A layered approach to (past) habituality in English*

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In this paper, we investigate whether expressions of habituality in UK English, in particular adverbs of event distribution and the auxiliaries used to and would, pertain to hierarchically different layers of semantic organization, in the sense that they would have different portions of the semantic structure in their scope. This question is addressed using the framework of Functional Discourse Grammar. The application of the Complement Clause Test and the Scope Test reveals that indeed habituality operates at three different layers: adverbs of event distribution operate at the layer of the Configurational Property, used to at the next higher layer, that of the State of Affairs, and would at the next higher layer, that of the Episode.

1 Introduction

In Functional Discourse Grammar (FDG, Hengeveld & Mackenzie 2008), grammatical categories and lexical modifiers are organized in scopal layers that are in a hierarchical relationship. It has been shown for many semantic domains, such as tense or evidentiality, that they contain subcategories that pertain to different layers. For instance, absolute temporal expressions have wider scope than relative temporal expressions (Hengeveld & Mackenzie 2008), and reportative evidentiality

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has wider scope than inferential evidentiality (Hengeveld & Hattner 2015; Kemp 2018). This study aims to investigate whether habitual markers, too, operate at different layers. In order to answer this question, we will focus on habitual markers in UK English, which has a rich variety of such expressions. We will study the distribution of the grammatical markers *would* and *used to*, as well as lexical expressions of event distribution over time such as the adverbs of event distribution *usually* and *frequently*.

In order to address the issue outlined above, Section 2 presents definitions of habitual aspect, and introduces adverbs of event distribution and the grammatical habitual markers *would* and *used to*. Section 3 provides a brief overview of FDG, with specific attention to those aspects pertinent to this study. Section 4 then details the methodology of this research, comprising the Complement Clause Test, which is a diagnostic to identify the layer at which a habitual expression operates, and the Scope Test, which determines the scopal relationship within a combination of habitual expressions and within a combination of a habitual expression with some other modification category. In Section 5 the Complement Clause Test is applied to adverbs of event distribution, and in Section 6 we apply the Scope Test to *used to* and *would*. Section 7 then presents our conclusions.

## 2 Habitual aspect

### 2.1 Definitions of habituality

Habitual aspect is defined by Comrie (1976: 27-28) as describing “a situation which is characteristic of an extended time period,” such that it is not incidental. This definition excludes iterative, non-characteristic situations from habituality, yet it includes states which are non-iterative, extended situations. Thus, Comrie (1976: 27) gives (1) as an example of a habitual that is stative, hence non-iterative:

(1) The Temple of Diana *used to* stand at Ephesus.

As the usual tests for states cannot be successfully applied to habituals, Binnick (2005: 343) views states and habits as different. Additionally, Binnick (2005: 343) concludes, “a habit cannot be true at a point in time, only over a period of time.” For this, we suggest using the notion of ‘distillation’, which indicates that habitual aspect does not report on a series of events, but rather distils the habit from the occurrence of individual events of encapsulated intervals of time within a time frame. A further characteristic of past habit is that the event(s) have ceased to occur. Expressions of
past habit may therefore carry the implicature that event(s) no longer occur in the current time frame.

In our discussion of Habitual Aspect in English, we focus on the expression of past habit, which includes the forms *used to*, and *would*, which will be discussed separately. However, we will first consider the nature of adverbs of event distribution, which are often used to distribute the habitual event within a time frame.

### 2.2 Adverbs of event distribution

Adverbs of event distribution are often found with the two grammatical expressions of past habit that we are examining: *used to* and *would*. The predicate expressing past habit is situated in a past time by encapsulating it in a past time frame. Habitual events can be anchored in the past by general context such as an addressee’s question about the past, adverbial clauses (e.g., *when I was a teenager*), or adverbial phrases (e.g., *in my teens*). As a habit is typically distributive within a period, and as the habit expressed is distilled from events in the intervals, it will not hold continously throughout the past time frame. Adverbs of event distribution and *whenever* clauses (Binnick 2005: 362) serve to express the distribution of a habitual event in intervals within the past time frame. Scheiner (2003: 9) states: “As for quantificational adverbs we can assume that they relate predicates to intervals.” As to the combination of habitual expressions and adverbs of event distribution, Tagliamonte and Lawrence (2000: 341) conclude from their spoken data that they cannot support the claim made by, for example, Leech (1987), that *would* correlates with adverbs of event distribution nor that there is a strong tendency for *used to* to appear without them. When adverbs of event distribution do appear in an expression of habit(uality), they are generally frequency adverbs, such as *often* and *rarely*, which Giannakidou (1995: 104) states are indefinite adverbs. For our research purposes, indefinite frequency quantificational adverbs have been drawn from categories in Quirk et al (1985: 543): usual occurrence: *usually*, *habitually*; continual frequency: *always*: high frequency: *frequently*, *often regularly* and adverbs expressing low frequency: *occasionally*, *seldomly*, *rarely*, and *never*.

### 2.3 Used to

As mentioned above, Binnick (2005, 2006) does not consider *used to* a habitual marker, because of its behaviour with stative states-of-affairs which are not distributive and therefore not habitual. The features of *used to* in usage patterns revealed in Tagliamonte and Lawrence’s (2000) analysis of habitual expressions found in a corpus of northern UK English lead Binnick (2005: 351) to conclude that *used to* is not a past tense but very similar to the English present perfect, which is a
relative tense. Both used to and the present perfect occur readily in the opening sentence of a discourse (ibid. 36), do not admit definite past tense temporal adverbials within their scope (ibid. 37), and do not regularly occur with negation (ibid. 37). Moreover, used to and the present perfect have preferred usage with animate subjects, in particular 1st person pronouns (ibid. 37), events referred to should be repeatable (ibid. 41), and they both have limited use with statives (ibid. 38). The last point regarding statives leads us to the notion that to be acceptable used to demands a change of state. However, as with the present perfect, the present or later state implied by used to must be related to the past situation and “give rise to consequent states of affairs” (Binnick 2006: 39). The conclusion is that neither the present perfect nor used to relate to a reference time in the text but to the implied present time of the consequent state of affairs. On the basis of exclusion of the past in the present, Binnick (2006: 42) labels used to an anti-present-perfect, which comprises the previously mentioned implicature of change cancellable by the phrase ‘and still does/is’, as in (2).

(2) John used to row/be a rower, and still does/is. (Authors’ example)

The similarity of used to and the English present perfect lead to the conclusion here that used to is a relative tense item.

Altenberg (2007) does not mention Binnick’s analogy of used to to the present perfect. While referring to Leech (1987) and Comrie (1976), Altenberg (2007: 116) interprets the typical Swedish translation of English used to with an adverbial expressing a period of time rather than an adverb of event distribution to show that English used to involves a contrast with the situation in the current time period. He concludes that used to expresses that a habit is discontinued in the past and therefore ‘contrasts with the situation at the moment of speaking’ (Altenberg 2007: 126). As mentioned, used to conveys an implicature of the habit under discussion no longer holding. In (3), we see that the habit in a past time frame is contrasted with a later situation in the past in which no license is available and consequently with an absence of the habit in this later past time frame, which is also understood to continue at the time of speech.
Bob Akelhurst used to go to a fair way up country to get the chicks from the hatchery whey they’d… they’d got surplus birds with the cock birds they didn’t want and I used to raise them up to freedom and release the offspring but we were suddenly stopped by licensing which was unfeasible to get because if I was… if I would’ve got a license I would have carried on but (50 Farmer’s Tales)

2.4 Would

Binnick (2005: 339) views will, and its past tense form would to be the real habitual markers of English. Binnick (2005: 358) argues that the multiple uses of will/would, including future and conditional, suggest that the modal would is polysemous and thus, that although the reading still depends on the context, habituality is one of the inherent meanings of would. Binnick (2005: 359) points out that when would is set in a past time frame through anchoring by an adverbial (4), used to (5), or another contextual feature (6), it unambiguously expresses habit and cannot be read semelfactively.

(4) Whenever I was little and I was poorly I would have cloudy lemonade and Maltesers®. (50 Farmers’ Tales)

(5) The herdsman I had working on the farm that time, he used to like swedes, eating them, and he always used to go back, get the cows in from eating the kale, he used to bring back some swedes for himself, eating in the house. He w- he would even fry them for breakfast and anything. Anyway, er, so now we have this method of, at the moment (50 Farmers’ Tales)

(6) I remember my mum doing a sort of budget and she would say … she didn’t had a rent because we owned the propriety and she would say: I need this for that, only this much money, I need that for groceries and (50 Farmers’ Tales)

From their data, Tagliamonte and Lawrence’s (2000: 349) conclude that would is generally used to express a habit of short duration, that would occurs within a passage recounting habitual past, and often occurs with a third-person subject, as in (5) above. In their notes, Tagliamonte and Lawrence (2000: 350) mention that Comrie (1976) and Visser (1963-1973) observe that “would expresses an act that the subject is inclined toward doing or that might be expected of the subject”. These suggestions, which are however difficult to confirm in data, could support the purported use of would in narrative clauses, where it carries a habitual non-semelfactive reading (Altenberg 2007: 126).
2.5. Distribution of used to and would

Binnick (2005: 352) suggests that both used to and would quantify distributively and in both usages a co-occurring adverb of event distribution pertains to each episode within the past time frame. While Tagliamonte and Lawrence (2000: 343) conclude that would and used to occur in near complementary distribution, Boneh and Doron (2013: 197) use Jespersen’s (1931) example in (7a) below to counter this claim. In (7a) would is simultaneous with the event of meeting, whereas in (7b) used to puts ‘spend’ before the event of meeting because used to is retrospective in nature (see also Boneh & Doron 2010: 350).

(7) a. We used to meet at the country house, where we would spend the weekend together.
   b. We would meet at the country house, where we used to spend the weekend together.

Furthermore, Boneh and Doron (2013: 183) record instances of would used to and wouldn’t used to found on the internet. Distribution of the habitual expressions and the position of negation, discussed below, support Boneh and Doron’s suggestion that would and used to cannot be structurally the same. These habitual markers are therefore likely to have different functions and are unlikely to be in complete complementary distribution. The present authors found further instances of would used to and wouldn’t used to, two of which are illustrated here:

(8)  - Throughout the Winter.
     - Yes.
     - Say w-when we would used to bring the the stock in at the (unclear) Menai Bridge Fair, that was the twenty fourth of October.¹

(9) Katy: So it’s getting quite... I mean is that another way it’s changed too, I mean if it’s, if it’s you know, you have all these breeding programmes now, did you- you probably wouldn’t used to have had that would you? (50 Farmers’ Tales)

The difference in function of would and used to might be explained by a hierarchical relationship between them. Using the scopal hierarchy of FDG, we will explore this further in Section 5.

¹ BNC, Gwynedd County Council oral history project.

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3 Functional Discourse Grammar

Functional Discourse Grammar (FDG) is a structural-functionalist theory of language with top-down organization (Hengeveld & Mackenzie 2009). Its formulation reflects that of Levelt’s (1989) speech production model, with conceptual and output components interacting with the grammatical component. A contextual component is also included in FDG, which interacts with all three other components. The grammatical component has four levels that organize grammatical categories into scopal layers (Hengeveld & Mackenzie 2008). This is made up of the Interpersonal, Representational, Morphosyntactic and Phonological Levels. Each previous level influences the following ones. The Interpersonal Level deals with the pragmatics of language and the Representational Level covers semantics. Of particular interest here is the Representational Level. Within this level there are several scopal layers in the following order, from higher to lower: Propositional Content (p), Episode (ep), State-of-Affairs (e), and lastly Configurational Property (f'). A Propositional Content is a mental construct, such as the objects of hope and believe; an Episode is a set of States-of-Affairs that share absolute time, location, and participants; a State-of-Affairs is a state or event, that can be situated in relative time; and a Configurational Property is a combination of a predicate with its arguments, and can be used to characterize a State-of-Affairs. The hierarchical relations between these units at the Representational Level is indicated in (10).

\[ (p_1: (e_1: (f'_1: \ldots) (e_1)) (ep_1)) (p_1) \]

It is within these scopal layers that one expects habitual markers to potentially operate, as habituality is a semantic rather than an actional category.

4 Methodology

In addressing the research question, we make use of examples from the British National Corpus (BNC), the oral history site 50 Farmers’ Tales and data in a PhD, both from the University of Kent (UK), together with examples taken from Boneh and Doron (2009, 2013). Examples (17) and (28) obtained with the N-gram viewer were adopted, as they were the clearest examples of the feature discussed. Example (2) is the authors’, two of whom are Native Speakers of UK English. The constructions analyzed are those involving the habitual markers would and used to, as well as the adverbs of event distribution listed in Section 2.3.

In determining the layer at which a habitual marker operates, we first make
use of the Complement Clause Test (Bastos et al. 2007; Hengeveld & Mackenzie 2008: 363–365; Kemp submitted). The reasoning behind the Complement Clause Test is that complement clauses can be classified in terms of the highest layer they contain. For instance, the complement of believe must be a mental construct, hence it is represented as a Propositional Content in FDG. Apart from the Propositional Content layer, this complement clause will then also contain all layers within the scope of the Propositional Content, i.e., the Episode, State-of-Affairs, and Configurational Property layers. On the other hand, aspectual and achievement verbs such as begin and manage will take the Configurational Property layer as their complement. The Configurational Property was defined above as the layer at which a predicate is combined with its arguments. Since aspectual verbs are participant-oriented, in the sense that the subject of their complement should be identical to the subject of the main clause, they must take this layer as their complement. This means that the higher layers of Propositional Content, Episode, and State-of-Affairs layers are irrelevant to these complement clauses.

Based on this principle, the following representations show how the complements of different classes of complement taking predicates differ from one another:

(11) Complements of verbs of knowledge and belief, such as realize and think
    \[(p_1: (e_1: (f_1: [\ldots]) (e_1)) (e_1)) (p_1))\]
    \[p_1 = \text{Propositional Content}\]

(12) Complements of verbs of emotion, such as regret or like
    \[(e_1: (f_1: [\ldots]) (e_1)) (e_1)) (e_1))\]
    \[e_1 = \text{Episode}\]

(13) Complements of verbs of causation, such as cause and trigger
    \[(e_1: (f_1: [\ldots]) (e_1))\]
    \[e_1 = \text{State of Affairs}\]

(14) Complements of aspectual and achievement verbs, such as begin and manage.
    \[(f_1: [\ldots]) (f_1))\]
    \[f_1 = \text{Configurational Property}\]

As these representations show, higher layers contain all lower layers. Thus, in (12) the complement clause is of the Episode type, which thus contains the layers of the State-of-Affairs and the Configurational Property.

These varying underlying structures of the different types of complement clauses can be exploited as a testing ground to determine the layer at which a certain
habitual expression operates. For instance, if a habitual expression is allowed in the complement clause type in (12), (13), and (14), but not in the complement clause type in (11), we know it operates at the layer of the Episode (ep). If it is allowed in the complement clause type in (13), but not in the ones in (11) and (12), we know it operates at the layer of the State-of-Affairs (e). And if it is allowed in the complement clause type in (14) but not in any of the others, we know it operates at the layer of the Configurational Property.

Therefore, to test which layer each habitual marker belongs to, one can take complement clauses, each classified by a different layer, and run through them in a hierarchical fashion from lowest-layer complement clause to highest, attempting to include a habitual marker in each clause. If the habitual marker cannot feature in the complement clause, then that habitual marker pertains to a layer higher than that of the complement clause, as a result of which the marker is not licensed in the complement clause. For reasons explained below, we will only use this test for adverbs of event distribution.

The Complement Clause Test can be used to study the behaviour of adverbs of event distribution, but has appeared not to be appropriate to test the behaviour of *would* and *used to*. The reason for this is that the latter are *portmanteau* expressions of both habituality and tense. Hence, when one of these items cannot occur in a certain type of complement clause, we cannot be sure whether this is because of the type of habituality that they express, or because of the tense they express. Therefore, we apply a second test, the Scope Test, in Section 6 to reveal the position in the hierarchy of the grammatical habitual expressions.

### 5 The scope of adverbs of event distribution

As mentioned in Section 4, we will use the Complement Clause Test to determine at which layer adverbs of event distribution operate. The application of these tests leads to an interesting finding: all adverbs of event distribution are allowed in complement clauses designating a Configurational Property. The following examples illustrate this:

(15) I am forced to **usually** travel with low cost companies.²

² [https://www.tripadvisor.co.uk/ShowUserReviews-g1-d8728985-r650806671-AEGEAN-World.html](https://www.tripadvisor.co.uk/ShowUserReviews-g1-d8728985-r650806671-AEGEAN-World.html).
Our hunter-gatherer forebears were forced to habitually deal with the limited availability of food.\(^3\)

We just managed to always find them.\(^4\)

Scientists continue to frequently cite Levyns for her theories on the origins of the Cape flora.\(^5\)

I began to think too often of the starveling cat.\(^6\)

He continued to see her regularly.\(^7\)

The mill continued to be used occasionally to grind flour for home consumption, until his eventual departure in 1932.\(^8\)

Keeping in mind that this lotion is more for ladies in their 50's I tried to use it seldomly.\(^9\)

Rita Ora manages to rarely put a foot wrong.\(^10\)

I've been forced to never take myself seriously again.\(^11\)

This finding is significant, as in Hengeveld and Mackenzie (2008: 171), in which instances like the above are not considered, it is claimed that adverbs expressing event quantification apply at the layer of the State of Affairs. The examples show that this position is incorrect. One way of interpreting this finding is that these adverbs quantify States-of-Affairs internally, i.e., to use seldomly, to never take myself seriously again, or to frequently cite Levyns are types of States-of-Affairs, not sets of States-of-Affairs. This finding is also consistent with the fact that the adverbs studied here are within the scope of relative tense operators, such as the anterior tense marker, which have unambiguously been classified as operators at the

\(^3\) http://crossfitcityroad.com/fasting-101/.


layer of the State-of-Affairs, as shown in (25):

(25) Having rarely been ill before, this was a shocking experience and caused me considerable anguish.\(^{12}\)

Here *rarely* is located in relative time by the relative temporal verb form *having been*, showing that it is within the scope of an operator of the State of Affairs.

6 The scope of *would* and *used to*

As argued in Section 4, we cannot use the Complement Clause Test to determine the scope of *would* and *used to*. Instead, we have to establish their position in the layered hierarchy by applying the Scope Test, which combines *used to* and *would* with other modifiers and/or operators, for which the position in the hierarchical structure of FDG has already been established independently.

Let us start with combining *used to* and *would* with expressions of qualificational aspect, which apply at the layer of the Configurational Property. In (26) and (27) the two verbs combine with progressive aspect:

(26) We would be playing in our own street, or possibly with friends in Abbotsford Place, Cumberland Street, or Apsley Place\(^{13}\)

(27) My mother always *used to* be singing when she was cooking or ironing but that just stopped.\(^{14}\)

Since *would* and *used to* have scope over the qualificational aspect in (26) and (27), they must operate at a layer or layers higher than the Configurational Property.

Next let us consider the behaviour of these two habitual expressions in relation to subjective epistemic modality and inferentiality, which are located at the layer of the Propositional Content:

(28) The Faiyum, presumably, *would* always be there, and he *would* visit when he chose.\(^{15}\)

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\(^{14}\) [https://brady.manchestereveningnews.co.uk/](https://brady.manchestereveningnews.co.uk/).

(29) Probably she used to go to the potters wheel and make pots.\textsuperscript{16}

Since would and used to are within the scope of modifiers of the Propositional Content, they should be at a layer lower than that. As they also have to be at a layer higher than the Configurational Property, this leaves us with the State-of-Affairs and the Episode as potential candidates.

Let us now consider the behaviour of would and used to with respect to negation. Regular negation in English is situated at the layer of the State-of-Affairs, and under special circumstances at the layer of the Episode (Hengeveld & Mackenzie 2018: 23). The following examples are taken from Boneh and Doron (2013: 183):

(30) In those days, Mary wouldn’t smoke after dinner.
(31) In those days, Mary didn’t use to smoke.

These examples show that in the case of regular negation, would precedes the negator and used to follows it. This shows that would has a wider scope than used to. From this we may then conclude that would operates at the layer of the Episode and used to at the layer of the State-of-Affairs.

Note that there are also cases in which negation is within the scope of used to, as shown in (32), which contrast with (31).

(32) In those days, Mary used not to smoke/used to not smoke.

The negation in (32) has a value different from the one in (31): in (32) to not smoke or not to smoke is a negative State-of-Affairs, not a negated State-of-Affairs: it is claimed that Mary was a non-smoker. In cases like these there is negation of the Configurational Property, not of the State of Affairs (see Hengeveld & Mackenzie 2018: 28).

Two further facts corroborate that would operates at a higher layer than used to. First of all, in certain dialects of English, habitual would and used to can co-occur in a single sentence. In those cases, would always precedes used to, as shown in the following examples from Boneh & Doron (2013: 11-12):

\textsuperscript{16}http://epubs.surrey.ac.uk/856022/1/27693993.pdf.
(33) I wouldn’t use to do my homework until six o’clock in the morning before school.

(34) He would use to go jogging every day.

Other examples from our corpora are the following:

(35) You have all these breeding programmes now, did you- you probably wouldn’t used to have had that would you? (50 Farmer’s Tales)

(36) Like when I'm feeling something, something I would used to do, which I knew like makes you feel better I feel like I can't do now and it makes me more sad.17

(37) - Throughout the Winter.
   - Yes.
   - Say w-when we would used to bring the the stock in at the (unclear) Menai Bridge Fair, that was the twenty fourth of October.18

Note especially the fact that in (33) and (35), negation occupies a position in between would and used to, which is consistent with our findings in the analysis of (30) and (31).

A second piece of additional evidence is that used to and would interact differently with quantification, as shown in the following examples, adapted from Boneh and Doron (2013: 189).

(38) a. I received eight more treatments, and the temporary amnesia became severe. I thought nothing bad about the treatments, however, for I was given a wonderful anaesthetic. When I awoke, a kind nurse used to be sitting beside me with warm milk for my stomach if it hurt.

b. I received eight more treatments, and the temporary amnesia became severe. I thought nothing bad about the treatments, however, for I was given a wonderful anaesthetic. When I awoke, a kind nurse would be sitting beside me with warm milk for my stomach if it hurt.

In (38a) the nurse that is being referred to is always the same individual, while in (38b) the nurse would vary. This means that in (38a) a single event with unique

17 Grassian, Daniel Trentin (2019) PhD, University of Kent, UK.
18 BNC, Gwynedd County Council.
participants is quantified over, while in (38b) the quantification concerns different States-of-Affairs, in each of which a different Individual is involved.

7 Conclusion

In this paper we applied the theory of Functional Discourse Grammar to establish whether the adverbs of event distribution and the auxiliaries *used to* and *would* in UK English pertain to hierarchically different layers, i.e., have different semantic scope. By applying the Complement Clause Test and the Scope Test we established that this is indeed the case. *Would* has the widest scope and operates at the layer of the Episode; it scopes over negation; it precedes *used to* when the two occur together; and it scopes over indefinites. *Used to* comes next and operates at the layer of the State-of-Affairs. It patterns with the Present Perfect, as both express relative tense; it preferably occurs under the scope of negation; and it scopes under indefinites.

Adverbs of event distribution have the lowest scope and operate at the layer of the Configurational Property. They occur in the complement clauses of aspectual verbs and achievement verbs. In all, we can say that *would* characterizes a set of different States-of-Affairs as habitual and thus operates at the layer of the Episode, *used to* identifies an individual event as habitually recurring and thus operates at the layer of the State-of-Affairs, while adverbs of event distribution characterize types of States-of-Affairs that involve repetition, and thus operates at the layer of the Configurational Property.

References


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