On the Margins of Perception - TO-Clauses: A Standard Construction of Perception Verbs?

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Résumés

English Français
The main objective of this corpus-based study is to provide an account for the fact that, contrary to what some grammars postulate, TO-infinitive clauses can be – and are – used in the complementation of perception verbs in the active. The analysis seeks to answer the underlying question of whether the norms or usages mentioned in prescriptive or descriptive grammars influence the way speakers use such constructions (perception verb + NP + TO-infinitival), while confronting these norms and usages to evidence provided by attested examples. Three varieties of English – British, American and Canadian English – are thus compared so as to identify: how frequently TO-infinitivals occur as complements; which verbs take this type of complement; and in which variety and in which register they are frequently used. It is shown that the utterances provided by the corpora contradict the norms that are prescribed or described in grammars. The study puts forward a semantic explanation as to the (in)compatibility of perception verbs with TO-infinitivals, partly based on the types of these verbs. It also demonstrates that the sentences sometimes convey a meaning of sensory perception, even if an interpretation of mental judgement or inference – often mentioned in grammars – is more frequent.

Cette étude vise à rendre compte de la possibilité qu'ont les verbes de perception d'accepter comme complément à l'actif une infinitive en TO – emploi proscrit ou restreint à certains verbes par les grammaires. Elle s'interroge quant à l'influence des normes et usages mentionnés dans les grammaires prescriptives ou descriptives sur la manière dont les locuteurs emploient la construction « verbe de perception + GN + infinitive en TO » ; pour ce faire, ces usages prescrits ou décrits sont confrontés aux données fournies par quatre corpus. Trois variétés d'anglais sont comparées (britannique, américain et canadien), afin de mettre au jour la fréquence d'occurrence des infinitives en TO, les verbes de perception concernés, ainsi

que la variété et le registre où cette complémentation est le plus fréquemment employée. L'étude montre que la réalité des énoncés est en contradiction avec les "normes" grammaticales, et propose une explication sémantique du phénomène de (non-)compatibilité des verbes de perception avec ces infinitives, qui se fonde en partie sur le type de ces verbes. Elle met également en évidence que si les énoncés véhiculent souvent une lecture de jugement mental ou d'inférence (signalée dans les grammaires), ils expriment parfois un acte physiologique de perception.

Entrées d'index

Mots-clés : infinitive en TO complément, verbes de perception, actif, normes, usages, compléments (a-)grammaticaux ou (non-)prototypiques, variétés d'anglais, jugement mental, inférence, perception physiologique
Keywords: TO-infinitive complements, perception verbs, active, norms, usages, (non-)standard complements, varieties of English, mental judgement, inference, sensory perception

Texte intégral

Introduction

1 Some reference grammar textbooks, including textbooks intended for students and language learners, rule out the use of object + TO-infinitive clause as the complementation of a perception verb in the active ([1]), all the while strongly recommending TO-infinitivals – instead of the use of bare infinitive clauses – in the passive.

> (1) But his expression sapped her courage, she **saw** him to be defensive and it was hard to find speech. (STRATHY)

2 TO-infinitive constructions are thus either excluded – in both prescriptive and descriptive grammars, as well as on grammar forums and websites – or restricted to some perception verbs only. In the latter case, it is often said that the sentence does not convey the meaning of sensory perception, but that of mental judgement or inference. We are thus faced with a twofold norm: a syntactic norm, as to the complementation patterns that are judged to be correct, and a semantic norm, as to the proper interpretation to give to the sentences when they are considered to be grammatically correct.

3 This study begins by reviewing the usages prescribed or described in both contemporary and older grammars, and shows that the so-called descriptive grammars can also be prescriptive in some ways. It focuses on utterances from three traditional varieties of English – British, American, and Canadian – as well as from Internet English, which were collected from the BNC, COCA, STRATHY and GloWbE corpora. The aim is to identify which perception verbs take this type of complement, while determining whether the sequence "perception verb + object + TO-infinitival" has a wider range of use in one of these varieties in particular. An additional goal is to see whether discourse types or modes – written or spoken – as well as registers – formal or informal – are relevant to the usage of TO-infinitivals in the complementation of perception verbs. The occurrences from the webpages in the GloWbE are also used to accomplish this goal, as well as to compare the three traditional varieties with a more recent one, Internet English.

4 The main objective of this investigation is to provide an account for the fact that, contrary to what some grammars postulate, TO-infinitive clauses can be – and are – used in the complementation of perception verbs in the active. In order to do so, the

study puts forward a semantic explanation as to the (in-)compatibility of perception verbs with TO-infinitivals, partly based on the types of these verbs. It thus seeks to answer the underlying question of whether the norms or usages mentioned in prescriptive or descriptive grammars influence the way speakers use such constructions, while confronting these norms and usages to evidence provided by attested examples.

1. TO-clause constructions as complements of perception verbs: Grammatical norms or usages prescribed or described

5 Both prescriptive and descriptive grammars, whether they are French or English, postulate that "NP + TO-infinitive clause"[1] is not a standard complement of perception verbs. It is usually stated that the standard or prototypical complements of these verbs are "NP + bare infinitive or -ING clauses", as in (2) and (3) respectively, though past participials are sometimes referred to as an alternative construction. Most French prescriptive grammars only mention these two prototypical clausal complements (Swan and Houdart 1983; Berland-Delépine 1990; Persec and Burgué 1999; Souesme 2000; Larreya, Rivière and Rocques-Frampton 2007). The same is true of grammar websites and forums, such as *Education First* "English Grammar" and *Wordwizard* "Language Discussion Forums". In some cases, these two complements are restricted to certain verbs of perception, such as *see* and *hear* (Berland-Delépine 1983) or only *see*, usually regarded as the prototypical perception verb (*Wiktionary*, "Appendix: English catenative verbs"). In others, the bare infinitive construction is considered as the main complementation pattern (Hornby 1954).

(2) She hung her head, **feeling** tears prickle in her eyes. (BNC)

(3) At the Tiki Theater Village, simulating a primitive lifestyle, I **could smell** meat roasting over open fires. (COCA)

6 Similar conclusions are reached in some descriptive grammars, which, in addition, try to account for the difference of meaning between the two standard complements licensed by perception verbs (Adamczewski and Delmas 1998; Larreya and Rivière 2010; Souesme 1992).

7 The aforementioned grammars and websites do not exclude TO-infinitivals; they simply do not mention them as possible complements for perception verbs. However, a few grammars explicitly rule out the use of a TO-infinitive clause after perception verbs. Among them are reference grammars (Aarts, Chalker, and Weiner 2014; McArthur 2003) as well as grammar forums and websites (*BBC World Service*; *WordReference.*): "Both **see** and **hear**, and also **notice** and **watch** and other verbs of perception, can be followed by **object** + **bare infinitive** (i.e. without **to**) or by **object** + **verb-ing**." (*BBC World Service*)

8 It appears that the date of publication of the grammar is of no relevance to either position – excluding TO-infinitive constructions as complements of perception verbs or disregarding them as possible complements. Both positions can be found in both contemporary and older grammars, as shown by the references cited above. It should also be noted that almost all of them indicate that TO-infinitive clauses are obligatory in the passive, as in (4); "the verb is used with a (pro)noun and a bare infinitive. Note that a *to*-infinitive is needed in the passive." (Hornby 25)

> (4) An Aeroflot jet landed in Shannon, Ireland, and a Russian **was seen** to deplane, hurry into the duty free shop, and whisper to the clerk, "I need protection". (COCA)

9 Nevertheless, TO-infinitive constructions are also judged to be correct complements of perception verbs by other descriptive grammars, whether they be older (Poutsma 1928–1929; Curme 1931; Jespersen 1940) or more recent publications (Berland-Delépine 1974; Quirk et al. 1985; Huddleston and Pullum 2002; Dufaye and Khalifa 2006). They all postulate that TO-infinitive clauses can be licensed by perception verbs only under certain conditions:

10 - TO-infinitivals are in most cases restricted to some perception verbs – only *feel* is concerned according to Quirk and Greenbaum (364) and Quirk et al. (1203). Other authors extend the list to *see* and *perceive* (Jespersen 1940; Zandvoort 1962), and *observe* (Poutsma 1928–1929; Curme 1931). Huddleston and Pullum's descriptive grammar, one of the most recent reference grammars, provides a longer list of verbs (1237) – *feel*, *hear*, *notice*, *observe*, *overhear* and *see* – while at the same time adding restrictions on the range of use of TO-infinitivals:

> With *hear* and *overhear* [iv] is virtually excluded in the active (**We'd heard him to be an impostor*) [...]. *Watch* wholly excludes the *to*-infinitival, whether active or passive. [...] *notice* is also marginal in [iv]. *Smell* is generally restricted to [ii], and hence is listed in Class 3 Cii below; it combines predominantly with *burn* (*I can smell something burning*).[2]

11 - Jespersen (240–241) adds that the TO-infinitive construction is rare with perception verbs and that TO is often used with *be*, which is also underlined by Curme: "after [...] *feel*, *see*, *observe*, *find*, we sometimes employ also the infinitive with *to*, indeed regularly [...] if the infinitive is the copula *be*" (Curme 124).

12 - As far as register is concerned, some linguists emphasise the idea that TO-infinitivals are used only in formal language (Berland-Delépine 193) or literary English (Zandvoort 1962).

13 - Semantically, the combination of a perception verb with a TO-infinitival "does not indicate immediate perception but an inference" (Jespersen 280). This idea is taken up by Huddleston and Pullum (1236), who also note that with verbs of sensory perception, the construction under study "does not represent the primary sense: it is not a matter of sensory perception but of mental inference".

14 The most thorough and detailed account of TO-infinitive complements of perception verbs is provided by Dixon (1991) and especially Duffley (1992). Their descriptive grammars both highlight the inference sense conveyed by the whole sentence. Dixon observes that "a 'Judgement' TO complement clause" can be licensed by what he calls "ATTENTION verbs", the type to which perception verbs belong (128–129). Duffley also indicates that "when the *to* infinitive is substituted for the zero form, verbs of perception undergo a lexical shift [...] from immediate perception to inference [, which] is perhaps most obvious with the verb *feel*" (31). This author begins by reviewing similar positions adopted in earlier works (Jespersen 1940; Bolinger 1974; Cotte 1982; Gramley 1987; Palmer 1988), all of which tried to account for the seemingly paradoxical association of TO-infinitive clauses and perception verbs. Indeed, in their primary sense, perception verbs convey the idea that the perceiving act coincides with the event perceived. As for the operator TO, it indicates that the predicative relation is not validated but validatable;[3] the speaker thus envisages the infinitive process beforehand – that is, he adopts a prospective stance on the event. Therefore, it seems hard to reconcile the idea of coincidence (perception verb) with the impression of beforeness/afterness (TO-infinitival). Duffley (35-36) argues however that in such sentences, there is no irreconcilable conflict as the verb of perception is construed in its conceptual sense, thus being in semantic harmony with the meaning of the TO-clause:

> An examination of the actual meaning expressed by the *to* infinitive after verbs of perception in the active voice shows therefore a necessary before/after relationship between the event of the verb of perception (which has shifted to evoke the notion of inference) and the event of the infinitive (which denotes the conclusion reached by means of the inference). This sequential representation, on the other hand, does not characterize the verbs of perception in their basic perceptual sense, where the relation is rather one of coincidence in time between the perceiving and the phenomenon being perceived.

15 Interestingly enough, none of the aforementioned grammars, be they prescriptive or descriptive, considers the TO-infinitive construction as grammatical with *watch*, *listen* and *look*, namely agentive perception verbs; they are either excluded from this construction – this is the case for *watch* (Dixon 1991; Duffley 1992; Huddleston and Pullum 2002) – or never mentioned at all.

16 A first conclusion that can be drawn from those inter-grammar comparisons is that the so-called descriptive grammars can also be prescriptive in some ways. They state, for instance, that the TO-infinitive structure is excluded or marginal with a particular verb (see, for example, how Huddleston and Pullum (2002) limit the use of TO-clauses with *notice* and *smell*), or they present incomplete descriptions of acceptable constructions for a specific verb (Quirk et al. (1985) disregard TO-infinitivals as an alternative construction for *see* in the active). It also appears that grammar websites, which can be considered as 'non-academic' grammars, are more prescriptive and far less complete than traditional or reference grammars.

17 Whether attested utterances conform to the norms as well as to the conditions and restrictions listed above remains to be verified. This issue will be addressed in sections three and four of the analysis, while the following section is devoted to describing the process of collecting data.

2. Data collection procedure

18 To conduct this research, different corpora were examined in search of sequences of 'perception verb + (preposition +) noun phrase / pronoun + TO + verb base': the BNC (the British National Corpus), the COCA (the Corpus of Contemporary American English), the STRATHY (the Strathy Corpus of Canadian English) and the GloWbE (the Corpus of Global Web-Based English) for English used in twenty different countries.[4]

19 The research focused only on certain perception verbs, which were selected according to the following criteria:

20 - the criterion of experience, which is widely used by psychologists, linguists and lexicologists. It shows that the concept of perception is expressed by basic verbs, such as *see*, *look*, *watch*, *hear*, *listen*, *smell*, *taste*, and *feel*, which refer to the fundamental structure of human perception – sight, hearing, smell, taste, touch and proprioception;

21 - the criterion of register, which allows for both selecting verbs that are considered to be representative of everyday language and excluding more specialised terms. The verbs thus selected constitute the fundamental core of the lexicon used by "the ordinary man" (Austin 1962), whereas the terms excluded are either technical or scientific (e.g. *investigate*, *scan*, *palpate*), formal or informal (e.g. *contemplate*, *regard*, *stink*), literary (e.g. *behold*, *espy*) or even archaic (e.g. *harken*);

22 - the criterion of frequency, which, for instance, permits to exclude verbs of limited or less common use (e.g. *discern*, *overhear* and *hark*). It appears that *see* and *look* are more frequently used than the other visual verbs;

23 - finally, the criterion of distribution, which allows for the exclusion of verbs licensing only nominal or prepositional object complements, such as *gape*, *gawk*, *inspect* and *scrutinize*.

24 The verbs thus selected for the corpus search represent the five/six sensory modalities, whether they be non-agentive or agentive (see Table 1). It appears that they are all mentioned in the grammars cited in the preceding section. Only *discern* (listed in Poutsma 1928–1929) was excluded as it does not satisfy the selecting criteria.

25 Semantically speaking, these verbs behave slightly differently. *See*, *hear*, *notice* and *perceive* refer to non-agentive perception, whereas *look*, *watch* and *listen* belong to the field of agentive perception; as for *observe*, it can be used to express both agentive and non-agentive visual perception. It should be noted that *notice* and *perceive* are not restricted to one particular perceptual modality, though they are often used for sight and hearing.

26 The four corpora were searched for standard and non-standard uses, or even so-called ungrammatical constructions of perception verbs. For instance, the following strings were used for the verb *watch*: "[watch].[v*] [n*] to [v*]", "[watch].[v*] [p*] to [v*]" and "[watch].[v*] [nn*] to [v*]",[5] which correspond respectively to "*watch* (all forms of verb *watch*) + noun / pronoun / noun phrase + TO + verb base". Then the findings were carefully looked through and all the non-relevant sentences were discarded. A total of 2,717 occurrences of TO-infinitivals were finally found, and they constitute the basis for this study. In addition, the same method was applied in order to collect data about the two standard complements of perception verbs, bare infinitive clauses and -ING clauses. This allowed for comparing the frequency of the three constructions in the same corpora – when possible – as well as for establishing if the frequencies of TO-infinitivals with the selected perception verbs were meaningful relative to the two other complement structures which might otherwise have been used by the speaker.[6]

27 The current study now sets out to accomplish two different goals concerning the comparison of the use and frequency of TO-infinitivals in the complementation of perception verbs: first, to determine if these TO-constructions are linked to a specific variety of English and then, to see if the discourse situation and register types influence the use of such complements.

3. TO-clause constructions: Usages linked to specific varieties, modes and registers

28 The question that comes to the fore is whether the use and distribution of TO-complement constructions with perception verbs can be accounted for by the variety of English in which they are used, and/or by the register in which they can be found. This section primarily focuses on the frequency of TO-complement clauses in three traditional varieties of English: British, American and Canadian. It will end with an analysis of register types and modes of communication in these varieties.

29 I have chosen to study British and American English primarily because the distribution of the variants they show is often explained using sociolinguistic criteria (see, for instance, Wierzbicka's explanation (1988) with respect to the use of periphrastic verbal phrases such as *have a V*, *take a V* and *give a V*). In addition to comparing British and American English, I wanted to compare two varieties whose speakers share a similar culture. This was made possible via a comparison of American and Canadian English. Finally, the GloWbE is a useful tool giving a precise idea of the development and the characteristics of Internet English, which can be considered as a new variety of English.

Moreover, the four corpora together allowed me to examine variation in English by variety, register and mode of communication.[7] Indeed, the BNC, the COCA and the

STRATHY all contain spoken and written sections, which was of great importance for my study. They are also updated regularly – at least as far as the COCA is concerned[8] – and, along with the GloWbE (released in 2013), they allow for identifying ongoing changes in language, which was another objective of this analysis. Therefore, including the GloWbE in this analysis has a twofold interest: on the one hand, it provides occurrences from webpages in twenty different countries, giving a clear idea of Internet English; and secondly, this recent mode of communication offers instances of both formal and informal registers, providing modes of expression that are halfway between spoken and written English. It must be noted that I only worked on three of the six "core dialects" (*GloWbE*), as I wanted to focus on British, American and Canadian English.

31 As far as varieties are concerned, Table 2[9] reveals no noteworthy differences among the three varieties of English under study. These show similar percentages of TO-clause complements of perception verbs, that is about 0.036% of all the total occurrences of the selected perception verbs; this confirms the claim that this type of clausal complement is rare with perception verbs in the active. A quick look at other varieties of English provides the same conclusion. For instance, in Australian English, TO-infinitivals appear 53 times in the complementation of *feel*, which represents 0.049% of all the occurrences of *feel* in Australian webpages listed in the GloWbE. This percentage is not very different from those of the three other varieties. As for Internet English, it appears that the results shown in GloWbE pages are similar to the global results in the corpora of traditional varieties – the BNC, the COCA and the STRATHY. The (in)frequency of TO-infinitive constructions with perception verbs does not really seem to vary according to the variety of English.

32 The BNC, the COCA and the STRATHY all contain spoken and written sections, whereas the GloWbE is composed of words from webpages, either Internet websites or blogs. I have chosen to work on these three main modes of communication – spoken and written English, and webpages – as they correspond to different types of registers: more formal for written English, especially in academic papers listed in the three corpora; less formal, and sometimes informal, for spoken English. As for webpages, both formal and informal registers are concerned as websites and blogs can be of varied quality.

33 Tables 4–7 present a comparison of the modes of communication and show that in the three varieties of English under study, TO-complements of perception verbs are the most frequent in webpages (54.76% of the 2,717 total occurrences; see Table 4) and the most infrequent in spoken English (5.56%). A closer look at their distribution in each variety brings to our attention noteworthy differences (see Tables 5–7). Indeed, if this conclusion is also valid for British and Canadian English, it is not so for American English, where the majority of TO-complement clauses are found in written form (49.6%). It could be inferred that British native speakers, as well as Canadian ones to a certain extent, are more careful and respectful of norms and usages in traditional discourse situations – fiction, prose, academic papers, and so on – than they are in less conventional ones, such as Internet websites and blogs. On the contrary, as American English shows little difference between the written mode and Internet English, this might suggest that Americans are less sensitive to, or aware of, norms or so-called restrictions on language whatever the communication context. However, another plausible explanation could be that the constructions under study have already entered written discourse, which could be the sign of a current change. Finally, TO-clauses appear to be quite rare in spoken language, but far more frequent in less conventional media, such as Internet websites and blogs, which favour more informal speech as well. A more in-depth study would be helpful to precisely determine which percentage of Internet pages belong to formal and informal speech, as Internet websites can show either type of register.

Another conclusion that can be drawn is that TO-complement clauses are more frequent in present-day language, which could be another sign of an ongoing change

in the complementation of perception verbs. Another clue with respect to this current change appears when looking at non-standard structures for agentive verbs, such as *listen to* / *look at* / *watch* + NP/pronoun + TO V. Indeed, TO-infinitivals are usually excluded from the complementation of this type of verb. Though the occurrences found in the corpora are few – especially compared to the occurrences of bare infinitive clauses and -ING clauses (see Tables 8–9) –, it can be noted that they are favoured in informal language, namely spoken English, as well as in less conventional modes of communication, that is Internet websites (see Tables 4–7):

35 - out of the 14 occurrences of *listen to* NP/pronoun TO V, 10 appear in American English and 9 of them are from websites;

36 - *watch* NP/pronoun TO V occurs only 25 times, mainly in Internet English – this seems in conformity with the various mentions in grammars of the impossibility for *watch* to take a TO-infinitive construction;

37 - *look at* NP/pronoun TO V was found most frequently in American and Internet English. This is by far the most controversial structure, and the variety and mode of communication in which it appears are quite revealing. Indeed, they seem to indicate that norms and standards are less significant in non-conventional modes of communication, regardless of the variety of English, as well as much disregarded in American English.

38 Therefore, it can be argued that the Internet plays a leading role in the current changes in the complementation of perception verbs, and especially in the increasing occurrence of TO-infinitive constructions. Indeed, if we compare the results obtained with the two standard constructions, bare infinitives and -ING clauses, it appears that both of them are most frequently found in written and spoken English (see Tables 10–11). Only the verbs *observe*, *listen* and *perceive* have a majority of their -ING complements found in Internet English (51.5%, 52.96% and 55.70% respectively) while bare infinitives are the most frequent structures in webpages only with *listen* and *notice* (50.11% and 64.98% respectively). For instance, *perceive*, which shows the highest percentage with TO-constructions, also has the majority of -ING occurrences in Internet websites (55.70%) but not that of bare infinitives (47.06%). The same remark applies to *observe*, the percentages of whose occurrences are similar to those of *perceive* (51.5% with -ING constructions and 47.36% with bare infinitives). As for *listen*, the highest percentages of the occurrences of the three variants are all found on Internet websites: 64.29% of TO-constructions, 52.96% of -ING-clauses and 50.11% of bare infinitives. In those cases, it could be concluded that the use of a TO-construction derives from the speaker's choice, which seems to support the hypothesis of the role played by the Internet in the evolution of the English language. It indeed looks as if the influence of the Internet is already perceived in the USA, as if Internet language had already begun to appear in conventional discourse types – especially written – and registers.

39 Non-agentive perception verbs could also be subject to current changes. This issue will be addressed more particularly in the fourth and final section, which is devoted to the usages of TO-infinitivals in the complementation of perception verbs with respect to verb types, according to semantic considerations.

4. TO-clause constructions and semantic considerations: Usages linked to verb types

40 The aim of this final section is to determine whether the search results meet the conditions and restrictions identified in prescriptive and descriptive grammars. To do so, a semantic viewpoint will be adopted to account for the seemingly paradoxical

association of perception verbs with TO-clauses.

41 First, it can be concluded that TO-infinitivals are not restricted to certain perception verbs only. As can be seen in Table 3, all selected verbs except *taste* can license a TO-infinitive construction.[10] However, this complementation pattern is quite rare with some verbs, such as *smell*, *listen* and *watch*. Only 1 occurrence of *smell*, 14 of *listen* and 25 of *watch* (examples [5], [6] and [7] respectively) were found in the four corpora.

> (5) When the likes of Costco, Lowes, Home Depot, and the list goes on and on start to merchandise their own SMU's in this category [...] you know they **can smell** money to be made and hence the race to the bottom of the barrel begins for not only the manufacturers doing business in the "middle" but the category as well and one would assume the end consumer ends up the winner, right? (GloWbE – Canada)

> (6) One of the things I was struck by in **listening** to him to preach in particular, is that he is very empathic towards the pain and suffering in his congregation. (GloWbE – US)

> (7) There are still negotiations going on between the Clinton folks and the Obama folks about the convention, still not resolved about a roll call vote, but if there is a roll call vote for Hillary Clinton, **watch** it to occur in the morning. (COCA)

42 If these findings came as no surprise with *smell* and *taste*, which do not frequently take standard clausal constructions either, the same cannot be said of agentive *watch*, which is quite frequent with bare infinitive and -ING clauses (see Tables 8–9). One possible explanation may lie in semantics, rather than in syntax.

43 Indeed, TO-infinitivals are more frequent with non-agentive perception verbs, *perceive* showing the highest proportion of these clauses (2.086%), immediately followed by *feel* (0.699%). *Perceive* can be conceived as a kind of hyperonym of all perception verbs, but it also expresses mental perception as it can be paraphrased as "grasp with the mind". It consequently is in semantic keeping with the inferential reading that TO-infinitivals bring to the whole sentence. As for *feel*, though it can express both agentive and non-agentive perception, it always functions on a non-agentive mode when taking a TO-complement construction, denoting proprioception, impression, and even belief or another cognitive state. However, *observe*, with TO-complement clauses representing 0.067% of all its occurrences, does not seem to fit the bill. Indeed, *observe* has both an agentive and a non-agentive meaning, and in its former sense, it is semantically close to *watch*. But contrary to *watch*, *observe* implies a cognitive dimension: a mental process is always involved in observing, which is often carried out in order to learn something. It appears that it is this deductive process that matters most in sentences including *observe*, as in (8–9).

> (8) When I asked you, '**Did** you ever **observe** them to argue or fight,' did you tell me about the Christmas Eve argument? (COCA)

> (9) Let me tell you, your reality is not reality. Only you choose and **observe** it to be your reality. (*GloWbE* – US)

44 As is underlined in various grammars, a perception verb licensing a TO-complement clause undergoes a lexical shift and the whole sentence takes on an inferential meaning, which is quite obvious and frequent with non-agentive verbs. In such constructions, TO indicates that there is no coincidence between the perceiving process and the state of affairs described in the TO-clause. Indeed, the process denoted by the infinitive clause is not the perceived act itself; it can only be inferred from the perceptual data obtained thanks to the perceiving act. This state of affairs is therefore conceived as subsequent to the perceiving act:

> A perceived event is not in the same relation to the act of perceiving it as an

> inferred event is to the act of inferring it. The former exists throughout the process of perception; the latter, however, has no existence before being conceived by the mind, and exists only as a conclusion which arises as a result of, after, the mental operation of inferring that the state of affairs it describes is true. (Duffley 33)

45 This leads Duffley to conclude that in such constructions, there is a sense of afterness conveyed by TO: "this use of the infinitive involves a final interception of *to*" (Duffley 36). It can therefore be argued that TO discursively serves to point out the gap between perception and conclusion or inference (see also Cotte 1982) because of its before/after dimension. With perception verbs, the gap comes to be interpreted as a temporal gap between perception and conclusion, as well as a gap between perceiving subject and cognitive subject. This gap is, in a way, bridged by the inferential process which takes place thanks to a perceptual-data basis and which leads to a cognitive, conceptual conclusion. TO can be considered as a kind of discursive indicator or pointer showing the way that leads from perception to cognition; as such, it has an iconic dimension, mirroring the mental path the perceiver-experiencer takes.

46 The inferential reading of the sentence goes together with the lexical shift undergone by the main verb, which is itself produced by the semantic content of the TO-clause. Indeed, the state of affairs it denotes is often expressed by stative verbs or processes, which constitute the great majority of processes in the TO-infinitivals under study. Among them can be found stative lexical *be* (1), as stated in grammars, but also *have* (10), other stative verbs (11), as well as perfect (12) and passive (13) verb phrases. The nature of the infinitive predicate is in keeping with the inferential reading of the sentence, as a perceiving act can only grasp a dynamic process, an event unfolding. Since in TO-clauses the process is stative, it cannot be grasped by a physical act, but can only derive from a mental process.

> (10) Now my sister lives in Dorset but I must admit that, aside from a traditional cream tea and a pretty decent portion of fish and chips, I **have never noticed** Dorset to *have* particular regional food specialities. (GloWbE – GB)

> (11) If we take our task to be an exercise in intersubjective translation, in speaking for others and their point of view, our hubris will cause us no end of difficulties, moral and philosophical. And if we **see** it to *lie* in the formal analysis of social systems or cultural structures, statistically or logically conceived, we evade the issue of representation and experience altogether. (COCA)

> (12) However, the big day might be seriously marred by a group that **feels** itself to *have been left* behind in Russia's ostentatious embrace of global competition. (COCA)

> (13) Both sufferers and non-sufferers were asked about their perception as to the cause of incontinence (table VI). In both groups one quarter **perceived** it to *be caused* by a medical condition, particularly more older male sufferers. (BNC)

47 However, contrary to what is claimed in many grammars, an inferential reading is not the sole possible interpretation for such sentences. The verb can – albeit less frequently – retain its perceptual sense as an event is perceived, and not inferred. In sentences as (14–16), the infinitive verb is dynamic and refers to an ongoing process occurring in the same time-span as the perceiving phenomenon. This scenario is quite common with *hear* (14), far more so than with other perception verbs (e.g. *listen* and *see* in [15–16]).

> (14) Harry **hears** Suzy to be saying that her flaws are genial ones. She carries on about a particular failed negotiation. (COCA)

(15) One of the things I was struck by in **listening** to him to preach in particular, is that he is very empathic towards the pain and suffering in his congregation. (GloWbE – US)

(16) It amazes me to **see** people to vote for someone that hasn't done anything to restore this country. (GloWbE – US)

48 The use of TO-infinitivals in such sentences can be explained by the fact that TO is iconic of a mental path leading from perception to cognition. In sentences in which an inferential reading prevails, the whole mental process from perceiving to inferring has been completed. In sentences such as (14–16), TO might be taken to indicate that the perception-cognition pathway exists, but that the perceiver is still at the perceptual input level; the perceptual data obtained in the perceiving act could lead to some inference, and thus to the conceptual level, but this is not what matters most in the sentence. This observation is in keeping with Duffley's "before/afterness" hypothesis (19–21) with respect to the use of TO-infinitive clauses.

49 It should be added that a majority of such sentences are found in websites; see, for instance, example (16) taken from *ABC News*. Here again, this might be a sign of current changes, occurring first in informal language and/or discourse situations. This trend could permeate formal language and TO-infinitivals with perceptual sense could then become standard constructions of perception verbs.

50 I turn now to the last part of the analysis, in which I attempt to provide an account for the seeming incompatibility of agentive perception verbs with TO-infinitive constructions. Such verbs highlight the intentionality of the perceiver, who is first and foremost an agent. However, being intentional is not enough for becoming an experiencer, in particular with *look* and *listen*. Indeed, one can look or listen but this does not entail that one necessarily sees or hears something; as such, there is no guarantee that certain data will be perceived. Therefore, in that respect, *look* and *listen* seem to be semantically incompatible with a TO-infinitival, since an effective percept serving as a basis for the inference is necessary. If no grasping of perceptual data is guaranteed, the inferential process deriving from it cannot be either. Consequently, agentive perception verbs are generally semantically incompatible with clausal complements denoting or bringing about an inferential reading, among which TO-infinitive constructions.[11] This explanation could also apply to *taste*, as this verb rarely expresses a non-agentive perceiving act. As far as agentive *watch* is concerned, it can be added that its meaning is even more incompatible with TO-clauses. Indeed, this visual perception verb denotes that the perceiver looks at an entity for a period of time, especially to observe changes or movements. As TO-clauses often include stative *be* or verb phrases, they cannot express an ongoing event – in other words, a change. This could further explain why sentences such as (7) are far from frequent.[12]

Conclusion

51 In this article, it has been shown that the sentences in which perception verbs take TO-infinitive complements contradict most of the norms that are prescribed or described in grammars. The current study puts forward a semantic explanation accounting for the (in)frequency of active perception verbs with TO-infinitivals. I have also demonstrated that a meaning of sensory perception can sometimes be conveyed in such sentences, in which case the interpretation of mental judgement can be disputed – though this may be the most relevant description provided in grammars with respect to TO-infinitive constructions taken by perception verbs. It therefore appears that the TO-infinitive complementation pattern licensed by perception verbs raises the question of where to place the limits of the field of perception, as the sentences under study can be said to be situated at the frontier

between perception and cognition.

52 Though no significant difference has been found between British, American and Canadian varieties of English, noteworthy dissimilarities have been identified with respect to the register and mode variations; indeed, Internet websites provide a majority of occurrences. It should already be clear that the structures studied in the current paper, though of limited use in current-day speech, are undergoing changes: they are more and more widely used in Internet English, in which they contribute to a perceptual reading that is more frequent than in traditional written or spoken modes. It would be interesting to broaden this study so as to encompass other varieties of English, whether they be of native speakers – as in Australia and Ireland, for instance – or of non-native speakers – such as in India and Jamaica. Such a study would crucially determine whether the so-called non-standard TO-infinitive constructions of perception verbs are subject to the same changes in other varieties of English, among which so-called 'non-standard' ones. It would then perhaps be possible to verify the hypothesis that the current changes identified in this paper are a sign of the evolution of the English language worldwide.

List of Tables

Table 1. Selected perception verbs and sensory modalities

	Sight	Hearing	Smell	Taste	Touch / Proprioception	Several sensory modalities
Non-agentive	see observe	hear	smell	taste	feel	notice - perceive
Agentive	look - watch observe	listen	smell	taste	feel	

Table 2. Total number and percentage of TO-clauses in the complementation of perception verbs in British, American and Canadian English and in Internet English

	Verb occurrences	TO-complement constructions	% of all occurrences of verbs
BNC	431,564	255	0.059%
GloWbE (Great Britain)	1,824,889	655	0.036%
British English	**2,256,453**	**910**	**0.040%**
COCA	2,840,830	868	0.031%
GloWbE (USA)	1,768,564	622	0.035%
American English	**4,609,394**	**1,490**	**0.032%**
STRATHY	149,636	106	0.071%
GloWbE (Canada)	569,653	211	0.037%
Canadian English	**719,289**	**317**	**0.044%**
Internet English	**4,163,106**	**1,488**	**0.036%**
TOTAL	**7,585,136**	**2,717**	**0.036%**

Table 3. Total number and percentage of TO-clauses in the complementation of perception verbs by verb and variety

	British English			American English			Canadian English			TOTAL		
	Verb occurrences	TO-complement constructions	% of all occurrences of the verb	Verb occurrences	TO-complement constructions	% of all occurrences of the verb	Verb occurrences	TO-complement constructions	% of all occurrences of the verb	Verb occurrences	TO-complement constructions	% of all occurrences of the verb
*look as*NP + TO V	548,186	21	0.004%	1,090,606	68	0.006%	167,082	22	0.013%	1,805,874	111	0.0061%
observe + NP + TO V	26,475	21	0.079%	88,208	40	0.045%	12,543	11	0.088%	127,226	72	0.0566%
see + NP + TO V	889,457	191	0.021%	1,710,122	276	0.016%	267,850	49	0.018%	2,867,429	514	0.0179%
watch NP + TO V	126,475	6	0.005%	291,534	14	0.005%	40,933	5	0.012%	458,942	25	0.0054%
hear + NP + TO V	169,910	9	0.005%	433,359	26	0.006%	64,729	5	0.008%	668,018	40	0.0059%
listen to NP + TO V	61,769	3	0.005%	148,814	10	0.007%	20,106	1	0.005%	230,689	14	0.006%
smell + NP + TO V	8,069	0	0%	29,393	0	0%	3,239	1	0.031%	40,901	1	0.0024%
taste + NP + TO V	8,032	0	0%	24,559	0	0%	3,447	0	0%	36,038	0	0%
feel + NP + TO V	356,781	381	0.107%	677,816	348	0.051%	114,707	78	0.068%	1,149,304	804	0.0699%
notice + NP + TO V	48,395	8	0.017%	100,342	8	0.008%	18,626	3	0.016%	167,363	19	0.0113%
perceive + NP + TO V	13,084	270	2.064%	34,441	702	2.038%	6,027	145	2.406%	53,552	1117	2.0858%
TOTAL	2,256,453	910	0.040%	4,609,394	1,490	0.032%	719,289	317	0.044%	7,585,136	2,717	0.036%

Table 4. Total number and percentage of TO-clauses in the complementation of perception verbs according to mode of communication

	TO-complement constructions	Spoken English		Written English		Internet websites	
		Occurrences	% of TO-constructions	Occurrences	% of TO-constructions	Occurrences	% of TO-constructions
look at NP + TO V	111	23	20.72%	36	32.43%	52	46.85%
observe + NP + TO V	72	7	9.72%	21	29.17%	44	61.11%
see + NP + TO V	514	40	7.78%	115	22.37%	359	69.85%
watch NP + TO V	25	5	20%	6	24%	14	56%
hear + NP + TO V	40	9	22.5%	7	17.5%	24	60%
listen to NP + TO V	14	3	21.43%	2	14.28%	9	64.29%
smell + NP + TO V	1	0	0%	0	0%	1	100%
taste + NP + TO V	0	0	0%	0	0%	0	0%
feel + NP + TO V	804	16	1.99%	404	50.25%	384	47.76%
notice + NP + TO V	19	0	0%	4	21.05%	15	78.95%
perceive + NP + TO V	1,117	48	4.3%	483	43.24%	586	52.46%
TOTAL	2,717	151	5.56%	1,078	39.68%	1,488	54.76%

Table 5. Total number and percentage of TO-clauses in the complementation of perception verbs in British English according to mode of communication

	TO-complement constructions	Spoken English		Written English		Internet websites	
		Occurrences	% of TO-constructions	Occurrences	% of TO-constructions	Occurrences	% of TO-constructions
look at NP + TO V	21	0	0%	2	9.52%	19	90.48%
observe + NP + TO V	21	1	4.76%	7	33.33%	13	61.91%
see + NP + TO V	191	4	2.09%	27	14.14%	160	83.77%
watch NP + TO V	6	0	0%	2	33.33%	4	66.67%
hear + NP + TO V	9	0	0%	1	11.11%	8	88.89%
listen to NP + TO V	3	0	0%	0	0%	3	100%
smell + NP + TO V	0	0	0%	0	0%	0	0%
taste + NP + TO V	0	0	0%	0	0%	0	0%
feel + NP + TO V	381	2	0.52%	159	41.73%	220	57.74%
notice + NP + TO V	8	0	0%	0	0%	8	100%
perceive + NP + TO V	270	3	1.11%	47	17.41%	220	81.48%
TOTAL	910	10	1.10%	245	26.92%	655	71.98%

Table 6. Total number and percentage of TO-clauses in the complementation of perception verbs in American English according to mode of communication

	TO-complement constructions	Spoken English		Written English		Internet websites	
		Occurrences	% of TO-constructions	Occurrences	% of TO-constructions	Occurrences	% of TO-constructions
look at NP + TO V	68	21	30.88%	28	41.18%	19	27.94%
observe + NP + TO V	40	6	15%	13	32.5%	21	52.5%
see + NP + TO V	274	33	12.04%	82	29.93%	159	58.03%
watch NP + TO V	14	5	35.71%	4	28.58%	5	35.71%
hear + NP + TO V	26	7	26.92%	6	23.08%	13	50%
listen to NP + TO V	10	3	30%	2	20%	5	50%
smell + NP + TO V	0	0	0%	0	0%	0	0%
taste + NP + TO V	0	0	0%	0	0%	0	0%
feel + NP + TO V	348	13	3.74%	214	61.49%	121	34.77%
notice + NP + TO V	8	0	0%	2	25%	6	75%
perceive + NP + TO V	702	41	5.84%	388	55.27%	273	38.89%
TOTAL	1,490	129	8.66%	739	49.6%	622	41.74%

Table 7. Total number and percentage of TO-clauses complements of perception verbs in Canadian English according to mode of communication

	TO-complement constructions	Spoken English		Written English		Internet websites	
		Occurrences	% of TO-constructions	Occurrences	% of TO-constructions	Occurrences	% of TO-constructions
look at NP + TO V	22	2	9.09%	6	27.27%	14	63.64%
observe + NP + TO V	11	0	0%	1	9.09%	10	90.91%
see + NP + TO V	49	3	6.12%	6	12.25%	40	81.63%
watch NP + TO V	5	0	0%	0	0%	5	100%
hear + NP + TO V	5	2	40%	0	0%	3	60%
listen to NP + TO V	1	0	0%	0	0%	1	100%
smell + NP + TO V	1	0	0%	0	0%	1	100%
taste + NP + TO V	0	0	0%	0	0%	0	0%
feel + NP + TO V	75	1	1.33%	31	41.33%	43	57.34%
notice + NP + TO V	3	0	0%	2	66.67%	1	33.33%
perceive + NP + TO V	145	4	2.76%	48	33.10%	93	64.14%
TOTAL	317	12	3.79%	94	29.65%	211	66.56%

Table 8. Total number and percentage of bare infinitive (BI) clauses in the complementation of perception verbs by verb and variety (*see* excepted)

	British English			American English			Canadian English			TOTAL		
	Verb occurrences	BI-complement constructions	% of all occurrences of the verb	Verb occurrences	BI-complement constructions	% of all occurrences of the verb	Verb occurrences	BI-complement constructions	% of all occurrences of the verb	Verb occurrences	BI-complement constructions	% of all occurrences of the verb
look at NP + BI	548,186	120	0.022%	1,090,606	246	0.006%	167,082	22	0.0132%	1,805,874	388	0.0215%
observe + NP + BI	26,475	62	0.234%	68,208	223	0.059%	12,543	21	0.185%	107,226	306	0.2854%
watch NP + BI	126,475	5,737	4.536%	291,534	19,351	0.005%	40,933	2,235	5.46%	458,942	27,323	5.9535%
hear + NP + BI	169,930	755	0.444%	433,359	2,614	0.006%	64,729	354	0.547%	668,018	3,723	0.5573%
listen to NP + BI	61,769	533	0.863%	148,814	2,036	0.007%	20,106	261	1.298%	230,689	2,830	1.2267%
smell + NP + BI	8,069	1	0.012%	29,593	16	0%	3,239	1	0.031%	40,901	17	0.0415%
taste + NP + BI	8,032	0	0%	24,559	1	0%	3,447	1	0.029%	36,038	2	0.0055%
feel + NP + BI	356,781	287	0.08%	677,816	1,125	0.051%	114,707	88	0.077%	1,149,304	1,500	0.1305%
notice + NP + BI	48,195	169	0.351%	100,342	252	0.008%	18,626	33	0.177%	167,163	434	0.2596%
perceive + NP + BI	13,084	6	0.046%	34,441	11	2.038%	6,027	0	0%	53,552	17	0.0317%

Table 9. Total number and percentage of -ING clauses in the complementation of perception verbs by verb and variety (*see* excepted)

	British English			American English			Canadian English			TOTAL		
	Verb occurrences	-ING-complement constructions	% of all occurrences of the verb	Verb occurrences	-ING-complement constructions	% of all occurrences of the verb	Verb occurrences	-ING-complement constructions	% of all occurrences of the verb	Verb occurrences	-ING-complement constructions	% of all occurrences of the verb
look at NP + V-ING	548,186	810	0.148%	1,090,606	2,033	0.213%	167,082	265	0.159%	1,805,874	3,108	0.1721%
observe + NP + V-ING	26,475	313	0.182%	68,208	949	1.245%	12,543	141	1.124%	107,226	1,303	1.2151%
watch NP + V-ING	126,475	2,616	2.068%	291,534	4,213	1.445%	40,933	592	1.446%	458,942	7,421	1.617%
hear + NP + V-ING	169,930	5,088	2.994%	433,359	14,789	3.413%	64,729	1,569	2.424%	668,018	21,446	3.2104%
listen to NP + V-ING	61,769	752	1.217%	148,814	1,138	0.765%	20,106	136	0.676%	230,689	2,026	0.8782%
smell + NP + V-ING	8,069	65	0.812%	29,593	300	1.014%	3,239	27	0.834%	40,901	392	0.934%
taste + NP + V-ING	8,032	8	0.100%	24,559	17	0.069%	3,447	2	0.058%	36,038	27	0.0749%
feel + NP + V-ING	356,781	2,816	0.565%	677,816	5,436	0.802%	114,707	1,014	0.884%	1,149,304	8,666	0.7566%
notice + NP + V-ING	48,195	1,015	2.106%	100,342	2,508	2.501%	18,626	332	1.782%	167,163	3,857	2.3073%
perceive + NP + V-ING	13,084	33	0.252%	34,441	101	0.293%	6,027	24	0.398%	53,552	158	0.295%

Table 10. Total number and percentage of bare infinitive (BI) clauses in the complementation of perception verbs according to mode of communication (*see* excepted)

	BI-complement constructions	Spoken and written English		Internet websites	
		Occurrences	% of BI- constructions	Occurrences	% of BI- constructions
look at NP + BI	388	229	59.02%	159	40.98%
observe + NP + BI	306	161	52.61%	145	47.39%
watch NP + BI	27,323	14,953	54.73%	12,370	45.27%
hear + NP + BI	3,723	1,919	51.54%	1,804	48.46%
listen to NP + BI	2,830	1,412	49.89%	1,418	50.11%
smell + NP + BI	17	14	82.35%	3	17.65%
taste + NP + BI	2	1	50%	1	50%
feel + NP + BI	1,500	1,094	72.93%	406	27.07%
notice + NP + BI	434	152	35.02%	282	64.98%
perceive + NP + BI	17	9	52.94%	8	47.06%

Table 11. Total number and percentage of -ING-clauses in the complementation of perception verbs according to mode of communication (*see* excepted)

	-ING-complement constructions	Spoken and written English		Internet websites	
		Occurrences	% of -ING- constructions	Occurrences	% of -ING- constructions
look at NP + V-ING	3,108	1,677	53.96%	1,431	46.04%
observe + NP + V-ING	1,303	632	48.5%	671	51.50%
watch NP + V-ING	7,421	3,777	50.90%	3,644	49.10%
hear + NP + V-ING	21,446	13,469	62.80%	7,977	37.20%
listen to NP + V-ING	2,026	953	47.04%	1,073	52.96%
smell + NP + V-ING	382	263	68.85%	119	31.15%
taste + NP + V-ING	27	16	59.26%	11	40.74%
feel + NP + V-ING	8,466	5,538	65.41%	2,928	34.59%
notice + NP + V-ING	3,857	1,953	50.64%	1,904	49.36%
perceive + NP + V-ING	158	70	44.30%	88	55.70%

Bibliographie

Aarts, Bas, Sylvia Chalker, and Edmund Weiner. *The Oxford Dictionary of English Grammar*. Online version, 2nd ed., Oxford UP, 2014. http://www.oxfordreference.com.

Adamczewski, Henri, and Claude Delmas. *Grammaire linguistique de l'anglais*. 5th ed., Armand Colin, 1998.

Austin, John Langshaw. *Sense and Sensibilia*. Oxford UP, 1962.

Berland-Delépine, Serge. *La grammaire anglaise de l'étudiant*. Ophrys, 1974.

Berland-Delépine, Serge. *La grammaire anglaise au collège*. Ophrys, 1983.

Berland-Delépine, Serge. *Grammaire pratique de l'anglais*. Ophrys, 1990.

Bolinger, Dwight. "Concept and percept: two infinitive constructions and their vicissitudes." *World Papers in Phonetics: Festschrift for Dr Onishi's Kijer*, edited by the Phonetic Society of Japan, Phonetic Society of Japan, 1974, pp. 65–91.

Cotte, Pierre. « TO, opérateur de dévirtualisation en anglais ». *Modèles linguistiques*, vol. 4, no. 2, 1982, pp. 135–149.

Curme, George O. *A Grammar of the English Language*. Vol. III, *Syntax*. D. C. Heath and Company, 1931.

Dixon, Robert M. W. *A New Approach to English Grammar, on Semantic Principles*. Clarendon Press, 1991.

Dufaye, Lionel, and Jean-Charles Khalifa. *L'épreuve de grammaire à l'agrégation d'anglais*. Ellipses, 2006.

Duffley, Patrick J. *The English Infinitive*. Longman, 1992.
DOI : 10.4324/9781315504650

Gramley, Steve. *The Infinitive Forms of English as Verb Complements*. Linguistic Agency of the University of Duisberg, 1987.

Halliday, Michael. *Language as Social Semiotic*. Arnold, 1978.

Holmes, Janet. "Inferring language change from computer corpora; some methodological problems." *ICAME Journal* 15, 1994, pp. 37–53.

Hornby, Albert Sidney. *A Guide to Patterns and Usage in English*. Oxford UP, 1954.

Huddleston, Rodney D., and Geoffrey K. Pullum. *The Cambridge Grammar of the English Language*. Cambridge UP, 2002.

Hudson, Richard A. *Sociolinguistics*. 2nd ed., Cambridge UP, 1996.

Jespersen, Otto. *A Modern English Grammar on Historical Principles*. Part. V, *Syntax*, vol. 4, G. Allen & Unwin; E. Munksgaard, 1940.
DOI : 10.4324/9780203715970

Lacassain-Lagoin, Christelle. (a) « Réalité d'une perception envisagée et expression d'un possible : les propositions en IF à la suite des verbes de perception visuelle. » *Du réel à l'irréel*, 1. *Diversité des langues et représentations métalinguistiques*, *Travaux du CerLiCO*, vol. 25, edited by Catherine Moreau, Jean Albrespit, and Frédéric Lambert, Presses Universitaires de Rennes, 2014, pp. 259–275.

Lacassain-Lagoin, Christelle. (b) « Perception, cognition et perspicacité : énoncés à lecture inférentielle avec les verbes de perception non agentive.. » *Perception, Perspective, Perspicacité – Perception, Perspective and Perspicacity*, edited by Françoise Buisson, Christelle Lacassain-Lagoin, and Florence Marie, L'Harmattan, 2014, pp. 55–75.

Larreya, Paul, and Claude Rivière. *Grammaire explicative de l'anglais*. 4th ed., Pearson

Longman, 2010.

Larreya, Paul, Claude Rivière, and Valérie Rocques-Frampton. *Guide alphabétique de l'anglais*. Pearson Longman, 2007.

McArthur, Tom, editor. *Concise Oxford Companion to the English Language*. Online version, Oxford Univ. Press, 2003. http://www.oxfordreference.com.

Palmer, Frank R. *The English Verb*. 2nd ed., Longman, 1988.
DOI : 10.4324/9781315841472

Persec, Sylvie, and Jean-Claude Burgué. *Grammaire raisonnée* 2. *Anglais*. Ophrys, 1999.

Poutsma, Hendrik. *A Grammar of Late Modern English*. Part I. *The Sentence*, P. Noordhoff, 1928–1929.

Quirk, Randolph, and Sydney Greenbaum. *A University Grammar of English*. Longman, 1973.

Quirk, Randolph, Sydney Greenbaum, Geoffrey Leech, and Jan Svartvik. *A Comprehensive Grammar of the English Language*. Longman, 1985.

Souesme, Jean-Claude. *Grammaire anglaise en contexte*. Ophrys, 1992.

Souesme, Jean-Claude. *100 fiches de grammaire anglais*. Bréal, 2000.

Swan, Michael, and Françoise Houdart. *Pratique de l'anglais de A à Z*. Hatier, 1983.

Trudgill, Peter. *Sociolinguistics. An Introduction*. Penguin Books, 1974.

Wierzbicka, Anna. *The Semantics of Grammar*. John Benjamins Publishing Company, 1988.
DOI : 10.1075/slcs.18

Zandvoort, Reinard Willem. *A Handbook of English Grammar*. 2nd ed., Longmans, 1962.

Internet Websites

BBC World Service. "Learning English." www.bbc.co.uk/worldservice/learningenglish.

Education First. "Resources for Learning English." www.edufind.com/english/grammar.

Summer Institute of Linguistics (*SIL*). "Glossary." www-01.sil.org/linguistics/glossary_fe/defs/TOEEn.asp#REFERENTIALVALUES.

Wiktionary. "Appendix: English catenative verbs." http://en.wiktionary.org/wiki/Appendix:English_catenative_verbs#Followed_by_a_bare_infinitive_or_a_gerund.

WordReference. "Language Forums." forum.wordreference.com.

Wordwizard. "Language Discussion Forums." www.wordwizard.com.

Dictionaries and Corpora

Davies, Mark. *The British National Corpus from Oxford University Press (BNC)*: 100 million words, 1980s-1993, (2004–). http://corpus.byu.edu/bnc/.

Davies, Mark. *Corpus of Contemporary American English (COCA)*: 520 million words, 1990–present, (2008–). http://corpus.byu.edu/coca/.

Davies, Mark. *Corpus of Global Web-Based English (GloWbE)*: 1.9 billion words from speakers in 20 countries, 2013. http://corpus.byu.edu/glowbe/.

The STRATHY *Corpus of Canadian English (STRATHY)*: 50 million words, 1970s-2000s. https://corpus.byu.edu/can/.

Notes

1 'NP' stands for both noun phrase and pronoun.

2 In Huddleston and Pullum's grammar (1236–37), [ii] refers to -ING constructions, as in *We saw Kim leaving the bank*, and [iv] to TO-infinitival patterns, either in the active or in the passive, as in *We saw him to be an impostor* and ? *He was seen to be an impostor* respectively.

3 The French Theory of Enunciative Operations defines the terms 'validated' and 'validatable' as follows: "This [predicative] relation is said to be either validated if, for a particular situation, it is given the value p (the positive value) or not validated if it is given the value p' (negative value): an enunciative origin asserts (i.e. declares that such is the case) that this value exists for the relation.

A relation can also be 'validatable' (waiting for an enunciative source to carry out the operation, as in the case of hypothetical relations); or the validation can be located by an operation called 'VISÉE' ('prospective validation'), the assertion that 'it is the case' (or 'it is not the case') being considered relative to a prospective (future) locating situation disconnected from the origin situation." (*Summer Institute of Linguistics*)

4 The size of each corpus is indicated in the bibliography.

5 This type of sequence was used for each selected verb in the interface to search the four corpora. As such, only occurrences of declarative sentences were obtained.

6 This is what Holmes calls the "envelope of variability" (1994: 30), that is the number of times TO-infinitivals appear relative to the number of times they could have appeared. I would like to thank one of the reviewers for making such a valuable suggestion.

It is however to be noted that it was sometimes impossible to get some results: for the verb *see*, the searches for bare infinitive clauses ('[see].[v*] [n*/p*/nn*] _vv0*') and -ING clauses ('[see].[v*] [n*/p*/nn*] _v?g*') in the four corpora gave only partial hits or no findings at all – probably because the hits are far too numerous to be processed by the concordancer.

7 In Hallidayan terms (Halliday 1978), "mode" refers to the means an act of communication takes place, notably by speech or writing. They represent one dimension to be taken into consideration when studying register. However, in this study, the term *register* is used to refer to formal or informal language. It is generally admitted that the terms *register*, *style* and *variety* can sometimes be confusing.

8 The COCA was updated in 2017.

9 The figures and percentages provided in the tables show tendencies only in the varieties and corpora selected for this study. As such, they should be viewed with caution.

10 It should be noted that Internet websites provided some occurrences of the construction under study with *taste*. See, for instance: *And both buffalo and cow milk straight from the cow* ***I've tasted*** *it to be sweet*. Available at <http://www.theforumsite.com/forum/topic/Does-human-milk-taste-like-cow-s-milk-/426531>. Accessed 10 Apr. 2017.

11 This also accounts for the fact that agentive perception verbs are incompatible with THAT-clauses (Lacassain-Lagoin 2014 (b)) and IF-clauses (Lacassain-Lagoin 2014 (a)).

12 It should be noted that *watch* and *listen* can license another type of structure including a TO-clause, as in the following sentences.

(1) Banish disappeared behind the van and Blood waited, **watching** for him to reappear on the other side. He did not. (*COCA*)

(2) He moved quickly to the lounge, and stood behind the door, **listening** for the key to go in the latch. But a moment later Bodie was on the channel again. (*BNC*)

Such sentences are far more frequent than the 'non-standard' variants *listen*/*watch* + NP + TO V. Indeed, they represent 0.023% and 0.047% of all the occurrences of the verbs *listen* and *watch* respectively while the so-called non-standard variants only represent 0.006% and 0.005% of all their occurrences (see Table 3).

Sentences such as (1-2) always convey a perceptual sense, contrary to what happens with non-agentive perception verbs. This sense is in keeping with the original meaning of TO, which indicates that the predicative relation is still to be validated. Indeed, the event referred to in the TO-clause has yet to occur, and the referent of the grammatical subject is waiting for the perceptual and to-be-perceived events to happen. Such sentences are thus in syntactic, if not semantic competition, with the non-standard variants mentioned above. It will be interesting to see if in years to come both types of structures – *for* NP + TO-clause and NP + TO-clause – continue to co-exist or not.

Table des illustrations

Titre	Table 1. Selected perception verbs and sensory modalities
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-1.jpg
Fichier	image/jpeg, 28k
Titre	Table 2. Total number and percentage of TO-clauses in the complementation of perception verbs in British, American and Canadian English and in Internet English
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-2.jpg
Fichier	image/jpeg, 72k
Titre	Table 3. Total number and percentage of TO-clauses in the complementation of perception verbs by verb and variety
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-3.jpg
Fichier	image/jpeg, 120k
Titre	Table 4. Total number and percentage of TO-clauses in the complementation of perception verbs according to mode of communication
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-4.jpg
Fichier	image/jpeg, 104k
Titre	Table 5. Total number and percentage of TO-clauses in the complementation of perception verbs in British English according to mode of communication
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-5.jpg
Fichier	image/jpeg, 104k
Titre	Table 6. Total number and percentage of TO-clauses in the complementation of perception verbs in American English according to mode of communication
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-6.jpg
Fichier	image/jpeg, 96k
Titre	Table 7. Total number and percentage of TO-clauses complements of perception verbs in Canadian English according to mode of communication
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-7.jpg
Fichier	image/jpeg, 96k
Titre	Table 8. Total number and percentage of bare infinitive (BI) clauses in the complementation of perception verbs by verb and variety (*see* excepted)
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-8.jpg
Fichier	image/jpeg, 104k
Titre	Table 9. Total number and percentage of -ING clauses in the complementation of perception verbs by verb and variety (*see* excepted)
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-9.jpg
Fichier	image/jpeg, 108k
Titre	**Table 10. Total number and percentage of bare infinitive (BI) clauses in the complementation of perception verbs according to mode of communication (*see* excepted)**
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-10.jpg
Fichier	image/jpeg, 80k
Titre	Table 11. Total number and percentage of -ING-clauses in the complementation of perception verbs according to mode of communication (*see* excepted)
URL	http://journals.openedition.org/erea/docannexe/image/6283/img-11.jpg
Fichier	image/jpeg, 82k

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Articles du même auteur

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