



FROM ANAPHORIC TO CATAPHORIC 'IT' A VIEW FROM COGNITIVE LINGUISTICS¹

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Abstract

Although the anaphoric use of pronouns has been studied in depth by linguists in the past, the cataphoric use of pronouns seems to have received less attention among linguists. However, cognitive linguists have recently begun to turn their attention to the cataphoric use of pronouns such as English *it*, using real rather than invented examples in their analyses. As this paper aims to demonstrate, cognitive linguistics can reveal at least three things about cataphoric *it* in English. First, rather than being a meaningless functional word or so-called dummy subject, cataphoric *it* is often polysemous and therefore rich in meaning. Second, grammatical iconicity suggests that while the use of *it* is optional with certain verbs, its use may be motivated by a desire to create conceptual distance at times. Third, certain verbs that are mental space builders show how the use of *it* may influence the semantics of the verbs with which *it* is used, especially when the use of *it* is grammatically optional.

1. Introduction

Students of English who wanted to learn more about the word *it* might begin by looking at a history of the English language. Taking a diachronic view of *it* would enable them to see, for example, that the possessive neuter pronoun *its* came into use rather recently, between 1500 and 1650 [Baugh & Cable, 2002 : 243]. Moreover, as Baugh and Cable state, '*In unstressed positions hit weakened to it, and at the beginning of the modern period it was the usual form for the subject and the object*' [243]. The apparent morphosyntactic stability of *it* since the 17th century might surprise students, but stability is more common for closed-class words than for open-class words. Comparing closed and open classes, Barber notes, '*individuals cannot just invent a new pronoun, in the way they can invent a noun*' [2002 : 21], for instance.

To learn even more about *it*, students of English might also turn to grammar textbooks, where they would learn that *it* serves at least five main

¹ The first version of this paper was presented at the 48th Annual SAES Conference at the University of Orléans in France in 2008. I thank colleagues at that meeting for the feedback they gave me. The final version was completed during my stay at the University of Freiburg in Germany in 2011. I thank the DAAD for supporting my research in Freiburg (Kentziffer A/11/00885).

functions today even if *it* belongs to the closed-class of pronouns. First, *it* can function as a so-called empty subject or dummy subject:

1. *It's twenty miles to London.* [Alexander, 1988 : 78]
2. *It's noisy in here.* [Alexander, 1988 : 78]
3. *It's hot in here.* [Larreya & Rivière, 2005 : 256]
4. *Damn it!* [Larreya & Rivière, 256]
5. *It's nearly three o'clock* [Downing & Locke, 2006 : 44]
6. *Is it raining? It is raining.* [Downing & Locke : 44]
7. *It is 600 kilometres from Madrid to Barcelona.* [Downing & Locke : 44]
8. *What time is it? It is 3 o'clock.* [Lallement et al., 2006 : 147]
9. *It's still raining.* [Lallement et al. : 147]

For Alexander, this primary function of *it* is based on his belief that '*every English sentence has to contain a subject and a verb*' [78]. Downing and Locke also believe *it* is necessary at times because English sentences syntactically require subjects, especially '*in order to distinguish between declaratives and interrogatives*' [44], as in (5) and (8) above.

Second, *it* can function as a preparatory or anticipatory subject. This is especially true when a gerund or an infinitive is the actual subject, although Murphy says it would be '*unusual*' [166] to use the infinitive as the subject in an example like (10):

10. *It's pleasant to lie in the sun* → *To lie in the sun is pleasant.* [Alexander : 78]
11. *It's pleasant lying in the sun* → *Lying in the sun is pleasant.* [Alexander : 78]
12. *It's no use telling him.* [Larreya & Rivière : 256].
13. *It was not easy to get a taxi.* [Malavielle & Rotgé : 227]
14. *It won't be easy to pass the driving test the first time.* [Downing & Locke : 413]

Although Alexander refers to this second function as a '*preparatory*' one [78], Downing and Locke call it an '*anticipatory*' one, noting that it is '*the "lightest" possible subject filler*' among extraposed subjects [47]. Regarding examples (12) and (13), both Larreya and Rivière [256], as well as Malavielle and Rotgé [227], explain that extraposed *it* may be used *pour annoncer une proposition*.

Third, *it* can be used for emphasis or contrast in cleft constructions, as can be seen here:

15. *Freda phoned Jack last night.* [Alexander 78]

16. → *It was Freda* [and not Rita] *who phoned Jack last night.* [Alexander 78]
17. → *It was Jack* [and not Rita] *who(m) Freda phoned last night.* [Alexander 78]
18. → *It was last night* [and not today] *that Freda phoned.* [Alexander 78]
19. *It surprised everybody that he failed his driving test.* [Downing & Locke 47]
20. *It was impossible for everyone to escape.* [Downing & Locke 47]

Cleft constructions, according to Langacker, reflect ‘our multifaceted capacity to conceive and portray the same situation in alternate ways’ [147]. The fact that an utterance such as (15) can be construed differently as in (16), (17), or (18), suggests that construal is a flexible yet robust cognitive ability [Tomasello : 155]. However, while linguists like Downing and Locke [250] would generally agree with Alexander that *it* can be used for purposes of emphasis or contrast in cleft constructions, they still note that a non-contrastive use of *it* is possible:

21. *It was in 1886 that the German pharmacologist, Louis Letwin, published the first systematic study of the cactus, to which his own name was subsequently given.* [Downing & Locke : 250]

Since the effect of contrast in (18), for example, seems absent in (21), *it* can also function in a non-contrastive manner in some cleft constructions.

Fourth, *it* can function as a preparatory object, especially after certain psychological verbs:

22. *Tim finds it difficult to concentrate.* [Alexander : 79]
23. *Jan thinks it funny that I’ve taken up yoga.* [Alexander : 79]
24. *I hate / dislike / enjoy / love it when you shout at me.* [Alexander : 79]
25. *I consider it my duty to go on.* [Malavielle & Rotgé : 227]
26. *I find it necessary to tell her.* [Malavielle & Rotgé : 227]
27. *I thought it best to say nothing.* [Malavielle & Rotgé : 227]
28. *He found it difficult to open the door.* [Larreya & Rivière : 256]
29. *I find it strange that he refuses to come.* [Downing & Locke : 52]
30. *She might consider it insulting for you to leave now.* [Downing & Locke : 52]
31. *You must find it flattering having so many fans.* [Downing & Locke : 52]

32. *He always takes it for granted that I'll be there for him.* [Lallement et al. : 147]
33. *I find it rather easy to portray businessmen. Being bland, rather cruel and incompetent comes naturally to me.* [Lallement et al. : 147]

Like Alexander [79], Hewings notes that the use of *it* as a preparatory object often follows 'verbs to do with "(not) liking" such as *enjoy, hate, like, love, don't mind, resent*' [234]. Although neither Alexander nor Hewings offer any explanation for this pattern of use, I will address this issue in more depth later in this paper.

Finally, a fifth function of *it* is the well-known anaphoric function, which is indicated in the examples below by subscript notation. As Alexander observes [79], *it* can function as an 'obligatory object' with a transitive verb—as in (34)—or it can function as 'an obligatory subject' when there is a specific anaphoric referent:

34. *What do you think of this cake₁? I like / don't like it₁.* [Alexander : 79] [post-verbal object required]
35. *Did the letter₂ I've been expecting come? Yes, it₂ came this morning.* [Alexander : 79] [pre-verbal subject required]
36. *'Tony is getting married₃'. 'I can't believe it₃'.* [Larreja & Rivière : 256]
37. *The Migration and Social Security Handbook₄ was published this month. It₄ is aimed at emigrants and immigrants, from business people to students and refugees* [Carter et al. 2000 : 88].
38. *'Where's my pen₅? 'It₅ is on your desk'.* [Malavielle & Rotgé : 226]
39. *They were all shouting and fighting₆; it₆ was terrible.* [Downing & Locke : 413]
40. *She was very scared₇, but she tried not to show it₇.* [Downing & Locke 413]
41. *Olga's baby₈ is due in October. – Oh, is it₈ a boy or a girl?* [Downing & Locke 413]
42. *After the child₉ is born, it₉ needs constant care.* [Downing & Locke 413]
43. *The cause of the fall of the Roman Empire₁₀ was the invasion of the Goths, but for the British Empire, it₁₀ was failure to modernize.* [Fauconnier & Turner 96]

How or why or when the neuter pronoun may be used to refer to human beings—as in (41) and (42)—is an interesting question that has been recently addressed by Hamm [2002]. Although that question in and of itself could be the topic of another paper, this paper is more concerned with cataphoric *it* than with anaphoric *it* because anaphor has received the lion's share of

attention in linguistic studies of pronouns. Having said that, a brief discussion of anaphor in part 2 of this paper is nevertheless warranted before cataphoric *it* is discussed in more depth starting in part 3.

2. Anaphors and Anaphoric *it*

Because pronouns can function in anaphoric ways, they offer linguists an interesting laboratory within which conceptual *résurgence* and its linguistic manifestations may be studied. Indeed, French terms like *reprise* [Malavielle & Rotgé : 226], *reprendre* [Lallement et al : 147], or *remplacer, annoncer, and renvoyer à* [Larrea & Riviere : 256] are deployed in textbooks in France to explain the anaphoric function of *it* in English. Linguists such as Alexander [79], Carter et al. [93], Fauconnier & Turner [96], and Downing & Locke [413]—to name just a few—have all discussed the well-known anaphoric function of *it* as well. Anaphoric examples like (37) led Carter et al. to observe that *it* normally ‘continues the topic we are already speaking or writing about. It is not used to introduce a new topic (especially at the beginning of a text or a new section in the text)’ [93]. Although that may be true for many anaphoric uses of *it*, that observation may be less valid regarding cataphoric uses of *it* when, for example, *it* has an anticipatory or preparatory function.

Of course, the anaphoric function of *it* relates to the problem of pronoun disambiguation in natural language. Indeed, many psycholinguists interested in theories of reference have examined this problem in the past. Reilly, for example, analysed sentences like (44) and (45):

44. John analyzed Mary’s essay. It annoyed him. [Reilly : 301]
 45. John analyzed Mary’s essay. It annoyed her. [Reilly : 301]

Since (44) ends with the word ‘him’, *it* refers to the essay, which is an instance of ‘object reference’ for Reilly. But since (45) ends with the word ‘her’, *it* refers to the event of analysing the essay, which is an instance of ‘event reference’ for Reilly. According to Reilly, object references (e.g. 44) are easier for readers to process than event references (e.g. 45) because we represent objects and events in different ways [307]. Likewise, McDonald and MacWhinney proposed

a model of anaphor resolution in which resolution can be initiated immediately upon encountering the pronoun. At all points, the baseline candidate for resolution is the first noun of the sentence, but this baseline is easily modified when additional information becomes available [563].

For instance, the referents for *it* in (44) and (45) change when ‘additional information’ such as a pronoun (*him* or *her*) is produced. McDonald and MacWhinney’s findings suggest that nouns or objects are default referents for anaphors, which might thus explain why it seems easier for readers to process object references than to process event references.

Some referential flexibility is nevertheless tolerated. Based on a series of reading experiments on anaphor and antecedent relations, Klin et al found that '*antecedents were not fully reactivated when readers processed the anaphors*' [141]. Klin et al. therefore concluded that '*readers are sometimes satisfied with an underspecified representation*' [142]. Once readers establish co-reference between anaphor and antecedent, they may be satisfied and thus have no need for further verification as to co-referential validity. But this flexibility may not be surprising. According to Garrod et al.,

Pronouns ... are assumed to operate in a very simple fashion: They just activate the 'discourse entity' token consistent with the pronoun selection constraint. So a pronoun which selects a strongly focused antecedent will immediately activate its entity token and so enable the interpreter to integrate the subsequent input into the representation directly [62].

Although Garrod et al. imply that pronouns function in complicated rather than simple ways, just how strong the focus is, and how co-referentiality may be established, were two topics recently addressed by Cowles et al.

Cowles and colleagues proposed a referential hierarchy whereby '*a referent that is currently "in focus" at the center of attention ... is most likely to be referred to with a pronoun*' [4]. One of their examples was (46):

46. *A rabbit ate my lettuce. It ate all my radishes, too.* [Cowles et al. : 4]

Apparently, because 'rabbit' is '*in focus*' in (46), this explains why readers immediately and correctly assume that *it* refers back to 'rabbit' rather than to 'lettuce'. Of course, making such an assumption when reading may not always be right, but the goals of communication seem to demand it. As Robert has written, *La communication (réussie ou non) d'un contenu de pensée sous une forme linguistique implique d'éliminer progressivement l'indétermination première de l'espace discursif entre locuteur et interlocuteur* [30]. Out of a desire to reduce uncertainty, we may assume *it* refers to 'rabbit' instead of 'lettuce' in (46), but what might explain that referential tendency? Cowles et al. suggested that the answer involved cognitive prominence, since we seem to have '*a bias in pronoun antecedent resolution towards the more prominent antecedent*' [15]. Our expectation that anaphoric pronouns will refer to objects rather than events may therefore very well depend upon the antecedent's prominence. What is more, antecedents that are *also* the topic of the utterance are *prominent*, hence their likeliness to be referred to by a pronoun [Cowles et al. : 7]. It should be noted that this argument is very similar to Hamm's discussion of antecedent selection [122], whereby one choice seems to impose itself over another, but for more recent psycholinguistic research on pronoun disambiguation, please see Matthews et al.

Although it might seem that psycholinguists are making a mountain out of a molehill here, as Hamm argued, *la chasse à la théorie de la référence reste ... ouverte* [132]. Put simply, this may be why pronoun disambiguation can seem so complicated: it comes into close contact with the thorny topic of

co-reference. That said, in experiments with patients suffering from Broca's aphasia, for example, Choy and Thompson found that '*aphasic individuals were equally impaired in their comprehension of anaphor and pronoun constructions*' [120], which suggests that establishing co-referential relations is an ability patients with Broca's aphasia can easily lose. Likewise in (43), for instance, Fauconnier and Turner explained the process of identity connection of '*highly unspecific elements*' [96] across mental spaces by noting that the pronoun *it* refers to the noun phrase '*the cause of the fall of the British Empire*' and that *it* operates as an identity connector linking the mental space of the Roman Empire on the one hand to the mental space of the British Empire on the other. In other words, since *it* is used for two tasks at once, Fauconnier and Turner call the disambiguation of anaphors a real '*feat of the imagination*' [95].

Fauconnier, of course, had examined anaphors before in *Mappings in Thought and Language*, where he spent nearly ten pages explaining the seven sentences of example (47) in terms of his theory of mental spaces:

47. *Achilles sees a tortoise. He chases it. He thinks that the tortoise is slow and that he will catch it. But it is fast. If the tortoise had been slow, Achilles would have caught it. Maybe the tortoise is really a hare.* [Fauconnier *Mappings*, 44]

With regard to the second sentence in (47), Fauconnier simply wrote that '*[b]ackground information tells us that Achilles is human and the tortoise is an animal. This allows the anaphoric pronouns he and it to identify a and b respectively in the Base Space*' [*Mappings*, 44]. Such a statement may seem to oversimplify a complex process of the human imagination. However, to be fair to Fauconnier, his main interest in examples like (47) had (strictly speaking) little to do with anaphoric pronouns, perhaps because he had already analyzed anaphoric pronouns in his earlier book, *Mental Spaces* [4-11]. Ironically, despite Fauconnier's well-known research on anaphors, cognitive linguists have only really just started to study cataphoric pronouns in any depth. While Achard [2010a, 2010b] has recently studied French cataphoric pronouns, Smith [2002, 2004] was perhaps the first cognitive linguist to study cataphoric *it* in English. As my discussion of Smith's work below shows, the pronoun is polysemous rather than meaningless, and its use as a cataphor appears to be motivated rather than arbitrary.

3. Cataphoric *it* and Polysemy

To say that *it* is polysemous would be an understatement. For example, the *Random House Webster's College Dictionary* defines *it* as follows:

pron. nom. it, poss. its, obj, it, pl. nom. they, poss. their or theirs, obj. them, n. -pron. 1. (used to represent an inanimate thing understood, previously mentioned, about to be mentioned, or present in the immediate context): It was broken. You can't tell a book by its cover. 2. (used to represent a person or animal understood, previously mentioned, or about to be mentioned whose gender is unknown or

disregarded): *Who was it? It was John.* **3.** (used to represent a group understood or previously mentioned): *The judge told the jury it could recess.* **4.** (used to represent a concept or abstract idea understood or previously stated): *It all started with Adam and Eve.* **5.** (used to represent an action or activity understood, previously mentioned, or about to be mentioned): *Since you don't like it, you don't have to go skiing.* **6.** (used as the impersonal subject of the verb *to be*, esp. to refer to time, distance, or the weather): *It is six o'clock. It was foggy.* **7.** (used in statements expressing an action, condition, fact, circumstance, or situation without reference to an agent): *If it weren't for Edna, I wouldn't go.* **8.** (used in referring to something as the origin or cause of pain, pleasure, etc.): *Where does it hurt?* **9.** (used in referring to a source not specifically named or described): *It is said that love is blind.* **10.** (used in referring to the general state of affairs or life in general): *How's it going with you?* **11.** (used as an anticipatory subject or object to make a sentence more eloquent or suspenseful or to shift emphasis): *It is necessary that you do your duty. It was a gun that he was carrying.* **12.** (used in referring to a critical event that has finally happened or is about to happen): *The lights went out. We thought, this is it!* **13.** Informal (used instead of the pronoun *its* before a gerund or present participle): *It having rained for only one hour didn't help the crops.* –*n.* **14.** (in children's games) the player who is to perform some task, as, in tag, the one who must catch the others. **15.** *Slang.* **a.** a desirable personal attribute, as talent or sex appeal. **b.** sexual intercourse. [717-718]

What might we say about this definition? First, word meaning depends on usage. For most of the general senses of *it* listed above, specific examples are given to show how *it* is—or can be—used. The examples may be invented, or they may be attested, but for lexicographers they serve a vital semasiological purpose: to offer evidence for the range of things, from the vague to the specific, that *it* may refer to. Second, there is a hierarchy of meanings; some meanings are given more prominence than others. For instance, the anaphoric sense of *it* is mentioned more often than the cataphoric sense, and informal uses are listed last. Corpus data could also tell us, of course, if the first entry above is also the most frequently used sense. Third, as Geeraerts states, dictionary publication limitations are such that 'any traditional form of linear ordering cannot do full justice to the multidimensional nature of semantic structures' [361]. Lexicographers cannot, for example, fully or easily represent polysemy in their entries by using visual figures of radial categories or semantic networks, which is why we might often sense that dictionary definitions never tell us the full story about a word's meaning.

To learn yet even more about *it*, students might turn to research in cognitive linguistics. Although Smith's initial interest was with the German pronoun *es*, his findings are relevant for English *it*. For instance, Smith argues that German *es* is polysemous because its prototypical anaphoric meaning has been expanded over time to include other meanings [Smith

2002 : 68, 73]. While there may be more than fifteen unique yet related senses of *es* in German [103], examples (48) to (51) reveal but four different functions that the German pronoun may have:

48. *Ist das Ihr Kind? Bitte nimm es weg von hier!* [Is that your child? Please take him/her away from here.] [Smith 2002 : 73]

49. *Mein Vater is Arzt, ich bin es auch.* [My father is a doctor, (and) I am one too.] [Smith 2002 : 74]

50. *Es spielt ein Kind im Garten.* [There is a child playing in the garden.] [Smith 2002 : 78]

51. *Es wurde viel gearbeitet.* [There was a lot of working (going on).] [Smith 2002 : 80]

While *es* in (48) refers to '*Kind*'—a neuter antecedent, in (49) *es* refers to '*Arzt*'—a masculine antecedent. In other words, *es* need not always refer to a singular neuter noun. For example, a speaker of German may say, '*An der Ecke standen ein Mädchen und ein Junge. Es waren seine Kinder*' [On a corner stood a boy and a girl. They were his children] [Smith 2002 : 74]. The referential flexibility demonstrated by *es* is evidence that its neuter and singular properties have undergone '*semantic bleaching*' over time [74]. If this were not the case, then the usage range for *es* would be more limited than it is. In (50), meanwhile, *es* profiles '*Garten*', a physical setting, whereas in (51) *es* has a scene-setting function by profiling the setting within which the construed action takes place [80].

Although grammarians like Alexander describe *it* as an '*empty subject*' [78], Smith doubts that impersonal German *es* in (50) or (51), for example, is '*merely a meaningless dummy element*' [82]. On the contrary, cognitive linguists like Smith maintain that nothing is entirely meaningless in grammar and that arbitrary grammatical structures do not really exist [69, 82, 85-86]. For example, consider (52):

52. *Es donnerte gestern.* [It thundered yesterday.] [Smith 2002 : 91]

In weather-verb constructions like (6) or (9) or (52), *it* fulfills a scene-setting function and can refer to the physical environment within which the weather event occurs. Although *es* and *it* are usually considered to be definite, they can also be used in a non-distinct manner [Smith 2002 : 92]. Indeed, according to Langacker, some linguists may call *it* a '*dummy subject*' simply because '*they have no clear conception of its referent*' even though the vagueness of such a setting-subject pronoun is '*precisely its crucial semantic property*' [377]. It might seem counterintuitive at first to say that vagueness is vital to a word's meaning, but this position is nevertheless consistent with a usage-based approach to semantics (see Tuggy). In (52), for example, German *es* and English *it* function as setting-subjects that may designate the general setting in which the weather event '*is construed to take place*' [Smith 2004 : 29]. The fact that the setting may be *general* rather than *specific* is reflected by the setting-subject use of *es* and *it*.

However, just as *es* and *it* have physical scene-setting senses, they also have abstract scene-setting senses as well:

53. *Es ist der Gesundheit nicht zuträglich, viel Kaffee zu trinken.* [It is not healthy to drink a lot of coffee.] [Smith 2002 : 94]

Example (53) is similar to examples (10) and (11), but in (53) *es* and *it* create a mental space within which the proposition can be inserted, as it were, and then either evaluated or commented upon [Smith 2002 : 94]. This metalinguistic function might help explain why *it* can be used as an extraposed syntactic-subject pronominal in examples such as (54) and (55):

54. *It is likely that the governor will run for president.* [Smith 2004 : 42]

55. *It is certain that Gore and Bush will have a close race.* [Smith 2004 : 42]

Unlike anaphoric *it*, cataphoric *it* refers forward to something which has yet to be explicitly mentioned. Such is the case in (54) and (55), where *it* refers forward to a proposition that is initially unclear. While systemic-functional linguists such as Downing and Locke might say that *it* is necessary in (5), (8), (54) or (55) because English sentences syntactically require subjects [44], a cognitive linguist might argue that the so-called requirement has more to do with semantics than with syntax. According to Smith, both '*es* and *it* can be used as anaphors for anything from a thing construed as a participant in an event to a reification of a full clause' [2004, 27]. This strong claim is supported by examples such as (56) and (57):

56. *Wir haben ihn weider deklamieren gehört. Es war ein verbales Schlachtfest.* [We've heard him recite again. It was a verbal slaughter.] [Smith 2004: 27]

57. *In der Klasse ist gestohlen worden, aber keiner will es getan haben.* [Something was stolen in the classroom, but no one claims to have done it.] [Smith 2004: 27]

While the recital is reified by *es* in (56), the act of theft is reified by *es* in (57) [Smith 2004 : 27]. This is why, to some extent, we could say that pronouns can be a means of reification. The reification of clauses in (56) and (57) convinced Smith that this '*sense provides the bridge for its use to designate settings of various sorts*' [2004 :27]. In other words, the reification function of *es* in (56) and (57) may be seen as a step along a path that runs from strictly anaphoric *it* on the one hand, to strictly cataphoric *it* on the other, passing through the scene-setting sense of the pronoun along the way. Of course, the scene-setting senses of *it* and *es*, as seen in examples such as (6) or (9) or (52), have intrigued linguists for years [see Nerlich]. However, the answer to the mystery of their use here may be metonymy.

According to Smith, *it* metonymically links events with the settings in which those events occur in weather-verb constructions [2002 : 28]. For example, the setting in (52) is local instead of global, and is grounded (as it were) by pragmatic context. If *it* can metonymically denote a setting or reference point, then we must remember that reference point is not synonymous with point of view [POV]. As Van Hoek argues, there are

constraints to keep in mind since the use of cataphoric *it* is not possible at times 'when the subject is inanimate and hence not a possible POV' [77]. Van Hoek's claim is based on examples like (58) and (59):

58. *It fell down and crushed some people who had never been inside the building before. [Van Hoek : 77]

59. *It always impresses people who have never seen the Taj Mahal before. [Van Hoek : 77]

Since inanimate objects like buildings cannot normally function as points of view, the use of cataphoric *it* in (58) and (59) may be incorrect because of the nature of the referents. In my opinion, native speakers might find (59) more acceptable than (58) because of the syntactic distance between pronoun and referent. For Van Hoek, however, such constraints are best analyzed in terms of 'conceptual semantic notions', like POV shifting, rather than in terms of 'autonomous syntactic constructs' [77]. That said, one main finding of cognitive linguists working on pronouns is that *it* is hardly meaningless, even when used impersonally to fulfill so-called syntactic requirements.

4. Cataphoric *it* and Conceptual Distance

For many cognitive linguists, the existence of certain forms and their use are motivated rather than arbitrary. This assumption was put to the test by Smith with respect to *it* and *es*. Another finding of Smith's was that anticipatory uses of *es* in (60) and (61), for example, reveal the creation of conceptual distance:

60. *Dass er es getan hat, verzeihen wir ihm.* [Smith 2002 : 95]

61. *Wir verzeihen es ihm, dass er es getan hat.* [We forgive him that he did it.] [Smith 2002 : 95]

As Smith learned, at least three dozen German verbs 'require cataphoric object *es*' [2002 : 100]. With such verbs, the use of *es* seems motivated by the basic fact that 'we generally tend to distance ourselves, both physically and psychologically, from unpleasant things' [97]. In examples such as (22) to (33), *it* can be used as a preparatory object after certain verbs 'involving negative, uncertain, or otherwise undesirable feelings' [Smith 2004 : 30]. And this pattern is also seen in the English examples (62) to (66):

62. *I despise it that John voted for the governor.* [Smith 2004 : 3]

63. *We abhor it that the mayor absconded with the money.* [Smith 2004 : 14]

64. *She resents it that the class starts so early.* [Smith 2004 : 14]

65. *They dislike it that the weather is so cold here.* [Smith 2004 : 14]

66. *He detests it that Clinton was impeached.* [Smith 2004 : 14]

In these examples, *it* is cataphoric, referring forwards rather than backwards. Moreover, *it* also appears to be used to create conceptual distance between the speaking subject and the proposition that follows *it*. Thus, *it* is neither semantically empty nor functionally meaningless; rather, *it* creates conceptual distance.

As we saw in examples (22) to (33), in part 1 of this paper, *it* may be used as preparatory object with certain so-called psychological verbs, and it is precisely this cataphoric use of the pronoun that is our main concern here. According to Smith, speakers may use *it* after verbs such as '*resent, hate, dislike, detest, or abhor*' in order to distance themselves from unpleasant or negative things expressed in the propositions [2004 : 33]. This was seen in examples (62) to (66). However, speakers are not always required to use the pronoun cataphorically in order to create such distance:

- 67. **Mary believes it that the senator will lose.* [Smith 2004 : 14]
- 68. **The governor promised it that she would sign the bill.* [14]
- 69. **They know it that there will likely be a drought this year.* [14]
- 70. **She thinks it that the baby is crying.* [14]

In (67) to (70), the use of *it* appears to be redundant. Thus, speakers can sometimes omit *it* after verbs such as '*believe, think, hope, know*' [Smith, 2004 : 33] if they wish to shorten the conceptual distance between them and their propositions. For instance, the conceptual distance in (62) to (66) is *reduced* in (71) to (73) when omitting *it*:

- 71. *I know (it) for certain that he is coming tomorrow.* [Smith 2004, 36]
 - 72. *I believe (it) that you got married.*
 - 73. *I hope (it) all goes very well and that a good time will be had by all.*
- [BNC]

The decision of speakers to either include or exclude the cataphoric pronoun may be motivated by concerns that have more to do with semantics than syntax since both versions of statements (71) to (73) are grammatically acceptable. In other words, a desire to *increase or decrease conceptual distance* could explain the choice for including or excluding *it* in examples such as (71) to (73).

To return to example (24), speakers can use *it* with verbs that are either very negative (e.g. *hate*) or very positive (e.g. *love*) [Smith, 2004 : 35]. But for the main verbs in (71) to (73), which are neither negative nor positive in any extreme way, *it* is optional. Why? This is the kind of question students of English grammar often ask. According to Smith, '*there are no strong motivating factors for separating the matrix subject from the subordinate proposition with these verbs*' [35], meaning verbs like *know, believe, and hope*. In other words, we can use the cataphoric pronoun to create conceptual distance, but with middle-of-the-road verbs, such as *know* or *believe*, creating conceptual distance may become less important, unless speakers want

hearers to have ‘an expectation of information to come’ [23]. That is one reason why *it* is optional in examples like (71) to (73).

Conceptual distance is related to the well-known linguistic phenomena of iconicity. As Smith states, ‘iconicity embraces the idea that there is a nonarbitrary relationship between meaning and the form or structure used to encode that meaning’ [2002 : 68]. There are three kinds of iconicity that are primarily discussed in the cognitive linguistics literature. First, there is iconicity of quantity: ‘Greater quantities in meaning are expressed by greater quantities in form’, as in plural nouns (e.g. *house/houses*) or superlatives (e.g. *tall/taller*) [Haspelmath : 2]. Second, there is iconicity of complexity: ‘More complex meanings are expressed in more complex forms’, as in the Spanish use of the verb *see* depending on whether or not the object seen is animate (*Veo a la niña*) or inanimate (*Veo la casa*) [Haspelmath : 2, 7]. Third, there is iconicity of cohesion: ‘Meanings that belong together more closely semantically are expressed by more cohesive forms’, as in the general preference for English speakers to use the verb ‘kill’ rather than the longer verbal paraphrase ‘cause to die’ [Haspelmath : 16].

The third type of iconicity mentioned by Haspelmath, iconicity of cohesion, is the one that is most relevant to Smith’s notion of conceptual distance [Smith, 2002 : 65]. In (71) to (73), for example, omitting *it* seems to create greater cohesion between speaker and proposition by reducing the distance between the two. The inclusion of *it*, by contrast, may produce the opposite effect. Iconicity of cohesion seems motivated by the ‘*spatialization metaphor CLOSENESS IS STRENGTH OF EFFECT*’ [Lakoff & Johnson, 1980 : 128-132]. For instance, compare (74) to (75) and then (76) to (77):

- 74. *Harry is unhappy.* [Smith 2004 : 31]
- 75. *Harry is not happy.* [Smith : 31]
- 76. *I taught Harry Greek.* [Smith : 31]
- 77. *I taught Greek to Harry.* [Smith : 31]

Example (74) has a more negative connotation than (75). This is because of the difference between the two words ‘*not happy*’ and the attachment of the negative morpheme to form a single word, ‘*unhappy*’. In other words, comparing (74) to (75) shows the metaphor CLOSENESS IS STRENGTH OF EFFECT in action. There is also a difference in connotation between (76) and (77). For instance, (76) implies that thanks to the speaker, Harry really knows Greek now. His knowledge of Greek is more complete in (76) than it is in (77). In other words, in (77) there is less certainty about how much Harry really learned from the speaker [Smith, 2004 : 32]. Such readings are the result of the iconic relationship between form and meaning in these examples. For instance, there is more syntactic and semantic cohesion in (76), a double-object construction, than there is in (77), which differs from (76) in its syntax and explicit marking of the indirect object. While CLOSENESS IS STRENGTH OF EFFECT motivates iconicity of cohesion, which in turn may explain the differences between (74) and (75), as well (76) and (77), the metaphor may not account for the effect of emphasis created by *it* in examples (62) to (66). In other words, a strong effect can be created by

including *it*. Another explanation therefore seems warranted to find out why speakers would include rather than exclude *it* in such examples.

5. Cataphoric *it* and Mental Spaces

Conceptual distance and iconicity are not the only reasons why we use *it* cataphorically. Fauconnier's theory of mental spaces suggests there is yet another factor that motivates the use of cataphoric *it*. Mental spaces theory is based on a relatively clear guiding principle. According to Fauconnier:

Language, as we know it, is a superficial manifestation of hidden, highly abstract, cognitive constructions. Essential to such constructions is the operation of structure projection between domains. And therefore, essential to the understanding of cognitive construction is the characterization of the domains over which projection takes place. Mental spaces are the domains that discourse builds up to provide a cognitive substrate for reasoning and for interfacing with the world. [Fauconnier, *Mappings* : 34]

In Fauconnier's theory, a distinction is made between linguistic structures and knowledge structures. Mental spaces are '*partial structures that proliferate when we think and talk, allowing a fine-grained partitioning of our discourse and knowledge structures*' [11]. Mental spaces are relevant to the use of cataphoric *it* in at least two ways.

First, according to Radden and Dirven, the extraposed subject in (78) is a cataphoric pronoun that '*opens a mental space for causes that might stimulate people's amazement*' [Fauconnier, *Mappings* : 283]:

78. *It is amazing how stupid George is.* [283]

For Radden and Dirven, '*the particular amazement meant in this situation is elaborated in the subject clause*' [283]—that is, *how stupid George is*—and the expletive syntactic-subject pronoun introduces that attitude. With regard to extraposed *it* in examples (54) and (55), Smith suggests that speakers may use *it* to introduce how they feel about a proposition *before* actually stating the proposition is, especially when they assume their '*opinions about events [are] as important (if not more so) as the events themselves*' [Smith, 2004 : 43-44]. Although Smith does not overtly mention the concept of information structure in his discussion, his hypothesis fits well with the view that information structure can be altered from topic/comment to comment/topic form in examples such as (54) and (55).

Second, mental spaces theory shows how cataphoric *it* can influence the semantics of verbs:

79. *You know (it) when the train goes by.* [38]

80. *Did you hear (it) when the train arrived?* [Smith : 38]
 81. *She was aware of (it) when the plane landed.* [Smith : 38]
 82. *The psychic could feel (it) when the UFO landed.* [Smith : 38]

Just as we saw in (71) to (73), the use of *it* in (79) to (82) is optional rather than compulsory. In (79) to (82), using *it* contrasts a physical effect or knowledge of the given proposition with a more abstract or intellectual awareness of the proposition. Using *it* here reinforces the fact that the event in each proposition has a concrete physical effect on the matrix subject and not just an abstract intellectual effect [Smith 2004 : 38]. Indeed, this may motivate a speaker's decision to use *it* with verbs such as *know*, *hear*, *feel*, and *aware*. While iconicity of distance suggests the shorter the distance the stronger the effect, in these examples the greater the conceptual distance the stronger the effect, as it were. According to Smith:

[W]hen the speaker wants to focus attention on perception of an event in the physical domain or setting (by using *know*, *be aware of*, etc), he can accentuate the influence of that event's occurrence in (and possibly on) the setting in which it occurs by designating the mental space set up by that verb (or verbal construction in the case of *be aware of*) with cataphoric 'it'. The use of 'it' to designate the space set up by the space builder highlights the importance of the physical location of the event with these verbs and thus the event's effect on the matrix subject. [Smith: 40-41]

Both Larreya & Rivière [256], and Malavielle & Rotgé [227], explain that *it* may be used as a preparatory subject *pour annoncer une proposition*. While that is true, using *it* in (79) to (82) enables the speaker to evaluate and/or comment upon the proposition that follows, propositions situated with mental spaces. That is why using *it* in these examples can influence the verbs' semantics. For example, the verb *know* in (79) is paraphrased by Smith as meaning to '*be physically (as opposed to intellectually) aware of something in the physical domain*' [2004 : 41]. Therefore, in (79) *know* is synonymous with *feel*. However, *feel* would not have the same sense as *know* in (79) if the cataphoric pronoun were not used. Cataphoric *it* can thus be used to emphasise a subject's awareness of a physical effect in a mental space designated by a matrix verb. This point is something that most student textbooks overlook, but it is nevertheless worth mentioning for students hoping to understand optional uses of *it* in more depth.

6. Conclusion

There is, of course, more that could be said about *it* in a longer study of the subject. First, many sections in this paper could no doubt be expanded with more examples and more analyses. The data in this paper come mainly from grammar textbooks written for students rather than computerised

corpora. Collecting more examples from more diverse corpora in the future would no doubt improve the validity of the generalisations made here. Also, Nerlich & Clarke remind us that ‘ever since Michel Bréal introduced the term polysémie into linguistics [in 1897], polysemy has caused problems in linguistic research’ [4]. The same might be true of my own discussion of polysemy in part 3 of this paper even though I discussed polysemy to try to show how a so-called functional word of little apparent meaning could in fact be functionally rich in meaning. Second, the debate between Haspelmath, Haiman, and Croft—in a recent issue of the journal, *Cognitive Linguistics* [2008]—shows that concepts such as iconicity have various degrees of explanatory power for some cognitive linguists. The story of *it* that I have told in this paper is therefore far from the only story of *it* that might be told by cognitive linguists. Third, some linguists working on English might find Smith’s research to be of limited use because German, rather than English, was his primary interest initially. However, it is impossible to deny that the research on impersonal pronouns in German by Smith, and in French by Achard, is relevant to those working on *it* in English from a cognitive linguistic perspective.

In conclusion, despite these limitations, this paper has hopefully shown that three insights can be gained when studying *it* as a cognitive linguist. First, the word is polysemous rather than meaningless, satisfying various functions of importance, even when used as a so-called dummy subject. Second, uses of *it* are often semantically motivated. For instance, *it* is used at times in order to create conceptual distance between speaker and proposition, especially with propositions of negative or undesirable states of affairs. Third, *it* is also used with certain perceptual or intellectual verbs so that speakers may comment upon or evaluate propositions following *it*, rather than merely introduce them with *it*. I admit it might have been possible to gain these insights from other perspectives, such as micro-rhetoric, for example, which for Hopper entails ‘viewing the minutiae of language as always and inescapably imbued with pragmatic significance’ [249]. However, I still feel that cognitive linguistics can add value to our understanding of language not by simply telling us *how* words can be used, but by explaining *why* words such as *it* can be used in the particular ways that they are actually used.

References

- ACHARD, M. ‘Fields and Settings: French *il* and *ça* impersonals in copular complement constructions’. *Cognitive Linguistics* 21-3 (2010): 443-500. (2010a)
- ACHARD, M. « Le sens cataphorique de ceci, cela et ça ». *Congrès mondial de linguistique française 2010*. F. NEVEU et al. (dir.) Paris : Institut de Linguistique Française, 2010 : 1607-1617. (2010b)
- ALEXANDER, L.G. *Longman English Grammar*. Harlow : Pearson, 1988.

- BARBER, C. *The English Language: A Historical Introduction*. 2nd ed. Cambridge: University Press, 2000.
- BAUGH, A. & CABLE, T. *A History of the English Language*. 5th ed. London: Routledge, 2002.
- CARTER, R.; HUGH, R. & MCCARTHY, M. *Exploring Grammar in Context*. Cambridge: University Press, 2000.
- CHOY, J.J. & THOMPSON, C.J. 'Online Comprehension of Anaphor and Pronoun Constructions in Broca's Aphasia: Evidence from Eyetracking'. *Brain and Language* 95 (2005) : 119-120.
- COWLES, H.W.; WALENSKI, M. & KLUENDER, R. 'Linguistic and Cognitive Prominence in Anaphor Resolution: Topic Contrastive Focus and Pronouns'. *Topoi* 26 (2007) : 3-18.
- CROFT, W. 'On Iconicity of Distance'. *Cognitive Linguistics* 19-1 (2008) : 49-58.
- DOWNING, A. & LOCKE, P. *English Grammar: A University Course*. 2nd ed. London: Routledge, 2006.
- FAUCONNIER, G. *Mental Spaces*. Cambridge : University Press, 1995.
- FAUCONNIER, G. *Mappings in Thought and Language*. Cambridge : University Press, 1997.
- FAUCONNIER, G. & TURNER, M. *The Way We Think*. New York : Basic Books, 2002.
- GARROD, S.; FREUDENTHAL, D. & BOYLE, E. 'The Role of Different Types of Anaphor in the On-line Resolution of Sentences in a Discourse'. *Journal of Memory and Language* 33 (1994) : 39-68.
- GEERAERTS, DIRK. *Words and Other Wonders*. Berlin: Mouton de Gruyter, 2006.
- HASPELMATH, M. 'Frequency vs. Iconicity in Explaining Grammatical Asymmetries'. *Cognitive Linguistics* 19-1 (2008) : 1-34.
- HAIMAN, J. 'In Defence of Iconicity'. *Cognitive Linguistics* 19-1 (2008) : 35-48.
- HAMM, A. « Référence, anaphore et coercion de type » in G. KLEIBER & N. LE QUERLER (dir). *Traits d'union*. Caen : Presses de l'Université de Caen, 2002 : 120-133.
- HEWINGS, M. *Advanced Grammar in Use*. Cambridge : University Press, 1999.
- HOPPER, P. 'Linguistics and Micro-Rhetoric: A 21st Century Encounter'. *Journal of English Linguistics* 35-3 (2007) : 236-252.

- KLIN, C. et al. 'When Anaphor Resolution Fails: Partial Encoding of Anaphoric Inferences'. *Journal of Memory and Language* 54 (2006) : 131-143.
- LALLEMENT, B.; BRION, B. & PIERRET, N. *La grammaire de l'anglais*. Paris : Hachette, 2006.
- LANGACKER, R. *Foundations of Cognitive Grammar, volume 2*. Palo Alto, CA: Stanford UP, 1991.
- LAPAIRE, J-R. *La Grammaire anglaise en mouvement*. Paris: Hachette, 2005.
- LARREYA, P. & RIVIERE, C. *Grammaire explicative de l'anglais*. 3^e éd. Paris : Pearson Longman, 2005.
- MATTHEWS, D. et al. 'Pronoun co-referencing errors: Challenges for generative and usage-based accounts'. *Cognitive Linguistics* 20-3 (2009) : 599-626.
- MALAVIEILLE, M. & ROTGE, W. *La Grammaire anglaise*. Paris : Hatier (Collection Bescherelle), 1997.
- MCDONALD, J. & MACWHINNEY, B. 'The Time Course of Anaphor Resolution: Effects of Implicit Verb Causality and Gender'. *Journal of Memory and Language* 34 (1995) : 543-566.
- MURPHY, R. *English Grammar in Use*. 2nd ed. Cambridge : University Press, 1994.
- NERLICH, B. « Un exemple-type de la théorie des actes de langage : 'il pleut,' 'it's raining,' 'es regnet' ». *Histoire, Épistémologie, Langage : Histoire des Conceptions de l'Énonciation* 8-2 (1986) : 149-164.
- NERLICH, B. & CLARKE, D. 'Polysemy and Flexibility: Introduction and Overview' in Brigitte NERLICH et al. (eds.) *Polysemy: Flexible Patterns of Meaning in Mind and Language*. Berlin: Mouton de Gruyter, 2003 : 3-30.
- RADDEN, G. & DIRVEN, R. *Cognitive English Grammar*. Amsterdam: John Benjamins, 2007.
- Random House Webster's College Dictionary*. New York: Random House, 1996.
- REILLY, R. 'Sentence Representations and Anaphor Processing'. *Journal of Psycholinguistic Research* 17 (1988) : 297-315.
- ROBERT, S. « Variations des représentations linguistiques : Des unités à l'énoncé » in Stéphane ROBERT & Catherine FUCHS (eds.) *Diversité des Langues et Représentations Cognitives*. Paris : Ophrys, 1997 : 25-42.
- SMITH, M. 'Cataphoric Pronouns as Mental Space Designators: Their Conceptual Import and Discourse Function' in Robert KIRSNER; Ellen

CONTINI-MORAVA & Betsy RODRIQUEZ-BACHILLER (eds.) *Cognitive and Communicative Approaches to Linguistic Analysis*. Amsterdam: Benjamins, 2004 : 61-90. [manuscript pre-print cited]

SMITH, M. 'The Polysemy of German *es*, Iconicity, and the Notion of Conceptual Distance'. *Cognitive Linguistics* 13 (2002) : 67-112.

TUGGY, D. 'Ambiguity, Polysemy, and Vagueness'. *Cognitive Linguistics* 4.3 (1993) : 273-290.

VAN HOEK, K. *Anaphora and Conceptual Structure*. Chicago: University of Chicago Press, 1997.