“Andrew Carnie’s textbook *Syntax* is now the standard text in generative syntax. The new workbook, designed to accompany the third edition, provides the instructor with a myriad of exercises that match up with the textbook. The primary goal of studying syntax is to learn how to carry out one’s own grammatical analysis, not to memorize analyses carried out by others. Thus, the workbook, which greatly facilitates this goal, is an important step forward.”

Peter Cole, University of Delaware

Written as a companion to the bestselling textbook, *Syntax: A Generative Introduction*, this workbook features over 120 new exercises in a format that corresponds to each chapter of the textbook. Students and instructors alike consistently point to the need for more exercises than can be provided in a single volume; this Workbook expands upon those in the textbook to give students more practice at mastering the concepts discussed. The provision of end-of-chapter answers makes *The Syntax Workbook* especially useful for self-study.

The exercises and topics covered include phrase structure, the lexicon, Case theory, ellipsis, auxiliaries, movement, covert movement, locality conditions, VP shells, and control. A website at [www.wiley.com/go/carnie](http://www.wiley.com/go/carnie) includes additional resources that can be accessed, including further exercises, links for further reading, and extra material on HPSG and LFG. This website supports the third edition of Carnie’s *Syntax: A Generative Introduction* as well as this workbook.

For my family: Jean, Fiona, Morag, and Pangur
The Syntax Workbook

A Companion to Carnie’s Syntax

Andrew Carnie
Contents

Introduction: Welcome 1

Part 1 Preliminaries 3
1 Generative Grammar 5
2 Parts of Speech 13
3 Constituency, Trees, and Rules 20
4 Structural Relations 39
5 Binding Theory 46

Part 2 The Base 51
6 X-bar Theory 53
7 Extending X-bar Theory to Functional Categories 72
8 Constraining X-bar Theory: Theta Theory 84
9 Auxiliaries and Functional Categories 93

Part 3 Movement 107
10 Head-to-Head Movement 109
11 DP Movement 117
12 Wh-movement and Locality Constraints 127
13 A Unified Theory of Movement 145

Part 4 Advanced Topics 149
14 Expanded VPs 151
15 Raising, Control, and Empty Categories 157
16 Ellipsis 169
17 Advanced Topics in Binding Theory 174
18 Polysynthesis, Incorporation, and Non-configurationality 177

References 180
Index 182
Thank you for purchasing *The Syntax Workbook* which goes along with the third edition of *Syntax: A Generative Introduction*. This workbook is designed to give you further practice beyond the presentation and exercises in the main text. Syntax often uses big tree diagrams, and the constant cry I’ve heard from students using the first and second editions is that there aren’t enough example diagrams or practice. On the other hand, adding practice exercises with answers would make the main text too big and expensive. So I’ve settled on this optional workbook as an alternative.

You have three different opportunities to practice now:

1) **Workbook Exercises (WBE)**: This workbook contains enrichment and additional practice exercises that go along with each chapter in the book. You can check your own answers against the answer key at the end of each chapter.

2) **General Problem Sets (GPS) (in the main textbook)**: You can do the general problem sets at the end of each chapter in the main textbook. I’m sorry but *the answers to these questions are not made available to students*. The reason for this is that many instructors use these problem sets as a means for student evaluation. Providing the answers to these would be counterproductive! If you are using the textbook for self-study or your
Introduction

instructor isn't using the problem sets for evaluation, I encourage you to find a linguistics professor or linguistics (post-)graduate student who can help you with determining if you are on the right track with these.

3) If you are an advanced student or a graduate student, I strongly encourage you to try the Challenge Problem Sets (CPS) at the end of each chapter in the main textbook. These problem sets are designed to make you think critically about the presentation in the text and to think about alternatives and problems that exist for the theory. Again the answers to these cannot be distributed to students.

I hope that you find that the addition of this workbook enriches your syntactic studies and gives you more opportunities to master the material.

This is the first version of this workbook and while we've done our best at quality control, it's possible that some errors have slipped through the student testing, copy-editing, and proofreading processes. I welcome any corrections or suggestions at carnie@email.arizona.edu. You should check my website or the Wiley-Blackwell website listed below to see if there are any errata available for this workbook or for the main text.

Many people have contributed to the creation and production of this book. My thanks to: Dean Allemagn, Diana Archangeli, Glynis Baguley, Uldis Balodis, Andrew Barss, Jean Carnie, Fiona Carnie, Morag Carnie, Pangur Carnie, Jae Hoon Choi, Danielle Descoteaux, Charlotte Frost, Carrie Gillon, Andrea Haber, Heidi Harley, Mike Hammond, Hyun Kyoung Jung, Dan Karvonen, Simin Karimi, Julia Kirk, Jeff Lidz, Dave Medeiros, Leah Morin, Alan Munn, Diane Ohala, Matt Pearson, David Pesetsky, Massimo Piatelli-Palmarini, Colin Phillips, Bill Poser, Jeff Punske, Marlita Reddy-Hjelmfelt, Sylvia Reed, Bob Ritchie, Jeff Runner, Yosuke Sato, Kevin Schluter, Dan Siddiqi, Peter Slomanson, Megan Stone, Maggie Tallerman, Chris Tancredi, Deniz Tat, Alex Trueman, Sakari Vaelma, the students in my various LING300 Syntax Classes at the University of Arizona, and my Facebook friends who I regularly victimized as testers for the problem sets in the book. I'm sure I've forgotten someone here, but please know you're appreciated anyway.

Andrew Carnie
Tucson

http://dingo.sbs.arizona.edu/~carnie
http://www.wiley.com/go/carnie
part 1

Preliminaries
Workbook Exercises

WBE1.  Prescriptive Rules

[Critical Thinking; Basic]

Part 1: All of the sentences below are prescriptively “wrong” according to many language mavens. Can you identify what's supposed to be wrong with them (i.e. what prescriptive rule do they violate?). If you’re not familiar with prescriptive rules you may have to search around on the Web a bit to figure this out, but if you’ve been trained to write in the American or British University tradition, most (or many) of these should stand out as “poor grammar” or “poor style”. Certainly, Microsoft Word’s grammar-checking program is flagging each of these sentences as I write them!

a)  What did you put the present in?
b)  She’s smarter than him.
c)  To boldly go where no one has gone before!
d)  He walks too slow.
e)  Hopefully, the weather will turn sunny soon.
f)  I found out something which will disturb you greatly.
g)  Who did you see?

© 2013 Andrew Carnie. Published 2013 by John Wiley & Sons, Inc.
Preliminaries

h) I can’t hardly sleep.
i) 10 items or less [a grocery store sign]
j) My view of grammar is different than yours.
k) I will not enjoy it.
l) If I was a linguist, then I wouldn’t have to study prescriptive rules.
m) The homework wasn’t done completely.
n) All of the linguists at the conference congratulated each other.
o) Me and John are going to the movies later.
p) I want to learn a new language like French.

Part 2: Consider each of the sentences above and evaluate whether or not they are really unacceptable for you. Try to ignore what you were taught in school was right, and focus instead on whether you might actually utter one of these sentences, or if you’d actually blink if you heard one of them produced by someone else. Listen to your inner voice rather than relying on what you have learned is “correct”.

WBE2. Scientific Method Practice

[Critical Thinking Practice; Basic]

Background: One particular kind of question in English is called a “Yes/No question”. These questions can typically be answered with either Yes, No, or Maybe. The standard strategy for forming Yes/No questions is to change the order of the words at the beginning of the sentence from the equivalent statement:

a) John hasn’t eaten anything. Statement
b) Hasn’t John eaten anything? Yes/No question

With this background about yes/no and declarative sentences in mind, consider the following hypothesis:

Hypothesis 1: Yes/No questions are formed by moving the second word in the equivalent statement to the front.

Now look at the follow sentences:

c) Bilbo will eat chocolate-covered sausage. Statement
d) Will Bilbo eat chocolate-covered sausage? Yes/No question

Question 1: Are sentences (c) and (d) consistent with hypothesis 1? (Pay careful attention to the wording of the hypothesis!)

Now consider the next two sentences

e) The old hobbit will eat the chocolate-covered sausage. Statement
f) Will the old hobbit eat the chocolate-covered sausage? Yes/No question

1 Loosely based on an exercise in Carnie (2011).
Question 2: Are sentences (e) and (f) consistent with hypothesis 1?

Question 3: Instead of (f), what sentence does hypothesis 1 actually predict to be the grammatical Yes/No question equivalent to (e)?

Question 4: Try to come up with a hypothesis that accounts for the grammaticality of (e). (Hint #1: words such as will are called auxiliaries. Hint #2: use as much of the language in hypothesis 1 as you can, making only minimal changes.)

WBE3. USING CORPORAS FOR DOING SYNTACTIC RESEARCH

[Critical Thinking Practice; Basic]

Make sure you read the discussion of blow up in section 3.2 of chapter 1 before attempting this question. Consider the phrase “blow off”. In colloquial American English, this sequence has two usages with quite different meanings.

a) The leaves blew off the sidewalk.
b) I blew off doing my homework.

In (a) blow means “(to move) in a burst of air”. The off is actually a preposition that is tied to the noun phrase the sidewalk. The other meaning, in (b), is the colloquial expression blow off meaning “didn’t do”, “ignored responsibilities”, or “didn’t show up” in some circumstances. Phrases like blow off or blow up often allow two orders of the object and the particle (off or up): I blew up the building and I blew the building up.

Now consider the following sentences:

c) Sean blew him off.
d) Sean blew off him.

Question 1: What meaning(s) does sentence (c) have? Are they different from sentence (d)? Is sentence (d) even grammatical in your dialect?

Question 2: Now you get to use Google® or a similar search engine to investigate the frequency of phrases like (a–d) to see if their relative frequencies correspond to the availability of meanings. Perform the following steps:

1) Go to Google.com® or a similar search engine.
2) Click on “advanced search” (you may have to click on the “gear” icon at the top right).
3) In the box labeled “This exact wording or phrase” type in the following phrases, then hit “search”. (Using the normal search function won’t work. You need to use the “exact wording” option.)
   i) “blow the guy off”
   ii) “blow off the guy”

It can also have a third, sexually charged, meaning. I emphatically want you to ignore that possibility here.
iii) “blow him off”
iv) “blow off him”

4) Note down the number of hits for each search. (In Google®, this number appears at the top of the search results right under the search bar.)

5) Next, calculate the percentages of (i) vs. (ii) (Blow the guy off vs. blow off the guy). To do this, take each number, divide it by the total number of hits of (i) and (ii) summed together, then multiply the result by 100.

6) Next calculate the percentages of (iii) vs. (iv).

Is there is a big difference between the percentage of examples like (iv) and the percentage of examples like (ii)?

**Question 3:** Is there a correspondence between the numbers you got above and your judgments of grammaticality and meaning?

**Question 4:** Look at the first few pages of your search results for “blow off him”. Do any of these have the “didn’t bother to show up” meaning? What does this tell you about the structure of sentence (d)?

### WBE4. Semantic vs. Syntactic Judgments

**[Application of Knowledge; Basic]**

*Each* of the following sentences might be considered to be ungrammatical, unacceptable, or just odd. For each sentence, indicate whether the ungrammaticality or oddness has to do with syntax (form) or semantics (meaning) or both.

- a) The chocolate-covered sausage sincerely wanted her mother-in-law to leave.
- b) What do you wonder who chased?
- c) Cat the dog the bark at.
- d) Andrew is a professor and not a professor.
- e) Danced makes me to have tired.

### Answers

**WBE1. Prescriptive Rules**

**Part 1:**

a) This sentence ends in a preposition. Prescriptively it should be *In(to) what did you put the present?*

b) The complement of a comparative is supposed to be in the nominative case. Prescriptively, this should be *She’s smarter than he*. The reasoning is that the sentence is really a shortening of *She’s smarter than he is.*
c) This sentence has a split infinitive (to boldly go). Prescriptively, this should be To go boldly where no man has gone before.

d) Slow is an adjective, not an adverb, but here it modifies a verb. The prescriptively correct form is He walks too slowly.

e) The adverb hopefully is supposed to only mean “in a hopeful manner”; the weather is unlikely to be hopeful. Prescriptively it should be I hope that the weather will turn sunny soon.

f) The string of words that follows something is a restrictive relative clause and should be introduced by that. An alternate non-restrictive meaning could be forced by inserting a comma before the which. Prescriptively this should be I found out something that will disturb you greatly.

g) Who represents the object of the verb see, so should be in the accusative form whom (Whom did you see?).

h) This one is hard for American speakers to spot. Hardly is a negative adverb, so this is seen as a case of double negation. In prescriptive terms it should be I can hardly sleep.

i) Less is supposed to be used with mass nouns (nouns like water or air) and item is not a mass noun, so prescriptively this should be 10 items or fewer.

j) The prescriptively correct form is different from. Than is supposed to be a conjunction rather than a preposition, and so can’t be used to connect an adjective with a pronoun. So prescriptively this should be My view of grammar is different from yours.

k) At least in prescriptive British English, the correct future auxiliary that is used with first person subjects (i.e., I, we) is shall, not will. So this should be I shall not enjoy it.

l) When the word if marks a counterfactual conditional (i.e., it is used to describe a state of being that isn’t actually true), then the verb should be in its subjunctive form. So this sentence would be If I were a linguist, then I wouldn’t have to study prescriptive rules.

m) Prescriptive grammarians tell us to avoid passives. Sentence (m) is a passive. The active form of this would be something like You didn’t complete the homework efficiently.

n) According to prescriptive grammar each other is only supposed to be used when there are two participants, so “proper” grammar would have this as All of the linguists at the conference congratulated one another.

o) Me is the accusative form of the pronoun, so it’s supposed to be used only in object positions or after a preposition. In this sentence, the pronoun is in the subject position so it’s supposed to be the nominative I. The order of the noun John and the pronoun is also reversed from prescriptive order. The “correct” form for this sentence is John and I are going to the movies later.

p) The conjunction like is supposed to mean “similar to” rather than “as an example”. So the prescriptive interpretation of this sentence is one where the speaker wants
to learn a language that's similar to French, but not French itself. Prescriptively, if you intend an “as an example” meaning you’re supposed to use *such as* instead of *like: I want to learn a new language, such as French.*

Part 2: The answer to this part of the question will be a personal one. You might truly find some of these sentences unacceptable, but others you might be surprised are judged “wrong” at all. Personally, I find my inner voice balks a bit at (d), (f), and (l). However, the rest sound like things I say every day. This said, from a descriptive point of view, you will find that native speakers of English will all utter sentences like these “ungrammatical” ones. In many cases, they’re probably far more common in actual speech and writing than the “correct” forms. So if we’re being scientists we’re going to want to concentrate on what people actually do rather than on what so-called experts tell us to do.

**WBE2. SCIENTIFIC METHOD PRACTICE**

**Question 1:** Sentence (d) is predicted by the hypothesis: The first word in the declarative/statement form is the second word in the Y/N question, and vice versa.

**Question 2:** Sentence (f), however, is not predicted: it is the fourth word of sentence (e) that appears first in the question.

**Question 3:** Hypothesis 1 predicts that the yes/no question form of sentence (9) would be “Old the hobbit will eat the magic beans. The second word (*old*) is inverted with the first (*the*).

**Question 4:** Hypothesis 2 should be something like “Yes/No questions are formed by moving the auxiliary of the equivalent declarative sentence to the front” or “Yes/No questions are formed by reversing the positions of the subject and the auxiliary.” Your wording may vary.

**WBE3. USING CORPORA FOR DOING SYNTACTIC RESEARCH**

**Question 1:** For me, sentence (d) is only grammatical with a lot of context (see the sentences in answer to Question 4 below), but to the extent it’s okay, it has to mean that Sean puffed air across him. Sentence (c) by contrast is completely grammatical and can mean either “Sean didn’t show up for their meeting” or “Sean used a puff of air to clear all the dust off of him”.

**Question 2:** Because of the way Google® and search engines like it work, the exact numbers for this experiment will vary from day to day. But the general pattern of effect should be found no matter when the experiment is done. Here are the results
I got on June 10, 2011. The numbers are not exact, as Google only offers an approximation once the numbers get large enough.

1) “blow the guy off” 12100 31.1% (of i + ii)
2) “blow off the guy” 26800 68.9% (of i + ii)
3) “blow him off” 3,330,000 90.2% (of iii + iv)
4) “blow off him” 363,000 9.8% (of iii + iv)

You’ll notice that one of these numbers is very different from the others. Although there is a clear difference between the statistical frequency of (i) and (ii), the form with the pronoun *him* following the *off* (iv) is significantly less frequent than that where it precedes *off* (iii). Furthermore, note that the percentages are in the reverse proportion to those of (i) and (ii): “off + N” order is more frequent with a full noun, but the reverse order (pronoun + off) is far more frequent when we have a pronoun instead of a noun phrase like “the guy”.

**Question 3:** There seems to be a correspondence between our judgments of meaning and the statistics here. The form most English speakers either find ungrammatical or consider to have a very limited and non-idiomatic meaning, i.e. (iv), is also the statistically rarest in the giant corpus known as the Web.

**Question 4:** The first three most relevant/popular hits I got were the following:

- e) As he walks up the stairs in the giant mansion, his thin linen clothes blow off him in a stiff breeze.
- f) The skunk sprayed Bill with its strongest scent. Bill’s mother had to hang Bill on the clothesline for a week to let the smell blow off him.
- g) Watching Warren’s skin blow off him like an unzipped windbreaker in a brutal, gale-force breeze was just… ewww.

Clearly all of these examples intend the meaning where there is air blowing around. This suggests clearly that *blow off him* is always interpreted where the “off” is a preposition that takes an object noun (i.e., [blow [off him]]). The fourth most important hit I got, (h), does have the “ignore” idiomatic meaning, but the *him* is actually the subject of an embedded gerundive clause, suggesting that this is a different animal from (e–g) above.

- h) I would just blow off [him saying he likes you for now].

The rest of the hits on the first page have the “puff of air” meaning seen in sentences (e–f), and a quick skim of the rest of the pages of hits shows that sentence (h) is an anomaly.

---

What does this mean for us as syntacticians? Sometimes corpora can be used to verify judgments we have about structure. But the statistics don’t get at one important fact about the sentences above: The rare form is restricted in meaning as well.

### WBE4. Semantic vs. Syntactic Judgments

- **a)** Semantically odd. Sausages don’t have mothers-in-law (among other strange things about this sentence).
- **b)** This is semantically hard to understand, but it’s probably due to a syntactic effect. English doesn’t typically allow you to have multiply displaced questions words like what and who.
- **c)** Syntactic. The order of the words is clearly wrong.
- **d)** Semantically strange. This is a contradiction. Andrew can’t both be professor and not a professor at the same time. (Although I’m not always doing syntax in real life!)
- **e)** There are a couple of syntactic peculiarities here. Danced is either a past tense or a past participle and shouldn’t appear as the subject of the sentence (we might expect dancing instead). In English (but not in many other languages), you don’t “have tired”; you “are tired”. Finally, make typically doesn’t take a non-finite clause (marked by the to). We expect something more like Dancing makes me tired. Note that the sentence is perfectly comprehensible and meaningful, even though it’s not a sentence that any native speaker of English would ever utter.