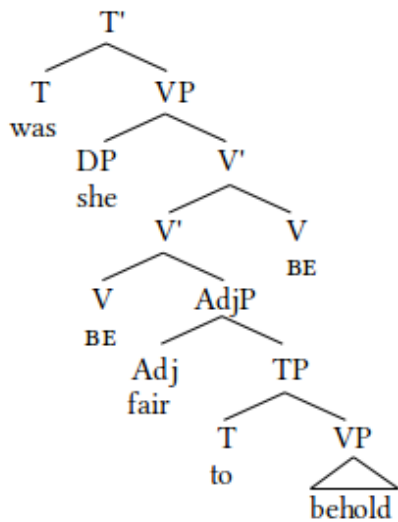
Next I Merge the (passive) subject, which would have originated as the object of 'behold'.

(56)



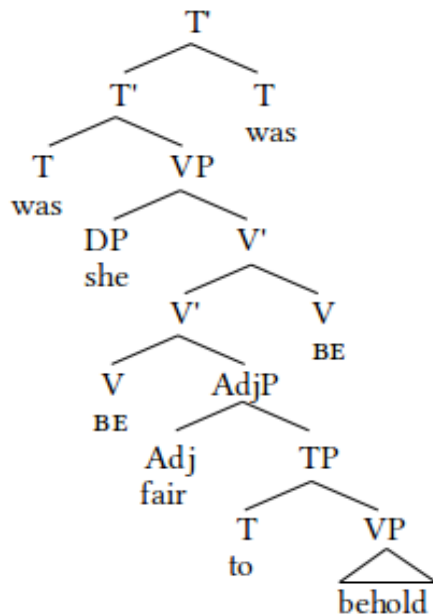
After that, the verb moves to T:

(57)



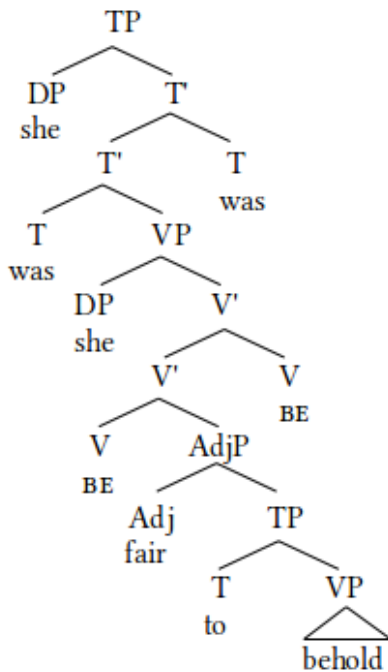
Once there, it is able to undergo Rotation again:

(58)



The subject moves to Spec,TP:

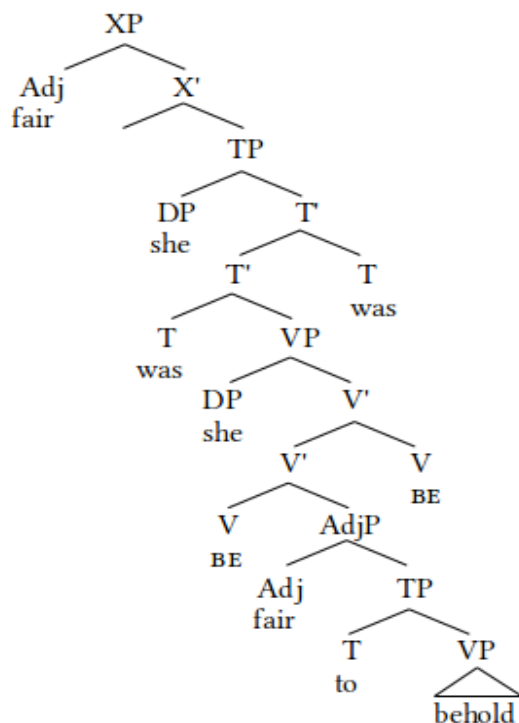
(59)



Because the verb is not transitive, a locative inversion is possible here. In the first possible derivation, the adjective alone moves to a projection above TP. As there seems to be no consensus on

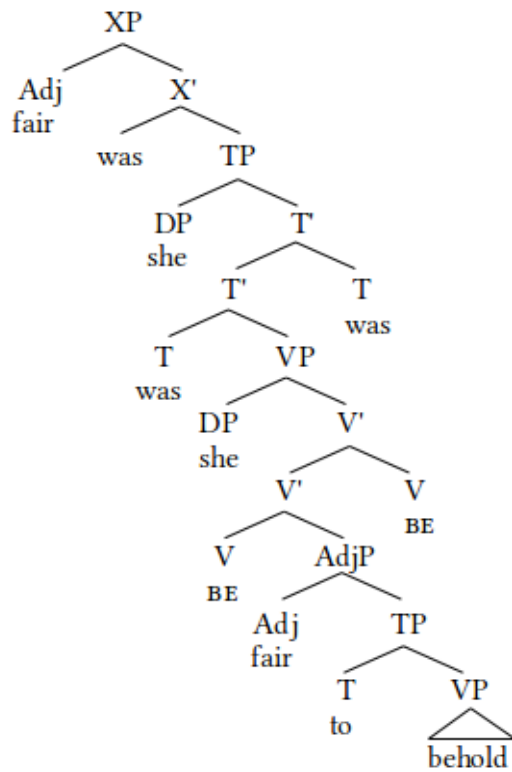
the structure underlying locative inversions, I am deliberately non-committal with my assumptions about the derivation. Although Rizzi & Shlonsky's (2006) analysis involves different assumptions than what I show, based on their observations that locative inversions are incompatible with “contexts not licensing left-peripheral positions (sentential subjects, ECM environments, etc.), and with T to C movement”, I assume that locative inversions involve movement of a PP (or adjective) to the specifier of some projection above TP. At this stage, it appears very similar to topicalization. Then, an intransitive verb is able to raise to some position above the subject. Whatever properties of an intransitive verb allow it to raise in natural language, while blocking a transitive verb from doing the same, also license this structure in poetic language. The exact nature of these properties is not essential to this analysis. Other approaches to locative inversions involve a rightward shift of the subject DP for prominence. An analysis of this type would also be compatible with my analysis of the structure in poetry, though the details of the derivation would look slightly different.

(60)



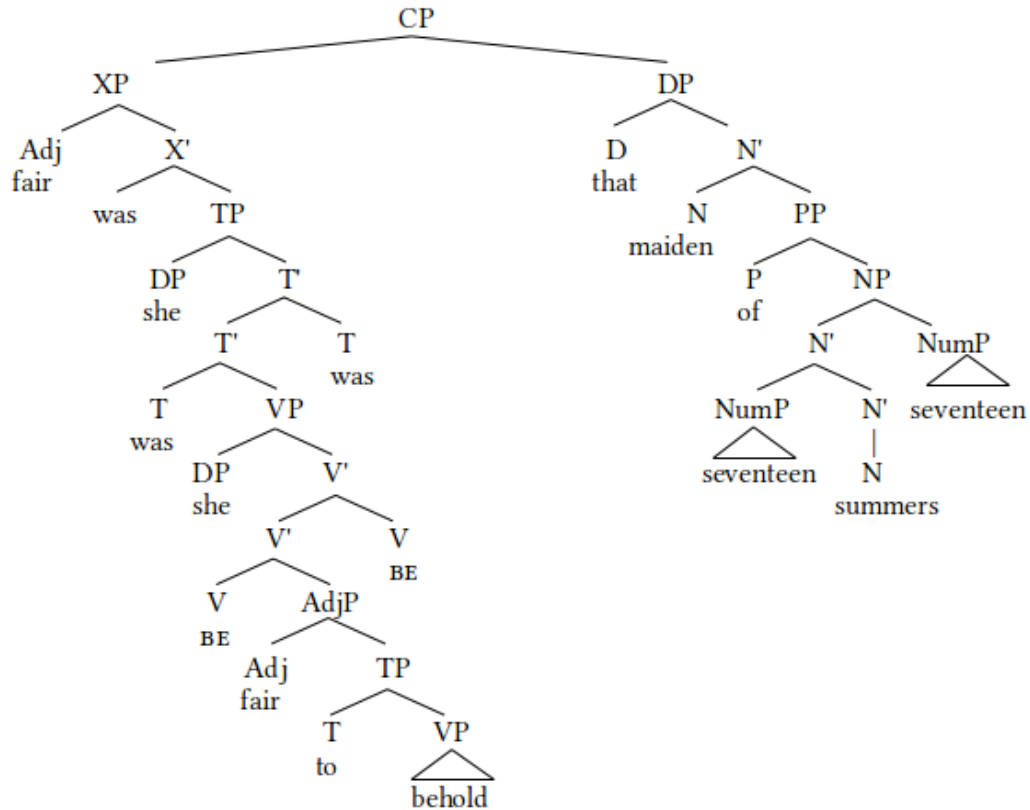
Then, the verb moves above the subject to create the locative inversion word order:

(61)



Finally, the right-dislocated doubled subject is brought back into the derivation for the final structure:

(62)



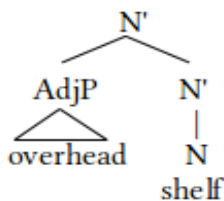
5.1.3 Verb<>Object Contiguity

In this final example derivation I provide, from line 225 of *Evangeline*, a prepositional phrase appears between a verb and its direct object. This is the most marked position for adjuncts in English, as explained in (7) above, and also the least attested adjunct placement in the corpus. The line appears in (63):

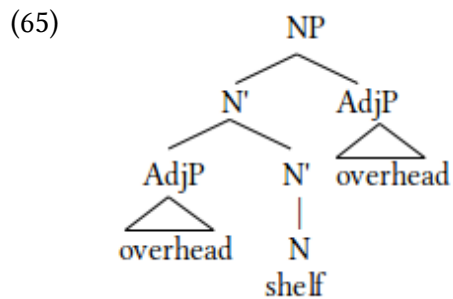
(63) Take from the shelf overhead thy pipe and the box of tobacco; (Evangeline, 225)

Here, I begin by Merging the PP that will later be Merged to the completed sentence:

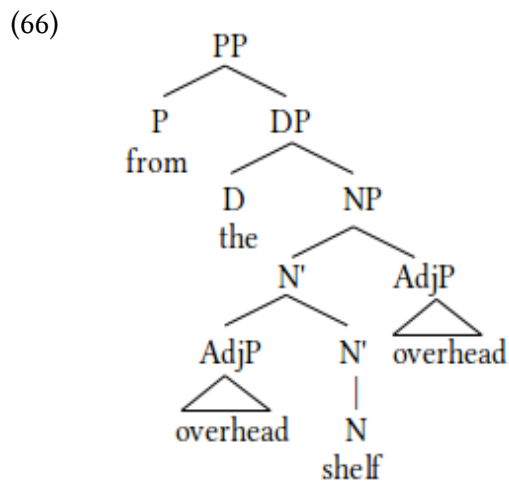
(64)



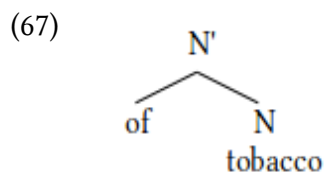
The adjective is able to Rotate, and two copies of it appear in the tree:



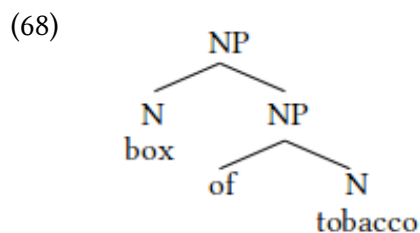
Next, the determiner and preposition are Merged, which I include in one step because they are unable to Rotate.



Now, the derivation can begin Merging the NP objects of the verb:

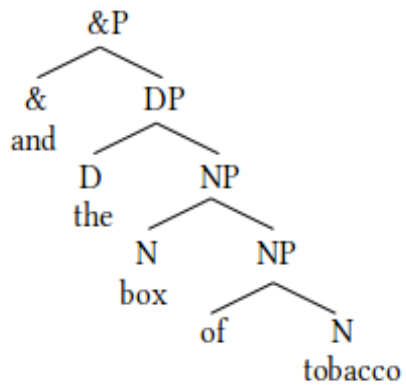


Within this complex NP, Rotation is not available.



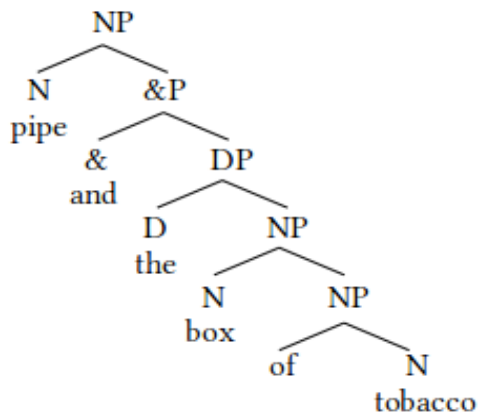
The determiner and 'and' are Merged, but cannot Rotate:

(69)



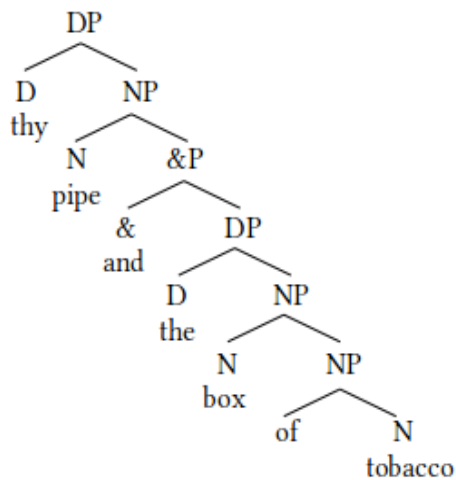
Now the second NP is Merged:

(70)



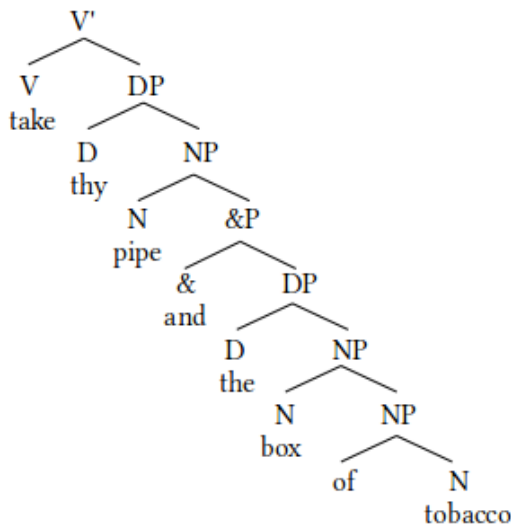
As is its determiner:

(71)



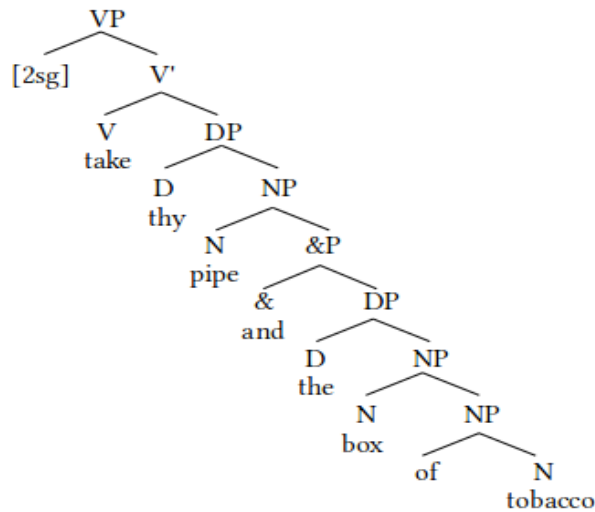
Now, the verb is added:

(72)



It should be able to Rotate relative its direct object, but because it is an imperative form, it would move to a sentence-initial position (assuming a syntax of head-final imperatives in English would look something like German (Platzack & Rosengren (1997))), this detail is irrelevant to (or at least unprovable by) the surface word order. Instead, I add a null subject, which is equally unimportant to the final word order, but is a convenient place-holder.

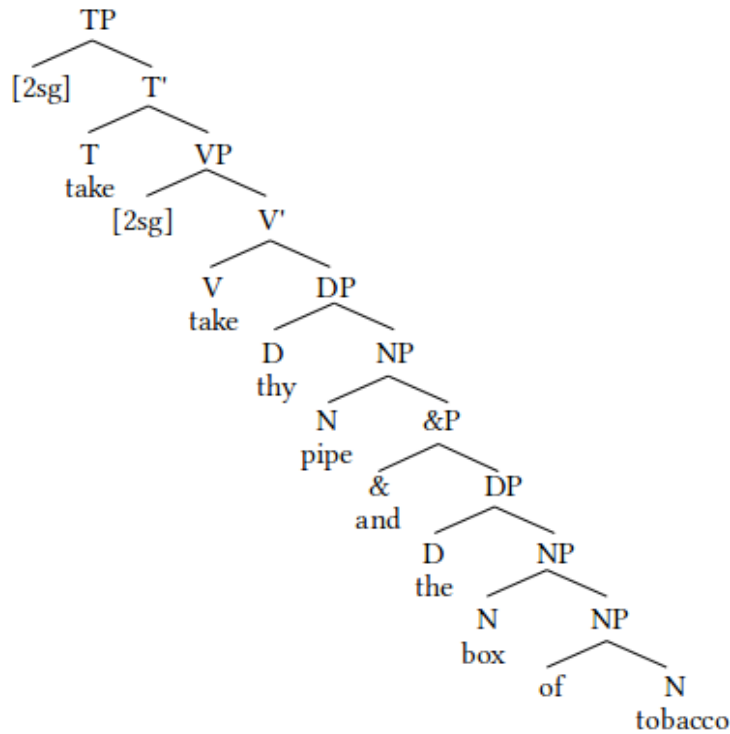
(73)



Now the verb and null subject move into T, or perhaps into C or a Focus position, though this

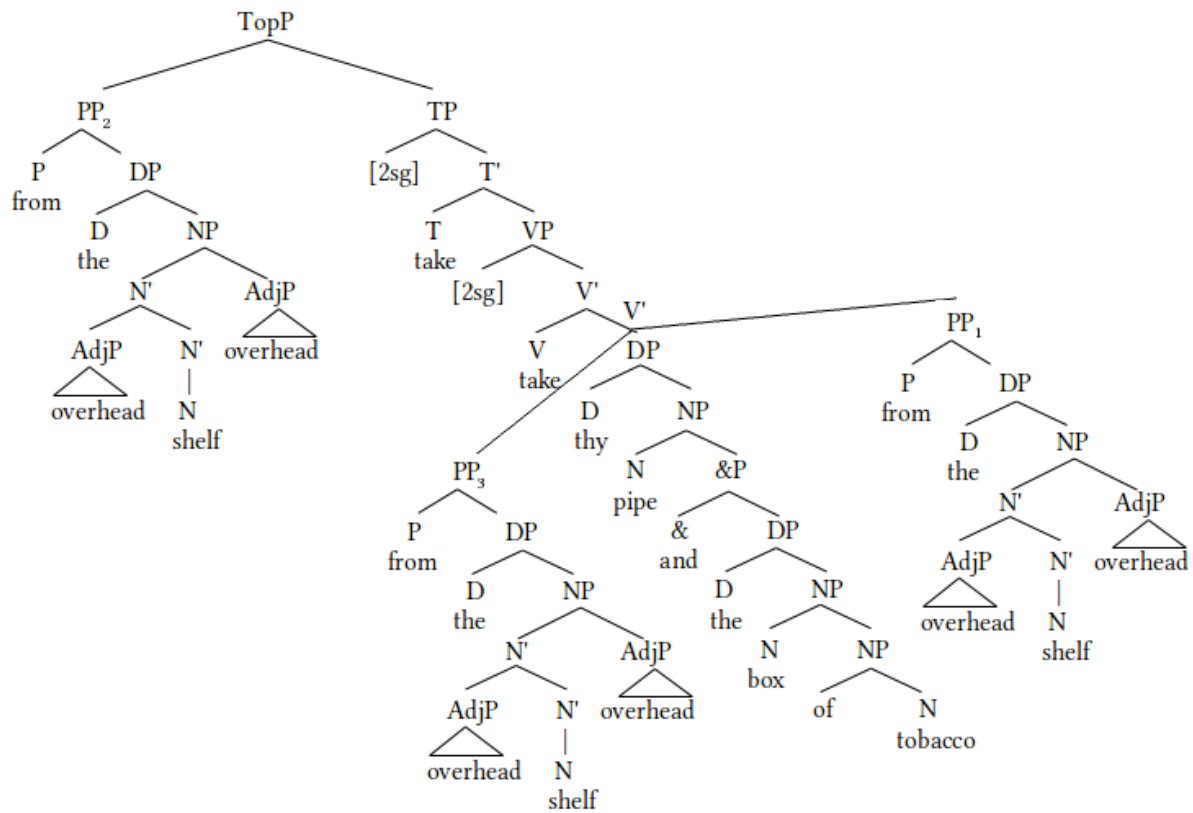
paper need make no specific claims about what projection the verb is in, as long as it is sentence initial.

(74)



The tree that follows shows the various positions of the previously constructed prepositional phrase, “from the shelf overhead”. First, it could appear sentence-finally, which I consider unmarked. This is labeled as “PP₁”. It could also appear between the verb and its object in essentially a Rotated version of the above, labeled “PP₃”. Another option is for it to appear sentence initially, in a topic position, “PP₂”.

(75)



Because the adjunct phrases do not participate in any Contiguity relations of their own, they are free to appear in a variety of places in the sentence, even if it means breaking an earlier-established Contiguity relation. The next section shows how the phonology decides which of these copies to pronounce.

5.2 SpellOut and selecting copies

Once the syntax has generated trees showing every possible, grammatical structure, these trees are evaluated by a second level of syntax, which still has access to syntactic structures, but also has greater awareness of the phonology of the lexical items the tree contains. Specifically, this post-syntactic level must be aware of lexical stress so that it will be able to match the syntax to a metrical template. By deciding which copies to send to SpellOut, this level will make certain that lexically

stressed syllables are aligned with strong positions (foot heads) and unstressed syllables are aligned with weak positions. Because dactylic hexameter allows a certain amount of flexibility in the meter – the first four feet may be either dactyls or spondees, while the final two feet must be a dactyl followed by a spondee – these templates must also be generated by the grammar.

5.2.1 Deriving metrical templates for dactylic hexameter

I consider the metrical templates to be generated in a separate grammar. The grammar presented in Golston & Riad (2000:129-136) will do this. Their analysis generates the possible metrical structures for dactylic hexameter, that is, six feet, of which the first four may be freely dactyls or spondees; the fifth is obligatorily a dactyl, and the sixth is obligatorily a spondee. The length of the line is the result of having each of the two metrons in a line (which they equate to phonological phrases within an intonational phrase) be ternary branching rather than binary. This gives three feet in each metron, and six per line.

As mentioned in §1, they remark that stress clash is the common factor between spondees and dactyls. At least for Greek, they write, “prominence falls on all heavy syllables and on the first of two light syllables.” (:114) This commonality is what allows for free variation between them. The stricter requirements for the final two feet, they claim, is due to all stichic meters requiring a heavy line-final position. This means the last foot will be a spondee. The penultimate foot is a dactyl in order to avoid four heavy syllables in a row at the end of the line, where it has been observed (by Allen (1973:107)) that metrical preferences are adhered to more strongly.

This generates the possible metrical structures which are seen in dactylic hexameter. We may take these possible structures as templates for meter to which the poet must match some syntactic structures. The template appears below:

(76) (Xuu)(Xuu)(Xuu)(Xuu)(Xuu)(XU)⁵

5.2.2 Matching lexical stress to a template

I use Optimality Theory to demonstrate the matching of the structures from §5.1 to the metrical templates from §5.2.1. The first example I show is the sentence that makes up part of the first line of the poem, repeated below with lexical (primary) stress marked and aligned to a metrical template.

(77) This is the f^órest prim^éval. The múrmuring p^ínes and the hémlocks. (Eva., 1)
(X u u)(X u u)(X u u)(X u u)(X u u)(X U)

The constraints that are relevant in this case are defined below. First is the preference to fit the lexical stresses of the line to the metrical template. In the most general terms, this constraint wants to ensure that every lexical stress is aligned with a metrically strong position, and every unstressed syllable is aligned with a metrically weak position. However, associating the varying degrees of prominence of (primary and secondary) stressed syllables in a sentence to a metrical grid with only a binary distinction between 'strong' and 'weak' positions is not so simple. While the details of text-setting are not the focus of this paper, I use the constraint in (78) to stand in for a number of constraints which would be needed to accomplish this in an Optimality Theory framework.

(78) FITMETER = A stressed syllable which forms a prominence peak, i.e. one that is more strongly stressed than the syllables immediately surrounding it, must be assigned to a strong position. All syllables not forming a peak must be assigned to a weak position.

In assigning violations of (78), I follow the concept presented in Hayes (1989) to determine when a secondary stressed syllable may be assigned to a weak position. Hayes defines Bounding Theory (:231) as a guideline for these cases:

5 Where 'uu' represents "either 'uu' or 'U'."

(79) **Bounding Theory:** A line, L, is metrical if, for every constituent C of L, the following condition holds: any peak defined in C that occupies metrical W position is adjacent to a peak also defined in C.

That is, a lexically stressed syllable may fill a weak metrical position if that syllable is next to another stressed syllable, but not otherwise. This will explain the variable behavior of function words such as prepositions and determiners which are attested in both strong and weak positions depending on their prominence relative to adjacent lexical items. For example, *that* in (80a) may be assigned to a strong position, but *this* in (80b) may only fill a weak position:

(80) a. This is... (Ev. 1)
b. ...that maiden... (Ev. 65)

Next is a constraint that a sentence be part of a metrical line. Any constraints ranked above this are considered to be disallowed in a line of Evangeline. Constraints ranked below this are acceptable deviations.

(81) SPELLOUT = A syntactic structure must be Spelled Out, linearized, and associated with a metrical template.

A sentence which violates (81) would not be a line of poetry. Ranked below this are constraints against the marked syntactic structures which are employed by Longfellow to avoid metrical faults:

First is a constraint against locative inversions without the associated discourse context.

Typically, a locative inversion would put older information in the pre-verbal position, and newer information in the post-verbal position, however, when this structure is employed solely for the sake of the meter, this is not the case.

(82) *LOCACTIVEINVERSION/_{CONTEXT} = Assign one violation per instance to a spelled out structure containing a locative inversion which does not meet the discourse requirements for one, i.e. having discourse-new information in the post-verbal position, and discourse-old information in the pre-verbal position.

Sentences containing locative inversions violate the syntactic principle Attract Closest, if one

analyzes the structure as deriving from movement of a locative phrase (which I use here as a stand-in for the variety of constituents which may appear phrase-initially in sentences containing locative inversions) over the closer subject which could presumably just as easily fill the phrase-initial 'locative' position. Rather than moving the subject of an intransitive verb to this position (whether it is Spec,TP or something higher), a lower constituent is chosen to fill it. Locative inversions are marked because they move a constituent for no syntactic reason: this movement is not required for, e.g., case assignment or other structural needs. It differs from topicalization in the inversion of the subject and verb or modal verb, which preserves selectional contiguity between, e.g., an auxiliary and a verb, or a verb and the subject. (Richards 2013c: 5).

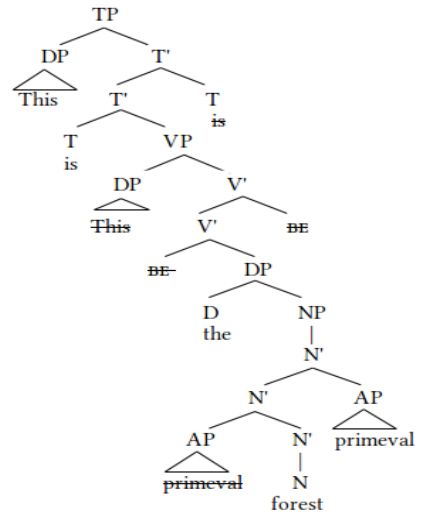
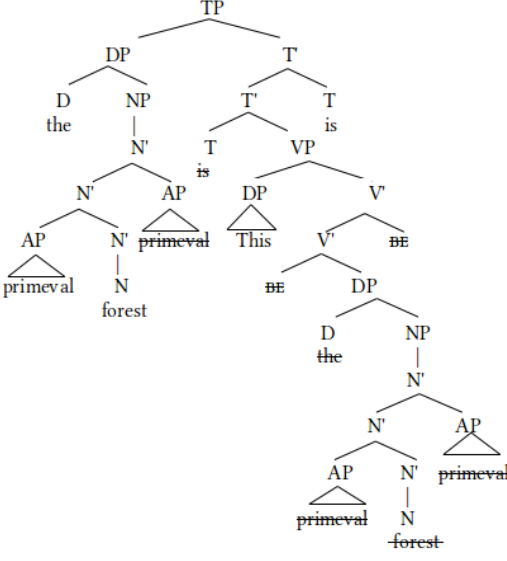
Another poetic inversion which occurs for the sake of the meter involves the Rotation of an adjective and the noun it modifies, or a verb and its direct object complement. Sentences containing these structures are marked because the Rotation shifts the location of the main phrasal prominence. The preference that nouns be followed by adjectives in English (except in cases associated with a particular semantics, on which see Cinque (2010)) is the result of the interaction of at least two constraints. First is a constraint preferring that prominence within a phonological phrase not be on the syntactic head, as noted by Nespor et al. (2008:2) that “main stress falls on the complement independently of its location, i.e. in both OV and VO languages,” and second is a constraint that for English, prominence should be on the left-most stressed lexical item in a noun phrase, as observed by Christophe et al. 2003:12, “within phonological phrases, prominence systematically falls on the right for head-initial languages such as English, French, or Greek, and on the left for head-final languages such as Turkish, Japanese or Bengali.” The first of these means that peak prominence will fall on an adjective in a noun phrase, and the second means that the adjective will appear to the left of the

noun, and it also means that peak prominence will not fall on a determiner, for example.

(83) *DISPLACEDPROMINENCE = This constraint is a stand-in for the series of constraints governing the position of phrasal stress in English, namely that phrasal prominence be placed on the rightmost lexical stress, and, ranked below this, a constraint against placing this prominence on a head. This constraint will penalize a spelled out sentence where an adjective follows a noun, or a verb follows its direct object.

Studies on child language acquisition of the ordering of heads and their complements, including the two mentioned in the previous paragraph, have found that children are aware of where phrasal prominence is placed in the language they are learning. To deviate from this placement of prominence creates a marked structure. Because English is a mixed head-directional language with head-initial verb phrases, but head-final noun phrases, the constraint I use, (83), is not specific to keeping phrasal prominence to either the right or to the left, but rather it penalizes a deviance from the norm in either noun phrases or verb phrases.

The tableau on the following page in (84) shows the attested line, from (77), as candidate (a); a line with no inversions as candidate (b); and a non-attested inversion as candidate (c). Because candidates (a) and (b) differ only in which copies have been chosen to SpellOut, I provide a tree for (a), but only a linearization of it in (b). Due to the limitations of space, a tableau of the same candidates appears in (84'). This tableau shows details of the lexical stress (shown as an x-grid above the written line with three levels for unstressed, bearing a secondary stress, or a primary stress) and how it aligns with the meter (shown as an x-grid below the line with two levels of stress for strong or weak positions, grouped into feet). Additional discussion follows the tableaux.

(84) [this, is, the, forest, primeval]	FITMETER	SPELLOUT	*DISPROM
<p>>a.</p>  <p>This is This be the primeval forest primeval be is. (X u u) (X u u)(X u the múrmuring pines and the hémlocks u) (X u u) (X u u) (X U)</p>			*
<p>b. This is This be the priméval fórest priméval be is. (X u u) (X u u) (X u the múrmuring pines and the hémlocks u) (X u u) (X u u) (X U)</p>	**!		
<p>c.</p>  <p>The priméval fórest primeval is this be the (X u u)(X u u) (X primeval forest primeval be is u the múrmuring pines and the hémlocks u) (X u u) (X u u) (X U)</p>	**!***		*

(84') [this, is, the, forest, primeval]	FIT METER	SPELL OUT	*DIS PROM
<p>>a.</p> <p style="text-align: center;">x x x x x</p> <p>x x x x x x x x x</p> <p>x x x x x x x x x x x x x x x x x x</p> <p>This is the f^orest prim^eval. The m^urmuring pⁱnes and the h^emlocks</p> <p>(x x x) (x x x)(x x x) (x x x) (x x x) (x x)</p> <p>x x x x x x</p>			*
<p>b.</p> <p style="text-align: center;">x x x x x</p> <p>x x x x x x x x</p> <p>x x x x x x x x x x x x x x x x</p> <p>This is the prim^eval forest. The m^urmuring pⁱnes and the h^emlocks</p> <p>(x x x) (x¹ x² x)(x x x) (x x x) (x x x) (x x)</p> <p>x x x x x x</p>	*1*2!		
<p>c.</p> <p style="text-align: center;">x x x x x</p> <p>x x x x x x x</p> <p>x x x x x x x x x x x x x x x x</p> <p>The prim^eval forest this is. The m^urmuring pⁱnes and the h^emlocks</p> <p>(x¹ x x²)(x³ x⁴ x) (x x x) (x x x) (x x x) (x x)</p> <p>x x x x x x</p>	*1*2!*3*4		*

Candidate (84a), which violates only a constraint against having a marked syntactic structure, is the winner. There are no violations of the highest ranked constraint that the lexical stresses fit the meter. However, in candidate (b), which is the closest to an unmarked syntax, there are two violations of FITMETER, marked in (84'b). First, the secondarily stressed first syllable of *priméval* is assigned to a strong position. Also, the stressed syllable immediately following is assigned to a weak position, even though it bears a stronger prominence than the *pri-*. These violations are fatal. Candidate (84c) uses a different syntactic structure to attempt to avoid the metrical violations of the faithful candidate (b). Here, we see a verb-final sentence with *the priméval fôrest*, appearing in initial position. If we match this to the best available metrical template, there are four violations of FITMETER. In this candidate, line initial '*The*' may not be assigned to a strong position because it is followed by a syllable bearing secondary stress and it cannot form a prominence peak. The *-me-* of

primeval is assigned to a weak position in the first foot, and unstressed *-al* is assigned to a strong position. If one were to create a foot structure to match the lexical stresses of the line, which, apart from the initial '*the*', does appear to be divisible into spondees and dactyls, one ends up with one foot too many for the line. It cannot match an available template, and is therefore ruled out. It also has a violation of *DISPLACEDPROMINENCE, as does the winning candidate.

The next example, the syntactic derivation of which was described in §5.1.2, contains a locative inversion. However, it is not done to fit the line to the meter. In this case, the unmarked syntax would also be metrically sound. In this example, from line 65, the locative inversion occurs to avoid placing a personal pronoun in line-initial position. There are a total of 9 examples⁶ of locative inversions which occur to avoid an initial pronoun, and which would still fit the meter without the inversion. In the corpus, there are only five lines⁷ which begin with a personal pronoun, and in each case, they are unable to undergo locative inversions or topicalization to amend this, because doing so would put an unstressed syllable in a metrically strong position. It is not the case, as the example in (85) shows, that Longfellow had an aversion to putting personal pronouns in metrically strong positions. It is only a preference against having them begin a line.

(85) Fáir was she to behóld, that máiden of sèventéen súmmers.
(X u) (X u u)(X U) (X u u)(X u u) (X U)

This will require the introduction of a new constraint, which seems to be particular to Longfellow's adaptation of dactylic hexameter for English. He may be attempting to mirror some aspect of the meter's use in Greek or Latin, and pronoun placement in those languages. He may also have considered pronouns not to be prominent enough for the first strong position in a line, although I have not noticed a similar reluctance to put demonstratives or prepositions in line-initial position

6 Lines 55, 63, 65, 107, 139, 184, 203, 232, 255, in the Appendix under Locative Inversions.

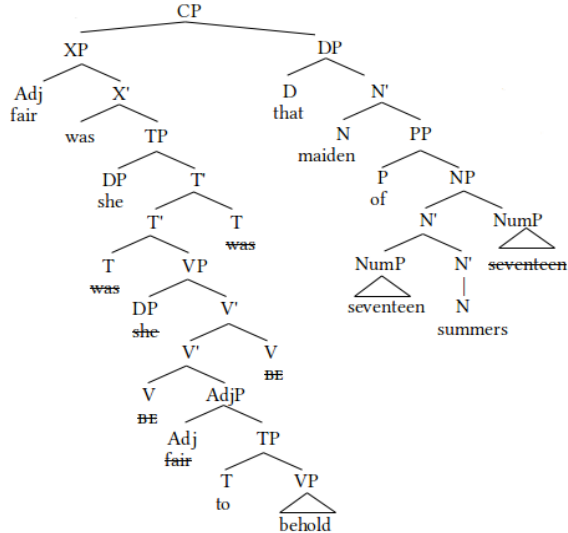
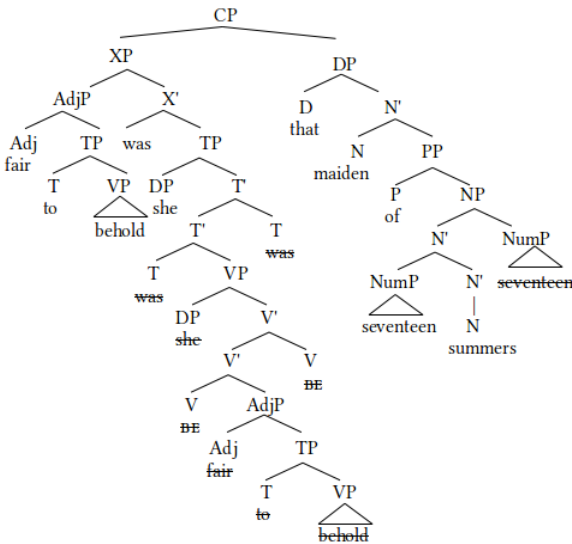
7 Lines 16, 17, 141, 143, 146, not included in the Appendix.

(both of which display similar flexibility in filling either weak or strong positions to pronouns, depending on whether they are adjacent to stressed or unstressed syllables).

(86) *PRONOUN1ST = Assign one violation to every line which begins with a personal pronoun.

Because there are five lines which begin with pronouns, this constraint must rank below SPELLOUT. However, evidence from the nine examples where locative inversions occur solely to avoid a line initial pronoun shows that *PRONOUN1ST must outrank *LOCATIVEINVERSION and the not-yet-defined constraint against topicalization.

In the tableau in (87), candidate (a) is the observed word-order of the line. Candidate (b) is the syntactically unmarked version, and candidate (c) is an alternate word-order which is not attested for this line. As in the previous example, candidates (a) and (b) share the same structure, but differ only in which copies are sent to SpellOut. In the interest of fitting the tableau to one page, I omit the tree for (b). As for the previous tableau, I provide a second tableau of the same candidates in (87') showing the mapping of lexical stress to metrical positions in each candidate.

(87)	[She, was, fáir, to, behóld, that, máiden, of, sèventéen, súmmers]	FIT METER	SPELL OUT	*PRON 1ST	*LOC INV
>a.	 <p>Fáir was she was she fáir to behóld was, that máiden of séventéen súmmers seventeen</p> <p>(X u) (X u u)(X u) (X u u)(X u u)</p> <p>(X U)</p>				*
b.	<p>Fáir was she was she fáir to behóld was, that máiden of séventéen súmmers seventeen</p> <p>(X u) (X u u)(X u) (X u u)</p> <p>(X u u) (X U)</p>			*!	
>c.	 <p>Fáir to behóld was she, that máiden of séventéen súmmers</p> <p>(X u u)(X u)(X U) (X u u)(X u u)(X U)</p>				*

(87')	[She, was, fáir, to, behóld, that, máiden, of, séventéen, súmmers]	FIT METER	SPELL OUT	*PRON 1ST	*LOC INV
>a.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x Fáir was she to behóld, that máiden of séventéen súmmers (x x)(x x x)(x x) (x x x) (x x x) (x x) x x x x x x				*
b.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x She was fáir to behóld, that máiden of séventéen súmmers (x x)(x x x)(x x) (x x x) (x x x) (x x) x x x x x x			*!	
>c.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x Fáir to behóld was she, that máiden of séventéen súmmers (x x x)(x x) (x x) (x x x) (x x x) (x x) x x x x x x				*

In the tableau in (87), the syntactically unmarked candidate (b) is ruled out by having a pronoun fill the first metrical slot of the line. The attested candidate (a) uses a locative inversion to avoid violating *PRONOUN1ST, and is able to do so without violating the FITMETER constraint. However, candidate (c) uses the same approach, but inverts the entire phrase *fair to behold*, rather than just the adjective *fair*. It could be that (a) and (c) are equally viable candidates for this line, or it may be that inverting a larger amount of either phonological material or syntactic structure incurs a greater violation of *LOCATIVEINVERSION. The corpus suggests that this is the case. Of the eight examples⁸ where a separable phrase has been fronted through locative inversion (to form a line similar to hypothetical (87c)), only two would still fit the meter if Longfellow had fronted only the first word, rather than the entire phrase. There are six examples⁹ of locative inversion where a single

8 Lines 33, 43, 62, 64, 98, 210, 212, 232 in the Appendix under Locative Inversions.
 9 Lines 45, 65, 66, 68, 160, 255.

word was fronted although more material could have been pied-piped along with it, as far as the syntax is concerned. Of these, three could fit the meter even if the larger phrase had been fronted together, and three will only fit the meter with the inversion of the single word. This might indicate a preference for inverting a single word rather than an entire phrase when both were metrically viable.

For the final example I provide, of line 225, I introduce the following new constraints:

(88) VERB/OBJECT CONTIGUITY = Assign one violation per occurrence for a line where an adjunct phrase intervenes between a verb and its direct object.

This constraint penalizes any violations of verb/object contiguity, as introduced in §1.1.3. This is the preference, based on Richards (2013c:3) that if α and β are related via Agree or Selection, α and β must be prosodically contiguous on some level of P-phrasing. By placing an adverb (and its associated phonological phrase boundary) between some α and β which want to be in a contiguity relation, a violation of this constraint is incurred. (Richards 2013c:19-23)

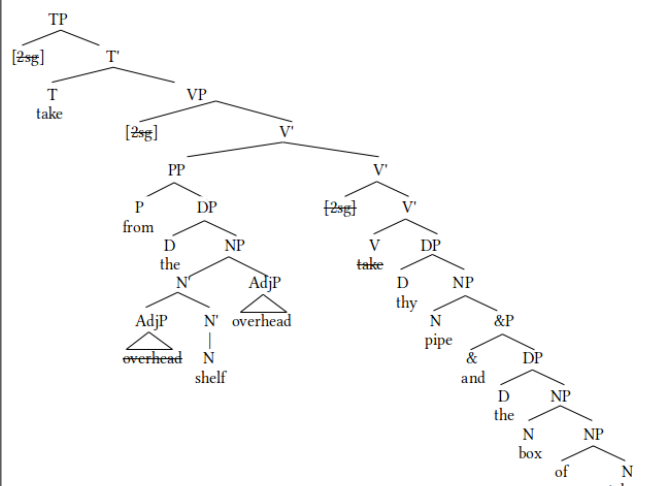
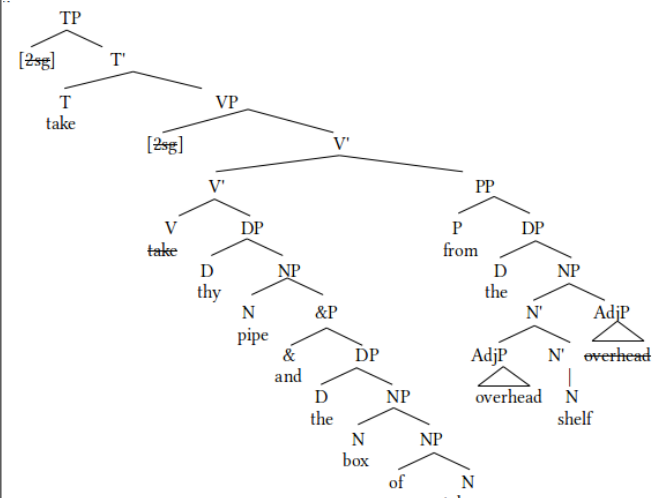
(89) *TOPICALIZATION/_{CONTEXT} = Assign a violation to a spelled out structure where the constituent appearing in a TOPICP is not the topic of the sentence.

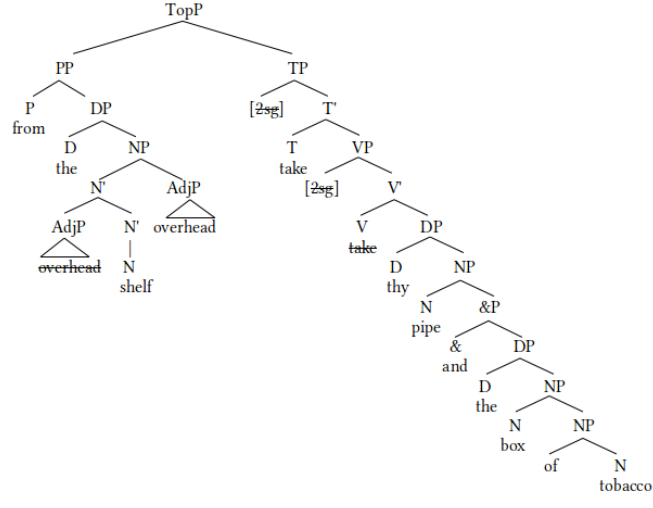
This constraint penalizes a line containing topicalization of any constituent without the associated discourse context for it. While sentences involving topicalization do not violate any of the concepts introduced in Richards' Uttering Theory (2010, 2013), these sentences are more marked prosodically compared to sentences where the topicalized or otherwise left-dislocated material remains in situ. Putting a constituent in a left-dislocated TopicP without it being the topic of the sentence is in violation of this constraint. The evidence from my corpus shows that these constraints rank below SPELLOUT, though there are no examples to whether one is a more marked structure than the other, and if they should be ranked relative to each other.

For the tableau in (90), as in the previous tableaux, candidate (a) is the attested one. Here, it

involves a prepositional phrase intervening between a verb and its direct object. Candidate (b) is the syntactically unmarked candidate, with the prepositional phrase appearing at the end of the sentence. Candidate (c) attempts to use topicalization of the prepositional phrase to avoid having it intervene between the verb and object.

Because each example employs a different syntactic structure, full trees have been provided for each candidate. Candidate (c) can be found on the page following candidates (a) and (b). As in the previous tableaux, a tableau of the same examples and violations appears in (90') showing the violations incurred in fitting the lexical stress to the meter.

(90) [take, thy, pipe, and, the, box, of, tobacco, from, the, overhead, shelf]	FIT MTR	SPELL OUT	SUBJ/V CONTIG	*DIS PROM	*TOPICA LIZATION
<p>>a.</p>  <p>Take from the overhead shelf overhead take thy pipe and the box of tobacco (X u u) (X u u)(X U)(X u u) (X u u)(X U)</p>			*	*	
<p>b.</p>  <p>Take take thy pipe and the box of tobacco from the overhead shelf overhead (X u)(X u u)(X u u)(X u u)(X u u)(X U) U)</p>	*!*				

(90) cont	[take, thy, pipe, and, the, box, of, tobacco, from, the, overhead, shelf]	FIT MTR	SPELL OUT	SUBJ/V CONTIG	*DIS PROM	*TOPICAL IZATION
	<p>C.</p>  <p>From the overhead shelf overhead take take thy pipe and the box of tobacco (X U) (X u u)(X u u) (X u u)</p>	*!				*

(90')	[take, thy, pipe, and, the, box, of, tobacco, from, the, overhead, shelf]	FIT MTR	SPELL OUT	SUBJ/V CONTIG	*DIS PROM	*TOPICAL IZATION
>a.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x x Táke from the shélf òverhéd thy pípe and the bók of tobácco (x x x) (x x x)(x x) (x x x) (x x x)(x x) x x x x x x				*	*
b.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x Táke thy pípe and the bók of tobácco from the òverhéd shélf (x x) (x x x) (x x x)(x x x ¹) (x ² x ³ x)(x x) x x x x x x	*1! *2*3				
c.	x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x Fróm the shélf òverhéd táke thy pípe and the bók of tobácco (x x) (x x x)(x x ¹ x) (x x x) (x x x)(x x) x x x x x x	*1!				*

Candidate (90a) violates the constraint against having an adjective follow the noun it modifies, for *shelf overhead*. It also violates the constraint against having phonological material intervene between a verb and its direct object. The syntactically unmarked candidate (b) violates the FITMETER constraint twice in the sequence *the overhead*. First, *the* must be assigned to a strong position, despite being weaker than the stressed initial syllable of *overhead*. Secondly, the first syllable of *overhead* is assigned to a weak position. Candidate (c), which employs a different kind of poetic inversion to try to escape the metrical violations incurred by (b), does not have complete success. It still requires a metrical mismatch in that *take* must be assigned to a weak position. Although it is adjacent to the stressed final syllable of *overhead*, Hayes (1989) shows that Bounding Theory (79) is sensitive to bracketing. Because there would be a strong phrase boundary between *From the shelf overhead* and *take*, the adjacent stress is not sufficient to allow *take* to fill a weak

metrical position, and it incurs one fatal violation of FITMETER.

This section has demonstrated through analysis of a few examples and discussion of related cases, that the poetic inversions that surface in *Evangeline* do so in order to avoid metrical flaws whether they are strictly to appropriately match stressed syllables to strong positions, or to fulfill lower ranked constraints, such as one against having a pronoun begin a line, or inverting only an X rather than pied-piping a whole XP when there is the option to do so.

6. Conclusion

This analysis has shown that it is possible to derive the syntactic inversions of “*Evangeline*” by assuming the same principles that govern prosodically-driven movement in Richards' Uttering Theory (2010, 2013). The syntax uses movement and rotation of heads to generate as many possible word orders as it can so that a post-syntactic level of phonology has the greatest chance of fitting the lexical items to the metrical structure of the line. However, the syntax is limited by requirements that, for example, heads remain contiguous (at some prosodic level) to heads they select for or are in an Agreement relation with.

While the syntactic structures that appear as a result of poetic inversions are often available in spoken language to express particular information structures, they are not necessarily associated with any special information structures in poetry. Marked syntactic structures for focus or variations in noun-adjective order to disambiguate between different interpretations (Cinque, 2010), for example, use the same inversions as poetry because those are the inversions that the syntax is able to generate to set it apart from the basic, unmarked syntax.

This corpus, selected from the first sections of *Evangeline* offers no solid empirical evidence to differentiate the analysis presented above and the idea that poetic inversions are the result of a

syntactic filter on post-syntactic movement, that is, saying that any line that could be derived by some syntax of some stage of the language is a possible well-formed line of poetry. However, the analysis presented here makes the prediction that there is some poem in some language which would employ a syntactic structure that was not available at any stage of the spoken language. This is a testable hypothesis and opens up the possibility of further linguistic study of poetic syntax in the future.

Because this approach assumes that the syntax generates as many word-orders as it is able to, and then the phonology decides which copies to pronounce at SpellOut, it is able to generate inversions that occur simply to allow a more easily rhymeable word to appear at the end of a line. At this post-syntactic level, the phonology would have access to information about rhymes in addition to information about stress and syllable counts. This avoids needing to say that the syntax is aware of this level of the phonology, but still means that the word orders are generated by the syntax.

Appendix¹⁰

Noun>Adjective Inversions (§ 1.1.1)

Line#	Line
1	This is the forest <i>primeval</i> . The murmuring pines and the hemlocks,
2	Bearded with moss, and in garments <i>green</i> , indistinct in the twilight,
4	Stand like harpers <i>hoar</i> , with beards that rest on their bosoms.
6	Speaks, and in accents <i>disconsolate</i> answers the wail of the forest.
7	This is the forest <i>primeval</i> ; but where are the hearts that beneath it
24	Dikes, that the hands of the farmers had raised with labor <i>incessant</i> ,
86	Led through an orchard <i>wide</i> , and disappeared in the meadow.
88	Such as the traveller sees in regions <i>remote</i> by the roadside,
121	Priest and pedagogue <i>both</i> in the village, had taught them their letters
154	All the signs foretold a winter <i>long and inclement</i> .
202	Nodding and mocking along the wall, with gestures <i>fantastic</i> ,

Subj/V contiguity violations (§1.1.2)

Line#	Line
6	Speaks, and <i>in accents disconsolate</i> answers the wail of the forest.
31	Looked on the happy valley, but ne'er <i>from their station</i> descended
71	Fairer was she when, <i>on Sunday morn</i> , while the bell <i>from its turret</i>
72	Sprinkled with holy sounds the air, as the priest <i>with his hyssop</i>
99	<i>Under the sheltering eaves</i> , led up to the odorous corn-loft.
105	Many a youth, <i>as he knelt in the church and opened his missal</i> ,
114	But, among all who came, young Gabriel <i>only</i> was welcome;
121	Priest and pedagogue <i>both in the village</i> , had taught them their letters
155	Bees, <i>with prophetic instinct of want</i> , had hoarded their honey
172	Day <i>with its burden and heat</i> had departed, and twilight descending
198	Rattled the wooden bars, and all <i>for a season</i> was silent.
204	Faces, <i>clumsily carved in oak, on the back of his arm-chair</i>
213	While the monotonous drone of the wheel, <i>like the drone of a bagpipe</i> ,

¹⁰ In this Appendix, the inverted material generally appears in italics, but each line presented here is not necessarily a complete sentence, and the context of the line may be necessary to see the inversion.

Line#	Line
237	"Four days <i>now</i> are passed since the English ships <i>at their anchors</i>
245	<i>By untimely rains or untimelier heat</i> have been blighted,
247	"Not so thinketh the folk in the village," said, <i>warmly</i> , the blacksmith,
250	Many <i>already</i> have fled to the forest, and lurk on its outskirts,
261	<i>Strongly</i> have built them and well; and, breaking the glebe round about them,

Verb/Obj contiguity violations (§1.1.3)

Line#	Line
8	Leaped like the roe, when he hears <i>in the woodland</i> the voice of the huntsman
69	When in the harvest heat she bore <i>to the reapers at noontide</i>
72	Sprinkled <i>with holy sounds</i> the air, as the priest <i>with his hyssop</i>
126	Take <i>in his leathern lap</i> the hoof of the horse as a plaything,
163	Was <i>for a moment</i> consoled. All sounds were <i>in harmony</i> blended.
225	Take <i>from the shelf overhead</i> thy pipe and the box of tobacco;
230	Taking <i>with easy air</i> the accustomed seat by the fireside:--
251	Waiting <i>with anxious hearts</i> the dubious fate of to-morrow.

Topicalization (§1.1.4)

Line#	Line
37	<i>There in the tranquil evenings of summer</i> , when <i>brightly</i> the sunset
48	<i>Down to his rest</i> , and twilight prevailed. Anon <i>from the belfry</i>
49	<i>Softly</i> the Angelus sounded, and over the roofs of the village
69	When <i>in the harvest heat</i> she bore to the reapers at noontide
74	<i>Down the long street</i> she passed, with her chaplet of beads and her missal,
90	<i>Farther down</i> , on the slope of the hill, was the well with its moss-grown
103	Thus, <i>at peace with God and the world</i> , the farmer of Grand-Pre
108	Many a suitor came to her door, <i>by the darkness</i> befriended,
127	Nailing the shoe in its place; while <i>near him</i> the tire of the cart-wheel
131	<i>Warm by the forge within</i> they watched the laboring bellows,
135	<i>Down the hillside hounding</i> , they glided away o'er the meadow.
152	Harvests were gathered in; and <i>wild with the winds of September</i>

Line#	Line
185	When from the forest at night, <i>through the starry silence</i> , the wolves howled.
186	Late, <i>with the rising moon</i> , returned the wains from the marshes,
193	Unto the milkmaid's hand; whilst <i>loud and in regular cadence</i>
194	<i>Into the sounding pails</i> the foaming streamlets descended.
201	Struggled together like foes in a burning city. <i>Behind him</i> ,
202	Nodding and mocking along the wall, <i>with gestures fantastic</i> ,
208	Such as at home, <i>in the olden time</i> , his fathers before him
217	So, <i>in each pause of the song</i> , <i>with measured motion</i> the clock clicked.
221	<i>And by her beating heart</i> Evangeline knew who was with him.
246	<i>And from our bursting barns</i> they would feed their cattle and children."
254	Then <i>with a pleasant smile</i> made answer the jovial farmer:--
265	<i>As apart by the window</i> she stood, with her hand in her lover's,

Locative inversions (§1.1.5)

Line#	Notes	Line
12		<i>Waste</i> are those pleasant farms, and the farmers forever departed!
33		<i>Strongly built</i> were the houses, with frames of oak and of hemlock,
35		<i>Thatched</i> were the roofs, with dormer-windows; and gables projectin
43		<i>Solemnly down the street</i> came the parish priest, and the children
45		<i>Reverend</i> walked he among them; and up rose matrons and maidens,
53		Dwelt in the love of God and of man. <i>Alike</i> were they free from
55		<i>Neither locks</i> had they to their doors, nor bars to their windows;
62		<i>Stalworth and stately in form</i> was the man of seventy winters;
63		<i>Hearty and hale</i> was he, an oak that is covered with snow-flakes;
64		<i>White as the snow</i> were his locks, and his cheeks as brown as the oak-leaves.
65		<i>Fair</i> was she to behold, that maiden of seventeen summers.
66		<i>Black</i> were her eyes as the berry that grows on the thorn by the wayside,
68		<i>Sweet</i> was her breath as the breath of kine that feed in the meadows.
70		Flagons of home-brewed ale, ah! <i>fair in sooth</i> was the maiden,
71		<i>Fairer</i> was she when, on Sunday morn, while the bell from its turret
85		<i>Rudely carved</i> was the porch, with seats beneath; and a footpath

Line#	Notes	Line
87		<i>Under the sycamore-tree</i> were hives overhung by a penthouse,
90		<i>Farther down</i> , on the slope of the hill, was the well with its moss-grown
92		Shielding the house from storms, <i>on the north</i> , were the barns and the farm-yard,
93		<i>There</i> stood the broad-wheeled wains and the antique ploughs and the harrows;
94		<i>There</i> were the folds for the sheep; and there, in his feathered seraglio,
98		<i>Far o'er the gable</i> projected a roof of thatch; and a staircase,
107		<i>Happy</i> was he who might touch her hand or the hem of her garment!
112		<i>Bolder</i> grew, and pressed her hand in the dance as he whispered
130	null copula	<i>Bursting with light</i> seemed the smithy, through every cranny and crevice,
139		<i>Lucky</i> was he who found that stone in the nest of the swallow!
148		<i>Now</i> had the season returned, when the nights grow colder and longer,
153		Wrestled the trees of the forest, as Jacob of old with the angel.
157	x2	<i>Cold</i> would the winter be, for <i>thick</i> was the fur of the foxes.
158	x2	<i>Such</i> was the advent of autumn. <i>Then</i> followed that beautiful season,
160		<i>Filled</i> was the air with a dreamy and magical light; and the landscape
171		<i>Now</i> recommenced the reign of rest and affection and stillness.
179		<i>Then</i> came the shepherd back with his bleating flocks from the seaside,
180	x2	<i>Where</i> was their favorite pasture. Behind them followed the watch-dog,
184		<i>Regent of flocks</i> was he when the shepherd slept; their protector,
186		<i>Late</i> , with the rising moon, returned the wains from the marshes,
188		<i>Cheerily</i> neighed the steeds, with dew on their manes and their fetlocks,
192		<i>Patiently</i> stood the cows meanwhile, and yielded their udders
203		Darted his own huge shadow, and vanished away into darkness.
210		<i>Close at her father's side</i> was the gentle Evangeline seated,
212	x2	<i>Silent awhile</i> were its treadles, at rest was its diligent shuttle,
218	?	Thus as they sat, <i>there</i> were footsteps heard, and, suddenly lifted,
219	?	Sounded the wooden latch, and the door swung back on its hinges.
232		<i>Ever in cheerfullest mood</i> art thou, when others are filled with
243		<i>Then</i> made answer the farmer:--"Perhaps some friendlier purpose

Line#	Notes	Line
254		<i>Then with a pleasant smile</i> made answer the jovial farmer:--
255		" <i>Safer</i> are we unarmed, in the midst of our flocks and our cornfields,
260		<i>Built</i> are the house and the barn. The merry lads of the village

Verb final (§1.1.6)

Line#	Notes	Line
149	SOV	And <i>the retreating sun</i> the sign of the Scorpion <u>enters</u> .
207	OSV	Fragments of song <i>the old man</i> <u>sang</u> , and carols of Christmas,

Miscellaneous (§1.1.7)

Line#	Notes	Line
110	No do-support	<i>Knew not</i> which beat the louder, his heart or the knocker of iron;
130	null copula	<i>Bursting with light</i> seemed the smithy, through every cranny and crevice,
220	V/CP cont	Benedict knew <i>by the hob-nailed shoes</i> it was Basil the blacksmith,
239	sentential subject	<i>What their design may be</i> is unknown; but all are commanded
261	CSC?	<i>Strongly</i> have built them <i>and well</i> ; and, breaking the glebe round about them,

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Gretchen Kern
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