

Brazilian English: An Unscientific Survey – Part II

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Good morning.

Thank you for coming to this second installment of my report on Brazilian English, as represented by 16 recent articles from Brazil in PRB and PRL. Many of the articles came from this Institute. Once again, I am grateful to all the authors whose work provided data and examples. If you are an author of one of the articles in the survey and you did not recognize a sentence from your paper in yesterday's examples, perhaps today you will find yourself quoted.

Yesterday I introduced the list of the eleven most common problems that I found in the sample and examined in depth the first four. These first items on the list occurred most often, so they deserved extra attention. Today, however, we will need to move faster, to cover the remainder. These are, in descending order of frequency,

The Seven Remaining Most Common Problems

5. Relative pronouns
6. Tense
7. Subject-verb agreement
8. Wordiness and Latin density
9. Comparisons
10. Infinitives vs Gerunds
11. Participial phrases

If so many grammatical terms cause your eyes to glaze over, be advised that this is not a class in English, but an editor's look at articles by Brazilian authors. I use these technical terms because they describe what I found, but the goal is to map out areas where a native speaker of Portuguese needs to be extra careful when writing for an English-language journal. By using examples from the surveyed articles, I hope to keep the focus on your work.

5. Relative pronouns (25 occurrences)

Shortly before this workshop, I learned that Celia Elliott had prepared a handout explaining how to choose correctly between “which” and “that,” in contexts like “this term, **which** is first order,” and “an approach **that** was first suggested in Ref. [3].” In view of her having covered this topic, I’ll skip it here, only noting that confusion between **which** and **that** accounted for about half of the 25 errors with relative pronouns that I found in the survey. The other half were mostly failures to provide a pair of words, “in which” or “on which,” called for by the context in sentences like this:

“In which” and “on which” can add elegance to a sentence.

The superscripts in the spinor components designate the triangular sublattice, A or B , the electrons are supported on.

This sentence does not represent a serious error, more a weakness of style that detracts from the polish of the article. You can get away with a sentence like this, but a simple change will improve it. You could add the word “that” after A or B , so you would have “the sublattice A or B that the electrons are supported on,” or, even better,

“In which” and “on which” can add elegance to a sentence.

The superscripts in the spinor components designate the triangular sublattice, A or B , **on which** the electrons are supported.

you could delete “on” from the end and insert “on which” after A or B . While the old rule of not ending a sentence with a preposition is no longer observed, I find this order clearer and more graceful.

“In which” and “on which” can add elegance to a sentence.

The superscripts in the spinor components designate the triangular sublattice, A or B , **on which** the electrons are supported.

We consider a simplified model where electron and hole move in a zero-width ring of radius R .

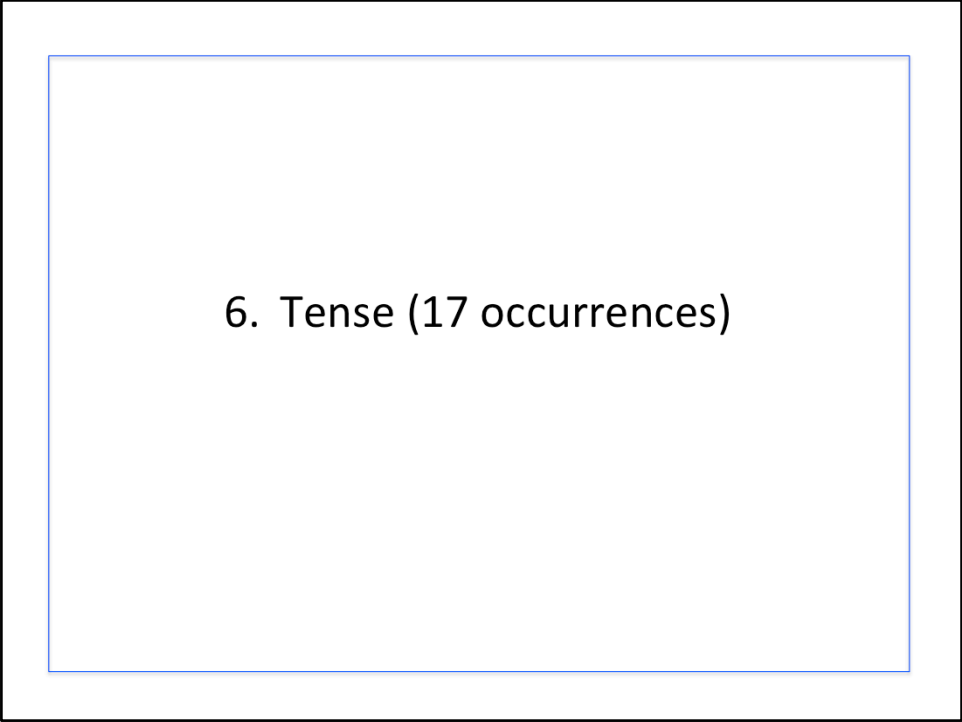
This second sentence substitutes “where” for “in which,” a practice so widespread now that it is probably not worth resisting. However, if I were the author, I would replace it here,

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because a model is not really a place, and “where” is the pronoun one uses to refer back to a place ... or an equation.



6. Tense (17 occurrences)

A description that switches **from “we verified” to “we calculate” to “we have obtained”** is distracting and disorienting to most readers, as it keeps shifting the vantage point from which they are viewing the work. I counted 13 instances in our sample of abrupt changes of tense in mid-discussion.

It's not that these authors used the tenses incorrectly. One can write about one's work in the Past, which is the tense favored by experimentalists, or the Present, which is the theorist's preference. And the Present Perfect—“we have seen” “it has produced”—is appropriate in many situations. The problem is simply mixing tenses without good reason.

Good tense change: Using the Present Perfect as a transition into or out of your article

Beginning:

The physics of small magnetic particles **has been studied** in great detail in recent years. [then switch to Past]

End:

We have analyzed the role of the dipolar interaction in the specific absorption rate, in the context of magnetic hyperthermia. [then switch to either Present or Past]

There is one instance of a tense change that works well in a scientific paper and that is widely used. That is employing the Present Perfect at the beginning or end of the paper as a transition into or out of your material. For example, you might begin, as one of the surveyed articles does, “The physics of small magnetic particles has been studied ...” and then switch to the Past tense to review what was done by whom. Or, at the end of the paper, open your Conclusions section with the Present Perfect, “We have analyzed ...” then switch to either the past or the present to summarize what you did. This is such a natural progression, your readers may not register it as a change in tense. But elsewhere in the paper, a good rule of thumb is to stay with one tense throughout any given paragraph.

How do you wish to look back?

Way back (Past Tense):

César **demonstrated** in 2009 ...

Back. Not necessarily long ago but completed (Past Tense):

We **studied** the effect of dimensionality ...

Not so far back. Perhaps still continuing (Present Perfect):

Recent research **has focused** on ...

As we **have shown** ...



A related problem in the surveyed articles was confusion of the Past tense and the Present Perfect. Let's look a little closer at these tenses and how they are used.

The Present Perfect gives a sense of immediacy in speaking to your reader. You and the reader are in the present together, looking back at recent and perhaps ongoing work. This sense of looking from one time to another is what makes the Present Perfect a good choice for openings and closings.

Be careful NOT to use the Present Perfect when describing something historical, especially when a year has been mentioned. And by the same token, don't use the Past tense for something very recent, like the preceding section of your article or any sentence beginning with "Recently."

I have given you a short **problem set on this subject**, with three sentences from the surveyed articles. After reading each sentence, decide whether Past or Present Perfect would best fit the context, based on clues within the sentences, and correct as needed.

7. Subject-Verb Agreement (16 occurrences)

The survey surprised me on this one. I found 16 instances in which a singular subject was given a plural verb or vice versa, a beginner's error. Yet these are authors whose English is overall quite accomplished. How could they write something like "both fluxes acts simultaneously"?

On looking more closely at the sentences in question, I found that most shared a structure that might explain the error. The sentences began with a singular subject, then mentioned something plural before getting to the verb. For example,

Is the subject singular or plural?

Singular	Plural	Verb
The first set	of NMR experiments	was performed were performed
or conversely,		
Plural	Singular	Verb
Their results	for the potential value	exceed exceeds

The subject is in the left-hand column. It determines which verb form is used. Those phrases in the middle are only modifiers, not the subject. If the authors had not been distracted by them, I feel sure they would have chosen the right form of the verb.

I've given you three examples from the survey in your problem set under the heading "Subject-Verb Agreement." First determine what is the subject of each sentence and circle it. Then select the correct verb to go with that subject.

8. Wordiness (16 occurrences)

A tendency towards wordiness is built into the romance languages, including Portuguese, because words of Latin origin dominate the vocabulary, and many of these words are multisyllabic, i.e., long. English, on the other hand, has a mixed ancestry, with words of Latin origin and of Germanic or Anglo-Saxon origin, and many of the Germanic words are short.

English vocabulary has a mixed ancestry.



initial
location
determine
utilize
similar to
attempt

first
place
find
use
like
try



Here are some familiar Latinate words. There is nothing wrong with them. Beside them are some of their Anglo-Saxon counterparts. To an English-speaking reader, a mix of these, an interplay of the two types, sounds most pleasing. Sentences that are dense with Latinate words, though correct, come across as pedantic and cumbersome.

The passages in the survey that I identified as wordy relied heavily on long, Latinate words, many of them ending in *-ion* and *-ity*. That is, those words were nouns for abstractions like determination, investigation, and capacity. Such words encourage a sentence structure with multiple “*ofs*”: The probability distribution **of** the expectation value **of** the square **of** the total spin per site—which have a kind of galumphing rhythm like a galloping elephant.

How can you avoid creating this impression in future articles? There are several ways, but I’ll mention four: first, reducing the Latin density by replacing a few—not all—of the Latinate words with a shorter English alternative; second, breaking very long sentences into two; third, replacing a wordy phrase with a simpler one; and fourth, changing abstractions into verbs.

Reducing your use of –ion will add muscle to your writing.

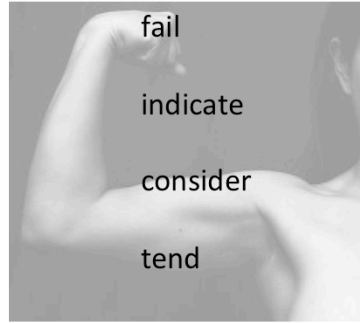
The human immune system is responsible not only for the **identification** of foreign molecules, but also for actions leading to their **immobilization**, **neutralization**, and **destruction**. (25 words)

The human immune system not only **identifies** foreign molecules, but also **immobilizes**, **neutralizes**, and **destroys** them. (16 words)

Here is an example of how to change abstract nouns to verbs. I credit Celia Elliott as the source of this sentence. See how this sentence has been reworded to change the blue-colored nouns to verbs. Instead of saying the immune system is responsible for identification, just say it identifies; instead of attributing to it actions leading to immobilization, say it immobilizes, etc.

You can also replace flabby phrases with active forms of the same verb.

make a decision	decide
experience failure	fail
give indications of	indicate
place under consideration	consider
exhibit a tendency	tend
have the capability	be able
perform a measurement	measure



You can also watch for phrases in which verbs have been given a noun form and change these phrases back to the original verb. While the shorter form on the right has the same Latin root, it creates an impression of leanness and—being a verb rather than a noun—action. Phrases on the left are not incorrect, but using fewer of them has the effect of toning up slack muscles in your writing

I've given you three examples of wordy sentences from the survey in your Problem Set. The object of this exercise is to rewrite them for simplicity and economy. There is no single right answer, but the answer section offers one alternative for each sentence.

9. Comparisons (15 occurrences)

Using the words “similar,” “different,” “similarly,” and “differently” was a problem in nine of the surveyed papers. For some, it was a preposition problem. They used something other than the required preposition.

a. Problems with Similarities and Differences

Memorize these preposition pairs,

Greater than, less than

Similar to

Different from

A way to remember that “similar” goes with “to” is to think of similarity as bringing things closer, converging *towards* each other, while different things diverge *from* each other.

Other writers of the surveyed articles had trouble with the adverb form “similarly.” This can be used with no preposition, when the item or action being compared is understood: “Similarly, we find for the second site ...” or it can be used with the preposition “to.”

Rather than confuse you with examples of the incorrect attempts that I found, I would like to remind you of a simpler alternative. The same comparisons can also be made using “like” and “as,”— which we shall now treat, because using these two words is easy. Well, it’s easy once you know the secret to choosing between them. Unfortunately, confusion of like and as was the other big problem in making comparisons.

b. Misuse of Like and As

Like compares things.

Like any superfluid state

Like that proposed by Prado

Like the entanglement entropy

As compares actions.

As in the spin-0 case, we take

As we did for the Potts models

Converges, as should be expected

All you need to know about these two words is the following: **Like** is used to compare things. **As** is used to compare actions. No special preposition is required—just whatever is already part of what you are comparing.

I've included a few comparison problems in your Problem Set. Please take a few minutes to do them.

10. Infinitives vs Gerunds (11 occurrences)

You know what an infinitive is, but perhaps are not 100% sure about a gerund. It sounds as if we are getting into deep water with English grammar here. I'm happy to tell you that you may be using gerunds already and you don't need to know what they are called. The point is that Brazilian English could probably use them more often instead of infinitives.

A gerund is a verb form that is used as if it were a noun. For example, in the sentence "Swimming was her favorite sport," swimming is a gerund. English often prefers gerunds where Portuguese uses infinitives. Most English speakers would say

We would suggest taking the limits

where a Portuguese speaker would say

We would suggest to take the limits.

Sometimes this is more than a preference. Gerunds are obligatory when following certain English words.

Learn more about gerunds from

<http://grammar.ccc.commnet.edu/grammar/gerunds>

If you would like to see a list of about 80 required uses of gerunds, I recommend a grammar website sponsored by the Capital Community College Foundation. For our purposes, looking at the 16 articles in our sample, a few examples will have to suffice. I found 11 instances where the authors used infinitives when a gerund would have been better. This is not to say that infinitives should be banished. They continue to play an important role in many contexts and can often be used alternatively with a gerund.

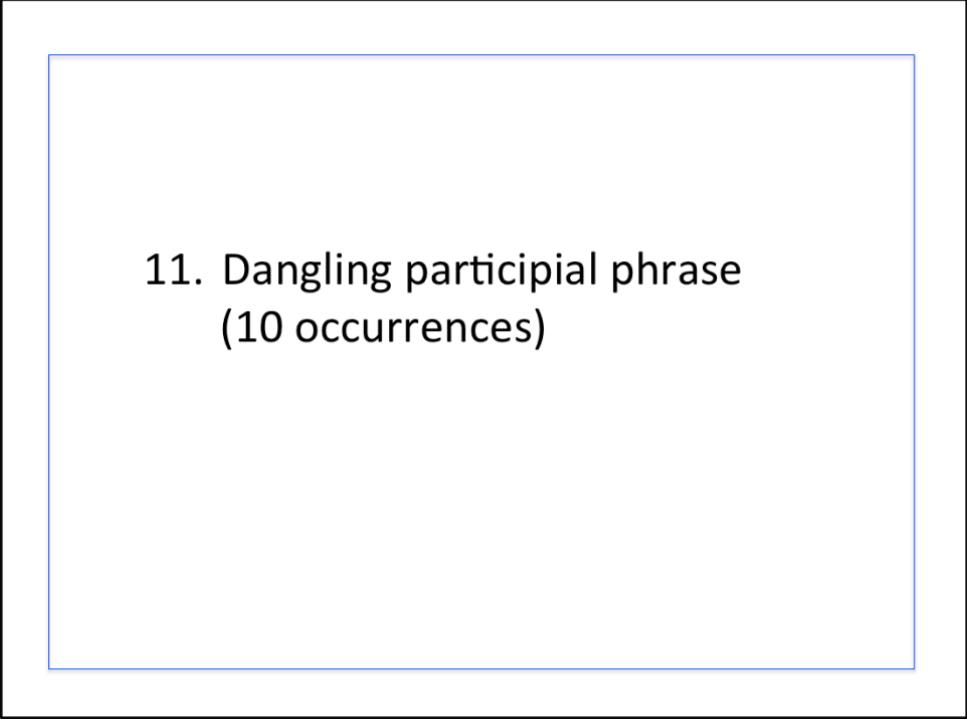
Correct uses of an infinitive and a gerund

This leaked Majorana dot mode provides **a clear-cut way to probe** the Majorana mode of the wire via conductance measurements through the dot.

This leaked Majorana dot mode provides **a clear-cut way of probing** the Majorana mode of the wire via conductance measurements through the dot.

Here is a correct use of an infinitive and an equally correct alternative with a gerund.

I have listed some sentences from the surveyed articles in your Problem Set and ask you to take a few minutes to change the infinitives to gerunds, in order to get a feel for this peculiarity of English.



11. Dangling participial phrase
(10 occurrences)

We are up to the last category of errors in our examination of Brazilian English. Again this has a fancy technical name, but is actually simple and recognizable.

Where is the agent?

Phrases beginning with a participle, such as

Opening the proceedings, **Maria gave a short speech ...**

Using these transformations, **we can rewrite the Hamiltonian ...**

By performing only local operations, **one is able to avoid ...**

should be immediately followed by the agent who is opening, using, performing, or whatever action the participle describes.

In the first example, someone is opening the proceedings—Maria. She needs to be named next in the order of the sentence. In the second example, who is the agent? We. And the third? One.

If the agent is not stated next, we get sentences like “Walking down the street, the houses looked old and shabby to Ellen.” This sounds as if the houses are walking down the street. When this kind of error is made in a physics article, the absence of an agent is not so noticeable, but it is still wrong. I counted 10 instances of this error in the surveyed articles.

There are two ways to correct an omission of the agent. The first is, obviously, to name the agent right after the participial phrase. The second is to begin the sentence with the agent, for example, As Ellen was walking down the street, ... When we use these transformations, ... If one performs only local operations Then we can follow the opening phrase any way we want.

I am not going to give you any exercises to work on this problem. It is clear enough, and you have already had a workout in English. I thank you for your attention and hope that this survey has alerted you to some features of Brazilian English that you will be paying closer attention to in your next article. Thank you.

Thank you!