An Inventory & Discussion of English Futurity

Analysis, History, and Evolution of Future Expressions with Guidance on Usage

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11/24/2009

Abstract: Detailed description of the ten ways expressing futurity in Modern English with historical context, discussion of usage, and guidance based on both prescriptive and descriptive grammar. Included is a discussion of the overall structural forms and syntactic governance of utterances in English with respect to aspect, mood, negation, and tense with special attention to how they relate to rules governing future expressions.

An Inventory and Discussion of English Futurity

I began this project with the intent of providing a simple, straightforward explanation of a grammar quandary that I had in the past not understood – that is, when to use shall versus when to use will. I knew there had to be some easily expressed rule or guidance regarding this usage but what I had found instead was that most people have no clue which one to use and when. Most Americans seem to feel that the two are equivalent forms and, having never been taught shall in school, tend to view it as an archaic form and thus don't use it at all. The case is similar in British usage with a higher incidence of shall in everyday speech, but again with this usage lacking any base in the speaker actually understanding the purpose of the verb and its relationship to will. By far the highest frequency of usage of shall occurs in non-native speakers who have learned English as an additional language. This is likely the result of the more prescriptively driven approaches of the teaching methods to which they have been exposed. Even with this higher incidence of usage though, understanding of its purpose appears to be lacking if not missing entirely with many non-natives who actively use shall displacing will almost entirely in their speech.

Years of teaching English to non-native speakers has given me a sort of insider's view into this shall versus will phenomenon. What I have found is that asking any two native-speaking English instructors when to use a certain grammatical or lexical construction will often result in three, four, five, or more often conflicting 'rules.' What this shows is that not only do students of the language not generally understand the grammar, but most often native speakers and in also those tasked with teaching the language do not fully understand the grammar and proper rules of usage. In surveying speakers of the language, teachers, and the content of method books and grammar guides, it has become quite obvious to me that in regard to futurity in English this confusion and uncertainty goes well beyond the simple issue of shall versus will but that it extends to the entire spectrum of future forms. Thus, I have undertaken this paper as a survey of all of futurity in English with great attention paid to the root of future forms, their history, development, and changes that have occurred. These forms are divided into logical categories and their usage fully explained described in detail. Finally, with the hope that the proceeding text provides ample background for understanding the roles of the ten forms of future expression – including shall and will, simple guidance is given for reference in usage, teaching, or developing course materials.

- Drew Ward

November 24th, 2009

I.   Introduction

The purpose of this paper is to provide an inventory of manners of expressing futurity in English. There are ten such forms in active use in modern English and a detailed description of each is provided including the etymology, history, and development of that future expression including when applicable its evolution from a previous non-future usage to the current meaning today. In fully understanding the purpose and usage of these future forms, it is necessary to understand quite a bit more than just futurity. Included in this paper are two parts. The first part discusses the overall structure of utterances in English including such things as tense, aspect, mood, and word order. It discusses each of these topics in reasonable detail but more importantly explores their role in relation to each other and to the language as a whole. This, holistic approach to discussing grammar is intended to reflect the interworkings of the language and the various ways in which the syntax and semantics of the English function together, complimenting and affecting the forms and behavior of the various attributes of the utterance. It is hoped that in understanding these concepts, the guidance provided for the future forms listed in the second part be better understood.

The second part of this paper provides a listing of these ten future forms. In doing so, it draws on both traditional grammatical and linguistic terminology and principles but also uses terminology unique to the author. Most of this terminology is described upon first usage within the body of the paper; otherwise, a description is provided in the notes section at the end of the text. Two conventions used in this text may be confusing and will be explained here: In discussing aspect the traditional reference to four aspects (simple, perfect, continuous (or progressive), and perfect continuous) is discarded in favor of a more logical approach based on the actual operation of the language versus adherence to convention. In the approach herein, English is said to have two aspects (informational and durational) occurring in both raw and perfected forms.   This system, although the creation of the author, is similarly proposed by Chomsky in his works on Transformational Grammar and by numerous other linguists in recognizing a need to reference the differing behaviors of verbs which are temporally delimited versus those which are. Terms like durative and cursive have been proposed among others with the primary classifications being focused on verbs that reflect activities (or those with inherent duration) and those which tend to have a more informational sense (those with no inherent duration). Some have classified these as stative versus active or process versus action verbs. Certainly in some languages these sorts of classifications may indeed be valid. However in English, all but a few verbs occur in both time limited and delimited forms – expressing both what happens and what is happening. For this reason, the terms informational and durational are used herein for discussion of English aspects. This is based on the purpose of the various expressions within each aspect and the inherent limits on usage as regulated by these forms. This classification also acknowledges that 'the perfect' is not a separate aspect or group of aspects, but merely the completed forms of the two primary aspects. In order to prevent confusion with other

usage in forms such as imperfective and perfective, and the standard perfect, the phrase 'perfected' is used herein. Thus English is proposed to be divided into two aspects Informational (A_{INF}) and Durational (A_{DUR}) with raw and perfected (A_{INF}^{P} and A_{DUR}^{P}) forms. Finally, it should be noted that when reference to auxiliary forms (usually modals) occurs in this paper, these forms are presented without the postpositional TO which is usually attached to many forms. This is based on the proposal that this TO is not actually a part of the modals themselves, but rather an effect of their structure and rules governing the forms of their subordinates. Thus OUGHT TO will appear as OUGHT, HAVE TO as HAVE, GOING TO as BE + GOING, etc. This usage shall become obvious upon discussion of the structural classes of these modals in Part II.

II. Overall Structure & Governance of Utterances in English

1. Future: Tense or Mood

It is a common misconception that while present and past are true tenses in English, that the future tense is actually a mood. This is an understandable assumption as most verbs are clearly declined for use in present and past formations while futurity in English is expressed with either present tense forms with the addition of an identifying future time phrase, or more often with a modal construction.

Although structurally differing from the more straight forward forms of the present and past tenses, the future is semantically as equal in tense categorization as are present and past. It is important to recognize that future, like present and past, is not a single tense, but rather a temporal grouping for expression of time beyond the present (near future, distant future, immediate present, far distant past, etc). The proceeding section will show that while often involving modality, Future in English is in fact a tense, and while interrelated with modality is not a mood.

2. Semantic Properties of Temporal Groupings (tenses)

This section discusses three grammatical categories – aspect, tense, and mood as they relate to temporal reference and to each other.

   a. **Terminology:** Tense and mood both entail relations to points in time in their semantic properties. Four points of time measurement come into play when analyzing either category:[1]

      i. **Time of Utterance**

1. T_{UTT}
2. Defined as the time at which the utterance is made.

ii. **Time of Assertion**

1. T_{AST}
2. Defined as the time at which the assertion is made.

iii. **Time of Completion**

1. T_{COM}
2. Defined as the time at which the assertion is completed.

iv. **Time of Evaluation**

1. T_{EVL}
2. Defined as the time at which the utterance is evaluated as true as related to the modal qualification placed on the assertion in the utterance.

b. **TENSE:** Tense as a pure grammatical category deals only with the relation of T_{UTT} with T_{AST} as placing the assertion before, after, concurrent with, or during the utterance. Tense however cannot exist in a semantic vacuum and always occurs side by side with mood which further involves T_{EVL}.

i. In English the distinction can be made between Pure Tense (temporal placement in the realis moods), and tense with further modal qualification, or Modal Tense (temporal placement in the irrealis moods).

ii. Because current discussion on mood and modality does not fully agree whether all moods fit into the realis/irrealis classification, and because modality in English is even more in dispute than most languages, for the purposes of clarity in this paper Pure Tense will refer to temporal reference in situations in which the assertion is known to be true at the time of utterance and Modal Tense will refer to temporal reference in situations in which the assertion is not known to be absolutely true at time of utterance.

iii. **NEGATIVES:** as a clarification to the above, especially with regard to grouping the Pure Tense and Modal Tense relationships, it must be realized that in English, negatives are not a separate mood. Just as the word order of English is set, so is its directional syntactic hierarchy. Simply put, things to the left modify things to the right in a construction. This results in indicative constructions (and so forth with other moods) remaining indicative whether the proposition expressed is negative or affirmative. This is quite obvious with many modal

constructions as most modals have no semantic negative[2] even when a structural negative may be analyzed by speakers to exist. Take for instance:

1. He must <u>drink water</u>.

2. He must <u>not drink poison</u>.

3. He must<u>n't drink that</u>.

4. She has <u>to go to work</u>.

5. She has <u>to not go to work</u>.

6. She doesn't <u>have to go to work</u>.

In (1) the actor is HE, the modal MUST requires that HE perform the action *'drink water'*. Likewise in (2) the same actor is required by the same modal that he 'not drink poison'. Even in (3), the supposed negative of MUSTN'T still proves to be only an orthographic construction as N'T still functions not as a component of the modal MUST, but as a component of the required action *'not drink that'*. Compare this to (4) in which an equivalent modal form is used. In (4) the actor SHE is required by the modal HAVE to perform the action *'go to work'*. Like with MUST, (5) requires the actor to *'not go to work'* (she is perhaps forbidden from attending that day). Yet in comparison to MUST, HAVE has the added versatility of being able to take a negated form so that in (6) SHE is NOT required to perform the action *'go to work'*. In (3) and (5) the modal is above the negative marker in hierarchy and thus modifies the entire phrase to its right including the negative whereas in (6) the negative marker is above the modal in hierarchy and thus negates everything to its right creating the opposite of the required mood.

In Pure Tense constructions, the hierarchy is maintained just as it is with the modals above, as tense and agreement is actually carried out via the auxiliary verb and not the content verb with:

7. I do <u>drink wine</u>.

8. He does <u>drink wine</u>.

9. He does <u>not drink wine</u>.

10. He did <u>drink wine</u>.

11. He did <u>not drink wine</u>.

12. *I drink <u>not wine</u>.

13. *He no <u>does drink wine</u>.

In (7) and (8) *'drink wine'* is the assertion and subject agreement and zero tense marking (present) assigned to the auxiliary verb do (as is always the case in unabbreviated constructions of the Informational Aspect (A_{inf}). In (9) we have the exact same construction except that the negative marker has been added to the assertion with subject he and agreed auxiliary verb does acting upon *'not drink wine'* as a whole unit. In (10) and (11) past tense marking has been added to the auxiliary verb to resulting in DID with the assertion still being *'drink wine'* in (10) and *'not drink wine'* in (11). In positive statements in the present and past tenses within this aspectual construction it is possible and in fact normal to abbreviate the auxiliary verb into a verbal contraction with the assertion as either [auxiliary + content verb] with (7) becoming *'I drink wine'* [drink + Ø agreement marker + Ø tense marker] or [do + drink = drink]; (8) becoming *'he drinks wine'* [drink + 3rd Person Singular agreement marker + Ø tense marker] or [do<u>es</u> + drink = drink<u>s</u>]; and (10) becoming [drink + Ø agreement marker + past tense marker] or [d<u>id</u> + drink = dr<u>a</u>nk].

The second possible abbreviation is [auxiliary + negation]. In (9) auxiliary does expresses the same zero marked present tense of (7) and (8) and the additional marked 3rd person singular agreement marking of (8); this is combined with the negative marker NOT to form a contracted form DOESN'T. These negative contractions differ from the [auxiliary + content verb] abbreviations above in that they are purely syntactic shortenings but not semantic combinations. This is because while the tense and person markings of the auxiliary are integrated into the verbal abbreviation, negation is not integrated into the whole of the negative contractions. This shortening is merely a tool of convenience of speaking and writing and not only does DOESN'T not act as a single semantic unit like the verbal forms, but indeed creates the appearance of semantically false meaning by borrowing the negative marker from the verb phrase in which it belongs. This means that the potential for DOESN'T in (9) actually hides the true structure of the sentence: '*He does <u>not drink wine'</u>* clearly shows the auxiliary as a syntactically single unit carrying the semantic values of aspectual marking, tense, and agreement. The alternative to (9) with abbreviated [auxiliary + negative] forming the negative contraction, doesn't convey that same clarity of pattern and hierarchy of modification in its form (9a) *'He doesn't drink wine.'* Most people would group the units of (9a) in exactly the same manner as they would (7), (8), or (9) – *'He doesn't <u>drink wine</u>.'* This of course would be incorrect as the actual semantic units give us *'He doesn<u>'t drink wine</u>.'* It is shortened forms, such as these negative contractions, that lend speakers to falsely analyze auxiliaries and auxiliary modals as having a negative form when in fact they don't as the negative belongs to the verb phrase which they are modifying in the utterance hierarchy.

This regulating hierarchy of word order in English, evidenced by the issues created by negative contractions, is further shown in the incorrectness of forms in which word order is violated. Observe that (12) *'*I drink not wine'* is not possible and creates a form that would semantically read *'*I drink <u>not wine</u>'* with *'not wine'* being some sort of thing like the vintner's version antimatter that the subject I drinks. (13) *'*he no does drink wine'* does not create a similar problem of logic, but instead creates a syntactic impossibility by negating the auxiliary and everything following it: *'*he no <u>does drink wine</u>'* so that the actual relation between the subject of the utterance and the auxiliary which carries the agreement, aspectual marking, and tense of the utterance is made impossible by the intervening negative basically creating a nonsensical construction that cannot be read in any way as logical.

So, whereas with situations in which the proposition of the utterance is not known to be true T_{EVL} comes into play, this operates independently of negation due to hierarchy with only T_{UTT} and T_{AST} coming into play when the proposition is known to be true. Thus whether negative or affirmative, pure tenses occur only in the indicative moods in constructions in the declarative and interrogative.

c. **TENSE & ASPECT:** Tense as a comparison of T_{UTT} to T_{AST} operates the same regardless of proposition or structure of the utterance. However the relevance of tense to the proposition differs depending on the aspect. Firstly modern English only has two aspects – informational A_{INF} and durational A_{DUR}. Both of these aspects occur in raw and perfected (completed) forms A_{INF}^{P} and A_{DUR}^{P}. Compare:[3]

   i. **Informational Aspect:** The Informational Aspect in English (also referred to as simple aspect or indefinite aspect) is used to express information that requires no reference to duration or continuous nature of the assertion involved. The informational is also used to express habitual actions. In referencing tense, the informational aspect usually only has the potential to refer to past or present assertions using Pure Tense in declined forms. There is no non-modal future form in the informational aspect and thus a non-qualified (known true) future cannot be expressed through any verbal form within the aspect. It is however possible to express pure future by using the present tense forms of the aspect with the addition of a future time phrase. Observe:
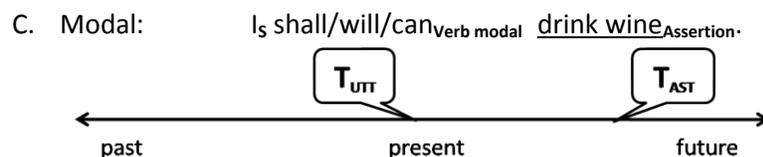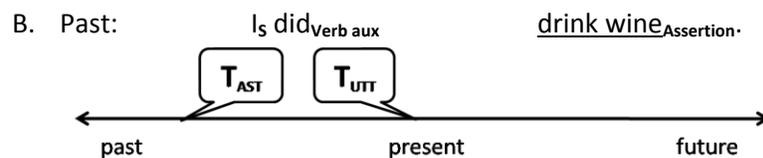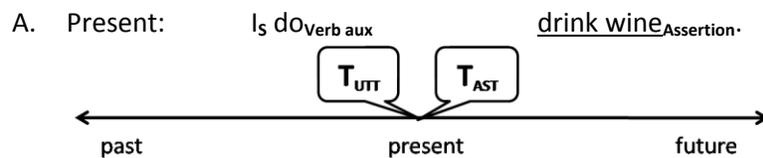
   1. **Santa Claus comes tonight!**
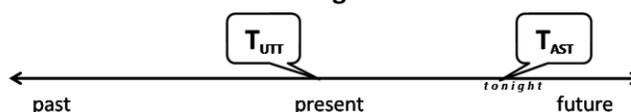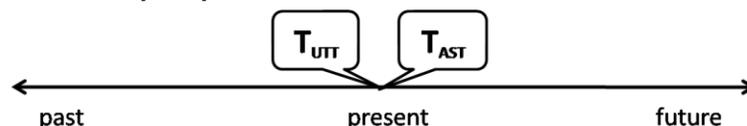

   2. **The maid comes tomorrow.**
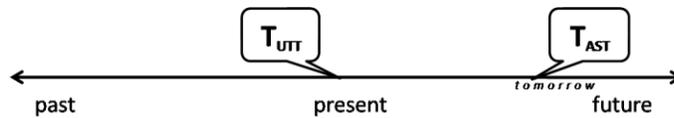
Forms such as these with their raw forms (1) Santa Claus$_S$ does$_{Verb\ aux}$ come$_{Assertion}$ tonight$_{Future}$ and (2) The maid$_S$ does$_{Verb\ aux}$ come$_{Assertion}$ tomorrow$_{Future}$ are the only Pure Future expressions possible in the informational aspect. These forms are semantically possible because the future event is a concrete known. All other futurity within this aspect, is by nature uncertain and thus uses a modal form. In fact what is traditionally referred to as the future form of this aspect should be better termed the modal form so that within the Informational Aspect you have two temporal forms with the auxiliary verb do and one modal form with no intervening auxiliary:

A. Present: I$_S$ do$_{Verb\ aux}$ drink wine$_{Assertion}$.

B. Past: I$_S$ did$_{Verb\ aux}$ drink wine$_{Assertion}$.

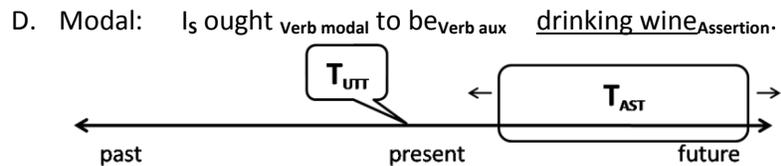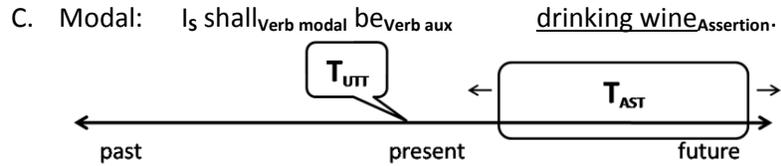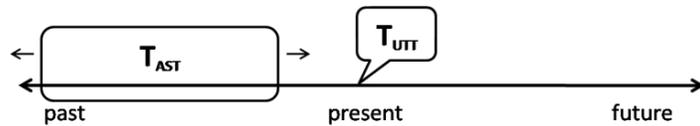C. Modal: I$_S$ shall/will/can$_{Verb\ modal}$ drink wine$_{Assertion}$.

ii. **Durational Aspect:** The Durational Aspect in English (also referred to as progressive aspect or continuous aspect) is used to express information that requires reference to duration or continuous nature of the assertion involved particularly for activities. The informational is also used to express repeating actions which may be seen as habitual but only when attention toward the activity nature of the action is required. Compare:

1. **I run every day.**

2. **I am always running everywhere because I am so busy.**

The Informational Aspect is used in (1) because it is an habitual action. (2) is however, an activity that is a repeating action while not being habitual and thus Durational Aspect.

In referencing tense, the durational aspect has declined forms for the present and past using the auxiliary be in the same manner in which do is employed in the informational. Also like the informational, the durational uses present tense forms combined with a future time element to express Pure Future. Unlike the rare examples given in the informational aspect however, combining the present tense forms of the durational aspect with a future times phrase is the normal manner of expressing Pure Future in English. Pure Future in the Durational is much more common than in the Informational due to the nature of this aspect. The durational deals primarily with activities and activities are much more predictably true or false in the future than the generalizations of the informational aspect. Likewise confidence in habitual actions (normally the realm of the informational) can never be fully sure in regard to the future as some event or decision may preclude that habitual nature in future times.

As with the informational Pure Present tense is declined for subject agreement via the auxiliary with the present remaining unmarked, the Pure Past is declined for both agreement and tense in the same way, and as mentioned above Pure Future is expressed via the present with some additional future time phrase. All other futurity within this aspect, is by nature uncertain and thus uses the aspect's modal form. As mentioned with regard to the informational, what is traditionally referred to as the future form of this aspect should be better termed the modal form so that within the Durational Aspect you have two temporal forms and one modal form but unlike the informational all three forms of the durational retain the auxiliary BE – declined in present and future tenses and in the modal constructions occurring as either finite BE or infinitive TO BE depending on structural class of the modal used:[4]

A. Present: I$_S$ am$_{Verb\ aux}$ drinking wine$_{Assertion}$.

B. Past: I$_S$ was$_{Verb\ aux}$ drinking wine$_{Assertion}$.

C. Modal: I_S shall$_{Verb\ modal}$ be$_{Verb\ aux}$ <u>drinking wine</u>$_{Assertion}$.

D. Modal: I_S ought $_{Verb\ modal}$ to be$_{Verb\ aux}$ <u>drinking wine</u>$_{Assertion}$.
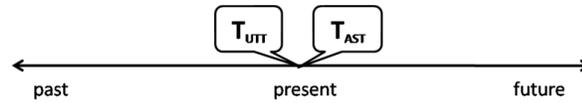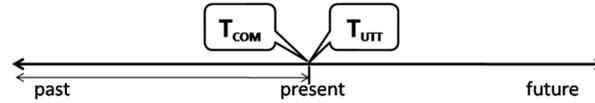

Note from the arrows on either side of the T_{AST} range, that unless specified with a limiting qualification within the utterance, that the beginning and end of the assertion is not evident. With an added qualifying term in (D) such as 'until 9 o'clock' the rightmost arrow would be removed as the terminus of the duration of the assertion would be known to be 9 o'clock, however the initial arrow would be retained as without further information the start of the assertion is still unknown.

iii. **Perfected Informational Aspect:** The Perfected Informational Aspect (A_{INF}^P) in English (also referred to as perfected simple aspect; present perfect, past perfect, and future perfect; or simply the perfect) is not a separate aspect, but rather the perfected forms of the Informational Aspect. It is used in much the same ways as the raw informational to express information that requires no reference to duration or continuous nature of the assertion involved and to express habitual actions. In perfecting the aspect however, it becomes possible to specify a point of completion for the assertion – something that is not possible in the raw informational. In referencing tense, unlike in raw aspectual forms, the perfected aspects have only the potential to refer to assertions relevant to past or present using Pure Tense in declined forms. Note that the word relevant is used for perfected forms when discussing tense. This is because with the perfected forms being used to reference a point of completion for the assertion, tense (temporal comparison) deals with a new reference point – the Time of completion (T_{com}). This measure differs from raw aspects in that those non-perfected forms do not include an option of specifying a point of completion. Compare:
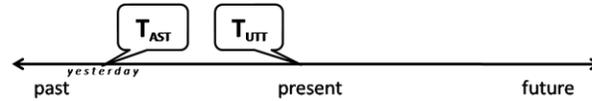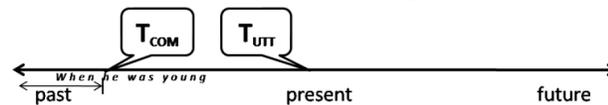
1. **John teaches history.**

T_{UTT} T_{AST}

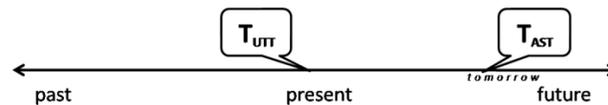past   present   future

2. John has taught history.

T_{COM} T_{UTT}

past   present   future

3. John taught history yesterday.

T_{AST} T_{UTT}

yesterday

past   present   future

4. John had taught anthropology when he was young.

T_{COM} T_{UTT}

When he was young

past   present   future

5. John teaches history tomorrow.

T_{UTT} T_{AST}

tomorrow

past   present   future

6. John will have taught history by tomorrow.

T_{UTT} T_{COM}

tomorrow

past   present   future
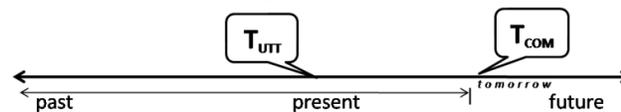
Note that T_{AST} is missing from the above diagrams. This is because perfected constructions do not concern themselves with the time at which the assertion occurs, but rather only with the time by which the assertion is completed. Note also from the arrows that without further qualifying information within the utterance, the exact point of completion is unknown as well. What is known is the time by which the completion had occurred, that is to say that it may not be known exactly when the assertion is completed, but what is know is that *as of* a given time that completion has occurred.

As of is the key phrase for perfected constructions and in the perfected informational aspect the information conveyed is that as of a given point in time the assertion is completed. For the perfected informational aspect in the present, no time phrase is ever allowed as the time of completion always coincides with the time of the utterance or [*as of* T_{UTT}, T_{COM}]; this provides the

rule: perfected forms in the present tense can never have a specified time qualification as the only acceptable time is the time of the utterance (which is always now). The only difference in the perfected informational aspect among the present, past and future tenses is that the point of completion of the assertion T_{COM} occurs at different times relative to the time of utterance T_{UTT}. Thus, while in the present tense no time phrase may be employed, in both past and future formations precise time phrases (exact times future or past, time ranges, ordering of events clearly known to be before or after T_{UTT}, or context logically placing the T_{COM} before or after T_{UTT}) must be used at all times.

As futurity of completion is by nature uncertain, the future tenses in the perfected informational aspect are expressed using a modal form. Again, what is traditionally referred to as the future form of this aspect should be better termed the modal form so that within the Perfected Informational Aspect you have two temporal forms and one modal form with all three forms of the durational retain the auxiliary HAVE – declined in present and future tenses and in the modal constructions occurring as either finite HAVE or infinitive TO HAVE depending on structural class of the modal used:

A. Present: I$_S$ have$_{Verb\ aux}$ drunk wine$_{Assertion}$.

B. Past: I$_S$ had$_{Verb\ aux}$ drunk wine$_{Assertion}$.

C. Modal: I$_S$ shall$_{Verb\ modal}$ have$_{Verb\ aux}$ drunk wine$_{Assertion}$.

D. Modal: I$_S$ ought $_{Verb\ modal}$ to have$_{Verb\ aux}$ drunk wine$_{Assertion}$.
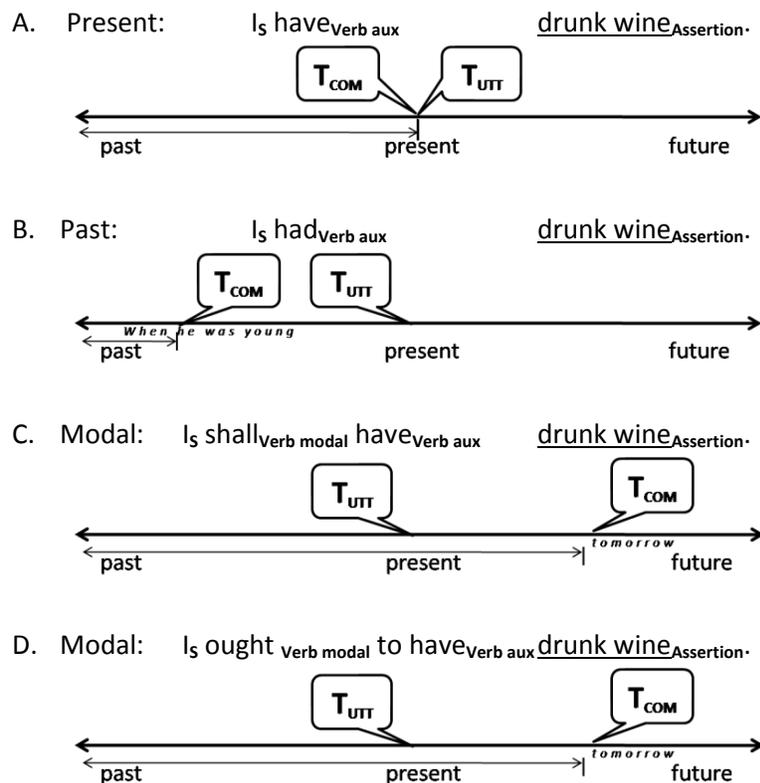
iv. **Perfected Durational Aspect:** The Perfected Durational Aspect in English (also referred to as perfected progressive aspect; perfect progressive, perfect continuous present perfect continuous, past perfect continuous, and future

perfect continuous; or simply the continuous in older texts) is like the Perfected Informational, not a separate aspect, but rather the perfected forms of the Durational Aspect. It is used in much the same ways as the raw durational to express information that requires reference to duration or continuous nature of the assertion involved and to express habitual actions. In perfecting the aspect however, it becomes possible to specify a point of completion for the assertion – something that is not possible in the raw informational, and to then measure the duration of the assertion up to that point in time. In referencing tense, unlike in raw aspectual forms, the perfected aspects have only the potential to refer to assertions relevant to past or present but not future using Pure Tense in declined forms. Note that the word relevant is used for perfected forms when discussing tense. This is because with the perfected forms being used to reference a point of completion for the assertion, tense (temporal comparison) is primarily concerned with the Time of completion (T_{com}). This measure differs from raw aspects in that those non-perfected forms do not include an option of specifying a point of completion. The Perfected Durational Aspect differs still from the Perfected Informational Aspect in that while the perfected Informational is only concerned with the relation of T_{UTT} to T_{COM}, perfected Durational retains reference to T_{AST} and allows for relation of T_{UTT} to T_{COM} within the durational scope of T_{AST}. Compare first raw Durational versus its perfected forms:
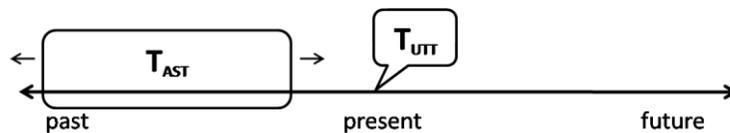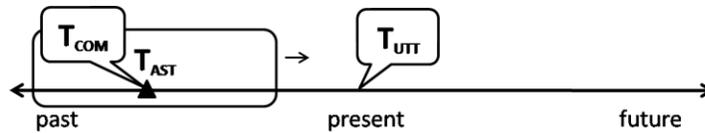
1. **John is teaching history.**
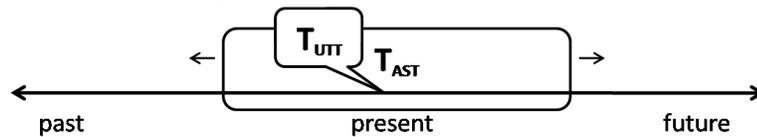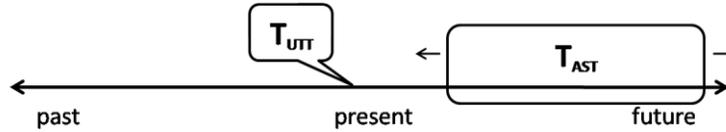

2. **John has been teaching history for two years.**
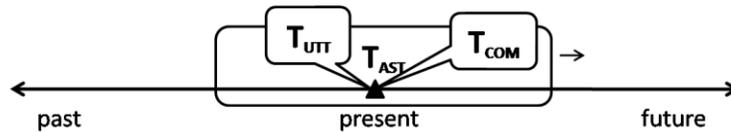
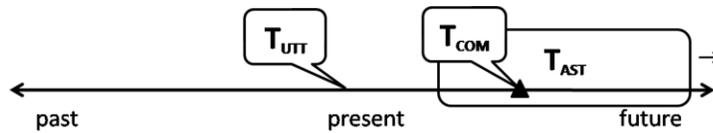3. **John was teaching anthropology at his last school.**

4. **John had been teaching anthropology since he graduated.**

**5. John will be teaching two classes tomorrow.**

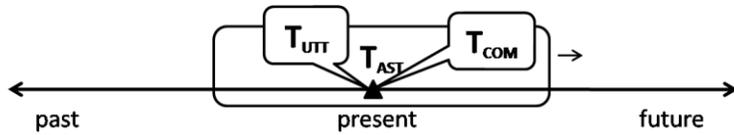**6. John will have been teaching for 6 years as of next semester.**

Note that T_{AST} is present in both raw and perfected durational forms because the duration of the assertion is key to the function of and semantic need for the durational aspect. The perfected forms integrate the added T_{COM}. Unlike T_{COM} in A_{INF}^{P} (perfected Informational Aspect) which clearly marks a terminus of the assertion, T_{COM} in A_{DUR}^{P} (perfected Durational Aspect) represents only a single point of completion within the whole of the duration of the assertion. T_{COM} in the perfected Durational is often referred to as interrupting the assertion as regardless of whether the assertion continues beyond T_{COM}, the duration of the the assertion is measurable up to that point. In the diagrams above the initial arrow has been removed to reflect this common usage in that (although not the case in the examples given) the Perfected Durational Aspect is most often used to measure the duration of an assertion up to a given point of completion so that by knowing how long something has been occurring up to a specified point in time, the start point of that assertion is thus known. Compare the difference in meaning for T_{COM} between perfected Informational and perfected Durational forms:
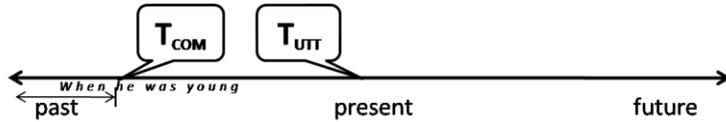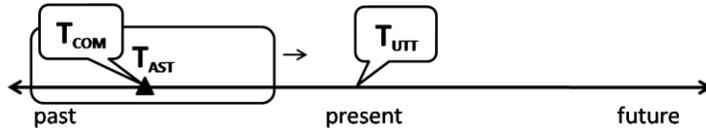
7. John has taught history.
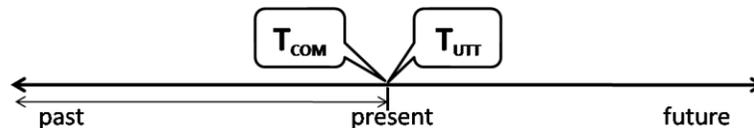
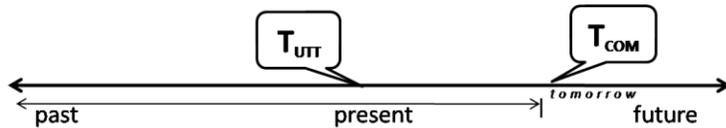**8. John has been teaching history for two years.**

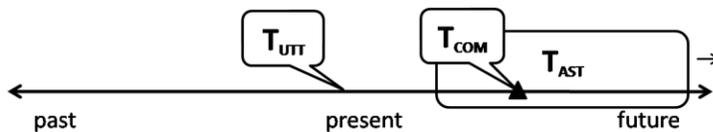**9. John had taught anthropology when he was young.**

10. John had been teaching anthropology since he graduated.

11. John will have taught history by tomorrow.

12. John will have been teaching for 6 years as of next semester.

The most noticeable difference between (7), (9), and (11); and (8), (10), and (12) is the presence of T_{AST} in the latter Perfected Durational forms. T_{COM} is still the core point of reference as both the Informational and Durational forms above are perfected (and perfection is always concerned with completion of the assertion).
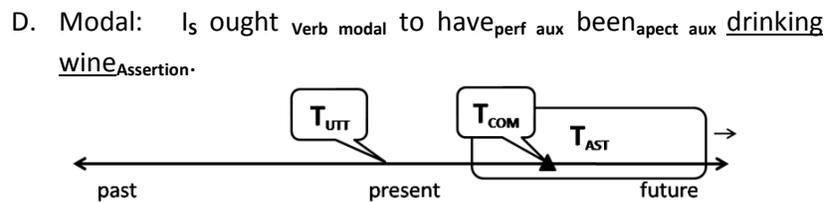
What should be noted is the differing functions of T_{COM} between the Informational and Durational aspects. T_{COM} in perfected Informational forms always coincides with the terminus of the assertion with the overall T_{AST} being irrelevant and the duration of the assertion being unknown entirely. In perfected Durational forms T_{COM} merely represents a known reference point up to which the duration of the assertion can be measured thus retaining the T_{AST} as an integral item. T_{COM} may occur at any time during T_{AST} or at the terminus of it; whether the assertion continues beyond T_{COM} is irrelevant to the purpose of

the form as no matter where T_{COM} is within the range of T_{AST}, the duration of the assertion up to that point can be measured and reported.

The presence of a small triangle diagramed above represents that the T_{COM} in the in the A_{DUR}^{P} constructions is an interruption of the assertion occurring somewhere within the durational range of T_{AST}. This again differs from A_{INF}^{P} constructions because the T_{AST} of an Informational assertion is momentary for semantic purposes because the Informational aspect lacks the ability to express duration. Thus in A_{INF}^{P} constructions T_{COM} and T_{AST} may be considered to coincide, with the only information made available being that T_{AST} is terminated as of T_{COM} and since T_{AST} can only be expressed as a given point in time and not a temporal range as with Durational constructions, for the purposes of temporal relevance (tense) $T_{COM} = T_{AST}$ in the A_{INF}^{P}. *As of* is again, the key phrase for perfected constructions and in the perfected durational aspect the information conveyed is that as of a given point in time the assertion is completed to that point (but not necessarily complete in total) and can be measured from its start. For the perfected durational aspect in the present, no time phrase is ever allowed as the time of completion always coincides with the time of the utterance or [*as of* T_{UTT}, T_{COM}]; this provides the rule: perfected forms in the present tense can never have a specified time qualification as the only acceptable time is the time of the utterance (which is always now). This prohibition of qualifying time phrases in the present applies to time phrases that would seek to move the T_{COM} but not from phrases of duration such as 'for two hours' as in A_{DUR}^{P} in the present, the T_{COM} must coincide with the T_{UTT}, but the T_{AST} can occur in any range of times before, beginning with, following, ending with the present so long as that T_{AST} is occurring at the very least during T_{UTT}. This means that the only quantifiable difference between the raw and perfected Durational Aspect is that the perfected forms allow for and require the addition of T_{COM} within the range of T_{AST}. The difference in A_{DUR}^{P} among the present, past and future tenses is that the point of completion of the assertion T_{COM} occurs at different times relative to the time of utterance T_{UTT}. This does not necessarily affect the T_{AST} of the assertion moving its range temporally forward or backward. It does however require that the range of the T_{AST} include T_{COM} and that that temporal point of T_{COM} occur within a portion of the duration of T_{AST} that occurs concurrent with the tense of the construction. In other words, in present tense A_{DUR}^{P} constructions T_{UTT} must coincide with T_{COM} which must occur within a range of T_{AST} that also coincides with T_{UTT}; in the past, T_{UTT} must occur after T_{COM} with T_{COM} occurring within a range of T_{AST} that is also in the past; and in the future both T_{COM} and the range of T_{AST} in which it occurs must occupy temporal space after T_{UTT}. Again, while in the present tense no time phrase may be employed, in both past and future formations precise time phrases (exact times future or past, time ranges, ordering of events clearly

known to be before or after T_{UTT}, or context logically placing the T_{COM} before or after T_{UTT}) must be used at all times and to fully exploit the purpose of $A_{DUR}{}^P$ constructions the additional information of a measure of the duration of T_{AST} up to T_{COM} should be included.

As futurity of completion is by nature uncertain, the future tenses in the perfected durational aspect are expressed using a modal form. Again, what is traditionally referred to as the future form of this aspect should be better termed the modal form so that within the Perfected Durational Aspect there are two temporal forms and one modal form with all three forms of the perfected durational retaining the perfecting auxiliary HAVE – declined in present and future tenses and in the modal constructions occurring as either finite HAVE or infinitive TO HAVE depending on structural class of the modal used followed by the aspectual auxiliary BE in past participle form BEEN:

A. Present: I_S have$_{perf\ aux}$ been$_{apect\ aux}$ drinking wine$_{Assertion}$.

B. Past: I_S had$_{perf\ aux}$ been$_{apect\ aux}$ drinking wine$_{Assertion}$.

C. Modal: I_S shall$_{Verb\ modal}$ have$_{perf\ aux}$ been$_{apect\ aux}$ drinking wine$_{Assertion}$.

D. Modal: I_S ought$_{Verb\ modal}$ to have$_{perf\ aux}$ been$_{apect\ aux}$ drinking wine$_{Assertion}$.
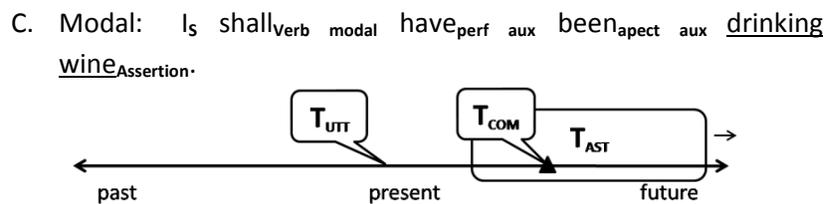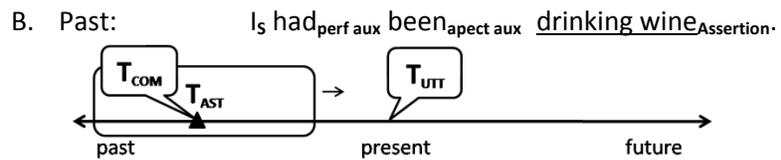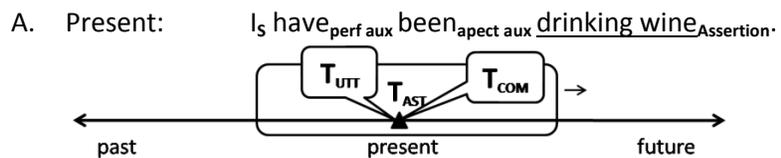
v. In summary, whilst English aspects convey differing amounts of information and types of information, tense within all forms (raw and perfected) references one or more known points in time (T_{AST} and/or T_{COM}) to T_{UTT}. The nature of this reference varies between forms depending on aspect and perfection, but in simple terms tense is nothing more than a temporal reference between these

points with the distance and direction of T_{AST}/T_{COM} from T_{UTT} determining the tense of the utterance.

When all propositions of the utterance are known to be true, Pure Tense as Pure Present and Pure Past may be used in both aspects raw and perfected and as Pure Future in raw forms. Future in perfected forms and all temporal reference when the utterance is not known to be true are expressed as Modal Tenses (or Past, Present, and Future with added modal qualification).

d. **Tense & Mood:** Unlike the relationship between tense and aspect which is very integral to both, that of tense and mood is more or less complimentary. Tense can be quantified independent of mood in that the temporal reference called for by the aspectual form of the utterance is obvious regardless of the mood expressed by the proposition. Mood however, is less separable from tense. In the Realis moods (any utterance in which the proposition is known to be true), Pure Tense – that is, tense without further modal qualification, is allowable. But in many cases, this is limited to the present and past temporal ranges. In fact past analyses of tense in English have surmised that due to the universal uncertainty of futurity that the use of Pure Tense is always limited to the present and past as only assertions that are happening or have happened can be known to be true.[5] As societal and environmental factors have improved however, culture has accepted that in some cases, certainty in futurity is indeed possible. Language has in turn accepted this cultural change and in English now allows for the use of Pure Future expression via the constructions in A_{INF} and A_{DUR} using the present tense forms with the addition of a qualifying time phrase placing T_{AST} at a time future of T_{UTT}. Aside from these limited allowed uses though, all other future forms require a modal construction expressing futurity of the assertion as primary function but only while qualified as a proposition of the mood employed (Modal Future).

Model Future is the most commonly employed Modal Tense which again, is simply tense expressed with qualification of a modal proposition required to make it true. Modal Tense is used to express temporal reference whenever the assertion is not certain. This is primarily the realm of the Irrealis moods. This is quite logical as the majority of irrealis constructions occur in the future tense – the tense most likely by nature to be uncertain.

For the sake of convenience examples used in this paper have placed T_{UTT} in the present which in most constructions means that past and present assertions are likely to be certain and thus in the realis. It is still possible under this constraint to form constructions in the irrealis with modal uncertainty in the past and present such as the past subjunctive or hypothetical propositions. Often though, movement of T_{UTT} into the past or future occurs with forms such as reported or predicted speech. Likewise, irrealis modal constructions can also occur in past and present tenses. These Modal

Tenses still express present and past time like their Pure Tense counterparts, but with the added requirement for qualification within the mood employed as described with Modal Future above.

This temporal component of irrealis modality creates the complimentary relationship between tense and mood mentioned at the beginning of this section. Mood can compliment tense and in the case of the future, usually does. But, tense does not necessarily compliment mood unless temporal reference is key to the mood at hand. With mood, the temporal relevance is governed more with reference of T_{UTT} to T_{EVL} than of T_{UTT} to T_{AST} or T_{COM} as with tense. T_{EVL}, or time of evaluation refers to the time at which the proposition of the utterance is evaluated as true. This is especially true in future constructions because propositions involving a future assertion cannot be evaluated with certainty until that future time is reached. So while tense simply requires referencing the known attributes of T_{UTT}, T_{AST}, and/or T_{COM} which is known regardless of the proposition itself, mood requires additional referencing of T_{EVL} which specifically requires integration of the proposition into the equation, thus adding an additional, often complex semantic layer.

e. **Conclusion**: Although separate grammatical categories and capable of being independently analyzed, aspect, tense, and mood act together to govern the temporal semantic qualities of utterances. In English there is an integral relationship between tense and aspect with aspect governing the relevant points in time for determining temporal reference within those aspectual forms. The relationship of mood to tense is more complementary with both being able to operate independent of the other in some instances, but required to realize the full meanings of each other in the majority of utterances. This is especially true in future constructions leading the four aspectual sets (two aspects, raw and perfected) having temporally marked forms for present and past, and a third modal form which acts as the only marked (modal) future. It should thus be said that each aspect occur in present, past, and modal raw and perfected forms.

III.   Futurity in English

3. Expression of Future Tenses in English:

As stated in Section 2, tense and mood are often complimentary and especially in the future mood plays a major role. Mood however is far too extensive a topic to fully explore in one paper, much less a single section of this one. As the purpose of this paper is to convey a better understanding of future forms and usage in English, the discussion of modality will be limited

only to those moods commonly employed in expressing Modal Future in English and when applicable Modal Past or Modal Future of the Past as pertain to praeterite forms of future-marking present/praeterite pairs.

Expressions of Futurity in English are grouped into two primary semantic categories: Pure Future in which it is wholly certain that the assertion will occur, and Modal Future in which certainty of the assertion is governed by some further modal qualification. Modal Futures are further divided into those with high certainty (shall/should and will/would), neutral certainty (be + about, be + going, and be + gonna), reasonable certainty (should and ought), and low certainty (may and might).

a. **Pure Future**

Future as a Pure Tense (tense not requiring modal qualification) is employed in utterances in which future time reference is required yet the proposition of the utterance is considered certain. Pure Future can be used in the raw Informational and Durational aspects, but not in the perfected.
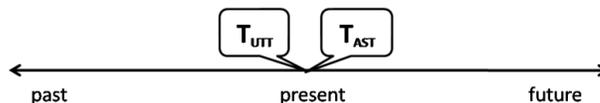
i. **Informational Aspect in the Pure Future**

The informational aspect is used to express information that requires no reference to duration or continuous nature of the assertion involved and is also used to express habitual actions. The use of the Pure Future in this aspect is limited to the former because the habitual nature of actions cannot be guaranteed with certainty in the future. Thus, the Pure Future is primarily employed in A_{INF} utterances for expression of generalizations about the future known to be certain.

1. **Structure: Present tense + future time phrase.**

The Pure Future of the Informational Aspect is formed by using the Pure Present tense form with the addition of a future time phrase such as an adverb (tomorrow, later), prepositional phrase (after dinner, before dark), or other temporal (next week, Tuesday, etc).

A. **John teaches English.**

B. **John teaches English tomorrow.**
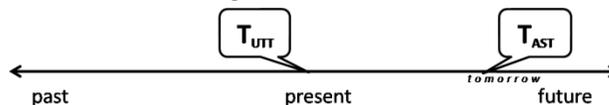
2. **Usage:**

The usage of the Pure Future in the Informational Aspect is rather limited and the examples above demonstrate one of these uses. In (A) John teaches English is a generalization and could also be seen as an habitual action. In (B) however, John teaches English tomorrow can only be read as a generalization about the future. Habitual actions cannot be reported in the future so this must be a generalization about what John will do the next day. In both the present and future forms above there is no requirement for knowing the T_{COM} or duration of T_{AST}.

ii. Durational Aspect in the Pure Future

The durational aspect is used to express information that requires reference to duration or continuous nature of the assertion involved particularly for activities. The Pure Future is primarily employed in A_{DUR} utterances for activity based assertions in which their occurrence the future is known to be certain. It is also used in situations similar to the usage of the Pure Future in the informational aspect but in which an added measure of duration of T_{AST} is provided.
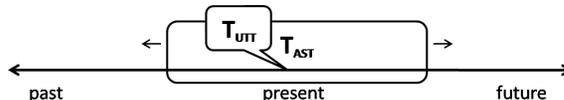
1. **Structure: Present tense + future time phrase.**

The Pure Future of the Durational Aspect is formed by using the Pure Present tense form with the addition of a future time phrase such as an adverb (tomorrow, later), prepositional phrase (after dinner, before dark), or other temporal (next week, Tuesday, etc).

A. John is eating sushi.

B. John is eating pizza tomorrow.
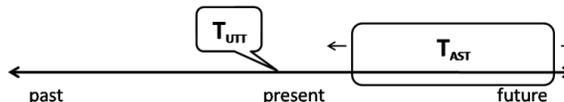
2. **Usage:**

The usage of the Pure Future in the Durational Aspect is actually the primary method for expressing Pure Future in English and is probably

the most common single future construction in the language. In (A) 'John is eating sushi' is an activity that John is doing at the time of that utterance. This differs from the present tense A_{INF} utterance above in that 'John eats sushi' would be a generalization or could be seen as an habitual action but either way would have no bearing on the activity currently occupying John whereas 'John is eating sushi' is a current activity with the inherent duration that comes along with that. In (B) The comparison between (A) and (B) is much simpler in the durational aspect as the only difference between the two is that TAST has been moved into the future in (B). As a semantic comparison it could be said that John is eating sushi now (and it may or may not be something he does regularly) but in the future of tomorrow the food John is to be eating is Pizza instead (and again we have no way of knowing whether this is habitual or not). In both the present and future forms above there is no requirement for knowing the T_{COM} or duration of T_{AST} although the nature of the assertions as activities lends an inherent undetermined duration by default.

b. Modal Future

Most expressions of futurity in English are not certain and thus use a Modal Tense construction. This Modal Future (or perhaps more clearly Modal Qualified Future) expresses the future time of an assertion but with added qualification of the mood expressed in the proposition of the utterance.

i. Structure:

1. The four aspectual sets (informational and durational, raw and perfected) have two temporal forms – one for declined true present and one for declined true past, and a third modal form. It is this modal form that is used to express Modal Futurity. The four modal forms are as follows:

    A. AINF – Informational Aspect (raw)

    I_S shall/will/can$_{Verb\ modal}$ drink wine$_{Assertion}$.
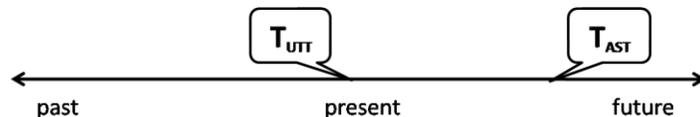
    B. AINFP – Informational Aspect (perfected)

    I_S shall$_{Verb\ modal}$ have$_{Verb\ aux}$ drunk wine$_{Assertion}$.

C. ADUR – Durational Aspect (raw)

I$_S$ shall$_{Verb\ modal}$ be$_{Verb\ aux}$ drinking wine$_{Assertion}$.

D. ADURP – Durational Aspect (perfected)

I$_S$ shall$_{Verb\ modal}$ have$_{perf\ aux}$ been$_{apect\ aux}$ drinking wine$_{Assertion}$.
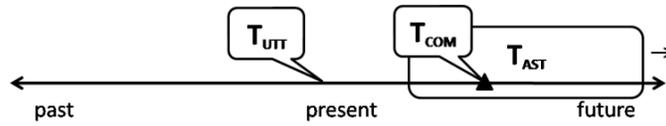
2. Modal Behavior by Structural Class

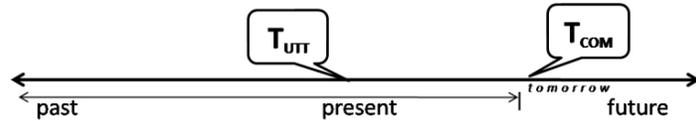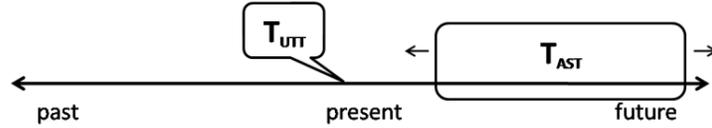Modals in English are grouped together into structural classes based on their structure, behavior, and morphological effect on the utterance they modify.[3] The term modal is used in place of modal verb or modal phrase because English uses quite a variety of forms both marked and unmarked to express mood; some of these are simple modal auxiliary verbs, others are partially inflected verbs, others still fully inflected verbs with modal functions in addition to their original meanings, and so on. So for the purpose of this discussion, a modal is any syntactically identifiable and separable unit that affects mood.

This paper discusses the eight most common modals for expression of Modal Future in modern English. These eight modals fit into three of the structural categories. These categories are listed below:

A. Class Ia: Germanic Modal Auxiliaries with Praeterite Form

Class I Modals are the most easily recognized modal verbs in English as the majority no longer have a standard use outside of their modal function. There are two sub-categories – Class Ia which includes modals such as SHALL/SHOULD, WILL/WOULD, CAN/COULD, MAY/MIGHT. These are the modal auxiliary verbs in English derived from the

standard Germanic modal system. Class Ia modals occur as present/praeterite pairs (even though the present form is used to express futurity). Class Ib modals on the other hand do not occur in the praeterite and have only one form such as with MUST.

Modals of this class have the following characteristics:

Trait	Value	Description
Form	Single	Single form in either present or coordinating praeterite; otherwise not declined for person, tense, or aspect.
Negation	No	Affirmative only, does not occur in negative expression of mood. Can provide affirmative expression of mood toward negative proposition.
Verbal Position (hierarchy)	Always occupies 1st Position (V_1)	Modals of this class always occupy the left-most position in the syntactic hierarchy of the utterance and thus take first verbal position or V_1 regardless of tense or aspect.
Subordinates	Always	Modals of this class subordinate all constructions to their right in the hierarchy of the utterance. All other modal classes and non-modal constructions must accept subordination from this class.
Accepts Subordination	Never	Class I modals always occupy left-most position in syntactic hierarchy and thus no other form can be placed before them.

		They can never be subordinated. Class I modals are incapable of subordination, even by other Class I modals.
Multiple Tense	Limited to Present/Praeterite Coordinated Pair	Unlike fully declinable verbs, Class I modals may not be declined to reflect temporal reference to the T_{UTT}. Although these modals are most often used to express futurity, the verb itself appears in either a present tense form used to express the desired modality in a single tense – usually Modal Future. Class Ia modals occur in coordinated pairs of present and praeterite forms which allow the Modal Future of the proposition to be applied to a past time or 'future of the past'.
Structure	Single Finite	Class I modals consist of a single-word undeclined verb in finite form.
Subordinate Form	Finite	Subordinated constructions take finite form in the left-most verbal position. If this left-most position of the subordinate is occupied by an additional modal, that modal (or in the case of declined modals, V_1 of that modal) occur in finite form.

These eight characteristic traits define this set of modals and their position and the behavior of other components in the utterance in which they appear. To clarify, Syntactic Hierarchy refers to the system by which syntactic components of an utterance modify or subordinate each

other in English. Word order and order of subordination in English is from left to right with units to the right in a construction being subordinated or modified by units immediately to their left. This hierarchy operates in exactly the same way as mathematical hierarchy in algebra. This hierarchy is especially important when considering the role of negation in modal constructions. Class I modals are often represented as having negative forms and these are usually represented as negative contractions with the modal verb: shall – shan't, will – won't, can – can't, etc.

As discussed in section 2:b:iii above, negative contractions are actually merely abbreviations of two semantically separate syntactic units. In the case of Class I modals seemingly negative forms are actually contractions of the modal with the initial (negative marking) component of the modal's subordinate. The left-to-right hierarchy precludes negation of Class I modals as is evidenced by the forms below:

   a.   I **will** <u>go to the store later</u>.
   b.   I **will** <u>not go to the store later</u>.
   c.   * I **no** <u>will go to the store later</u>.
   d.   ‡ I **will not** <u>go to the store later</u>.

For clarity, the left-most hierarchical unit is in bold while its subordinate is underlined. In (a) modal WILL subordinates the verb phrase 'go to the store later'. Likewise in (b) that same modal WILL subordinates a second whole verb phrase 'not go to the store later' which is a negative assertion versus the positive assertion in (a). WILL still modifies the assertion as what will be done is (affirmative) 'go to the store later' in the former and (negative) 'not go to the store later' in the latter. Note that the modality of the proposition of the utterance is not negated, but the assertion which the modal subordinates is.

In (c) NO occurs in left-most position attempting to modify 'will go to the store later', but this is not syntactically allowed because Class I modal WILL must always occur in left-most position and thus cannot be subordinated by NO. (d) is syntactically correct in structure, but the analysis given

via the bold and underlined markings makes it semantically incorrect as WILL NOT as a single modal unit does not exist. Will as is discussed in section 3.B.3 below expresses future as brought about by the will (wishes) of the subject (versus future brought about due to obligation to outside events or other modal influence). There is no logical opposite of future in that time moves forward regardless of action or attitude of the subject. So, the future is expressed by will and that future will exist as either an affirmative of the assertion (a) or as a negative of that same assertion (b) but short of the ability to stop time and create an alternative universe, (d) cannot logically be possible.

Finally, for the purposes of discussing modal effect on subordinate verbs, finite refers to the raw form of a verb often termed the 'bare infinitive' while infinitive refers to the TO + VERB construction.

B. Class IIa: Durational Aspect Verbal Modals

Class I Modals are the second most common modal form. They consist of verbal forms of otherwise non-modal verbs used in much the same way as Class I modals to affect the modality of the proposition they subordinate. All Verbal Modals are fully declinable tense and person. Class IIa verbals (BE GOING, BE WILLING, etc) occur only in the durational aspect, Class IIb (LIKE, etc) occur only in the informational, and Class IIc verbals (HAVE, NEED, WANT, etc) are fully declinable in both aspects; all may be perfected. Class II modals are often said to be equivalent forms to Class I modals required for syntactic versatility not possible with Class I such as declining for tense and aspect. This is true in some cases, but is not true of future marking modals. The Class IIa modal BE GOING is discussed below as a future marking modal.   It is often said to be semantically equivalent to SHALL or WILL, but detailed analysis shows this not to be true.

Modals of this class have the following characteristics:

Trait	Value	Description
Form	Multiple	Multiple forms matching the non-modal forms of the content verb declined for person, and tense, within the durational aspect.
Negation	Yes	Occurs in both affirmative negative expression of mood. Can provide affirmative or negative expression of mood toward affirmative and negative propositions.
Verbal Position (hierarchy)	Occupies the verbal position to the immediate left of its subordinate.	Modals of this class always occupy the position to the immediate left of their subordinate in the syntactic hierarchy of the utterance. If not subordinated by another modal, Class IIa modals take first verbal position or V_1 regardless of tense or aspect.
Subordinates	Any assertion as well as other modals beyond those belonging to structural classes that do not accept subordination.	Modals of this class subordinate all assertions to their right in the hierarchy of the utterance. Other Modal Classes that do not preclude subordination must accept subordination from this class.
Accepts Subordination	Always accepts subordination by other modals but cannot be subordinated by negative markers.	Class II modals always occupy left-most position in syntactic hierarchy not occupied by a subordinating modal. Thus no other form can be placed before them meaning they can never be subordinated by anything other than a modal, including a negative marker.

Multiple Tense	All	Class II modals may be fully declined for person and tense to reflect temporal reference to the T_{UTT}. Although these modals are most often used to express futurity, the verb itself appears in either all tenses. When Class II modals of Futurity occur in non-present tenses they allow the Modal Future of the proposition to be applied to a past or future time as T_{EVL} referenced to the T_{AST} or 'future of the past' and 'future of the future'.
Structure	BE + PRESENT PARTICIPLE: Fully declined Durational Aspect	Class IIa modals are structurally identical to the full declension and conjugation of the included content verb in the durational aspect and occur in both raw and perfected forms.
Subordinate Form	Infinitive	Subordinated constructions take infinitive form in the left-most verbal position. If this left-most position of the subordinate is occupied by an additional modal, that modal (or in the case of declined modals, V_1 of that modal) occur in infinitive form.

As with Class I modals, Class II modals cannot be subordinated by a negative marker, however unlike Class I, this class is capable of expressing the negative of the proposed mood. Hierarchy is again important when considering the role of negation in these modal constructions. Unlike Class I Modals whose use in negative contractions yields a false sense of modal negation, Class II modals retain the inherent flexibility of their content verbs

in that they have an included auxiliary which declines for person, tense, and can accept negation. For Class IIb modals, that auxiliary verb is BE which means that ISN'T, AREN'T, WASN'T and WEREN'T are valid negative contractions.

As discussed in section 2:b:iii above, negative contractions are actually merely abbreviations of two semantically separate syntactic units. The left-to-right hierarchy creates an interesting situation in which negation of Class II modals can be interpreted in two ways:

e. She **is <u>willing</u>** <u>to talk about it</u>.
f. She **is <u>not willing</u>** <u>to talk about it</u>.
g. She **is not <u>willing</u>** <u>to talk about it</u>.
h. She **isn't <u>willing</u>** <u>to talk about it</u>.

Above, the left-most hierarchical unit is in bold representing the auxiliary verb of the modal while the content verb of the modal in present participle is underlined and in bold. The entire modal's subordinate is underlined but not boldface. In the above utterances the modal is BE+WILLING (volition) and the assertion is 'talk about it' with talk occurring in infinitive form as required for subordinates Class II modals. Had a Class I modal been used talk would be subordinated in finite form as in 'I should talk about it.' In the above form modals BE is declined for person and tense to IS, which then functions with the present participle WILLING to create the volitional mood. Keeping to the left-to-right hierarchy is can be said to subordinate the participle thus making it part of the modal form. In (e) IS subordinates WILLING with the meaning "What is she? She is willing (to talk about it)." (f) and (g) introduce the concept of negative modality. Noting the underlined portions of the modal exemplifies the two possible ways in which a negative modal form could be interpreted. In (f) hierarchy has IS coordinating with NOT WILLING as a single unit. This interpretation actually negates the mood itself creating a sort of *antivolition*. Or, "What is she? She is 'not willing' (to talk about it)." The interpretation of (g) is somewhat different. While still being negative, in this example IS is interpreted as modifying the negative marker NOT while NOT in turn modifies WILLING or formulaically IS [NOT [WILLING]].

Or with the same analysis as above "What is she? She is not (willing to talk about it)." The contracted form in (h) is equally open to interpretation but in this case semantically matches the interpretation in (g).

Observe that the modal used is listed as BE+WILLING and not BE+WILLING+TO because TO is not part of the modal, but simply a result of subordination by a modal within this class, TO belonging to the subordinated verb.

C. **Class IVb: Phrasal Modals (Group 2) - Informational**

Classes III and IV concern Phrasal Modals. Phrasal modals are thus named because they are formed in the same way as phrasal verbs. That is, they include a verb as the head of the compound attached to a non-verbal qualifier. That qualifier can be an adverb, adjective, or preposition (usually without object). Class IV: Phrasal Modals (Group 2) consists of BE + ADVERB constructions.   Phrasal Modals vary in declinability with some being fully declinable in both aspects and others having only a single undeclined form. For the purpose of discussing future marking modals only Class IVb phrasals shall be considered as BE + ABOUT is the only Phrasal Modal regularly employed in expressions of futurity. Class IVb modals occur only in the informational aspect. They are fully declinable for person and tense within the informational and may be perfected.

Modals of this class have the following characteristics:

Trait	Value	Description
Form	Multiple	Multiple forms conjugation of the component verb BE, declined for person, and tense, within the informational aspect.
Negation	Yes	Occurs in both affirmative negative expression of mood. Can provide affirmative or negative expression

		of mood toward affirmative and negative propositions.
Verbal Position (hierarchy)	Occupies the verbal position to the immediate left of its subordinate.	Modals of this class always occupy the position to the immediate left of their subordinate in the syntactic hierarchy of the utterance. If not subordinated by another modal, Class IIa modals take first verbal position or V_1 regardless of tense or aspect.
Subordinates	Any assertion as well as other modals beyond those belonging to structural classes that do not accept subordination.	Modals of this class subordinate all assertions to their right in the hierarchy of the utterance. Other Modal Classes that do not preclude subordination must accept subordination from this class.
Accepts Subordination	Always accepts subordination by other modals but cannot be subordinated by negative markers.	Class IV modals always occupy left-most position in syntactic hierarchy not occupied by a subordinating modal. Thus no other form can be placed before them meaning they can never be subordinated by anything other than a modal, including a negative marker.
Multiple Tense	All	Class IV modals may be fully declined for person and tense to reflect temporal reference to the T_{UTT}. Although these modals are most often used to express futurity, the verb itself appears in either all tenses. When Class IV modals of Futurity occur in non-present tenses they allow the Modal Future of the proposition to be

		applied to a past or future time as T_{EVL} referenced to the T_{AST} or 'future of the past' and 'future of the future'.
Structure	BE + ADVERB: Fully declined Informational Aspect (IVb)	Class IVb modals consist of an adverb preceded by the verb BE, fully conjugated and declined for person and tense in the informational aspect in both raw and perfected forms.
Subordinate Form	Infinitive	Subordinated constructions take infinitive form in the left-most verbal position. If this left-most position of the subordinate is occupied by an additional modal, that modal (or in the case of declined modals, V_1 of that modal) occur in infinitive form.

Phrasal Modals differ slightly from other classes in that the inclusive verb acts as the syntactic head of the verbal phrase yet the semantic head of the compound lies primarily in the qualifier (adjective, adverb, or preposition) attatched.

D. Class VIIa: Reduced Verbal Modal (Durational)

Class VII consists of idiomatic slang reductions of certain oft used Class II modals. Class VII modals are similar in function to those Class II modals from which they originate. There is no semantic difference between a Class VII modal and its Class II root form. The reduced forms differ from those of Class II in that the component present participle is phonetically and orthographically reduced with the –ING ending becoming –N and the adjacent TO from the subordinate of the Class II form reduced to –A; the reduced TO is appended to the reduced –ING with an additional N

intervening to maintain euphonism (GOING TO => GONNA; WANT TO => WANNA). Class VII is split into two sub-classes: VIIa: Reduced Verbal Modals (Durational) – those reduced forms requiring BE as their auxiliary verb; and VIIb: Reduced Verbal Modals (Informational) – those reduced forms requiring DO as their auxiliary. Because TO has been semantically incorporated into the modal construction, all Class VII subordinates occur in finite form. Otherwise Class VII behaves in exactly the same way as Class II.

Modals of this class have the following characteristics:

Trait	Value	Description
Form	Multiple	Multiple forms matching the non-modal forms of the root content verb declined for person, and tense, within the durational aspect.
Negation	Yes	Occurs in both affirmative negative expression of mood. Can provide affirmative or negative expression of mood toward affirmative and negative propositions.
Verbal Position (hierarchy)	Occupies the verbal position to the immediate left of its subordinate.	Modals of this class always occupy the position to the immediate left of their subordinate in the syntactic hierarchy of the utterance. If not subordinated by another modal, Class IIa modals take first verbal position or V_1 regardless of tense or aspect.
Subordinates	Any assertion as well as other modals beyond those belonging to structural classes that do	Modals of this class subordinate all assertions to their right in the hierarchy of the utterance. Other Modal Classes that do not preclude

	not accept subordination.	subordination must accept subordination from this class.
Accepts Subordination	Always accepts subordination by other modals but cannot be subordinated by negative markers.	Class II modals always occupy left-most position in syntactic hierarchy not occupied by a subordinating modal. Thus no other form can be placed before them meaning they can never be subordinated by anything other than a modal, including a negative marker.
Multiple Tense	All	Class II modals may be fully declined for person and tense to reflect temporal reference to the T_{UTT}. Although these modals are most often used to express futurity, the verb itself appears in either all tenses. When Class II modals of Futurity occur in non-present tenses they allow the Modal Future of the proposition to be applied to a past or future time as T_{EVL} referenced to the T_{AST} or 'future of the past' and 'future of the future'.
Structure	BE + REDUCED PRESENT PARTICIPLE + REDUCED TO: Fully declined Durational Aspect	Class IIa modals are structurally identical to the full declension and conjugation of the root content verb in the durational aspect and occur in both raw and perfected forms. Additionally the present participle of the root verb is reduced and appended by reduce infinitive marker TO from the subordinate.
Subordinate Form	Finite	Subordinated constructions take finite

form in the left-most verbal position. If this left-most position of the subordinate is occupied by an additional modal, that modal (or in the case of declined modals, V_1 of that modal) occur in infinitive form.

Current Examples within this class are BE + GONNA (Class VIIa) and WANNA (Class VIIb) which are semantically identical to their root forms BE + GOING (Class IIa) and WANT (Class IIc). Note that as additional reduced forms gain acceptance semantic congruence may not be maintained, but for the current inventory of this class, equality of meaning between reduced forms and their root is the case. It should also be observed that Class VIIa WANNA which is only declinable within the Informational aspect, has as its root form Class IIc WANT which is declinable in both Informational and Durational aspects. Currently no form within Class VII occurs in both aspects.

E. Class V: Non-Declined Archaic Praeterite

Class V is unique in that it consists of a single modal, OUGHT. Class V is similar in function to Class I with the only difference being that Class I subordinates to the finite form versus the infinitive for Class V. As with certain Class II modals, the Class V modal ought is sometimes merged with the adjacent TO from the subordinate form reduced to –A; the reduced TO is appended to the modal OUGHT with no intervening T needed to maintain euphonism as OUGHT ends in a consonant cluster (OUGHT TO => OUGHTA). It should be noted however, that unlike Class VII, the reduction of OUGHT + TO to OUGHTA is only phonetic and orthographic and not semantic or syntactic. Thus OUGHTA is not assigned to a separate class from OUGHT. Speakers who do exhibit common reduction of OUGHT + TO to OUGHTA do not maintain the reduction in question or false-negative contraction forms. This shows that OUGHTA is not recognized as a semantic unit unto itself. Still though it must be remembered that OUGHTA does contain the subordinated TO

and thus while OUGHT subordinates take the infinitive, the finite form appears with OUGHTA.

Class V deals with a unique situation in which an archaic form has been retained in active modern usage. OUGHT is originally the praeterite form of OWE. It is no longer used in that sense as OWE now declines as a regular verb: OWE, OWED, OWED. OUGHT has however maintained that archaic sense of owing in its modal usage with OUGHT having a near mirrored semantic quality with SHALL and SHOULD in this sense. That is, that the proposition to be brought about owes its resolution to the situation at hand. This standard usage expresses an OBLIGATIVE mood [EVENT: DEONTIC: OBLIGATIVE].[6] In future expression OUGHT is used to express ASSUMPTIVE mood [PROPOSITIONAL: EPISTEMIC: ASSUMPTIVE] which allows the speaker to express future within the certainty of the assumed trueness of known circumstances.

As with Class I modals, OUGHT does not decline for person, number, or tense and thus does not employ an auxiliary verb.

Modals of this class have the following characteristics:

Trait	Value	Description
Form	Single	Single form in either present or coordinating praeterite; otherwise not declined for person, number, tense, or aspect.
Negation	No	Affirmative only, does not occur in negative expression of mood. Can provide affirmative expression of mood toward negative proposition.
Verbal Position (hierarchy)	Always occupies 1st Position (V$_1$)	Modals of this class always occupy the left-most position in the syntactic hierarchy of the utterance and thus take first verbal position or V$_1$ regardless of tense or

		aspect.
Subordinates	Always	Modals of this class subordinate all constructions to their right in the hierarchy of the utterance. All other modal classes and non-modal constructions must accept subordination from this class.
Accepts Subordination	Never	Class V modals always occupy left-most position in syntactic hierarchy and thus no other form can be placed before them. They can never be subordinated. Class V modals are incapable of accepting subordination, even by Class I modals.
Multiple Tense	No	Unlike fully declinable verbs, Class V modals may not be declined to reflect temporal reference to the T_{UTT}. Although these modals may be used to express futurity, the verb itself appears in praeterite form.
Structure	Single Finite	Class V modals consist of a single-word in praeterite form but otherwise undeclined.
Subordinate Form	infinitive	Subordinated constructions take infinitive form in the left-most verbal position. If this left-most position of the subordinate is occupied by an additional modal, that modal (or in the case of declined modals, V_1 of that modal) occur in infinitive form.

As with other modals, an abbreviated construction in the form of a negative contraction traditionally exists, but is again, a false-negative with the NOT of OUGHTN'T belonging to the subordinated assertion and not the modal itself.

C.   List, Description, and Usage of Future-Marking Modals

a.   **HIGH CERTAINTY: SHALL / SHOULD, WILL/WOULD**

SHALL and WILL and their praeterite forms should and would are the primary modals of futurity.   They come closest to the pure future uses of the nonperfected present informational and durational forms (which are the only non-modal futures in English).   These modals present future assertions with a high degree of certainty with that certainty being brought about by either a personal or natural obligation to known circumstances (SHALL) or through resolve of the actor due to his own volition (WILL).   It should be noted that SHOULD and WOULD in this sense only apply to their use as the past-referring praeterite form of SHALL and WILL.   WOULD is also used in future subjunctive and conditional forms which are not discussed in this paper.   For other expressions of futurity using SHOULD, see SHOULD (II), OUGHT below.

i.   **Etymology**

1.   **SHALL**

Attested as erly as 888, making it among the oldest words in English: as 'to be about (for) to do': to be engaged in, to be busied in preparation for, to be scheming, preparing, or intending.   Listed as obsolete. (OED, 2nd Ed., (about) A:11).

2.   **WILL**

From OE WYLLAN meaning to wish, desire, want; having original meaning identical to Modern German WOLLEN.   Early attested as an auxiliary of the future tense with implication of intention or volition thus distinguishing it from SHALL. (OED, 2nd Ed., ????).

ii.   **History**

1.   SHALL has the original meaning of OWE which would seem to place it even originally in congruence with OUGHT.   However, Grimm traces shall's OE form sculan to an earlier Gothic skulan meaning to owe or be under obligation.   This is linked to the OE past tense form scyld equivalent to German schuld meaning guilt.   The Germanic cultural reference to guilt is important as the legal system of most Germanic societies, including that of Anglo-Saxon England, maintained less of a punitive legal system of jails and punishments, but more a system fines and monetary values being placed on acts committed against others.   The concept of *weregeld* or 'blood money' was key to these early legal systems in which a wrong against a person or family was to be righted by payment of a decided fine paid directly to those wronged.   Thus this early meaning of shall derives from the idea of

owing under obligation of guilt. By the Middle English period, shall begins to adopt the notion of futurity while still retaining its connotation of obligation. Thus has developed the modern meaning of future due to obligation.

2. WILL'S original volitive meaning of want has transitioned into future expression in much the same way as shall. Unlike shall, will developed future meaning early in the Old English period but like shall it maintained its core meaning of want as well with forms expressing volition being present even up to the late Middle English and early Modern English periods. Shakespeare's Romeo and Juliet provides an interesting look at the development of will as that work finds the original usage will as pure volitive, will as a noun of volition, and the modern will as an auxiliary of future by volition, running the full gamut of the the verb's development in a single work.

iii. More about Mood

In order to effectively comprehend the proper usage of SHALL and WILL and to understand the history behind their development as future modals and their joint usage in this respect, it is necessary to understand a bit more about the modal systems that govern these two future forms.

1. Event versus Propositional

Expression of mood can be divided into two super-categories: Event modality and Propositional modality.

a. **Event Modality** deals with events that have not taken place but are merely potential (Palmer, 2001). There are two types of Event Modality: Deontic and Dynamic.

b. **Propositional Modality** conversely deals not with events (referred to herein manly as assertions), but with propositions – that is, the speaker's attitude toward the truthfulness or certainty of the proposition of the utterance. Propositional Modality is further divided into Epistemic and Evidential Modality.

Analysis of shall and will as modals of future expression deals with Event Modality with usage of these modals in Propositional situations falling beyond the scope of their future-marking usage.

2. Deontic versus Dynamic

Understanding the two types of Event modality is truly key to grasping the purpose of the dual-modal system of shall and will in English.

a. **Deontic Modality** refers to moods which are internal. That is, the subject of the utterance is the source of the pressure which brings the proposition to fruition. Deontic mood express

b. **Dynamic Modality** draws on external forces. That is, the conditioning factors derive from a source outside the control of the subject. Dynamic moods express onto the subject the idea that he is permitted, ordered, obligated, or somehow otherwise compelled to act.[6]

Bybee (1995) proposes an alternative classification along similar lines. Her proposal that event modality should be classified as either speaker-oriented or agent-oriented modality is equally relevant for the discussion of SHALL and WILL.[9] There is still much debate on such classifications as these with the deontic-dynamic paradigm being mostly the proposal of Palmer[6] and even more complex proposals offered and in some codified as fact in various books and websites. Without furthering debate however, there is one primary characteristic of most of these classification schemes – internal versus external control, or that:

> Event modality may be grouped into moods in which the subject of the assertion is the source of modal pressure (internal compulsion), or moods in which modal pressure from an outside source is applied toward the subject (external compulsion).

3. External SHALL versus Internal WILL

In expressing the future with high certainty in English there exist two modals – SHALL (external compulsion) and WILL (internal compulsion). Their modal usage in future expression is discussed below.

iv. Future Modality

1. **Sʜᴀʟʟ: Obligative Mood**
   a. Sʜᴀʟʟ expresses future via obligation. This external compulsion by which modal pressure from an outside source is applied toward the subject creates an obligation or rather a situation with the subject of the assertion being under outward control, coercion, compulsion, influence, or pressure.

2. **Wɪʟʟ: Volitive Mood**
   a. Wɪʟʟ expresses future via volition. Unlike with shall, this is an internal compulsion by which the subject of the assertion is the source of modal pressure, creating a situation in which the speaker's own volition rather than outside forces bring the assertion to fruition. In other words, will as volitive future implies that neither any other person's will, nor any external compulsion whatsoever brings the assertion to fruition, but rather that it is the subject's own free will that the assertion be made true.[5]

v. Usage

1. **Structure:** sʜᴀʟʟ/sʜᴏᴜʟᴅ and wɪʟʟ/wᴏᴜʟᴅ are Class I modals.

2. **Frequency:** Raw Google™ hits show 220 million hits for sʜᴀʟʟ; wɪʟʟ shows between 550 million and 1.5 billion hits with roughly 1/3 being non-modal or non-verbal constructions (such as the legal term), leaving around 500-700 million modal hits. The overwhelming preponderance of occurrences of wɪʟʟ over sʜᴀʟʟ provides ample demonstration of the lack of understanding of the usage of these two modals among most speakers of English. Also, with well over 1 billion total hits (including relevant uses of sʜᴏᴜʟᴅ and wᴏᴜʟᴅ), high certainty modals are by far the most prevalent of future forms.

3. **Original Usage:** English (OE) originally had no future forms with the present tense being used in lieu of a defined future with the addition of some future-specific time phrase. Sʜᴀʟʟ, with its obligatory sense of owing to circumstances was the first verb to be put into use as an auxiliary of the future. Wɪʟʟ was at this time not used in expressions of futurity, but instead simply as a verb of volition.

In this original usage SHALL and WILL would have both been declined in all persons with each expressing their modal sense first with future time being a secondary effect of those obligative and volitive meanings.

4. **Combination of Forms:** Early in the Old English period SHALL was paired with WILL in expressing future. This duality of forms seemingly identical in meaning derived from a desire for courtesy and politeness in language. This had given rise to pairs of similar terms used in expressing identical primary meanings but with the difference being that polite forms were either internal or external, being opposed to their mated as polity required. Consider:
   a. Polite Forms
        i. SHALL and WILL
        ii. MUST and HAVE
        iii. SHOULD/OUGHT and BE + SUPPOSED

These polite form pairs express roughly the same idea in both components, but the difference is compulsion. In (i) SHALL expresses future as brought about by the external compulsion of obligation; WILL the internal compulsion of volition. (ii) and (iii) also express compulsion through obligation in both components of the pair. Here, the difference between forms comes from the directive source of the compulsion. MUST expresses obligation as asserted onto the subject by the views of the speaker. If the speaker and the subject are the same, then the meaning is that he feels he is obligated to perform the assertion due to overwhelming obligation. If the speaker and the subject are different, then it is the speaker who feels that the subject is obligated as such.

Compulsion of this type, of the speaker forcing his views or will onto a different subject was seen as impolite or discourteous in early English society. For this reason HAVE as an equivalent modal of obligation was brought into use. The substitution of HAVE for MUST allowed the speaker to separate himself from the compulsion as HAVE carries an equivalent compelling force of overwhelming obligation, but without reference to the source of that compulsion. The difference in courtesy becomes thus obvious with *'you must go'* meaning *'I compel you to go'* or *'It is my view you be compelled to go'* whereas *'you have to go'* means *'you are compelled to go'* or *'compulsion exists requiring you to go'*. This is basically the linguistic version of 'passing the buck,' allowing the speaker to express the

original ideal while avoiding any responsibility or semblance of authority over the subject. (iii) follows the same pattern with BE + SUPPOSED lacking the inherent source of compulsion of SHOULD or OUGHT.

5. SHALL and WILL as Polite Forms

As stated above, SHALL and WILL were combined during the Old English period from their native modal purposes of obligation and volition for the purpose of expressing futurity. This combination holds to a similar pattern as that of MUST and HAVE in that SHALL, and the sense of external compulsion inherent, was felt as too strong a form of address violating rules of polity and moreover a need for humility. Humility it seems was the overriding force behind the development of this pairing, with the two formerly independent forms merging into a common modal of future expression with SHALL being used for the 1st person and WILL for the 2nd and 3rd.

The explanation of this change of auxiliary in passing from SHALL in the first person to WILL in the other persons is found in this consideration of courtesy or politeness and especially in the aforementioned desire for expressing humility. The phrase *'I shall come'* expresses that the speaker is to come and that he is under external influence or compulsion to do so. Thus is speaking humbly of himself as being only a servant of obligation, a more humble proposition than the alternative *'I will come'* in which he acts only by his own volition, being the sole source of compulsion. Conversely, when that same speaker, addressing a second person uses the form *'you shall come,'* this is seen as equivalent to him saying, *'the power of external events will leave you no choice but to come.'*[6] This form, although perfectly allowable and logical, was seen as lacking due courtesy and consideration for the feelings of the addressee. SHALL was thus abandoned in such usage and replaced with WILL, which was felt to be more polite, having the meaning that *'your, or their, free will and pleasure will induce you, or them, to come.'* This was considered to be polite and deferential, and became the form of futurity when persons other than the self were concerned.[6] Hence, when there is no need to emphasize the inherent meanings of obligation or compulsion, that is, when SHALL and WILL are merely used to express high certainty future, SHALL is used in the 1st person (I shall, we shall), while WILL is used in the 2nd and 3rd (you will, he will, she will, they will). Note however that

there is no reason to convey courtesy to non-persons so that the neuter 3rd person takes SHALL in all cases (it shall, they shall – with they used as the neuter plural).

vi. Guidance

1. Primary Usage – Futurity

a. **Declarative:** In Statements in which the primary intent is to express futurity without deference to volition or obligation use the following conjugation:
   i.   I shall
   ii. You will
   iii. He/She will
   iv. It shall
   v.   We shall
   vi. They will

b. **Interrogative:** With interrogative forms, the 2nd person (addressee) takes the place of the speaker as the source of perceived volition. The forms used reflect this change. Thus, in questions in which the primary intent is to express futurity without deference to volition or obligation use the following conjugation:
   i.   Shall I?
   ii. Will you?
   iii. Shall he/she?
   iv. Shall it?
   v.   Shall we?
   vi. Shall they?

Note that the need for courtesy is lessened in interrogative forms with the will of the addressee (you) assumed throughout thus the 2nd person taking WILL with all others using SHALL. With respect to alternative circumstances the below forms are also possible:
   vii. Shall you?
   viii. Will he/she?
   ix.   Will they?

These forms differ due to the nature of the question being asked. In (vii), you, even though the addressee, is asked about a future outside of his own volition. In a similar manner, (viii) and (ix) result from a form in which you is asked about a future with with respect to the volition of 3rd person subjects. The form *'Will I'* is considered nonsense as the addressee (you) can have no better knowledge of the will of the speaker (I) than he does himself.[6]

2. **Specific Usage – Futurity via Obligation**

   a. In all forms, declarative and interrogative, SHALL is used for all persons.

3. **Specific Usage – Futurity via Volition**

   a. In all forms, declarative and interrogative, WILL is used for all persons except the neuter which is seen as incapable of volition. If by chance volition of a normally neuter subject is thought to be known, WILL is allowed for example a dog that is scared could be thought to possess the volition to bite someone if approached.

4. **SHOULD and WOULD**

   a. In reference to future of past events or of subjunctive forms SHOULD and WOULD follow exactly the same rules of usage as SHALL and WILL within the same meaning. Care should be taken to use SHOULD and WOULD only within these past-future senses as both have more common usage in other modal expressions, including other modal future expressions as discussed below.

b. **NEUTRAL CERTAINTY: BE + ABOUT, BE + GOING, BE + GONNA**

These three modals comprise a group of forms used to express future by intent. They are semantic similar in root and semantically identical in modern meaning and usage.

i. **Etymology**
   1. **BE + ABOUT**

Attested to as early as c1230 as 'to be about (for) to do': to be engaged in, to be busied in preparation for, to be scheming, preparing, or intending. Listed as obsolete. (OED, 2nd Ed., (about) A:11).

2. **BE + GOING**

From GO. BE + GOING as futuritive modal first appeared c. 1500 initially as a colloquial and later standard synonym to BE + ABOUT used in the same sense of preparing or intending to carry out an assertion. (OED, 2nd Ed., (go) V:47.b).

3. **BE + GONNA**

Reduced form of BE + GOING; attested to throughout most of the history of usage of BE + GOING with a standardized spelling appearing in the early 20th Century.

ii. **History**

1. BE + ABOUT likely developed from a non-modal phrase with *'I am about to shoe the horse'* having the original meaning of *'I am here (at this place) for the purpose of shoeing the horse'*. This answer to *'why are you here?'* or more specifically *'why are you about (this place)?'* has the same implication as *'what is your intention?'* with the reply *'I am about…'* taking the obvious role of addressing intent. It is important in considering the historical development of this phrase to keep in mind the older meaning of about being proximate or near as in *'Where is John?' 'Oh, he's about.'*

2. BE + GOING originally had a slightly different meaning of being 'on the way' or 'moving toward' carrying out the assertion versus BE + ABOUT which had the meaning or 'being present' for the purpose of carrying out the assertion – the original semantic difference being that of lative (to) for GOING and locative (at) for ABOUT.

3. BE + GONNA is a phonetic and orthographic reduction of GOING combined with the TO from its subordinate. This form has existed in various spellings for just about as long as BE + GOING has been in use. Until recently it had been dismissed from most linguistic analysis as being slang and unworthy of research concern. In recent years linguists have begun more readily accepting the form as an active component of the overall English corpora and much research has been conducted on forms such as BE + GONNA, GOTTA, and WANNA. BE + GONNA is still however considered non-standard with the preferred form being BE + GOING.

iii. **Future Modality**

1. **Intentive Mood**[7]

   a. As proposed by Robert Dunn (1987) in response to Holdcroft – a commissive mood in which the speaker's intent or the circumstances of the moment commit the proposed future to be certain and true.

2. Be + going expresses future by intention. Unlike WILL and SHALL, GOING does not provide qualification as to outward obligation (SHALL) or inward volition (WILL). It simply expresses futurity with it being the intent of the speaker to bring that future to certainty.

iv. **Usage**

1. **Structure:** be + able (Class IVb), be + going (Class IIa), be + gonna (Class VIIa)

2. **Frequency:** BE + GOING although originally a colloquialism equivalent to BE + ABOUT appears to be displaced or at least have become fully equivalent to BE + ABOUT as the primary modal of intentive future in regular usage. Raw Google™ hits show 124 million hits for BE + ABOUT; BE + GOING show 133 million hits with roughly 13% being non-modal constructions, leaving around 100 million modal hits; the abbreviated GONNA, 26 million which gives the comparison of 126 million for BE + GOING with GONNA to 124 million for BE + ABOUT. While this does not show a tendency for GOING over ABOUT it does reflect a change as previously GOING has been seen as relegated to colloquial or dialectal speech with ABOUT being the preferred form.

3. **Future by intent:** with the subject being the actor of the assertion.

4. **Predictions:**   With copula (subject IT) or THERE+ expresses a likelihood that known circumstances will bring about the assertion.
   a. It's going to rain.

v. **Guidance**

1. **Future by intention:**

   a. Little guidance is needed here except to say that as these forms express future by intent of the subject, then that intent should be inherent within the context of the

utterance. If this concept of intention is not necessary to the meaning of the utterance, then some other form of future expression is likely to be more idyllic.

2. **Predictions**

a. Although common, use of be + about, BE + GOING, & BE + GONNA to make predictions is semantically erroneous as there can be no intention when there is no actor for the assertion. Likewise, copula IT (and its headless counterpart THERE+) cannot possess volition thus precluding use of WILL and WOULD for the same reasons. MAY and MIGHT as permissive future, are likewise logically incorrect as there is no one to whom permission can be given. This leaves SHALL/SHOULD (future obligation), SHOULD and OUGHT (future likelihood), and MIGHT (distantly possible future) as the only truly logical modals for prediction.

b. While language and prescriptive grammar does tend to be based on logical systems, those speaking a language, and the descriptive grammar describing their usage often is not. That is the case with predictions using BE + ABOUT, BE + GOING, and BE + GONNA:

    i. ‡ It's going to rain today.
    ii. It shall rain today.
    iii. It ought to rain today.
    iv. I might rain today.
    v. It should have rained today.
    vi. ‡ It was going to rain.

Although in (i) it is clearly illogical to predict that "it is going to rain", as weather can neither intend its actions nor oppose them, this contruction's use in predicting future of likely certainty is well established. Utterances (ii) and (iii) have roughly the same meaning with shall expressing future as is to be brought about by known outside forces (barometric pressure, humidity, temperature, or other available information known to bring about rain). OUGHT expresses roughly the same proposition but with less certainty – that assuming the known variables, rain should occur (SHOULD would also perform the same function here). In (iv) MIGHT expresses the same likely future but with far less certainty. As with OUGHT, the SHOULD in (v) express a likely future based on the assumed effect of known

variables but in this case is acting as the past version of (SHALL) in that rain was predictable under those circumstances but has it is perfected, it can be assumed that rain although considered to have been the likely result of known variables, did not occur. It is seen again in (vi) that a similar notion can be expressed with BE + GOING with (vi) very closely matching (v) in usage. It should be noted however, that it is marked ‡ as semantically incorrect. It is not marked * as the prevalence of its usage lends it syntactic credibility, but as there was no past intention on the part of the weather to rain, there can be no reference to a past intention that was not carried out. So again, while often used, BE + GOING (likewise BE + ABOUT and BE + GONNA) is best avoided in making predictions unless that prediction involves a sentient actor whose intention is likely or known.

C.   **RESONABLE CERTAINTY: SHOULD (II), OUGHT**

SHOULD and OUGHT express futurity with reasonable certainty based on the speaker's view of the likely effect of known variables to bring about the future assertion under normal circumstances. They express less certainty than SHALL/SHOULD and WILL/WOULD, yet more certainty than MAY and MIGHT. Versus the other more and less certain forms, this category is unique in that the level of certainty is assumed based on the view of the speaker as he relates perceived circumstances to known effects of separate situations known to have similar circumstances. It should be noted that SHOULD when occurring with the same meaning as OUGHT (SHOULD (II)) is classified as semantically separate from SHOULD (I) – the high-certainty praeterite of SHALL.

i. **Etymology**

1. **SHOULD**
Praeterite of SHALL. See above.

2. **OUGHT**
OE áhte ME oughte, originally the praeterite of OE áʒan ME owen ModE OWE. OUGHT attested to in earliest of recorded texts with reduced form OUGHTA attested to as early as 1864. (OED, 2nd Ed., (go) V:47.b).

ii. **History**

1. SHOULD likely developed from a non-modal phrase with *'I am about to shoe the horse'* having the original meaning of *'I am here (at this place) for the purpose of shoeing the horse'*. This answer to *'why are you here?'* or more specifically *'why are you about (this place)?'* has the same implication as *'what is your intention?'* with the reply *'I am about…'* taking the obvious role of addressing intent. It is important in considering the historical development of this phrase to keep in mind the older meaning of ABOUT as being PROXIMATE or NEAR as in *'Where is John?' 'Oh, he's about.'*

2. OUGHT originally was merely the praeterite of OWE with that being its primary meaning and purpose. This meaning is retained in some colloquial forms but is no longer found in standard speech. Early in the development of the language, OUGHT came into use as an auxiliary expressing an obligative mood. Oxford describes it as: the general verb to express duty or obligation of any kind; strictly used of moral obligation, but also with various weaker shades of meaning, expressing what is befitted, proper, correct, advisable, or naturally expected. (OED, 2nd Ed., (ought) ???). OUGHT's use in future expressions is not attested to in the OED, but the underlined portion in their description above is integral to the usage of OUGHT to express futurity as a likely result of observed circumstances. Ought has developed into an auxiliary which is indefinite to time, and as with should in which it maintains a parallel synonymous usage in this context, has actually come to refer to future time as expressed to be certain within the context of what is naturally expected from the variables known.

iii. Future Modality

1. Assumptive Mood

   a. A propositional epistemic mood in which the proposed future is assumed to be true within a reasonable measure of certainty based on what the speaker views to be naturally expected from the circumstances of the situation.

2. These modals express future via assumption. They express a weaker sense of certainty than SHALL/WILL but present a reasonable certainty from the speaker's viewpoint.

iv. Usage

1. **Structure:** SHOULD (Class I), OUGHT (Class V)

2. **Frequency:** SHOULD and OUGHT have historically had similar meanings and usage especially in non-future expressions with OUGHT providing the added context of moral obligation over SHOULD which deals with obligation in general. In future expressions their meaning and use is identical. Raw Google™ hits show 38 million hits for SHOULD with around 25% being future usage; OUGHT shows 9 million hits (including OUGHTA) with roughly two-thirds being future, resulting in around 20 million total hits for this group of future modals making them by far the least prevalent of future forms. An analysis of literary texts seems to show that future usage of these modals is increasing and that use of OUGHT to express future is actually resulting in a slight resurgence of usage in this verb overall.

3. In expressing future via assumption SHOULD and OUGHT share identical meanings are interchangeable.

4. Expectations: SHOULD and OUGHT express expectations about the future. The speaker assumes a reasonable level of certainty that the assertion will be brought to future fruition based on the variables known and their usual effect on similar situation. In other words, the use of SHOULD or OUGHT in expressing futurity means the speaker expects the assertion to occur. Take for instance:

   a. It's should rain today.
   b. I ought to be there by five.

   In (a) rain is to be expected because some unmentioned circumstances usually lead to rain (perhaps it's very cloudy, damp, and the speaker hears thunder). The speaker in (b) expects to arrive at his destination no later than five o'clock (because for instance, he will leave at 4:30 and it normally takes him less than thirty minutes to drive that route).

v. **Guidance**
   a. Very little guidance is needed for use of SHOULD and OUGHT in expressing expectations about the future because short of using the phrase *'I expect to…'* or *'I expect it to…'* there are few other semantically equivalent constructions and none that are actually in active standard use.

b. Care should be taken to ensure that the proper modal is chosen in making predictions with SHOULD and OUGHT being the ideal forms for predictions of reasonable but not high certainty.

D. LOW CERTAINTY: MAY AND MIGHT

MAY and MIGHT both express future possibility with MAY, and MIGHT respectively providing the least certainty regarding the assertion coming to be. Note that this section is entitled 'MAY AND MIGHT' rather than 'MAY/MIGHT'. This is because while originally MAY and MIGHT were the present and praeterite forms of the same modal verb expressing permission, use of MIGHT as the past tense of MAY in this permissive sense has fallen from use entirely in modern English so that the two are generally analyzed as separate verbs. They are grouped together in this section as independent, yet semantically similar future modals.

i. Etymology

1. MAY / MIGHT
OE *magan*: to be able. From proto-Germanic **mag*, similar originally to German mögen. Might O.E. *mihte, meahte,* originally the past tense of *may.* Much later use as expressing subjective possibility to the future -> 'perhaps will'. (OED, 2ⁿᵈ Ed., (may) II.B.5.a).

ii. History
1. MAY originally occupied the semantic position currently held by can with the meaning of BE + ABLE. Even today there exists considerable confusion between the use of CAN versus MAY with the current primary meanings being BE + ABLE for CAN and BE + ALLOWED for MAY. CAN originally held the current meaning of KNOW, a notion still evident in the word CUNNING which derives from this older meaning.
2. For much of the history of English, MAY has functioned primarily as an auxiliary verb moving from fully declined to Class I status between the Old and early Middle English periods. The primary function of MAY has been to express permission and into the 17th Century MIGHT carried the same meaning appearing as the form of MAY in past constructions. Usage of MIGHT as past tense of MAY is not attested to from the 18th Century on.[8]

3. Sometime in the early Modern English period MAY began to take on the secondary meaning of expressing possibility toward a future assertion or as Oxford states, having the meaning of 'perhaps will'.

MAY draws on its primary use in the permissive mood in this respect reflecting possible certainty of the assertion in the future in as much as the circumstances permit.

4. MIGHT in modern usage expresses future possibility in much the same manner as MAY but with an even lower level of certainty, making MIGHT the least certain of all the future forms. MIGHT is also unique in that its use as a future subjunctive is similar to WOULD and COULD but unlike the former two does not require further qualification. WOULD and COULD require some additional disqualifying phrase that keeps them from being true whereas MIGHT expresses distant possibility with no required clarification as to why that possible assertion is so uncertain.

iii. Future Modality

1. Speculative-Permissive Mood

a. MAY and MIGHT create an interesting blend of mood in expressing future assertions. Both express a blend of permissive (event: deontic: permissive) and Speculative (propositional: epistemic: speculative) mood with MAY leaning more toward the permissive and MIGHT less so, but with both being primarily speculative in attitude toward future certainty of the assertion.

2. MAY expresses future via speculation that there exists possible certainty of the assertion in the future in as much as the known circumstances would likely permit. MIGHT carries this distance from certainty further with even less regard to known circumstances providing a merely speculative view of the future certainty of the assertion.

iv. Usage

1. **Structure:** MAY and MIGHT are both Class I Modals.

2. **Frequency:** Raw Google™ hits show 483 million hits for MAY with around 320 million of those referring to the month of may and an additional roughly 40 million involving the purely permissive use of the modal, leaving around 120 million hits for MAY used as future possibility; MIGHT shows 120 million raw hits with the vast majority

being future modal usage (phrases such as 'might makes right' yield many more results while single-term search for might alone yields almost entirely verbal results). At around 250 million total hits, this class of is ranked 3rd in frequency of use among future modals. Similar to ought, future use of may and might have almost entirely supplanted the permissive use of these verbs in Modern English leaving only occasional polite forms for that purpose.

3. MAY is used to express a limited level of certainty in a future assertion in that the speaker views the assertion as permitted by known circumstances but not necessarily likely to be carried out.

4. MIGHT has a use similar to MAY in that it acknowledges that conditions possibly permit the assertion but with even less certainty. Whereas MAY implies a limited likelihood of certainty in assertion assuming all known circumstances remain the same, MIGHT simply acknowledges possibility with no likely implication of certainty.

v. **Guidance**

1. **Future Permitted Possibility**

   a. The most limited future use is that of MAY in expressing future possibility as qualified by permission. This permission can be of an actual situation of one person or body actively giving permission which is seen as allowing the future assertion to become possible, but this usage is rare. More commonly, the concept of permission is that of circumstances being seen as allowing the assertion to become possible.

   b. The use of MAY should be employed sparingly and the speaker should be certain that this permissive information is in fact inherent in the proposition of the utterance. MIGHT cannot be used in this manner.

2. **Predictions**
   a. As with SHALL/SHOULD, WILL/WOULD, SHOULD and OUGHT, MAY and MIGHT are used to make future predictions. Like SHOULD and OUGHT, this has become the primary usage of MAY and MIGHT in Modern English. Whereas SHALL/SHOULD and

WILL/WOULD are used to predict future assertions with a high level of certainty, and SHOULD and OUGHT with a reasonable level of certainty, MAY predicts future assertions with low certainty, with MIGHT predicting assertions as possible but with very little certainty at all.

b. The level of proposed certainty is the governing factor and this should be considered in deciding which of the future modals to use in making a prediction.

D. Notes

a. Prescriptive versus Descriptive Attitudes toward Usage

In discussing usage in English, especially from a standpoint of pure linguistic curiosity, there is often an attitude of dismissal toward forms that may not be in active use for the reader, or in assigning rules of usage. This often leads to a riotous debate regarding the logic of adherance to prescriptive grammar as opposed to adopting the more lax rules of descriptive grammar based on average usage. Certainly there are some forms such as Johnson's proposition that sentences may never end in a preposition that even them most staunch prescriptivists admit have little bearing on intelligibility and should perhaps be abandoned. However, sometimes a lack of use of prescriptive forms comes not from their lack of effciency but instead from a simple lack of understanding on the part of those who choose not to use them. There are two additional points that should be considered in this discussion:

i. With thorough explanation and proper understanding speakers are likely to understand the reasoning behind prescriptive usage and thus adopt that usage.

ii. Prevalence of SHALL and other such more 'prescriptive forms' among 2nd Language Learners.

The point to be made is that regardless of a single person's views or active usage, many prescriptive forms are in active use worldwide, and that often these forms, when used correctly are the ideal usage and add to the versatility and precision of the language in a way that descriptive usage with its loss or misuse of these forms does not.

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