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A cognitive pragmatic approach to punctuation.

In the Preface to his “Making a Point”, David Crystal writes:

“There are two extreme views about punctuation. The first is that you don't actually need it because it's perfectly possible to write down what you want to say without any punctuation marks or capital letters and people can still read it. You don't even need space between words really. They don't exist when we speak to each other after all and yet we none the less understand what people are saying.

The second is that it's essential because it aids legibility. It's much easier to read if there's punctuation. Also, the marks show us how to read aloud in a way that reflects the pauses, rhythm, and melody that we use in speech. They help us see the grammar of complex sentences. And they help us sort out ambiguities – otherwise, nobody would ever have got the joke in *Eats, Shoots and Leaves*”. (Crystal 2015, p.IX)

With individual opinions ranging between the two extremes, the scientific debate mainly focuses on the prosodic versus grammatical function of punctuation. Studies in corpus linguistics and computational analysis of texts similarly hinge on the rhetorico-prosodic vs parsing function of punctuation. In this paper I would like to show that such an approach is an oversimplification and by itself insufficient to explain the complexities of punctuation: no matter how hard we try to systematically connect punctuation with intonation, pauses and syntactic boundaries, exceptions will always turn out in usage that force us to find specific explanations in specific contexts in terms of intentionality, attitudes, pragmatic force, etc.

As an alternative, I would like to explore the following hypothesis: punctuation is a complex dynamic system of signs, adaptable to contexts and sensitive to semantic and pragmatic meanings. The proper domain of investigation of punctuation is neither the word nor the sentence but the text/discourse. From a cognitive point of view, punctuation signs contribute to the economy of text interpretability indicating points in the text where cognitive processes may operate to construct a pattern which allows its pragmatic interpretation in an efficient, efficacious and appropriate manner.

Within this perspective, I will try to show that text punctuation assumes more or less marked/ more or less natural configurations depending on some choices along scales of naturalness defined by some semiotic parameters, such as diagrammatic iconicity, transparency and salience (among others). The notion of naturalness will furthermore be complemented with the notion of optimality in order to more systematically account for some phenomena like:

a) lack of punctuation, as in Joyce's stream of consciousness:

“I was a Flower of the mountain yes when I put the rose in my hair like the Andalusian girls used or shall I wear a red yes and how he kissed me under the Moorish wall and I thought well as well him as another and

then I asked him with my eyes to ask again yes and then he asked me would I yes to say yes my mountain flower and first I put my arms around him yes and drew him down to me so he could feel my breasts all perfume yes and his heart was going like mad and yes I said yes I will Yes.” — James Joyce, *Ulysses*.

and in some students' e-mails:

“Salve professore io ho svolto l'esame di inglese giuridico a settembre 2015 e ottenni l'idoneità tuttavia a causa di impedimenti di tipo lavorativo non ho mai potuto venire a ricevimento per convalidare il voto sul libretto cartaceo purtroppo solo adesso mi accorgo che non è stato convalidato neanche sul libretto elettronico mi chiedevo se fosse necessario recarsi a ricevimento per ottenere questa convalida l'email con il risultato la ho sempre ma sul vecchio indirizzo di posta elettronica (...)” (personal communication)

b) Discourse segmentation as in:

“And then lots of people started coming into the little station.(...). And the people kept coming into the little station so that it was even more crowded than the big station. And then I couldn't see the walls anymore and the back of someone's jacket touched my knee and I felt sick and I started groaning really loudly and the lady on the bench stood up and no one else sat down. And I felt like I felt like when I had a flu and I had to stay in bed all day and all of me hurt and I couldn't walk or eat or go to sleep or do maths.” (M. Haddon, *The curious incident of the dog in the night-time*)

c) The use of full stops to separate nouns - not sentences or clauses, as grammar would prescribe:

“But there is also punishment and self-imposed pain here – guilt, perhaps, at taking the role of breadwinner away from the father. Anxiety. Solitude. Defilement. Despair. Blacking. All these things come together, and we are left with the image of a young boy writhing in agony on the rat-infested floor”. (Oxford English Grammar, 512)

d) The emergence of some attitudes (ex. irony) in specific punctuation contexts:

Raymond promised to write the article when he had the time.

Raymond promised to write the article, when he had the time.

Raymond promised to write the article. When he had the time.

In psycholinguistics, the role of punctuation has been mostly investigated within the prosodic vs grammatical function perspective. Inappropriate punctuation that is incongruent with the underlying syntax has been proven to impair reading speed and comprehension. Some experiments have shown the role of commas as facilitators in disambiguating tasks (especially in garden-path sentences). However, it has also been pointed out that in other, less critical cases, commas seem to be transparent; moreover, the effects of optional punctuation are virtually unknown and in most cases the semantic and pragmatic constraints and implications of some punctuation choices have been totally neglected. The hypothesis put forward in this paper will be substantiated with new experiments focusing on the latter factors.

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